

**Technical University of Liberec
Faculty of Economics**

Proceedings of the 9th International Conference

Liberec Economic Forum 2009



**15th – 16th September 2009
Liberec, Czech Republic, EU**



TECHNICAL UNIVERSITY OF LIBEREC
Faculty of Economics □

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Gender and Regional Differences in Earnings Expectations of Czech and English Students: Evidence from Business Schools

Abstract

During the last fifteen years there has been a growth in interest in the returns to higher education by policy makers. This has mainly been due to the increasing pressures of funding higher education as the student numbers have expanded in the developed economies. One of the major reasons for the growth of student numbers has been the belief of students that there are financial benefits to higher education.

This study reports on data on students' expectations regarding the benefits of their higher education studies at three Czech faculties of economics and one English business school. First year students completed a questionnaire which asked their views concerning their earnings at four points in their lives i.e. immediately after graduation and ten years after and, hypothetically, if they had entered the labour market directly from high school, and ten years later.

The results of the survey show that students perceive higher education to be a profitable investment. However, these perceptions and expectations are influenced by gender and region of study. Students in Prague expected the highest earnings within the Czech sample. Female students generally expected lower earnings than males, although in Huddersfield, female students tended to expect their earnings to be closer to males' than was the case in the Czech Republic. Overall students are well informed and therefore able to make rational decisions regarding their investment in further study.

Given that student perceptions and expectations tend to reflect reality, they may be a useful proxy indicator of the demand for higher education at any particular point in time, at least in vocationally oriented subjects such as economics or business studies. Therefore policy makers would be well advised to track changes in such perceptions.

Key Words

earnings expectations, human capital, gender, higher education, policy making

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Introduction

During the last fifteen years, there has been a growth of interest in the returns to higher education by policy makers. This has been due to increasing difficulty in funding higher education as student numbers have expanded. The fact that there are often substantial private returns to higher education has been used as a reason to shift the burden of funding higher education away from the tax payer and to the student – or sometimes to the graduate [3].

In countries where there is a consensus for a welfare state financed by high levels of general taxation (e.g. in Scandinavia), universities have tended to remain free at the point of entry. This has also been the case in countries in which the age participation rate has remained below the OECD average (e.g. in the former COMECON countries of Central/Eastern Europe). In such countries, the costs associated with university funding have remained “affordable” for the taxpayer. In the Czech Republic for instance, public universities have remained free at the point of entry with student numbers capped and excess demand has been mopped up by encouraging the growth of a vigorous private sector [0].

By contrast in the UK the private sector remains very small and the “marketisation” of higher education has taken place in the public universities via the introduction of tuition fees, which cover part of the cost of study. Tuition fees for full time undergraduate students were first introduced in England and Wales in 1998 and were set at £1,000 per student per annum for all Bachelor degree courses i.e. they were considered to represent just a contribution to the cost of a Bachelor degree – which could range from £4,000 per annum for a subject in the arts and social sciences to £15,000 per annum for medicine. By 2005/06 the fee, which was contingent on family income, had risen to £1,175.

In January 2005 the UK parliament voted to permit Universities in England and Northern Ireland to charge a fee of up to £3,000 per annum for all courses. These fees increase yearly by no more than the rate of inflation and are currently (2008/2009) set at maximum of £3,145 per annum (£3,225 in 2009/2010). This amount is payable by students from England, Wales, and Northern Ireland studying in England, Wales, Northern Ireland or Scotland.

Students from Scotland pay no tuition fees when studying a full-time undergraduate degree course in Scotland, though they must pay if they choose to study in England, Wales or Northern Ireland [13]. Scottish universities and colleges can charge a fixed rate upfront fee of £1,735 a year (£2,760 for medical courses) for those students who do not already live in Scotland i.e. are not ordinarily resident in Scotland on the first day of the first academic year of their course [13],[21].

The new fee regime which came into force in England and Northern Ireland in September 2006 does not require the payment of an upfront fee – rather it offers students to take out a loan to cover the cost of the fee. The loan is then repayable after graduation – but only once annual income exceeds £15,000 if employment is obtained in the UK. (The salary trigger for loan repayment varies from country to country. In the case of the Czech Republic for instance, it is set at the equivalent of £9,000 per annum, while in the case of Denmark it is £18,000 per annum). In other words this is a form of graduate tax, similar to that which was introduced in Australia in 1989 [2].

The introduction of fees within (UK) higher education has been advocated by their proponents for two reasons. First of all, it was the need to finance the increasing costs associated with higher education and thus the tuition fees have been seen as a way of introducing a new funding stream to higher education to complement those from government, business, charities and community groups.

During the last forty years the number of students in higher education has expanded rapidly in the developed economies. In the UK, for instance, this has resulted in the proportion of 18 year olds attending university at some point in their life increasing from approximately 6 per cent in 1965 (Barr, 1989) to 43 per cent in 2007 [14]. The so called age participation rate is even higher in countries such as the United States and Japan [17; p.345].

The second argument, however, relates to considerations of social justice. It is argued that it is not equitable for the costs of higher education to be borne by the general taxpayer when in fact the private benefits of higher education are earned disproportionately by the sons and daughters of the middle and upper middle classes and even in cases where this is not true, those private beneficiaries go on to earn substantially more than the average member of the population. It is argued, for example, why should the refuse collector subsidise a future doctor? [1]. A recently published modelling exercise has demonstrated that the new English system indeed should be progressive in its impact [8].

Whatever one's view on these distributional questions, it is clear that eventually the law of diminishing returns may set in. That is to say once fees reach a certain level – even deferred fees – they may act as a disincentive to participation in higher education. Irrespective of whether or not there are *actual* private returns to higher education, if the *perceived* returns are considered to be outweighed by the costs (of the repayment of fees), participation in higher education may decline. Therefore from a public policy perspective it is important to be able to monitor students' *perceptions* of the returns to higher education [0].

This study reports on data on students' perceptions concerning the returns to their higher education studies in three Czech faculties of economics and one English business school. The study is unusual in focusing on the question of *perceptions* as most studies in this area have attempted to measure *actual* returns.

1. Earnings Expectations: Literature review

According to the theory of human capital, the choice of level of education, its length and field of study depends on returns to this investment [4]. People will decide to invest money in education if their investment is profitable i.e. if they expect to gain at least the same amount of money as they invest/spend. Thus it is their expectations of returns to such investment that lead to the decision to undertake extra schooling.

This would suggest that there has been a vast body of economics literature on the subject of student expectations. However, this does not seem to be the case since, as Manski [15] commented, "the profession has traditionally been sceptical of subjective data; so much that we have generally been unwilling to collect data on expectations"(p43). Only a few studies have examined the comparability of earnings expectations to reality e.g. Dominitz [9], who however did not relate the topic to educational decisions. Those who did relate their studies on expectations to the

educational context are Betts [5], Dominitz and Manski [12], Menon [16],[17], Webbink and Hartog [22] and Botelho and Pinto [6].

Betts examined earnings expectations of undergraduates at the University of California and found that differences in expectations were dependent on the field of study and the year of study. Students produced better estimates regarding their future earnings the closer they were to graduation [5]. Dominitz and Manski surveyed high school students and university undergraduates and their expectations of the income they would earn if they completed different levels of education. They concluded that students were “able to respond meaningfully to questions eliciting their earnings’ expectations” [10; p.25].

Menon estimated the perceived rates of return to education of high school students and found they “acted according to human capital theory” [14;p4] i.e. unlike those who were to continue their studies at university, labour market entrants did not perceive the higher education to be a profitable investment since their perceived rate of return to higher education was lower. Therefore she concluded that perceived rates of return are important when deciding whether or not to enter higher education [17].

Webbink and Hartog used Dutch panel data and surveyed students for five subsequent years. All years, levels and types of higher education were included and participants were asked every year about their positions in or outside higher education, motivations for the decisions made and their future plans. They found that there were no systematic differences between expectations and outcomes, and that students are able to make realistic estimates at both group and individual level, although students from high-income families tended to overestimate their earnings [20].

Botelho and Pinto surveyed first and final year university students in Portugal and examined their expectations of monetary benefits from higher education. They confirmed that students can estimate their future earnings “and that, as a consequence, economists’ reluctance to gather subjective data on expectations does not seem warranted” [6; p.7]. Their findings are in line with previous studies which found that students are aware of the financial benefits of higher education.

In addition, they found that female students expect lower returns than their male counterparts and that their (female) estimates are more accurate when compared to the actual returns. Another conclusion of their study is that final year students expect lower returns to higher education than those in their first year and that they have, irrespective of gender, “a relatively accurate understanding of the national average market returns to education” [6; p7]. Finally their findings revealed a tendency to “self-enhance” since students tend to overestimate their future returns when compared with their perceptions of the average returns to schooling.

2. Survey of Expected Earnings at Czech and English Universities

2.1 Background

The institutions surveyed in the Czech Republic and England, in this study, are equivalent in status and form, although they are not identical in terms of curriculum. Czech students have a greater amount of economics, accounting, mathematics and information systems in their curriculum than their British counterparts while the latter tend to study a larger amount of the newer and “softer” management subjects. In the Czech Republic, Faculties of Economics correspond to UK Business Schools. Despite the Bologna process, which introduced the 3+2 system (three years study towards Bachelor’s and two years study towards Master’s degree) in the Czech Republic, most Czech students “graduate” with a Master award after 5 years study. In England, most students, who enter higher education aged 18/19, “graduate” with a Bachelor award after 3 years study.

2.2 Methodology

With help and support of colleagues in Liberec and Prague, a survey of earnings expectations was undertaken during the academic years 2004/2005, 2005/2006, 2006/2007 and 2007/2008 of first year students at three Czech faculties of economics, at the Technical University of Liberec, the University of Economics, Prague and the University of Pardubice, and at the University of Huddersfield Business School (UK)¹. Students completed the questionnaire in Czech (Prague, Pardubice and Liberec) or English (Huddersfield) and altogether there were 2,609 respondents. A large lecture for first year students, with a high attendance rate, was identified and all those who were present were asked to complete the questionnaire. First year students were surveyed, during their first term, because their decision to enter higher education had been a recent one.

The questionnaire began with general questions relating to gender and age. In the second part the students were asked about their expectations of income (in current prices i.e. without taking into account price inflation) in their first job immediately after graduation and then after 10 years of work experience. They were also asked about the level of earnings they would have expected if they had not entered higher education, both immediately after leaving school and after 10 years of employment. In all four cases, the expectations were obtained at three levels: minimum, most likely and maximum. For simplicity only the most likely earnings estimates are used for calculations in this paper.

¹ The survey was undertaken with the support of GA ČR 402/04/0039 from the Grants Agency of the Ministry of Education of the Czech Republic

2.3 Survey Sample

Given the gender structure of our sample, which reflects the make up of the student bodies concerned, the average expected earnings reflect the gender make up of the sample. Therefore all the data are analysed separately by gender in an attempt to eliminate the gender influence on the findings. For the gender structure of respondents see table 1.

Tab. 1 Gender Distribution of Respondents

Year	Gender	Huddersfield	%	Liberec	%	Pardubice	%	Prague	%
2004/2005	Male	103	60	41	35	36	17	84	41
	Female	68	40	75	65	175	83	121	59
	Total	171	100	116	100	211	100	205	100
2005/2006	Male	46	69	29	27	21	18	160	39
	Female	21	31	80	73	94	82	252	61
	Total	67	100	109	100	115	100	412	100
2006/2007	Male	33	46	59	29	41	29	125	37
	Female	38	54	144	71	99	71	213	63
	Total	71	100	203	100	140	100	338	100
2007/2008	Male	105	60	20	32	13	14	34	29
	Female	69	40	43	68	82	86	85	71
	Total	174	100	63	100	95	100	119	100

Source: own calculations

2.4 Survey Results

Women in both the Czech Republic and the United Kingdom earn less than men. In fact in the Czech Republic women earned, during the surveyed years, approximately 75% of male earnings. In the UK this proportion is even lower; women earned, during the surveyed years, approximately 57% of male earnings [16; pp160-161],[19]. Our findings suggest that Czech female students expect lower earnings than their male peers. In Huddersfield, however, female students expect more equal and sometimes even higher earnings than males, especially in the last two surveyed years.

Table 2 presents the results of salary expectations and their differences depending on gender and place of study. The Czech expected earnings are expressed in CZK/month and the English earnings are expressed in GBP/year, which are the traditional ways in the respective countries. These results were used for the analysis in this paper.

At all the universities, the students, both male and female, expect a significant increase in salary as a result of their university education, as well as after 10 years of post graduation work experience. They also stated that they would have expected a significant increase after 10 years work experience if they had completed secondary education only. It is noteworthy that students expect similar earnings immediately after obtaining a university degree to those without the university degree and with 10 years of experience. Thus, a university degree is worth approximately 10 years of work experience after secondary education (A-levels).

Tab. 2 Expected Earnings – Gender Breakdown

Prague CZK/month								
2004/2005		2005/2006		2006/2007		2007/2008		
	male	female	male	female	male	female	male	female
UNI	21929	18372	24838	20956	25440	22552	28912	24853
UNI 10	44305	33058	51419	38478	70136	39590	65647	46735
SS	13917	11818	14729	12720	16146	14691	17727	14952
SS 10	24560	19521	23435	30526	26517	20481	27303	20994
Liberec CZK/month								
2004/2005		2005/2006		2006/2007		2007/2008		
	male	female	male	female	male	female	male	female
UNI	21363	18060	19259	17671	22432	20738	22625	19814
UNI 10	35659	27800	37862	28544	38220	36434	38050	32023
SS	12895	11580	11328	11241	13415	12271	14900	13965
SS 10	21220	16693	18724	16865	19853	18359	21200	19929
Pardubice CZK/month								
2004/2005		2005/2006		2006/2007		2007/2008		
	male	female	male	female	male	female	male	female
UNI	18653	15227	16381	15565	20890	17626	29154	20148
UNI 10	33028	24827	24762	24660	41659	26434	45167	32135
SS	12194	9589	11143	10851	12585	11439	16083	14012
SS 10	19181	14598	17381	15660	32917	16714	25500	19075
Huddersfield GBP/year								
2004/2005		2005/2006		2006/2007		2007/2008		
	male	female	male	female	male	female	male	female
UNI	20801	20364	19644	17225	18818	20861	19893	20172
UNI 10	36385	32561	33544	29619	33212	30574	34778	41460
SS	14101	12454	13922	11417	14227	13971	13852	14177
SS 10	21249	16820	21478	18813	20303	20212	21379	20678

Source: own calculations

The basic concept for comparison of male and female earnings is the so called Gender Pay Gap (GPG). Table 3 indicates both actual and expected GPG i.e. expected as well as actual female earnings as a proportion of male earnings in all the surveyed regions i.e. Liberec, Pardubice, Prague and West Yorkshire (where Huddersfield is located).

The results show that female students from Huddersfield business school expect much more equal earnings to those of males than actually is the case in both West Yorkshire county and the UK as a whole. The difference is approximately 30 percentage points. In the Czech regions on the other hand, female students seem to be more aware of the actual labour market situation. Although they overestimate their earnings as a proportion of male earnings in Prague and Liberec, their expectations are no more than 12 percentage points higher. Females from Pardubice overestimated the proportion only once in the surveyed years.

Tab. 3 Female earnings as a proportion of male earnings: actual and perceived

	2004		2005		2006		2007	
	Actual	Perceived	Actual	Perceived	Actual	Perceived	Actual	Perceived
Huddersfield	60.34	88.72	61.49	86.40	63.45	98.92	63.68	104.92
Prague	73.75	80.70	73.77	80.58	73.55	78.33	74.34	79.60
Liberec	77.25	82.74	78.89	89.11	80.35	92.93	75.54	89.87
Pardubice	78.18	77.89	78.25	95.52	78.47	71.89	76.46	75.55

Note: for more detailed breakdown see Appendix C

Source: own calculations based on [7], [10], [20]

The fact that women expect a higher proportion of male earnings than is the case in the labour market does not seem to be caused by men underestimating their expected earnings. Both female and male earnings were compared to national as well as regional actual male and female earnings. Male students from Huddersfield expected approximately 75% of regional male earnings after graduation whereas female graduates from Huddersfield expected to earn nearly 120% of female regional earnings. In all other scenarios i.e. UNI 10, SS and SS 10 female expected earnings as a proportion of regional female earnings were at least 30 percentage points higher than those of males.

The difference between males and females in the Czech Republic was not as large since females expected on average only 10 percentage points higher earnings as a proportion of female regional earnings compared to those of males. For the average expected earnings as a proportion of regional earnings see table 4 and for detailed breakdown of expected earnings compared to regional data and the regional data themselves see appendix A1 and A2 respectively.

Tab. 4 Average expected earnings as a proportion of average regional earnings

	Prague		Liberec		Pardubice		Huddersfield	
	male	female	male	female	male	female	male	female
UNI	74.68%	86.63%	95.44%	108.84%	96.99%	95.92%	74.36%	118.76%
UNI 10	169.97%	157.53%	167.17%	177.76%	165.29%	151.22%	129.59%	202.41%
SS	46.17%	54.17%	58.33%	69.86%	59.59%	63.94%	52.68%	78.43%
SS 10	81.00%	85.11%	90.38%	102.36%	108.69%	92.23%	79.25%	115.19%

Source: own calculations based on [7], [10], [20]

Table 5, which presents averages of expected earnings as a proportion of national data, shows that the earnings expectations reflect reality. Students from Prague, both male and female, expect a higher proportion of national earnings than those from Liberec and students from Liberec expect to earn a higher proportion of average national earnings than students from Pardubice. Indeed, wages in Prague are higher than in the Liberec region which in turn are higher than wages in the Pardubice region.

Also the differences between the proportions reflect the reality. Male students from Prague expect after graduation approximately the national average salary, whereas students from Liberec expect 85.5% and those from Pardubice expect 84% of the national average salary. Earnings in Prague are significantly higher than anywhere in the Czech Republic, whereas earnings in Liberec region are only slightly higher than those in Pardubice region (approximately 1,000 CZK/month for both genders).

Tab. 5 Average expected earnings as a proportion of average national earnings

	Prague		Liberec		Pardubice		Huddersfield	
	male	female	male	female	male	female	male	female
UNI	100.52%	114.62%	85.50%	101.21%	84.03%	90.59%	66.03%	114.86%
UNI 10	229.24%	208.44%	149.63%	165.33%	143.11%	142.88%	115.31%	195.51%
SS	62.17%	71.67%	52.31%	64.97%	51.63%	60.53%	46.83%	75.81%
SS 10	108.82%	112.34%	80.98%	95.19%	94.06%	87.34%	70.45%	111.40%

Note: for detailed breakdown and the national data see appendix B1 and B2 respectively

Source: own calculations based on [7], [10], [20]

3. Discussion

Our results show clearly that students, both male and female, perceive higher education to be a profitable investment. They expect a significant increase in earnings thanks to a university degree. Since students expect similar earnings immediately after obtaining a university degree to those without the university degree but with 10 years of experience, it can be concluded that a university degree is approximately worth 10 years of work experience after secondary education. However, students expect their earnings to grow further and more quickly with the degree. This suggests that the benefits of higher education are perceived to be larger in the medium term.

Our findings suggest that on average Czech female students expect to earn less than their male peers. Since women in the Czech Republic earned approximately 75% of male earnings between 2004 and 2007 expectations of our female sample, although slightly overestimated, reflect the reality. Female students in Huddersfield on the other hand expect more equal earnings on average as well as in all four individual scenarios and sometimes even expect to earn more than their male counterparts. Indeed, interviews conducted with female students in Huddersfield suggest that no discriminatory aspects or differences in earnings are perceived. Equality in earnings is to be expected immediately after graduation since there is no obvious reason why females should expect to earn less as graduates given that access to information is equal for both genders and equal opportunities policies are in place. It is later in females' working life, if they decide to take time off work to raise children, when earnings start to differ.

Our findings suggest that indeed women at all surveyed universities expect to earn a lower proportion of male earnings after 10 years of work experience and a higher proportion of male earnings immediately after graduation from both secondary school and university (see Appendix C). Additionally, according to the Czech Statistical Office the biggest differences in earnings, by gender, are at the highest end of the spectrum. Women in the 95th percentile earned in 2007 69.6% of males' earnings [11].

Our data tend to reflect reality by following similar patterns regarding regional differences in earnings. Students, both male and female, from Prague expect the highest earnings from all three Czech surveyed regions and students from Liberec expect higher earnings than those from Pardubice. This reflects the actual labour market conditions in the respective regions since Prague has the highest earnings compared to all other regions in the Czech Republic and earnings in the Liberec region are a little higher than in the Pardubice region. This tends to suggest that although employment can be sought anywhere, earnings expectations are heavily influenced by the labour market conditions in the region of study.

It is possible to compare student expectations in Huddersfield as a proportion of regional earnings to the results from Prague. Indeed, male students, from both Huddersfield and Prague, expect to earn after university graduation approximately 75% of regional average earnings. Similarly, with secondary education only males from Huddersfield would expect 53% of West Yorkshire average earnings and males from Prague would expect 46% of Prague average earnings. The major city in West Yorkshire is Leeds with a population of approximately 750,000, which makes it comparable to Prague.

As mentioned above, females from Huddersfield tend to overestimate their earnings and thus expect after graduation their proportion of the regional average to be 30 percentage points higher than that of their female counterparts in Prague. Similarly if they entered the labour market after finishing secondary education, they would expect to earn a 25 percentage points higher proportion of regional earnings than females in Prague.

Conclusion

The analysis of student expectations and their comparison with the actual data shows that students are well informed and therefore are able to make rational decisions regarding their investments in further study. Thus policy makers would be well advised to try to track changes in such expectations – not only amongst university students but also amongst secondary school leavers. Such perceptions may be a useful proxy indicator of the demand for higher education at any particular point in time since it is the student expectations which are likely to influence the demand for higher education, at least in vocationally orientated areas such as economics and business studies.

In 2009/2010 the first year students of two more English universities will be surveyed and thus more opportunities for comparison will be provided.

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Appendix A1

Expected earnings in Prague (CZK/month) as % of average Prague earnings by gender

	2004/2005		2005/2006		2006/2007		2007/2008	
	male	female	male	female	male	female	male	female
regional earnings	30,508	22,500	31,831	23,481	35,115	25,827	37,866	28,148
UNI	21929	18372	24838	20956	25440	22552	28912	24853
	71.88%	81.65%	78.03%	89.25%	72.44%	87.31%	76.35%	88.29%
UNI 10	44305	33058	51419	38478	70136	39590	65647	46735
	145.22%	146.92%	161.54%	163.87%	199.73%	153.29%	173.37%	166.03%
SS	13917	11818	14729	12720	16146	14691	17727	14952
	45.62%	52.52%	46.27%	54.17%	45.98%	56.88%	46.82%	53.12%
SS 10	24560	19521	30526	23435	26517	20481	27303	20994
	80.50%	86.76%	95.90%	99.80%	75.51%	79.30%	72.10%	74.58%

Source: own calculations based on [7], [10]

Expected earnings in Liberec (CZK/month) as % of average earnings in Liberec region by gender

	2004/2005		2005/2006		2006/2007		2007/2008	
	male	female	male	female	male	female	male	female
regional earnings	20,756	16,033	21,256	16,769	22,473	18,058	25,592	19,331
UNI	21363	18060	19259	17671	22432	20738	22625	19814
	102.92%	112.64%	90.61%	105.38%	99.82%	114.84%	88.40%	102.50%
UNI 10	35659	27800	37862	28544	38220	36434	38050	32023
	171.80%	173.40%	178.12%	170.22%	170.07%	201.76%	148.68%	165.66%
SS	12895	11580	11328	11241	13415	12271	14900	13965
	62.13%	72.23%	53.29%	67.03%	59.69%	67.95%	58.22%	72.24%
SS 10	21220	16693	18724	16865	19853	18359	21200	19929
	102.24%	104.12%	88.09%	100.57%	88.34%	101.67%	82.84%	103.09%

Source: own calculations based on [7], [10]

Expected earnings in Pardubice (CZK/month) as % of average earnings in Pardubice region by gender

	2004/2005		2005/2006		2006/2007		2007/2008	
	male	female	male	female	male	female	male	female
regional earnings	19,947	15,594	21,181	16,573	21,976	17,245	23,887	18,264
UNI	18653	15227	16381	15565	20890	17626	29154	20148
	93.51%	97.65%	77.34%	73.49%	95.06%	102.21%	122.05%	110.32%
UNI 10	33028	24827	24762	24660	41659	26434	45167	32135
	165.58%	159.21%	116.91%	116.43%	189.57%	153.29%	189.09%	175.95%
SS	12194	9589	11143	10851	12585	11439	16083	14012
	61.13%	61.49%	52.61%	51.23%	57.27%	66.33%	67.33%	76.72%
SS 10	19181	14598	17381	15660	32917	16714	25500	19075
	96.16%	93.61%	82.06%	73.93%	149.79%	96.92%	106.75%	104.44%

Source: own calculations based on [20]

Expected earnings in Huddersfield (GBP/year) as % of average West Yorkshire earnings by gender

	2004/2005		2005/2006		2006/2007		2007/2008	
	male	female	male	female	male	female	male	female
regional earnings	25,692	15,502	27,403	16,849	26,760	16,980	26,710	17,010
UNI	20801	20364	19644	17225	18818	20861	19893	20172
	80.96%	131.36%	71.69%	102.23%	70.32%	122.86%	74.48%	118.59%
UNI 10	36385	32561	33544	29619	33212	30574	34778	41460
	141.62%	210.04%	122.41%	175.79%	124.10%	180.06%	130.21%	243.74%
SS	14101	12454	13922	11417	14227	13971	13852	14177
	54.89%	80.34%	50.80%	67.76%	53.17%	82.28%	51.86%	83.35%
SS 10	21249	16820	21478	18813	20303	20212	21379	20678
	82.70%	108.50%	78.38%	111.66%	75.87%	119.03%	80.04%	121.56%

Source: own calculations based on [20]

Appendix A2

Average regional earnings by gender

	2004/2005		2005/2006		2006/2007		2007/2008	
	male	female	male	female	male	female	male	female
Prague	30,508	22,500	31,831	23,481	35,115	25,827	37,866	28,148
Liberec	20,756	16,033	21,256	16,769	22,473	18,058	25,592	19,331
Pardubice	19,947	15,594	21,181	16,573	21,976	17,245	23,887	18,264
Huddersfield	25,692	15,502	27,403	16,849	26,760	16,980	26,710	17,010

Note: Prague, Liberec and Pardubice earnings are in CZK/month, Huddersfield earnings are in GBP/year

Source: own calculations based on [7], [10], [20]

Appendix B1

Expected earnings in Prague as % of average earnings in the CR by gender

	2004/2005		2005/2006		2006/2007		2007/2008	
	male	female	male	female	male	female	male	female
national earnings	23,044	17,256	24,271	18,221	25,593	19,305	27,489	20,684
UNI	21929	18372	24838	20956	25440	22552	28912	24853
	95.16%	106.47%	102.34%	115.01%	99.40%	116.82%	105.18%	120.16%
UNI 10	44305	33058	51419	38478	70136	39590	65647	46735
	192.26%	191.57%	211.85%	211.17%	274.04%	205.08%	238.81%	225.95%
SS	13917	11818	14729	12720	16146	14691	17727	14952
	60.39%	68.49%	60.69%	69.81%	63.09%	76.10%	64.49%	72.29%
SS 10	24560	19521	30526	23435	26517	20481	27303	20994
	106.58%	113.13%	125.77%	128.62%	103.61%	106.09%	99.32%	101.50%

Source: own calculations based on [7], [10]

Expected earnings in Liberec (CZK/month) as % of average earnings in the CR by gender

	2004/2005		2005/2006		2006/2007		2007/2008	
	male	female	male	female	male	female	male	female
national earnings	23,044	17,256	24,271	18,221	25,593	19,305	27,489	20,684
UNI	21363	18060	19259	17671	22432	20738	22625	19814
	92.70%	104.66%	79.35%	96.98%	87.65%	107.42%	82.31%	95.79%
UNI 10	35659	27800	37862	28544	38220	36434	38050	32023
	154.74%	161.10%	156.00%	156.65%	149.34%	188.73%	138.42%	154.82%
SS	12895	11580	11328	11241	13415	12271	14900	13965
	55.96%	67.11%	46.67%	61.69%	52.42%	63.56%	54.20%	67.52%
SS 10	21220	16693	18724	16865	19853	18359	21200	19929
	92.08%	96.74%	77.15%	92.56%	77.57%	95.10%	77.12%	96.35%

Source: own calculations based on [7], [10]

Expected earnings in Pardubice (CZK/month) as % of average earnings in the CR by gender

	2004/2005		2005/2006		2006/2007		2007/2008	
	male	female	male	female	male	female	male	female
national earnings	23,044	17,256	24,271	18,221	25,593	19,305	27,489	20,684
UNI	18653	15227	16381	15565	20890	17626	29154	20148
	80.95%	88.24%	67.49%	85.42%	81.62%	91.30%	106.06%	97.41%
UNI 10	33028	24827	24762	24660	41659	26434	45167	32135
	143.33%	143.87%	102.02%	135.34%	162.77%	136.93%	164.31%	155.36%
SS	12194	9589	11143	10851	12585	11439	16083	14012
	52.92%	55.57%	45.91%	59.55%	49.17%	59.25%	58.51%	67.74%
SS 10	19181	14598	17381	15660	32917	16714	25500	19075
	83.24%	84.60%	71.61%	85.94%	128.62%	86.58%	92.76%	92.22%

Source: own calculations based on [7], [10]

Expected Earnings in Huddersfield (GBP/year) as % of average earnings in the UK by gender

	2004/2005		2005/2006		2006/2007		2007/2008	
	male	female	male	female	male	female	male	female
national earnings	28,363	15,897	29,580	17,019	30,483	17,631	31,594	18,044
UNI	20801	20364	19644	17225	18818	20861	19893	20172
	73.34%	128.10%	66.10%	101.21%	61.73%	118.32%	62.96%	111.79%
UNI 10	36385	32561	33544	29619	33212	30574	34778	41460
	128.80%	204.82%	113.40%	174.03%	108.95%	173.41%	110.08%	229.77%
SS	14101	12454	13922	11417	14227	13971	13852	14177
	49.72%	78.34%	47.07%	67.08%	46.67%	79.24%	43.84%	78.57%
SS 10	21249	16820	21478	18813	20303	20212	21379	20678
	74.92%	105.81%	72.61%	110.54%	66.60%	114.64%	67.67%	114.60%

Source: own calculations based on [20]

Appendix B2

Average national earnings according to gender

	2004/2005		2005/2006		2006/2007		2007/2008	
	male	female	male	female	male	female	male	female
Prague	23,044	17,256	24,271	18,221	25,593	19,305	27,489	20,684
Liberec	23,044	17,256	24,271	18,221	25,593	19,305	27,489	20,684
Pardubice	23,044	17,256	24,271	18,221	25,593	19,305	27,489	20,684
Huddersfield	28,363	15,897	29,580	17,019	30,483	17,631	31,594	18,044

Note: Prague, Liberec and Pardubice earnings are in CZK/month, Huddersfield earnings are in GBP/year

Source: own calculations based on [7], [10], [20]

Appendix C

Female earnings as a proportion of male earnings in surveyed regions and all scenarios

		actual	percieveed			
			UNI	UNI 10	SS	SS 10
2004	UK	56.05				
	WY (Hudds)	60.34	97.90	89.49	88.32	79.16
	CR	74.88				
	Prague	73.75	83.78	74.61	84.91	79.48
	Liberec	77.25	84.54	77.96	89.80	78.67
	Pardubice	78.18	81.63	75.17	78.64	76.11
		actual	percieveed			
			UNI	UNI 10	SS	SS 10
2005	UK	57.54				
	WY (Hudds)	61.49	87.69	88.30	82.01	87.59
	CR	75.07				
	Prague	73.77	84.37	74.83	86.36	76.77
	Liberec	78.89	91.75	75.39	99.23	90.07
	Pardubice	78.25	95.02	99.59	97.38	90.10
		actual	percieveed			
			UNI	UNI 10	SS	SS 10
2006	UK	57.84				
	WY (Hudds)	63.45	110.86	92.06	98.20	94.54
	CR	75.43				
	Prague	73.55	88.65	56.44	90.99	77.24
	Liberec	80.35	92.45	95.33	91.47	92.47
	Pardubice	78.47	84.38	63.45	88.96	50.78
		actual	percieveed			
			UNI	UNI 10	SS	SS 10
2007	UK	57.11				
	WY (Hudds)	63.68	101.40	119.21	102.35	96.72
	CR	75.24				
	Prague	74.34	85.96	71.19	84.35	76.89
	Liberec	75.54	87.58	84.16	93.72	94.00
	Pardubice	76.46	69.11	71.15	87.12	74.80
		actual	percieveed			
			UNI	UNI 10	SS	SS 10

Source: own calculations based on [7], [10], [20]

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Using ICT for Knowledge Prospecting and Developing International Entrepreneurship Competencies

Abstract

This paper points out both several strategic competencies which can be deployed in big international companies by using information and communication technology, and how the knowledge, skills and competencies of managers can be enhanced. Competencies of global managers require skills in wide areas. They need to be aware of cultural diversity, demonstrate awareness of their own culture, have proficiency in certain languages, and share certain inter and intra personal competencies. As a part of their organizational competence, international managers need to possess a certain level of business and professional expertise, which is supplemented by multicultural communication and cooperation. They also have to know how to share knowledge in the working teams, cooperate and communicate with employees, business partners, and customers. Information and communication technology (ICT) plays an important role as a tool for increasing of communication competencies important for creating marketing strategies. Therefore the author is mapping (by the structured questionnaire and interviews) all possibilities of used learning materials, ways of sharing ideas and information sources in the company. The results from questionnaire and published researches indicate that it is necessary to use all the variety of knowledge together with the information sources and to share them among the colleagues in an intuitive way. This effort helps companies to be successful through the alignment of the knowledge management, long term business goals, efficient using information and communication technology, and information sources.

Keywords

project management, information and communication technology, international company, competencies, innovation, knowledge

JEL Classification

O32, M16

Introduction

The current business environment is characterized as highly turbulent, influenced by modern information and communication technologies, globalization, short innovation and production cycles and employees' mobility. It is not easy to compete in such an environment; organizations have to utilize their corporate resources to the greatest possible extent. Such resources include finance, employees, tangible assets, technologies and also knowledge.

As stated by P. Drucker [5]: "The most important, and indeed the truly unique, contribution of management in the 20th century was the fifty-fold increase in the productivity of the 'manual worker' in manufacturing. The most important contribution management needs to make in the 21st century is similarly to increase the productivity

of 'knowledge work' and the 'knowledge worker.' In a similar manner, Nonaka [13] states: "In an economy whose only certainty is uncertainty, knowledge is the only source to gain permanent competitive advantage."

Especially the unique company resources help to achieve sustainable competitive advantage. This idea is supported by resource – based theory. A company can be understood as a collection of physical capital resources, human capital resources and organizational resources [2]. Resources that cannot be easily purchased, that require an extended learning process or a change in the company culture, are more likely to be unique to the enterprise and, therefore, more difficult to imitate by competitors. One of the most important resources is knowledge especially in current modern business. Why do some entrepreneurs find successful business opportunities while others do not? One of the reasons is that these opportunities are connected with previously gained experience and knowledge of such an entrepreneur.

Knowledge can be defined as a justified true belief, creating meaning [1]. There are two types of knowledge: tacit and explicit [13]. Explicit knowledge is formal and systematic. Tacit knowledge is highly personal, context – specific, subjective, and difficult to verbalize or communicate. Tacit knowledge is gained through experience and interactions between individuals and processes.

Knowledge transfer [13] reduces uncertainty and turns individual learning into organizational learning. There are four ways of transferring knowledge: formal, informal, personal and impersonal. Formal transfer of knowledge such as meetings, training sessions, or seminars promotes greater distribution of knowledge but hinder creativity, which is needed in successful knowledge application. Personal channels are good for distributing context specific knowledge and impersonal transfer of knowledge uses knowledge repositories for readily generalized knowledge.

It is also very important to motivate people to share their knowledge inside the organization. The most effective tools should be integrated for support the knowledge and business processes and for help to create an appropriate environment. Information and communication technology play important role enabling the better use and sharing knowledge within organization. We can see an opportunity for sharing knowledge in enterprises by using Web 2.0 ideas as Wikis. This is one of the possibilities and tools to create an intranet inside the company. Other possibilities can be realized with the blogs. Blogs are an ideal Web 2.0 platform that employees can use to create communicating channels for their content and work via the intranet. Blogs can provide the information or the answers questions that workers desperately need and can find.

How are the companies able to reach their business goals? What do they have to do to become innovative? The management has to be looking for the different approach how to challenge customer problems, technological substitution and market changes. This involves sustain long term effort for innovation and often requires a redesign of the business model. Companies have to ask the question what their business is over and over. Due to the shorter product life cycle and intense competition in many industries there has been an increased focus on design activities and other ways of creating unique value and selling propositions through innovative features.

The structure of this paper is the following. The second part explains the competencies which are important for today “global managers” in innovation teams in the international companies. The third part represents results of the questionnaire. Discussion and conclusion are the closing section.

1. Competencies of global managers

A number of authors see the competence as the knowledge, skills and attitudes used by employees in the performance of work [17], [16]. Such competencies require individuals or managers who possess capabilities in various areas. Competencies of global managers need to be aware of cultural diversity, demonstrate awareness of their own culture, have proficiency in certain languages and share certain number inter and intra personal competencies in table 1 [1]. Hinckley and Perl [6] interviewed managers and established an understanding of competencies required by managers. They identified three areas of competencies: intra personal, interpersonal and organizational competence. Sharing knowledge in the working teams, cooperate and communicate with employees, partners and customers are necessary parts of their organizational competence. Information and communication technology for this communication and marketing play an important role as a tool for these competencies. Table 1 explains these competencies and the possible teaching approaches.

Tab. 1 Competencies of managers and teaching approach

Competencies	Teaching approach	Selected references
Interpersonal Competence:		
Oral and written communication	International discussion, company conferences	[19]
Qualitative thinking	Video-conferencing, projects-case studies	[20], [15]
Intra-personal competence:		
Education and training	Company portal Audio-video	[8], [7]
Organizational competence:		
Traditional marketing	Marketing research	[11]
Web marketing	Web-based marketing research	[7]
ICT	Online strategies, web site design	[10]
International business competencies	Project management, groupware applications	[15]

Source: own

Explaining the communication the following classical model of communication can be used.

This classical model developed by Shannon [18] and redefined by Weiner [22] shows that a message sent to receiver has to be encoded and decoded by language, symbols, artefacts etc. to allow the transmission and that can be distorted by noise. Weiner [22] adds that in the communication the recipient sends a replay (feedback) to the sender. Strauss [19] indicates that the success of communication depends not only on the correct use of coding and decoding mechanism but also on the social relationships

between sender and recipient. Holá [7] also finds that the results of communication processes depend on the cultural context of both participants.

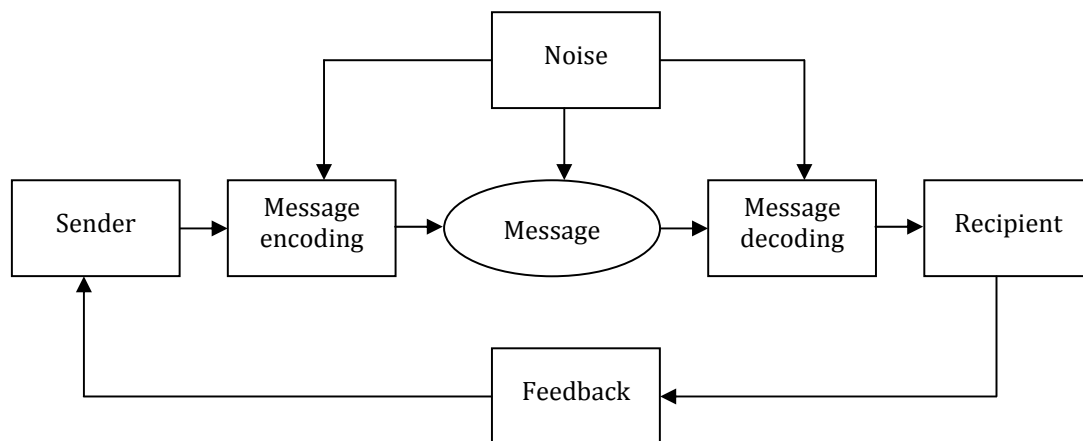


Fig. 1 The classical communication model

Source [18], [22]

Much knowledge is created in any development projects but to create value, the knowledge has to be absorbed and used in the organization. The international team of managers working in different departments (sales, development, production, marketing, R & D) is cooperating together during the entire innovation process. This process is very well structured, documented and consists of the three stages:

- exploratory (generation of ideas),
- development (feasibility study),
- industrialization (project authorization).

All stages are supported by project management methods. Much effort is directed towards the second and the third stages. The first step, where it is possible to introduce new ideas, is left out. This early stage is often terminated before learning opportunities have been fully explored. Therefore the issue of this paper is focused especially on this early step.

The first idea usually starts in local countries and later is considering and sharing in headquarter. Every innovation activity is supported by the team of experts from different countries. Every innovation team has his leader. In the company there are the following activities used for sharing knowledge inside company:

- different training activities (e-learning, audio-video tools),
- company and some other conferences,
- e-mail,
- internet – web searching,
- company's intranet.

It is necessary to truck all the possible initiative ways through the company. Communication channels have varying capacity for resolving ambiguity, negotiating different interpretations and facilitating understanding. The knowledge intensive work atmosphere of innovation teams suggests that all the initiative might be formulated and

discuss through all the possible channels (e-mail, intranet, face to face communication, meetings etc.). Experiences with the communication channels, the message topic, the organizational context and the participants shape how a person develops richness perceptions.

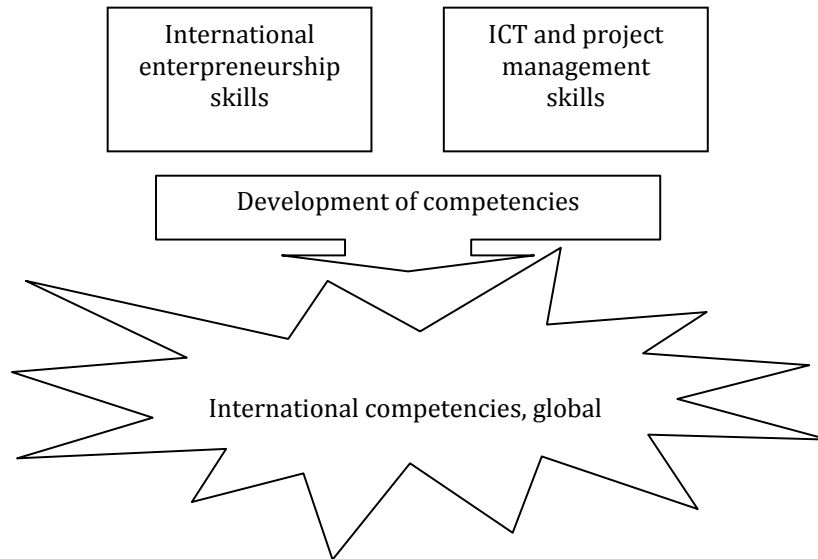


Fig. 2 Skills and tools to develop international entrepreneurship competencies

Source: own

2. Data collection and methodology

Von Zedtwitz [21] asked 14 international companies about the greatest challenges and issues for the managers involved in innovation processes. A content analysis of the 50 documented answers reveals that the two most cited issues are: implementation problems, knowledge exchange and ICT skills and knowledge. Perks and Jeffery findings also suggest that though a successful innovation network configuration theoretically involves recognizing, where the innovation value resides in the network and developing capabilities and mechanism to understand and access value; practically, this effort is problematic for companies embedded in their own base of knowledge and relationship patterns. Thus, the underutilization of international innovation teams still prevails, even though companies invested into ICT. This situation points out to the structural problems that impede the leveraging of expertise. Beuijerse [3] introduced nine possible knowledge streams within the organization:

1. determine the knowledge necessary,
2. determine the knowledge available,
3. determine the knowledge gap,
4. knowledge development,
5. knowledge acquisition,
6. knowledge lock,
7. knowledge sharing,
8. knowledge utilization,
9. evaluation of utilized knowledge.

Darroch J. and McNaughton, P. [4] identified three knowledge management components:

1. knowledge acquisition,
2. knowledge dissemination,
3. responsiveness to knowledge.

In this paper these 9 streams have been divided into 3 steps:

1. exploratory - generation of ideas (the 3 phases from above mentioned model): market research, customers satisfaction study, cooperation with customers for obtaining customer information,
2. development - feasibility study (4th – 7th),
3. industrialization - project authorization (8th - 9th phases).

Much effort is directed towards the second and the third stages of innovation process. These stages are supported by project management methods and software applications supported by team cooperation. The first step where it is possible to introduce new ideas has been left out. This early stage, often terminated before learning opportunities, has been fully explored. The questionnaire has been focused on the competencies of the individuals who play important role in knowledge processes in big international companies, and the relationship between individual knowledge sourcing activities and performances. As much as 35 respondents are from seven countries: Czech Republic, France, Italy, Hungary, Poland, Romania and China. In table 2 are the main results from the questionnaire.

Tab. 2 Results from questionnaire

Used information sources during exploratory	Tools and methods	%
1. Internet	Web pages of competitors, news, ...	100
2. Communication with customers	Meetings, e-mails, field researches	80
3. Fairs and exhibitions	Face to face meetings, internet	78
4. Company database	Internet, project management application	75
5. Specialized databases	Internet	74
6. Company meetings	Face to face meetings, video conferences, Intranet	73
7. Cooperation with universities or research institutions	Project management	52
8. Discussion with other managers about possibilities (feedback)	Groupware applications, Intranet	45

Source: own

Results of questionnaire indicate that some of information sources are not used quite often. The most frequent information source is communication with customers. Therefore the company should pay attention to customer relationship management through the whole company. From the results we can also see that using external sources and external cooperation are not used quite often. These sources and possibilities could be increased. The using of groupware application is not sufficient, and this can be one of the reasons that sometimes some ideas are invented in one country slowly, while they are used in other countries successfully. The reason is that information is not entered into company intranet.

Conclusion

Results of questionnaire and published researches indicate that it is necessary to use all the variety of knowledge together with the information sources and to share them with the colleagues in an intuitive way. Project managers should be trained how to share information with the appropriate colleagues. In international companies it is also necessary to facilitate the recording of knowledge and encourage effective sharing of it with colleagues, to map and monitoring knowledge processes, and results must be communicated effectively (see the feedback from Fig. 1). International managers have to facilitate individuals in their work and allow them to record information sources and the knowledge generated around them. The effective sharing with colleagues also needs to be supported to capitalize on the assets created by individuals and teams. Shared components of information should be stored in a generally accessible location and in an intuitive navigable form that allows easy location and retrieval of useful information. Through the alignment of the knowledge management, long term business goals, efficient using of information and communication technology and information sources the efforts help the companies to be successful. Allowing access of the right information, at the right time and in the right fields is one of the instruments of the competitive advantage.

Further author's research will be focused on using data mining techniques what can help profound and deep analyze different approaches in searching information during the innovation processes.

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Communication Strategies for the Generation 50plus, Exemplified by the Automotive Sector

Abstract

For a long time marketing, especially advertising, has been tailor-made for the so-called advertising-relevant target group at the age of 14 to 49. Only a small amount of gross advertising expectancy was expended to acquire elderly people. But amongst all European societies Germany is the one that is ageing the most/fastest. Due to decreasing birth-rates, an escalating life expectancy as well as a declining population rate the elderly will be numerically exceeding the younger generation in only a few years time, so that, for the first time in Germany's history, the generation 50plus is going to be the largest section of the population.

This also poses challenges for the German economy. Although the potential of the 50plus market is already well-known to enterprises, it seems problematic for them to utilize it. The distinctive heterogeneity of the generation 50plus, its high expectations and the apprehension of image and turnover losses among younger target groups when addressing marketing strategies at the elderly still decelerates the exploitation of this profitable market segment. Taking the line of the least resistance is therefore commonly preferred this very day, so that, albeit the demographic trend, marketing activities often are still focussed on younger target groups.

This raises the question which effects the demographic change should have on supply, service and communication strategies of the enterprises. It proves very difficult to include the age of consumers as a subject of communication. The term "senior marketing" has an unpleasant taste to it.

The authors furnish proof of the fact that the generation 50plus is of great importance for the marketing in the near future. Communication strategies, especially for a focussed advertisement for different elderly target groups, are recommended, exemplified by the automotive sector.

Key Words

generation 50plus, advertising, target group, age pyramid, automotive sector, demographic development, senior marketing, buying power index

JEL Classification:

M31, M37

Introduction

For a long time marketing, especially advertising, has been tailor-made for the so-called advertising-relevant target group at the age of 14 to 49. Only a small amount of gross advertising expenditures was expended to acquire elderly people. But amongst all European societies Germany is the one that is ageing the most/fastest. Due to decreasing birth-rates, an escalating life expectancy as well as a declining population rate the elderly will be numerically exceeding the younger generation in only a few years time,

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1. Demographic development in Germany – age pyramid and buying power indexes

Germany's population currently accounts for approximately 82 million inhabitants, 5.5 million less than only 30 years ago [1]. This is deeply rooted in a regressive birth-rate since the 1960s. According to that every subsequent generation of infants is one third lesser/smaller than the one of its adults [2]. With an average number of only 1.37 children per woman Germany, therefore, has one of the lowest birth rates globally. However, this far-reaching/drastic negative growth was balanced by an annual immigration overspill until 2002, whereby, excepted in 1998, Germany's population was increasing constantly. Certainly, the migration balance has been declining since 2003, so that, in 2007, the mortality rate exceeded the immigration rate by 98.381 people [3].

In the meantime life expectancy in Germany has further increased. According to the Federal Statistic Office, average expectation of life at birth is 76.9 years for newborn boys and 82.3 for newborn girls [4]. Compared to those, 100 years ago life expectancy was barely over 55. Consequently, the age structure of the population in Germany alters incrementally in support/for the benefit of the elderly and causes a significant shifting of the age pyramid (cf. chart 1).

Hence, the path towards a long life society is preassigned. This is best exemplified by comparing the quota of twenty-year-old and sixty-year-old people in Germany. While the quota of twenty-year-olds will decrease from currently 21 percent to 17 percent in 2030, the sixty-year-olds will, by then, account for already on third of the total population [5]. Additionally the annual birth rate is going to decline from currently

685.000 to 500.000 in 2050 due to a diminishing amount of potential mothers, so that there will be twice as many sixty-year-olds as newborn children [6].

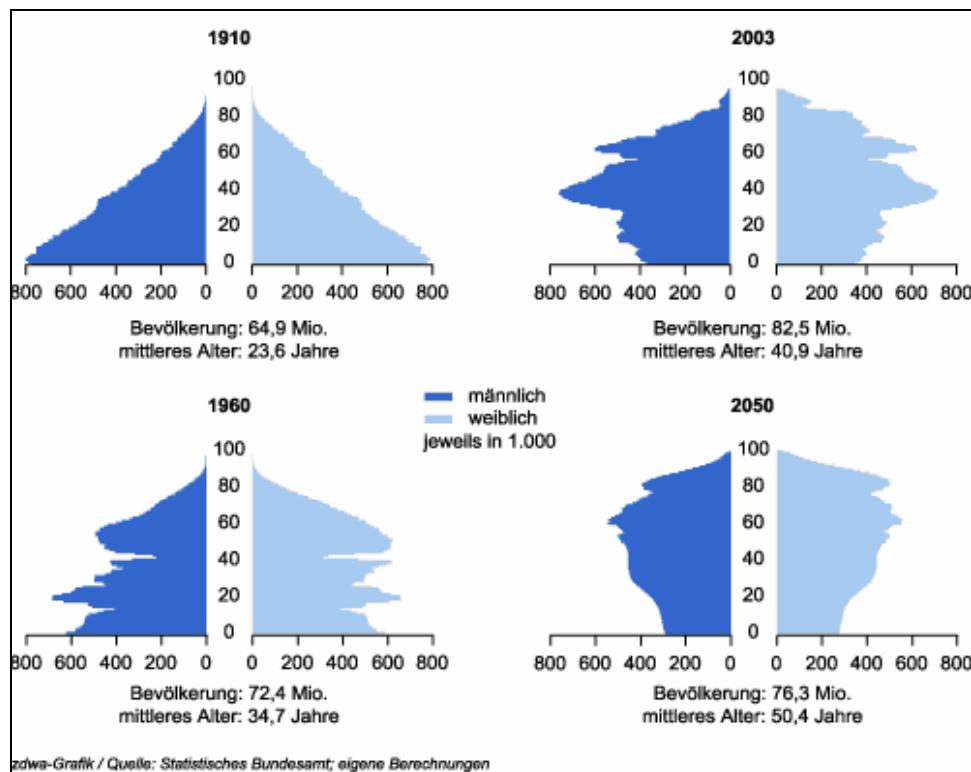


Chart 1 Age pyramid Germany

Source: Statistisches Bundesamt and own calculations

Beyond, the sixty-year-olds possess almost the highest buying power among all sections of the population in Germany. According to the German Institute for Economic Research their annual buying power accounts for 316 billion Euros, almost one third of the total consumption expenditures in the country. Due to the demographic development the quota will rise to almost 41 percent until 2050 [7], amongst the fifty-year-olds even up to approximately 58 percent. On the contrary, the under fifty-year-olds are going to lose six percent of the total consumption quota in the upcoming years [8]. For this reason the generation 50plus will be the most distinguished /outstanding target group in terms of consumption of the 21st century [9].

2. The generation 50plus – almost 50 target groups

According to demographic calculations the generation 50plus is going to be the solely growing market and aging (?) segment in the next fifty years. With currently thirty million consumers and further seven million within the next ten to fifteen years, the fifty-year-olds will be numerically the largest section of the German population [10].

However, this population group is as heterogeneous as no other and, hence, is deemed to be the most challenging market research group above all [11]. This is due to the fact, that the generation 50plus defines itself hardly by the age than by life styles and behavioural patterns. Although age-related interferences like recessive visual acuity or

hearing, physical deficits and sagging mechanical cognitive abilities occur, the biological age becomes less important for the generation 50plus. They feel on average about ten years younger than they actually are [12]. Still, the fifty-year-olds do not want to be perceived as a would-be forever-young-generation but rather as middle-aged people/people in their prime with maturity and sagacity. This is most notably by reason that the pragmatic cognitive abilities like general knowledge, know-how or vocabulary accelerate when individuals get advanced in years/with every additional year of age. Therefore the generation 50plus feels superior to younger people in terms of life experience, ability to judge, patience and social competence [13]. However, today's society basically knows two age images: the stereotype of the age as a deficit and the "forever-young"-stereotype [14]. These conceptualisations get first and foremost communicated by the (advertising) media and impress significantly the society's attitude. But the generation 50plus knows its value and expects a corresponding valuation. This point of view is also reflected in their life styles and behavioural patterns. However, due to the fact that the society's values have changed in time response arisen by reason of temporal occurrences and conflict attitudes between generations [15], also life styles and behavioural patterns which are closely connected to desiderata as well as attitudes and therefore determine the society's values, changed and new ideals, respectively intermixtures of new and old values emerged [16]. This has struck most notably the generation 50plus, so that this target group is as heterogeneous as no other. Thus, to reach the generation 50plus pinpointed and without any losses, modern market research methods do not only use formal characteristics like age, gender or income but additionally so-called psychographic variables which enable market-researchers to characterise individuals pursuant to their attitudes and moral concepts for drawing conclusions for their consumers' behaviour [17]. In this respect several major similarities were already constituted. According to that consumption captures an eminent significance in fifty-year-olds' lives. It does not only serve them as a very provisioning but rather as alternation in the daily routine and as a social interaction. Indeed, buying decisions are formed as habits as far as possible and are based on product experiences that have been achieved over the years [18]. Therefore, the complexity of information search and information processing is extremely marginal in contrary to impulse buying [19]. Therefore, these spontaneous and mentally hardly controllable buying decisions get primarily avoided not to risk incorrect decisions [20]. However, the generation 50plus also samples new goods/"gives other goods a try", preconditioned they get allured by evidentiary designation and a high degree of information. On the contrary senior consumers are less broad-minded in terms of shopping venues because they have a very strong consistency what this is concerned. This is deeply rooted in their high awareness in matters of quality, so that they frequent preferably user friendly places to shop [21].

Another eminent significance in fifty-year-olds' lives is the use of public media. Thereby televiewing has turned out to be the most important leisure activity. More than eighty percent aged between fifty and sixty-four and nearly 90 percent older than sixty-five spend their time with watching television every day [22]. Beyond that, an outstanding affinity exists for print media and the internet. This is due to the fact, that both can be used self-directed and at rest. According to a survey by the Allensbach Institute for Opinion research forty-nine percent aged between fifty and sixty-four and forty-four percent older than 65 read books, newspapers and magazines frequently given that they understand and keep things better they read than they merely watched in television

[23]. This advantage is also valued by the generation 50plus on the internet why they rank by now among the most strongly/the fastest growing target group in the World Wide Web [24].

3. Advertising for the generation 50plus – an empirical analysis

The generation 50plus pertains to the most eager users of all kinds of advertising [25]. However, advertising campaigns have been rarely successful yet on the grounds that expectations and desiderata of the fifty-year-olds are still insufficiently known. This cannot be disguised since the generation 50plus has a very long lasting consumption experience and therefore detects mistakes in commercials immediately. On this account reams of studies have been published concentrating on detecting the expectations and desiderata of the generation 50plus for a successful promotional communication. In conformity the results revealed, that advertising campaigns basically and essentially have to be authentic, faithfully and realistic. This does not mean showing a glorified life in retirement, an ideal world of an extended family, adolescent actors in antique look or exaggerated and insincere product promises. In fact, the generation 50plus values distinct, definite and informative messages having a well-defined coherence to the promoted product or service and its benefits [26]. Thereby foreign-language denotations and incomprehensible terms must be abandoned [27]. Moreover, messages that are explicitly addressed to ‘seniors’ as well as specifically concerted products and services for ‘seniors’ get rejected by the generation 50plus [28]. To perform services that strengthen the fifty-year-olds’ self-confidence and offer an emotional gain is rather favoured [29]. This is also due to the actors. For this reason the pictured individuals are supposed to be mature, authentic role models who have both life experience and a positive attitude towards life. A certain entertainment value is also favoured given that boredom and melancholy are objectionable. Still, humour and creativity need to be comprehensible the same as the commercial itself [30]. Conveying this into practice seems, however, a complicated undertaking for enterprises, so that only a few commercials can be referred to as appealing for the generation 50plus. In conjunction with that the advertising efforts of the automobile manufacturer AUDI are of relevance. Indeed, their success has not been proved yet why the authors of this article have decided to accomplish an empirical analysis in this regard.

3.1 Research design

There are miscellaneous methods in the empirical research work to attain cognition. Fundamentally, there are two different kinds of research areas: the quantitative and the qualitative method [31]. Quantitative procedures allow for objective and traceable descriptions of complex structures by making social circumstances measurable for applying them to a statistic analysis [32]. In this connection theoretical assumptions (hypotheses) are quite often determined in advance and get verified by means of the data. To warrant identical conditions for the development of the measured data within the study the quantitative research uses standardised research methods. In contrary qualitative research methods cannot be aligned with a standardised scheme but have to

be flexible designed due to the fact that special characteristics and attributes of a social area have to be measured as detailed/exact, differentiated and subject-proximal as possible [33]. Thereby, however, the sample size, objectivity and comparability of the results are limited, so that the authors decided to use the quantitative research method for the underlying empirical analysis. On the basis of a specific approach to research the target of the study was to generate, evaluate and analyse the preferences of individuals in regard to automobile advertising in television in general and their attitude towards pre-selected commercials from AUDI. Thus, the method of collecting data had to be a personal opinion poll given that in this connection the commercials could have been visualised and afterwards evaluated by dint of a given questionnaire. The questionnaire basically consisted of closed ended questions for general statements to automobile advertising and rating scaled evaluation sheets for the validation of the AUDI commercials concluding with soziodemographic data to age, occupation and net income. The pre-selected AUDI commercials had the following combinations:

- junior actor, serious story line
- senior actor, serious story line
- junior actor, humorous story line
- senior actor, humorous story line

Subsequently, adequate hypotheses could be devised. These are as follows:

- H₁: The generation 50plus does not differ from younger age groups in terms of the perception of and their response to commercials of the automobile industry.
- H₂: The generation 50plus ascribes the auto brand as well as the autotype a superior interest by trend than younger target groups.
- H₃: The generation 50plus favours with an increasing net income primarily commercials of up scaled German auto brands.
- H₄: The generation 50plus favours rather informative and authentic (serious) commercials.
- H₅: The generation 50plus differs considerably from younger target groups regarding the percipience of humour in commercials.
- H₆: The generation 50plus can be classified in (to each other) heterogeneous subcategories, so that multiple differentiated market segments can be determined within this age group.

The opinion poll was put into effect between October and December 2008 in Berlin, Stuttgart and Riesa with a sample of hundred randomly chosen individuals aged between 18 and 85.

3.2 Results and consequences for the marketing in the automotive sector

The examination of the underlying study resulted in some quite differing insights regarding the effect of automobile advertising in television on fifty-year-olds and the younger generation. Hence, there are no conspicuous differences in respect to the

perception of and the response to commercials of the automobile industry in general but in matters of single attributes like authenticity, information content and humour. According to that, the generation 50plus finds particularly authentic and informative commercials appealing and perceives humour in commercials differently than younger target groups. While most notably the respondents aged between 18 and 29 were made laugh by the AUDI commercials with the humorous storyline, the fifty-year-olds could not find much entertainment value. Still, they uprated the humour in the AUDI commercial with the mature actor, so that an orientation towards elder protagonists can be assumed. Beyond that, the above average brand affinity of the generation 50plus was conspicuous. While only forty-five percent of the respondents aged between 18 and 49 ascribed an superior interest to the auto brand or the auto type, sixty-six percent aged between 50 and 64 did, ninety-one percent of the respondents aged between 65 and 79 and yet hundred percent of the respondents older than 80 years. Additionally, the superior the monthly net income was the more respondents of the generation 50plus chose an up scaled German auto brand.

Subsequently, the fifty-year-olds could be classified into three heterogeneous subcategories pursuant to their perception of commercials in televisions (cf. chart 2). "The waverers" account for fifty percent of all respondents and, therefore, belong to the numerically largest group. They can be characterised as insecure concerning the evaluations of the AUDI commercials due to the fact that they basically evaluated those in the medium range. "The conservatives" belong to the second largest group and account for twenty-seven percent of all respondents. They can be characterised as consuetudinary due to the fact that they rated the adolescent commercials surpassingly negative. Last but not least, "the rationales" account for only twenty-three percent and yet the smallest target group. They can be classified as very eager for knowledge due to the fact that they focussed their evaluations essentially on the content of the AUDI commercials.

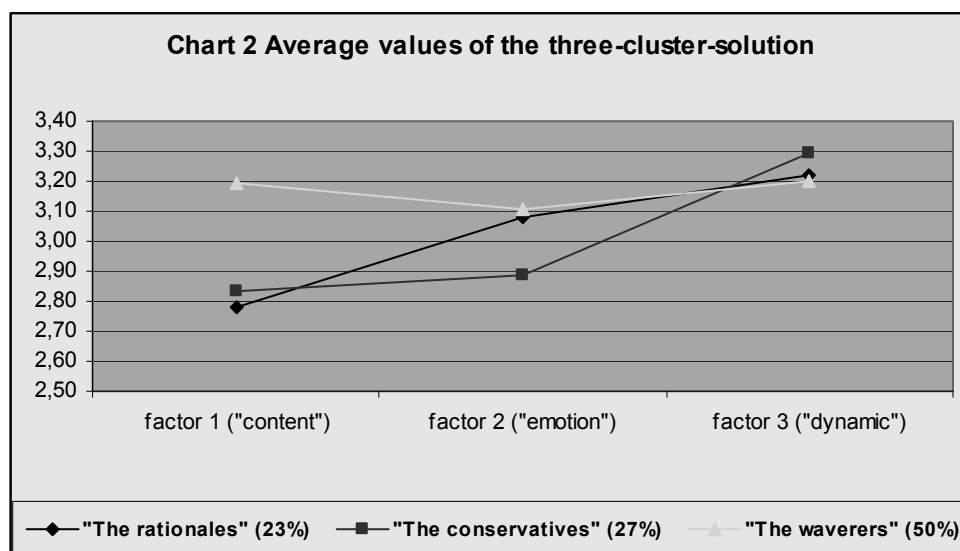


Chart 2 Average values of the three-cluster-solution

Source: Own Evaluations

From these insights it can now be arrived at conclusions for the marketing in the automotive sector.

The automotive market is notably vulnerable to economic changes and fluctuations due to its close economic ties within the value added chain. Moreover, the globalisation of and the glut on the markets as well as the increasing competitive pressure have shaped the automotive sector, so that particularly successful communication strategies are exceedingly important in this market [34]. In this regard the generation 50plus allegorises a very interesting target group. This is due to the fact that the maintenance and furtherance of the mobility is of high relevancy for the fifty-year-olds' life quality [35]. It constitutes an essential requirement for social contacts and procures a high degree of self-determination.

According to a survey by the Allensbach Institute for Opinion research the number of elderly drivers has increased drastically for the last twenty years, so that the quota of deliberate drivers aged between 70 and 75 rose from fourteen to forty-nine percent, of those aged between 75 and 79 from 0.5 percent to thirty-three percent and of those older than 80 from 0.5 percent to 22 percent after all [36]. Every second automobile already gets sold to a person beyond the age of fifty [37]. Thereby, new cars are favoured given that the generation 50plus is necessarily disposed to spend more money for quality. Correspondingly, enterprises need to be responsive to the preferences of elderly consumers by a clear and authentic market positioning and a product and service quality that hits the stringent expectations of the generation 50plus [38].

Moreover, the market bond in the automotive sector needs to be used for an integrated communication policy, so that the brand can be uniformly communicated, most notably since the brand awareness is a centric factor in connection with buying a car [39]. To strengthen the faith in the brand the automotive sector is additionally supposed to follow up crossmedia strategies. At this juncture several media channels can be used as communication media, including the internet as the most important medium of the future [40]. To avoid spreading losses the publication of advertisements in special 50plus media is also advisable. However, the designing should not be disregarded. Due to age-related interferences red colours are the most suitable for advertisements. Additionally they symbolise vitality, emotions and lust for life as well as attracting attention. The lettering is supposed to be well readable but should be accompanied by product visualisations [41].

However, besides the classic media dialogue oriented and promotional communication strategies gain incrementally in importance to achieve the marketing political targets, for instance, direct marketing, merchandising, sponsoring, participation of fairs and event marketing [42]. Particularly direct marketing and merchandising could be used in the automotive sector for developing new and target group-specific approaches.

Conclusion

Nowadays elderly people play an important and active role in the German society. Within the next decade, the generation 50plus will be numerically the largest section of the German population. It turned out that the generation 50plus is also of great importance for the marketing because of its high buying power and its inclination for shopping. For some time the economy has been realized that it has to adjust to this situation. But it seems to be a "mission impossible" to do advertising for products and

offers that were developed especially for elderly people and at the same time to avoid terms like "seniors" or "old" in commercials and spots. Therefore it would be a high achievement to represent the topic "age" more realistic in advertising campaigns. Because of their experience and their way of life elderly consumers as a rule have high quality requirements on products and services which are not easy to meet. It is also very difficult to do marketing for them as they are able to form their own opinions and won't be impressed by advertising promises without further proof. So the generation 50plus counts for the most difficult and heterogeneous target group at all. The elderly consumers are defined against others not primarily by their age but by their lifestyles, activities, interests and opinions. It's superfluous to point out that it is very complicated to get access to them by advertising.

Nevertheless the presented empirical study dealing with the effects of different TV commercials of the automotive industry on consumers produced some basic insights. It was possible to deduce measures and recommendations for the communication in the automotive market. Marketing for the lucrative target group generation 50plus should offer solutions that demonstrate acceptance of the age, reflect positively upon it and strengthen the self-confidence of the elderly.

As a result of the empirical analysis of the effect of the four TV commercials the fifty-year-olds could be classified into three heterogeneous subcategories. "The waverers" account for fifty percent of all respondents and can be characterised as insecure concerning the evaluations of the commercials due to the fact that they basically evaluated those in the medium range. "The conservatives" belong to the second largest group and can be characterised as consuetudinary because they rated the adolescent commercials surpassingly negative. "The rationales" - the smallest target group - can be classified as very eager for knowledge due to the fact that they focussed their evaluations essentially on the content of the commercials.

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The Roles of Currencies in the Process of World Economy Globalization

Abstract

For centuries, currencies have been seen; beyond their economic functions; as symbols of sovereignty. Today, in the environment of globalisation, they are often seen as symbols of the economic and financial strength of economic areas in an international context. Globalization and integration (which influence each other) substantially change economic relations: They increase trade and factor mobility between regions thereby fostering interregional competition and affecting the interregional division of labour. The process of financial globalization has brought a massive change in the economic landscape of all countries across the globe. The international role of currencies is measured by the share in global markets, in particular, in debt securities markets, international loan and deposit markets, foreign exchange markets, and international trade. The concept of the global roles of currencies combines the domestic and international (cross-border) use of currencies and therefore captures the overall importance of different currencies in a globalized economy. The measure of a currency's global role is based on the size and stage of development of the underlying economy, as well as the size and stage of development of its financial markets and the scope of financial instruments available in this currency. The quantitative results show, that the dollar is still the dominant global currency, followed by the euro. However, in comparison with the measurement based on the international debt market the yen and pound sterling switched ranks and a slightly larger global role is attributed to the yen.

Key Words

globalization, integration, international currency, international market, monetary functions

JEL Classification:

F36, G15

Introduction

For centuries, currencies have been seen – beyond their economic functions – as symbols of sovereignty. Today, in the environment of globalisation, they are often seen as symbols of economic and financial strength of economic areas in an international context. Economic integration is the process through which nations lessen the economic significance of their borders. It can take the form of pacts that reduce tariffs and other barriers, letting goods and services move more freely. It can take the form of investor protections that foster capital mobility or visa programs that help firms find willing workers. When goods, services, capital and labour can move to where they are most efficiently employed, economies can grow at faster rates than they otherwise could [6]. But increasing mobility of goods, labour and capital entails greater exposure to global economic pressure. Globalization and integration (which influence each other)

substantially change economic relations: They increase trade and factor mobility between regions and thus fostering interregional competition and affecting the interregional division of labour.

Financial globalization and financial stability is just one aspect of the entire process of globalization. The process of financial globalization has brought a massive change in the economic landscape of all the countries across the globe. Financial globalization has brought a remarkable change in intensive cross-border financial and cost flows, in international risk-sharing management with the help of an extensive range of financial equipment, in the rising stakes of cross-border properties, the flaring international profile in the financial stability of economic markets, and lastly in market operators and institutions.

It is a process by means of which financial markets of many countries are being integrated globally. Financial liberalization is not a sufficient condition for financial globalization. It is an aggregate concept that refers to a rising global linkage through cross-border capital flows. There are different forces such as governments, borrowers, investors and financial institutions that facilitate financial globalization. Governments allow financial globalization by liberalizing restrictions on domestic financial sectors and capital accounts of Balance of Payments. Financial globalization allows investors to achieve cross-country risk diversification. Financial institutions have also played an important role in globalization.

1. Theoretical Framework and Related Literature

The literature on the international role of currencies in capital markets is based on two key notions. First, a clear distinction between “domestic” and “international” is made; with the literature aiming at identifying strictly what “international” means in terms of currency use, focusing therefore on the degree to which a currency is used “outside its home country or issuing area” [2] [3]. Some authors define an international currency as the one used in “international transactions” [4] or, more specifically, that is used “outside its home country by non-residents for transactions with residents of the home country or with residents of third countries”[7]. Other authors differentiate between cross-border transactions and cross-border holdings of international assets and liabilities [8], but they aim at a strict differentiation between international and domestic use too. The second key concept in the literature on the international role of currencies in capital markets is the international debt market, defined as the market of issuances by non-residents of a currency area. The literature focuses on this market because it reflects the clearest delineation of international activity from domestic activity in capital markets. Accordingly, the market for equities, government bonds and non-international corporate debt are seen as domestic.

The concept of the global roles of currencies combines the domestic and international (cross border) use of currencies. The “global roles of currencies” reflect the general importance of a given currency in the world economy, and its position and significance in an international monetary system. This concept does not attempt to distinguish between “domestic” and “international”, but encompasses both dimensions and therefore carries the label “global”. It assesses the overall status of a currency and its

financial markets in the global economy. The measure of the global role of currencies is based on the magnitude and stage of development of various financial market segments that are open to a given currency. The quantification is based on size indicators and structural indicators related to the currency's financial markets and the underlying economy. [10]

2. The international role of currencies

An international currency is the one that is used by the residents of countries that are not the country of issue. International currencies as well as national currencies fulfil three functions: a means of payments, a unit of account and a store of value. According to Krugman [5], these three functions can be subdivided into six, if the use of the currency by private and public sectors is taken into account (Table 1).

Table1: The functions of the international currency

Functions	Private sector	Public sector
Means of payments	Vehicle	Interventions
Unit of account	Denomination	Anchor
Store of value	Portfolio allocation	Official reserves

Source: Krugman (1991)

As a means of payments, an international currency is used by non-residents for trade and capital flows. Private non-residents use an international currency as a vehicle, i.e. as an intermediate value in transactions between two smaller currencies. The monetary authorities also use international currencies as means of payments, when they intervene in the foreign exchange market. As a private unit of account, an international currency is used to invoice, i.e. to set the price of goods and of assets, as well as when issuing bonds or defining a bank loan. This function is different from the means of payments function, since prices may be set in one currency, and payments in another. National authorities can also use the international currency as a unit of account, when they peg their currency to it. As a store of value, an international currency is used both by the private sector and by the public sector to maintain the value of savings. The motivation of private investors is an optimal trade-off between return and risk diversification. The motivation of the public sector differs according to the exchange rate regimes. It can resemble private holder's optimisation, or be devoted to exchange rate management.

The private and public functions of a specific international currency can develop differently: a specific international currency can be chosen as a vehicle for transactions and be seldom used for public interventions in the foreign exchange market. A large part of the trade of a country can be invoiced in a specific international currency, but this currency does not need to be chosen as a monetary anchor. Finally, official reserves will be denominated in a specific international currency only if monetary authorities want to stabilise the exchange rate against this currency, whatever the composition of private portfolios is. However, there are synergies between the various functions of an international currency. These synergies use various channels (Fig.1):

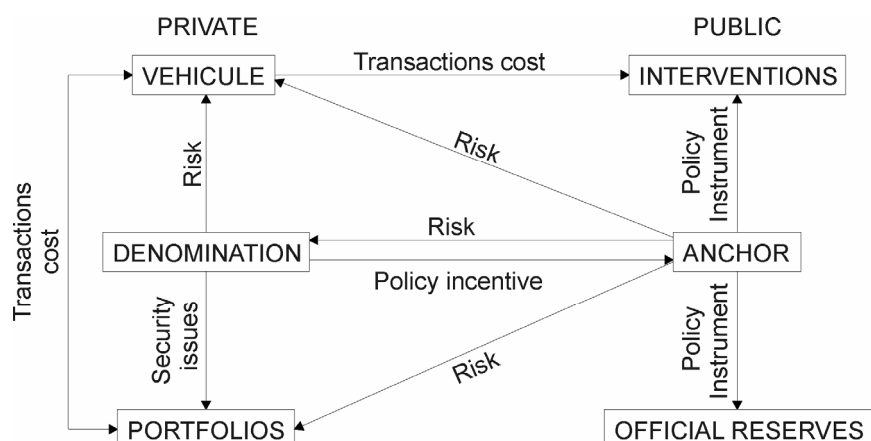


Fig.1: The main synergies between the functions of an international currency

Source: Mojon [9]

The international roles of currencies are measured by the share in global markets, in particular debt securities markets (Fig.2), international loan and deposit markets, foreign exchange markets (Fig.3), and international trade.

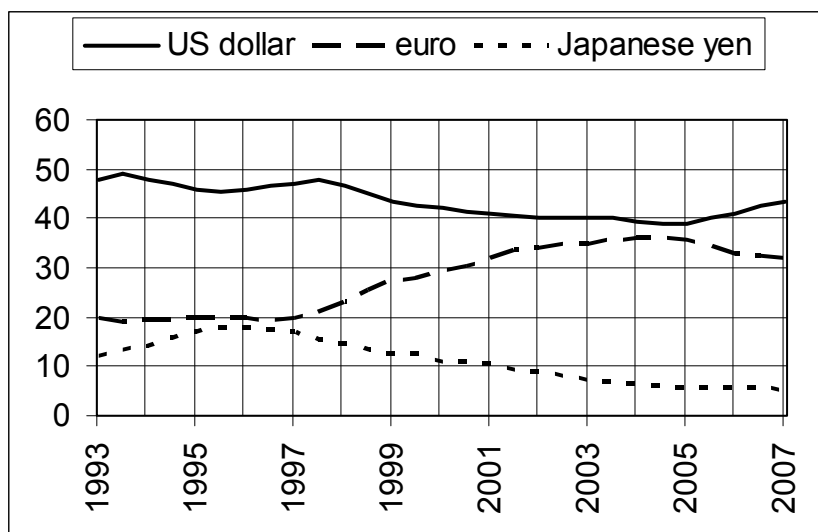


Fig.2: Stock of international debt securities: currency shares (as a percentage of the total amount)

Source: BIS [1]

In international debt securities markets, the euro's share declined by around 1 percentage point, reaching 32.2% in December 2007. This decline was caused by a relative fall in the short-term segment, i.e. money market instruments, whereas the euro's share marginally increased in the gross issuance of international bonds and notes. The financial market turmoil may possibly explain the decline in the relative share of the euro in the short-term segment. On the contrary, the US dollar's share rose to 43.2% at the end of 2007. The share of the Japanese yen remained stable at 5.4% in 2007.

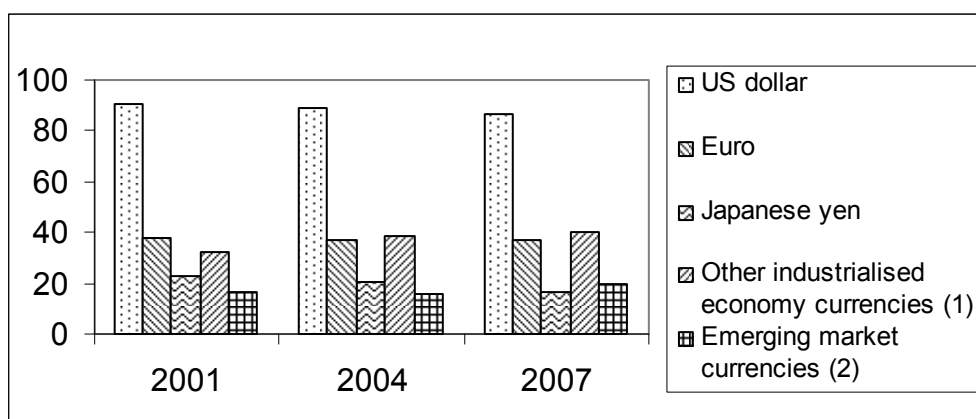


Fig.3: Turnover in traditional foreign exchange markets, currency breakdown (percentages)

(1) AUD, CAD, CHF, DKK, GBP, NOK, NZS, SEK

(2) Difference between 200%, and the shares of AUD, CAD, CHF, DKK, EUR, GBP, JPY, NOK, NZS, SEK and USD. This may include some currencies of industrialised economies not reporting separately. Although their shares are likely to be rather small, the figures reported should be seen as an upper bound.

Source: ECB [2]

Similarly, the use of the euro remained broadly unchanged in *foreign exchange markets*. Data on foreign exchange trades taken from the Continuous Linked Settlement (CLS) system indicate a slight decline in the average share of the euro in daily settlements, from 39.1% in 2006 to 37.8% in 2007. More comprehensive survey data compiled by the Bank for International Settlements (BIS) suggest that the euro was used in approximately 37% of all foreign exchange transactions in April 2007, which is broadly comparable to the figures obtained in the last survey three years ago. Over this three-year period, the shares of the US dollar and the Japanese yen decreased by 2.4 and 3.7 percentage points respectively, largely to the benefit of emerging market currencies, possibly reflecting these countries' increasing trade and financial integration in the global economy.

3. The global role of currencies

Discussions and academic contributions on the international role of currencies express two basic attitudes. The first attitude deals with the general importance of a given currency in the world economy, and its position and significance in the international monetary system. The second attitude focuses more narrowly on the cross-border use of currencies, analysing which currencies are used outside their home constituencies, by what type of economic agents and for what purposes. One can usefully label the first attitude as the "global role" of currencies, reflecting the position and importance of a currency in the global economy, while the second attitude can be labelled as the somewhat narrower "international role", reflecting the use of a currency outside its constituency of issuance. Both concepts can be interrelated: currencies that are used heavily outside their constituencies are more likely to play an important global role and, conversely, currencies that are globally important are likely to be used more heavily outside their own constituencies. Nevertheless, both notions are conceptually distinct;

they are not necessarily driven by the same factors and do not necessarily have the same policy implications. Despite the conceptual distinction, however, both concepts have largely used the same quantitative basis so far, namely the use of currencies in the international debt securities market. Although other indicators – such as shares in the foreign exchange reserves of central banks – are sometimes used as well, the respective currency shares of securities outstanding in the international debt market remain the most adequate quantitative measure used to assess the international role of currencies in global capital markets.

The concept of the global roles of currencies combines the domestic and international (cross border) use of currencies and therefore captures the overall importance of different currencies in globalized economy. The measure of a currency's global role is based on the size and stage of development of the underlying economy, as well as the size and stage of development of its financial markets and the scope of financial instruments available in this currency. In relation to financial markets, size indicators include the amount of assets, instruments and turnover; structural indicators focus on the regulatory quality or the absence of barriers. For the underlying economy, size indicators include the share in global GDP and trade. Four main markets are considered: debt securities, equity securities, interest rate derivatives and foreign exchange markets. All four markets are massive, even when compared with global GDP. Structural indicators relate to macroeconomic stability and the institutional environment. Structural indicators mostly reflect the result of direct policy choices. This is the case of many indicators relevant for the regulation and supervision of financial markets, but also for the degree of state involvement in financial markets – for example, through government owned or government-sponsored financial institutions. Structural indicators are important policy variables that are likely to have an impact not only on domestic financial market development but also on the role of international actors. (Table 2)

Table 2: Selected indicators for a measure of the global role of currencies

Size indicator	Structural indicator
Size of economy - Share in world GDP in current prices (%) - Share in global trade (imp+exp, %)	Financial market regulation - Access to equity
	Size of state - Property rights - Freedom of corruption
Size of financial market - Indicators of Debt market (in bn USD) - Indicators of Stock market - Indicators of Derivates market - indicators of Foreign exchange (FX) market	Monetary issues - Central bank independence - Inflation volatility
	Trade barriers (Goods and Finance) - Freedom of regulatory trade barriers - International capital market controls

Source: Thimann [10] ; adapted by author

The various size and structural indicators can be combined into one single indicator which would yield one measure of the global role of currencies. [10]

The global role indicators are then used to examine empirically international cross-border holdings of debt and equity securities. The empirical findings show that in addition to standard gravity variables, the indicators of a currency's global role help to explain cross-border financial integration. The global role of the domestic currency is

positively related to bilateral cross-border holdings of financial assets. A comparison between the global role and the established international role shows that the global role outperforms the international role in the explanation of cross-border holdings. Hence, the empirical findings lend support to the global role concept as being relevant for understanding of financial integration; from a policy perspective these findings are in line with the intuitive conjecture that financial market development facilitates international financial integration. The quantitative results show, that the dollar is still the dominant global currency, followed by the euro and yen (Table 3).

Table 3: The “global roles of currencies” based on size and structural indicators (percentages)

	Advanced economy currencies	US dollar	Euro	Japanese yen	Pound sterling	Emerging market currencies
Global role measure	88,8	38,7	27,0	8,6	7,1	11,2
Adjusted global role measure	93,5	41,2	27,7	9,2	7,5	6,5
Established international measure	97,1	44,3	31,3	5,3	9,3	2,9
Global role measure by country groups	100	43,7	30,4	9,9	7,9	
Size indicator US=100		100	66,8	25,3	18,8	
Structural indicator US=100	96,2	100	104,2	89,5	96	70,5
Capital account openness	99,6	100	96,6	100	100	45,6

Note: The adjusted global role measure takes account of financial markets openness, which is shown in the last column. (normalized to 0-100)

Source: Thimann [10]; adapted by author

The weight of the dollar and euro both shrink compared with their pure “international role”, but their relationship – whereby the euro reaches about 70% of the dollar’s value – remains unchanged. This illustrates that the international transactions have been heavily concentrated on these two currencies so far. The US dollar is clearly the leading global currency, with a global share of 38.7%, well above the share of the US economy, which reflects the size and structural stage of development of US financial markets. The Japanese yen’s global concept plays more important role than the international concept due to the larger domestic financial market in Japan.

The concept of the global role of currencies can enhance the policy discussion on the general importance of certain currencies in the global economy. For example, as far as the US dollar is concerned, the global role concept underscores its attractiveness as the leading global currency, resulting from the economic strength and governance framework of the underlying economy and the size and stage of development of its financial markets. The key pillars of the global role of the dollar are the size and liquidity of US equity markets, the amount of debt instruments issued by financial institutions and corporations, and the leading role of the US dollar in global foreign exchange markets and reserves.

The role of the euro will continue to rise as a result of enlargement of the EU – which will gradually add to the global economic weight of the euro area – and, more importantly of financial development and integration within Europe. In recent years, the growing corporate bond market, the increasing role of equities in external financing and the development of the money market have been important steps in this process. The difference between the underlying financial markets available to the US dollar and the euro is particularly pronounced in the equity market and the foreign exchange market; within the debt market, the government segment is broadly comparable, but the difference is large in terms of debt issued by financial institutions. Moreover, the euro's segments in the derivatives markets are getting larger, reflecting a very advanced stage of financial development, especially with regard to derivatives on government securities that are heavily used by foreign investors.

Finally, the global role indicator sheds light on the relative position of the currencies of emerging economies. These currencies have been largely neglected in the established analysis of the international role of currencies since they play virtually no role in global foreign exchange reserves and are not used in the international debt securities market, which is dominated by European and US financial institutions and corporations. However, owing to domestic financial market development, the stabilization of the economic policy, regulatory frameworks and the opening-up of markets, they are beginning to play a more significant role in the global economy than in the past.

4. Policies

There are a number of benefits for a country if its currency is used internationally. It enlarges the scope of issuers and investors and may thus lower borrowing costs and ultimately facilitate balance of payment financing. The increasing demand for money creates seigniorage revenues, and is likely to bring more business for the country's banks and other financial institutions. International use of the currency will foster economic and financial integration with the rest of the world, which can boost trade and potential growth. The use of a currency in key markets for commodities or trade invoicing will shift exchange rate risk to third countries and insulate the economy against exchange rate fluctuations. There are even arguments that international currency use will improve a country's terms of trade through externalities and lead to an increase in the purchasing power of the currency. [4] Finally, the benefits include political power and prestige. However, international currency use also entails costs. The increasing demand for money is likely to raise volatility in money demand, especially if foreign shocks are unknown and different from those affecting the home country. With the advancing statistical reporting, most central banks are able to separate out foreign demand for money, but with regard to some components, such as cash, uncertainty remains. International currency use can also have an impact on financing conditions in a way that is, at times, undesired. Benefits and costs are not equally distributed within an economy. International currency use is likely to be of particular benefit to the financial industry, the real economy and the fiscal authority. By contrast, the costs, which can arise if the extent of international currency use relative to the size of the home country is high, are mainly concentrated at the central bank; they include issues such as a potentially lower control over monetary and financial aggregates, and a possible blurring of responsibilities.

The indicators used to measure size and structural developments contain information that is also relevant from a policy point of view. Policy variables included in the concept are: the opening of an economy to international trade and capital flows, the development of the domestic financial market in terms of instruments, regulation and oversight, and the credibility of the overall policy framework. Therefore, the respective shares of the global role of currencies are useful indicators for global investors and the underlying components of this concept are useful indicators for policy-makers.

Conclusion

The international roles of currencies are measured by the share in global markets, in particular, in debt securities markets, international loan and deposit markets, foreign exchange markets, and international trade. The concept of the global roles of currencies combines the domestic and international (cross border) use of currencies and therefore captures the overall importance of different currencies in a globalized economy. The measure of a currency's global role is based on the size and stage of development of the underlying economy, as well as the size and stage of development of its financial markets and the scope of financial instruments available in this currency. The measure is based on size indicators and structural indicators relating to the currency's financial markets and the underlying economy. A comparison between the global role and the established international role shows that the global role outperforms the international role in the explanation of cross-border holdings. Hence, the empirical findings lend support to the global role concept as being relevant to the understanding of financial integration; from a policy perspective these findings are in line with the intuitive conjecture that financial market development facilitates international financial integration.

US dollar is still the leading global currency, resulting from the economic strength and governance framework of the underlying economy and the size and stage of development of its financial markets. The role of the euro will continue to rise as a result of the enlargement of EU – which will gradually add to the global economic weight of the euro area – and, more importantly, of financial development and integration within Europe. The Japanese yen's global concept plays more important role than the international concept due to the larger domestic financial market in Japan.

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The Statistical Outcomes in the Airport as a Tool of Decision-Making and Management Process

Abstract

A thorough statistical treatment of airport generated data is the basis for more effective management and decision-making process in the airport. On the real, but anonymous data we show an example of processing some airport and air traffic data and subsequent we use them for airport security.

These outputs can be used for creating a deeper analysis and specific recommendations for organizations operating in the airport and improve their decision-making and management process.

The article describes the problems that were needed to be addressed with the data obtained before we can use them as input file for the analysis.

From the following adjusted data it can be obtained from a number of other relevant information which can also be effectively used in the management and decision making process in the airport.

Alternative evaluation of other statistics and characteristics listed files will be presented later.

Key Words

flight delay. flight analysis. Košice Airport. airport safety. airport activities

JEL Classification:

C02, C69, C59, M15

Introduction

The statistical treatment of data, which are recorded in the airport, and the defining of statistical outputs are the basis for effective management and decision making in the airport environment. In the first chapter we briefly describe how we have to process the provided data and we outline problems that have occurred in their processing. The second chapter presents some basic Outputs which we create from these data. All data are transformed into anonymous marks to protect the names of airlines which are required from the airport. The third chapter describes how these data can be used in management and decision making process in the airport. We mainly focus on the security operation of the airport but we also outline other potential uses.

The data show the period from January to December 2008. The works [1] [2] also discuss about data processing from the airport. In these works the data are processed only for the time period from January to October 2008 because at that time data for the

last two months of 2008 were not available yet. In this work we do not make the analysis of all characters and all the features. We focus only on those that are subsequently used for creating models for the management and decision making process.

1. Data processing technics

Provided data are quite extensive thus they require preparation for further processing. The data have 11 980 rows and each row provides 44 records. This means that we have received more than a half million data.

A precise description of the data is presented in previous articles which are focused on the issue of flights delay [1] [2]. We excluded 742 rows that did not contain information about the scheduled departure or arrival and the actual time of departure or arrival from these records.

Provided data include among other following characteristics:

- DATE - the date, when record has been made,
- CARRIER - the name of the airline, which took the listed flight,
- FLIGHT NUMBER - flight number,
- ARRIVAL - Boolean value that determines if this flight was the arrival flight,
- DEPARTURES - Boolean value that specifies if this flight was the departure flight,
- STM - time of arrival, respectively departure, which is given in hours and minutes,
- ATM - the actual time of arrival, respectively departure, which is also given in hours and minutes,
- DL - delay of the aircraft (flight) in minutes.

We identified following results:

- The expected value of time deviation from the scheduled time of arrival respectively departure in minutes.
- The expected value of time deviation from the planned time of arrival.
- The expected value of time deviation from the planned time of departure.
- The expected value of time deviation from the scheduled time of arrival, respectively departure, with respect to flights made by individual airlines.
- The expected value of time deviation from the scheduled time of arrival for flights made by the individual airlines.
- The expected value of time deviation from the planned departure time for flights made by individual airlines.
- The expected value of time deviation from the scheduled time of arrival respectively departure in view of the day of the week.
- The expected value of time deviation from the scheduled time of arrival respectively departure in respect of the current month.

- The expected value of time deviation from the scheduled time of arrival respectively departure with respect to flights divided on scheduled flights and charter flights.
- Variances and standard deviations for the samples.

While analyzing the data, we focused mainly on analyzing the temporal time deviation that arose in the execution of each recorded flight to delay the planned range and arrivals in the Košice airport.

These deviations for each flight we had to calculate firstly and enter the additional data to existing dataset for all records in that period. If it was a delay (i.e., the aircraft landed respectively took off later, as the flight was scheduled), we entered the time delay with a positive sign. If flight took off or landed earlier before its scheduled arrival (departure) time, we entered that time difference for all records with a negative sign. After the creation of additional records we had to identify the flights which have not been realized. These records had to be omitted and we do not use them for further analysis.

The processing of the data was made at the request of the Košice airport. These data have not yet been processed and the statistics published on the web site of the airport do not process these results. Partial results can be found in works [1] [2].

2. Received basic outputs

We marked the airlines by symbols AIR-01 - AIR-20, when first 19 marks mean the airlines with biggest market share on Košice Airport and AIR-20 groups all other airlines with smaller market share.

Tab. 1 Average time deviation (in minutes) regarding airlines

Airlines	Arrival	Departure	Arr + Dep	Airlines	Arrival	Departure	Arr + Dep
AIR-01	27,26	39,74	33,52	AIR-11	13,61	13,45	13,53
AIR-02	40,43	26,04	33,23	AIR-12	10,18	13,82	12
AIR-03	24,31	29,96	27,13	AIR-13	-0,26	21,42	10,58
AIR-04	18,12	33,35	25,69	AIR-14	11,65	8,22	9,9
AIR-05	24,11	23,93	24,02	AIR-15	4,19	14,69	9,44
AIR-06	9,26	32,75	21,31	AIR-16	9,19	2,6	5,89
AIR-07	18,35	22,52	20,43	AIR-17	-1,35	10,02	4,33
AIR-08	17,18	18,4	17,79	AIR-18	2,9	3,49	3,2
AIR-09	15,63	13,49	14,56	AIR-19	-2,23	1,15	-0,54
AIR-10	14,54	14,34	14,44	AIR-20	19,16	18,17	18,66

	Arrival	Departure	Arrival + Departure
TOTAL	7,52	10,05	8,78

Source: own processing

We found out that average value of delay of flight for arrival or departure flights is over 8 minutes. Landing aircrafts have average delay about 7,5 minutes and taking off aircrafts have average delay over 10 minutes. The values of deviations from the planned

time for each airline are shown in table (Tab. 1). We can see that the differences between airlines are significant.

In table (Tab. 2) there is survey of flight delay in respect to day in week.

Tab. 2 Average time deviation (in minutes) regarding weekday

Day	Arrival	Departure	Arr + Dep
Monday	8,47	10,73	9,56
Tuesday	7,89	10,96	9,43
Wednesday	5,90	10,87	8,37
Thursday	6,95	8,42	7,68
Friday	9,95	12,33	11,18
Saturday	6,72	6,38	6,54
Sunday	5,37	8,23	6,72
TOTAL	7,52	10,05	8,78

Source: own processing

In table (Tab. 3) we show the survey of flight delay in respect to month of year.

Tab. 3 Average time deviation (in minutes) regarding month of year

Months	Arrival	Departure	Arr + Dep
January	2,64	9,88	6,24
February	-1,55	4,04	1,27
March	-0,45	5,93	2,76
April	5,62	6,12	5,92
May	5,31	7,04	6,22
Jun	11,54	11,55	11,69
July	9,62	11,33	10,51
August	6,77	8,82	7,87
September	8,41	8,11	8,33
October	7,46	7,66	7,69
November	7,19	6,84	7,01
December	12,38	8,16	10,26
TOTAL	7,52	10,05	8,78

Source: own processing

We also monitor the temporal statistics of flights from the perspective of the target location (Tab. 4), respectively initial airport in the Schengen area or out of the Schengen area (nonSchengen).

Tab. 4 Average time deviation (in minutes) regarding target location

	Arrival	Departure	Arr + Dep
nonSchengen	13,87	17,39	15,60
Schengen	6,35	8,62	7,49
TOTAL	7,52	10,05	8,78

Source: own processing

In table (Tab. 5) we show the time deviation in respect to scheduled and non-scheduled flights and international and domestic flights.

Tab. 5 Average time deviation (in minutes) regarding type of flight

Type of flight	Arrival	Departure	Arrival + Departure
Domestic Schedule (DS)	-3,88	5,48	0,79
International Schedule (IS)	7,24	6,12	6,68
Domestic nonschedule (DN)	11,80	18,04	15,06
International nonschedule (IN)	18,10	19,93	19,01
TOTAL	7,52	10,05	8,78

Source: own processing

3. Characteristics utilization for airport safety

Security at the airport is very important. One of the factors that helps improve the security and safety in the airport is also the ability to estimate the time of carrying out the airport activities. These activities, which are carried out at the airport, are defined by plan. These activities include maintenance of Airside, inspection of aircraft and others. Analysis of time arrivals and departures can be used to estimate the deviations of specific flights, and to adjust the plan realistic assumptions. More real time implementation of these activities will lead to less amount of downtime. As can be seen on the above results in some cases we have seen the systematic occurrence of delays. In this case, it is possible already in the planning process of these activities include this fact into time plan. As another very important aspect of time-use analysis of flight we can determine the activities of security services. Given the schedule of flights and their species based on the analysis it is possible to plan the activities exactly. Thus may prevent the possible problems in relation to the passengers. Inspections are not carried out only in the aircraft immediately after the landing and getting off the passengers and other personnel but also throughout the Landside. Also, the airport may well instruct the passengers especially with regard to charter flights, which systematically give delays. The aim of the airport management would be to check the best estimate the real-time of airport operations for the flights and thus eliminate possible sources of downtime or other security and safety problems.

Specific examples of ways of using the data provided for the benefit of other organizations and companies that are not part of the airport are the taxi and urban transport. The provision of selected processed statistics for dispatching of taxi can help for better planning of filling positions at the airport, so as not to unnecessary downtime, while the taxi was the highest usefulness. Similar situation is with the plan runs of regular urban transport, which provide transport between the airport and town. If the transport company has such information, it can flexible adapt the corresponding Schedule bus lines in time. It is envisaged to increase the effectiveness of transportation to those destinations.

An example of minimizing security risks within the premises of the airport is also planning visits to service ATMs that are located in the arrival and departure hall. When handling security with cash, which is updated to the individual machines come to the

place, it is necessary to ensure the least risk of slippage. One of the requirements of minimizing the risk is count of civilians in the hall, when we want the minimum count of civilians. Planning such time window is done on the basis of the arrivals and departures, but based on our research we can say, that plan and the reality is not often the same and therefore the security agencies (mostly to the services hired by bank institutions) on the basis of such information can better plan for the service to visit to minimize the likely number of civilians present in the arrivals hall and departure airport.

Conclusion

The results in the second and third chapter give us an initial image how the time deviations are depended on the different measured characteristics and how they influence the safety and security in airport. Based on the processed data we can choose the next steps of these data analysis and the other steps to assign the security. Similar analysis of data of flights we can find also for airports Chicago O Hara and Schiphol [3] [4]. These publications include similar approach for data analysis, but the results are adequate to airport size, which they describe. Six Sigma can be used for gaining the better level of security and safety in airport. We can do this as is written in publications [5] [7] Economic impact of flights analysis is very important in additional analysis. [6] From processed data we can see that positive deviation preponderates before negative deviation, which means that flights have delay in more times before the situation when flights come or take off earlier. We can see strong difference in case of analysing data concerning the type of flights. The Schedule flights indicate more negative deviations ahead of positive deviations. This parameter could be analyzed in detail. Also the economic impact of delay is in existence of downtime. The delay of flights can be estimated and we can improve the planning of airport activities which are describe higher.

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Selected Optimization Procedures in the Airport as a Regional Development Foundation

Abstract

To thrive and operate the airport as an integral part of the region it is necessary to have a secure and safe airport operation. In this article we briefly outlines some aspects of airport safety operations optimization and refer to the possible ways of dealing with the mentioned problems.

For developing a mathematical model, we exploit the discrete model to represent the environment in which we used tools of discrete optimization.

One important optimization tool is also a function of purpose. We use special types of dedicated functions which used operators max, min and Σ . Moreover, the shape of these functions consists of a combination of these operators which are calculated over the pre-defined disjoint sets.

This alternative approach to the known problems brings alternative results that can be used in decision-making and management process.

Key Words

optimization, airport, regional development

JEL Classification:

C02, C69, C59

Introduction

For the prosperity of the airport and its operation as an integral part of the region it is necessary to ensure safe operation of the airport. Airport security is a relatively large area of operations that are necessary to perform and how they are diversified in our article briefly outlines some aspects of airport operation and safety. We will point out the possible ways of dealing with the mentioned problems. We focus only on some forms and ways of ensuring security. They model a possible way how to make airport security efficient.

For the creation of a mathematical model, we used the discrete structure, which represents the basic schematic protection of airport security environment. Thus created discreet model we used the means of discrete optimization.

One important mean of optimization is also a function of purpose. We use special types of dedicated functions, using operators. Moreover, the shape of these functions consists of a Σ , max, min and combination of these operators, which are calculated over the pre-

defined disjoint sets. This alternative approach to the problem brings alternative known results that can be used in decision-making and management.

1. Safety Requirements for the Protection of Airport

Among other activities, and ways of ensuring it is important to follow the entire circumference of the airport and surrounding areas. To control individual objects, flight surfaces and limit the airport is essential to protect against ground attacks from outside the airport to aircraft and aerospace ground equipment. The protection of airports, aircraft and ground equipment must be organized according to continuously updated plan. The defence plan should be developed for each object separately, based on the conditions in which the object is located, as well as its function, importance, and many other aspects.

Airport operator, in co-operation with other bodies involved must be defined and labelled at the international airport of its public part, part of the flight and airport security restricted areas.

The public part of the airport is also part of the airport, which form the adjacent terrain and buildings or parts that are not part of the airport flight. Everything that is outside the airport boundary fence forms part of the public. Surveillance of the public part of the airport is conducted using technical equipment (mostly to the monitoring system of the airport), and physically, in the form of non-walkers or motorized patrols.

Flight is the kinetic part of the airport area of the airport, together with the adjacent terrain and buildings or parts thereof, in which entry is restricted.

Security restricted areas are those areas of airports, which are identified as the highest-risk areas, which are used in addition to access control and other controls in order to ensure civil aviation security. Such spaces, among others, typically include facilities for departing passengers between the place of business aviation screening after entry into the aircraft bay, including those areas in which the aircraft entered into service containing checked baggage and cargo, packing luggage, cargo warehouses, postal centers and facilities for catering and cleaning aircraft. Access to security restricted areas shall be controlled in accordance with the procedures set out in the airport security program and the establishment of the airport determining mode of entry and the entry of vehicles. Any security designated as a restricted area must be separated from public space by natural barriers. This area must be inspected at irregular intervals by the airport operator.

Security system for the protection of civil airports, aircraft and ground installations in its completeness is made up of a combination of four basic types of protection:

- Physical protection
- Conventional protection
- Technical protection
- Protection mode

Protection of important objects airport shall be conducted in three areas:

- Outer Ring
- Middle Ring
- Inner Ring

We will describe in more details the physical protection of the airport and various protection circuits for implementing the airport premises.

Physical protection of the airport represents an immediate protected object guarding individuals. Organize a high level of physical protection of the airport is essential for high efficiency of all other types of protection. An important feature of this type of protection is that, under the circumstances, may act against the threat, it can eliminate the attack; take action to avert the danger. The practical activity is carried on in more natural forms of protection - on the ground, patrol, security surveillance, accompanied by security.

The public area of the airport consists of the interior parts of terminals and external spaces. In both areas it is of physical surveillance and supervision by technical means to observe suspicious behaviour of persons, to identify vulnerabilities that could be used to carry out an act of unlawful interference, and to discourage people from committing such acts.

Custom Protection Division carries out airport protection, which is part of the organizational structure of the airport and in accordance with Law No. 473/2005 Z. z. for the provision of services in the field of private security and amending certain laws, provides the flight part of the airport and at places that are owned and the airport, protect the assets of the airport. At the same time contributes to the safety of air traffic and to ensure order and security in the territory of a public international airport.

Physical protection is carried out in the airport, which security is implemented in the above three basic lines. The following brief specification of the aforementioned three lines.

Outer circle - outer radius of the border are usually only marked by warning signs or other signals. The main purpose of such measures is to warn against entry into the hotel zone. The territory for this threshold should be monitored through various technical means and sensors, either secretly or contrary way. Often uses a combination of hidden and clearly visible means of security protection. The monitoring is to ensure offenders and early warning of the physical protection of the airport. Boundary separating the outer and middle circle should consist of various mechanical barriers, the most common fence, the mechanical function can be strengthened by means reacting on try to overcome or damage.

Middle Ring - Middle Ring itself can be divided into several zones, which should operate according to the intended protection of the natural system. Members of protection must be provided with arms and funds to meet the conditions and needs of their deployment.

Internal circuit - circuit is defined by the guarded area. In this circuit can be combined resources of all groups. An important criterion for the functionality of the object of protection is the ability to effectively respond to the attack, which was not any warning information. This ability, therefore, the functionality of the system of protection can be verified in a model situation that simulates a real attack. Those concepts and definitions can be found in [1, 2, 3 and 4].

2. Problem formulation

Physical security requires particular technical and staffing. Staffing is costly. In addition to financial difficulty, when searching for the physical protection of workers is necessary to ensure a reliable person and security risks. If we already have available the appropriate staff and physical protection, it is necessary to ensure their effective use in the process of protecting the safety of the airport. One possibility is to optimize the efficient use of personnel movement in restricted paths, which are passed to protect the airport.

Consider the scheme of possible movements of the physical protection of workers in the protection of airport lines. There are sections that provide for certain groups of workers with that level of equipment and powers. Movement of workers is carried out in dedicated lanes and run in parallel in the different groups to ensure protection. Even if the random movement and control of objects and places in the airport, it is appropriate to ensure this in the pre-planned structure, which can be realized at random intervals, or even a random choice and control paths, if the plan would allow.

In creating the said plan should take into account the particular route, which carried out the protection and of course the burden of different groups of workers protection. Proper planning of these parameters can have a significant impact on the quality of physical protection of the airport, which is the basis for additional funds to protect the safety airport. It appears that it is good to choose the route, so that all protection points have been secured, but the numbers of sections used by individual teams have the same protection as is possible, respectively to differ in the as less as possible. It is also appropriate to create a plan to control routes, so that the time interval of one parallel control was as short as possible to the individual sections have been inspected as often as possible.

The challenge is to find a plan for protection of routes for different groups to ensure the protection, in order to meet the requirements described above, if such plan exists.

3. Mathematic model

In this chapter we describe the procedure how to find a conservation plan routes in order to optimize the requirements described in the previous chapter. Create a chart of all possible control points and all possible control paths between the various control points. This scheme can represent graphs containing vertices and edges. Vertices represent points of protection to be ensured. This is largely on the airport property,

buildings, places on the area of the airport fence and on location. A pair of points is associated edge, where it is possible to make the physical transition between that worker control pair of control points. Under this capability means that protection can be moved between the two control points in the route, or on the field inspecting, taking over the control moves from one control point on the second control point. In this way, we incurred non-oriented graph to modify as follows:

The edges of the routes by which control is exercised by the same group of protection, or edges, which can be checked in one cycle, and may not be parallel to them under the control of one cycle control, we do one category. Thus we create a new graph with the so-called coloured edges. For simplicity, assume all the edges are rated by weight of one.

The challenge is to find a spanning tree which minimizes the number of edges in each colour category. Mali we also find a spanning tree, which has the same number of edges in each colour category, if there is a skeleton. If there is such a skeleton, we want to find a spanning tree, the difference between the number of edges between the colour categories to a minimum.

To solve the formulation of a mathematical model, we use the knowledge they have been described for example in the works [5 – 14].

Let the graph $G = (V, E)$ and degradation edge set E to disjunctive category $S_1, \dots, S_p$. Each edge $e \in E$ is defined by the weight $w(e)$, where $w(e)$ is a nonnegative integer. They are the dedicated functions of BA (D) and Bo (D):

$$BA(D) = \max_{1 \leq i \leq p} \sum_{e \in S_i \cap D} w(e),$$

$$BO(D) = \max_{1 \leq i \leq p} \sum_{e \in S_i \cap D} w(e) - \min_{1 \leq i \leq p} \sum_{e \in S_i \cap D} w(e),$$

where $D \in D(G)$ and assume that $\max_{e \in E} w(e) = 0$ and $\min_{e \in E} w(e) = 0$. Problems with functional duties such as BA are described in Articles 5 [14]. In these problems is the task of finding a solution acceptable $D \in D(G)$, the value of the dedicated functions BA was minimal. Problems with BO functional feature can be found for example in the work [6, 7 and] in these problems we find the admissible set $D \in D(G)$, the value of the dedicated functions BO was minimal. These optimization problems have been described in the following systems of admissible sets: all skeletal graph G , all perfect pairing in the graph G , all the a-b path in the graph G , all Hamiltonian circle in the graph G (in Hamiltonian circle is assumed that the graph G is Halin graph).

Problems with functional BA function is NP-complete already for the two categories, ie $p = 2$ This result is negative, but using the results of work [11] we can find at least an alternative solution to the problem of functional BA function. Of the assumptions listed in the construction of the model, we know that all edges of weight $w(e)$ equal to one. The number of categories of p is fixed, represents a separate group of workers, ensuring the protection of the airport. Under these assumptions we can solve the problem with functional BO function in polynomial time. Algorithm that solves this problem can be found in the work [11].

Consider a pair of appropriate functions of BA (T) and BO (T):

$$BA(T) = \max_{1 \leq i \leq p} \sum_{e \in S_i \cap T} w(e),$$

$$BO(T) = \max_{1 \leq i \leq p} \sum_{e \in S_i \cap T} w(e) - \min_{1 \leq i \leq p} \sum_{e \in S_i \cap T} w(e),$$

where T is a spanning tree of G and D (G) is a system of all frames graph G. Using the algorithm of work [11] find optimal solutions to the problem of functional function BO (T). If there is no optimum, this means that in a graph G the set of admissible solutions D (G) is empty. To empty the system of admissible sets D (G) is not admissible and therefore the optimal solution for the problem of functional function BA (T). In this case, another procedure that the graph G finds a connection and all components of each component of the context algorithm is applied again, to find the optimum.

Suppose that the TOPT is the optimal solution to the problem of functional function BO (T). This means that the skeleton TOPT applies:

$$BO(T^{OPT}) = \left(\max_{1 \leq i \leq p} \sum_{e \in S_i \cap T} w(e) - \min_{1 \leq i \leq p} \sum_{e \in S_i \cap T} w(e) \right) \xrightarrow{T \in D(G)} \min.$$

Using the algorithm [11] we create a sequence of admissible solutions, the value of dedicated function BO (T) is the same as the optimum, or higher. This sequence we use in finding appropriate solutions to the problem of functional function BA (T). We calculate the sequence of functions dedicated BA (T) and organize them in ascending order. Then we choose a permissible solution, which features dedicated BA value is the smallest of the calculated values. Thus, the admissible solution to the first problem in general may not be optimal, but given the complexity of this problem is obtained approximate solution used in conjunction with the second problem, the optimum is known.

Conclusion

In this article we describe how to optimize the planning of physical security at airports. This method of protection is an essential part of the protection of airports and is an essential part of ensuring the safety of the airport. It is therefore essential that the increased attention is paid to the protection and efficient use of the possibilities of this ingredient airport protection. This optimization has an impact on the effective implementation of physical protection, effective management of staff activities and avoiding over-congestion of some staff to ensure the physical protection of the airport. The results should be compared also with safety improvement [15].

Well secured airports can continue to expand and improve their services and operations. Thus we can increase the competitiveness of the region, of which is the airport part, since the airport increases the potential for the region and surrounding towns.

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New Challenges of Export Credit Insurance in Current Economic Situation

Abstract

Currently, the world stands in the economic crisis and decline in economic efficiency was recorded also in the Czech Republic. The Czech Republic adopted anti-crisis measures in response to inhibiting growth. The Czech economy is export-oriented and so the measures are aimed mainly to the elimination of risk in the context of export. The Czech Republic wants to help increase exports by means of state institutions which are Export Guarantee and Insurance Corporation, Inc. (thereinafter „EGAP“) and Czech Export Bank, Inc. (thereinafter „CEB“).

Credit insurance market is today one of the important segments of domestic, European and world insurance market. As most economies face downturn as well as does the international trade, credit insurance is used intensively, mainly the state supported part.

To overcome the current problems of the financial crisis, the state increased basic capital of CEB and increased insurance capacity of EGAP, as well temporarily increased the insurance coverage and increased the proportion of state participation in the insurance of export risks. One of the impacts of global crisis on the activity EGAP was also offered cheaper products, introduction of new products and modifications to some existing insurance products.

The system of state support of export and the link between EGAP and CEB result from the principles that collectively included in the OECD Consensus. EGAP and CEB occupy an important positions in the export policy of the Czech Republic and therefore is expected their involvement in the support of Czech exports in the future.

Key Words

anti-crisis measure, risk elimination, Czech Export Bank, Export Guarantee and Insurance Corporation, export credit insurance with state support

JEL Classification:

E01, E02, E26, E44

Introduction

Export promotion comes to the fore in accordance with the global economical crisis and demand drop in the EU countries. Czech economic is strongly dependant on the foreign trade and in the times of demand crisis is very vulnerable. Therefore it has adopted **anti-crisis measures** which should help to reduce crisis impact and should stimulate foreign customers to buy Czech goods and services. First of all, it is necessary to identify insurance risks in terms of the credit insurance and subsequently specify content of and define government institutions supporting export credit insurance activity. Then we must describe individual crisis countermeasures which have effect on the export credit insurance.

1. Export credit insurance and economic crisis

The Global economic crisis has also become evident in the Czech Republic and its impact is mainly seen as the downgrade of the economic output and decrease of the foreign trade rate. Domestic companies activities in the foreign countries has decreased and export, which affects GDP, has decreased due to the crisis consequently. Dropping export figures negatively affects position of the Czech Republic abroad, which has negative impact on the Czech exporters trying to expand and increase their presence in the foreign markets, domestic companies competitiveness reduction, rise of the unemployment rate, labour productivity decrease and also innovation processes slowdown.

This is why the export promotion is in the spotlight. The export promotion in the Czech Republic is realized through the government institutions such as **The Export Guarantee and Insurance Company** (EGAP) and **The Czech Export Bank** (CEB). EGAP offers insurance of credits and investments to Czech exporters and investors in foreign against market uninsurable commercial, political and territorial risks. CEB is offering long term and preferential export financing with granting the supplier and buyer credits, further foreign investments financing and interest rate difference refund.

1.1 Risks identification

From the credit insurance point of view there exist two kinds of risks, namely commercial and territorial risks. **Commercial credit risks** arise from the economical and financial situation of buyers and distinguish two basic risk categories which are insolvency and unwillingness.

Territorial credit risks arise from the country's political and macro economical situation of the foreign buyer. Reasons representing territorial risks are mainly the events of the political nature like wars, revolutions, economical and administrative decisions of the third country or public authority decision in the obligor's country, payments ban (moratorium), impossibility or delay of the funds transfer, expropriation without compensation, nationalization, investments revenue transfer preclude or revenues from the sale of investments, politically motivated criminal offence damaging investment or natural disasters. In some cases, these risks are described as political and in relation to the obligor has force majeure nature. [3]

EU directions divide risks according to their securable or non securable market nature. Commercial risks are privily securable but political risks are not because of the insufficient reinsurance capacity. Risks, which are market securable, are commercial risks of the non-government obligors with the two years due date described as **marketable**. These risks are covered by the private insurers of the credit insurance. Any other risks, such as political, territorial, catastrophic and commercial risks of the public obligors are considered as **unmarketable** risks, thus market non securable. [5]

1.2 Credit insurance

Rules for the short term **commercial credit insurance** are set by the market conditions, because private credit insurance companies only insure marketable risks meaning that they insure only risks for which re-insurance on the re-insurance market could be obtained. This insurance operates on the commercial base and there is a huge insurance and securable market. Long term commercial risks and territorial and political risks are very difficult to insure on the commercial market of the private insurance. Private insurance companies do not have enough insurance capacity and therefore this gap on the credit insurance market is filled by the export credit insurance with state support. [2]

Insurance with state support is crucial for the credit insurance because support of export has positive impact not only for the GDP and state payment balance, but its positive effect directly influence concrete exporters. Thereby state support of export through the medium insurance of export risks become a significant stabilizer of macroeconomically progression and also export companies too. In case, that export credit insurance company gives support to exporters by its insurance, increase exporters hopes for getting order. Cooperation with export bank allows exporter get credit financing his export projects by better credit terms.

While insurer negotiate re-insurance of insure commercial exports credit risks on commercial principle with commercial reinsurer, in case of re-insurance of insurance with state support performs reinsurer-function state budget by issue a bill for clients (exporters).

1.3 Consensus OECD

The system of state support and the link between export credit insurance and export bank arise from the same principles which are contained in the Arrangement of the international regulations for officially supported export credits by another name **the OECD Consensus** which is the subject of decision of Council of the OECD of the day 4th April 1978.

The aim of the OECD Consensus is to provide the institutional framework for export credit market and its main purpose has been created a framework for the internationally agreed usage of the officially supported export credits which is based on uniform rules and principles.

In practice, this means securing of same competitive conditions in the field of the official export credit support, therefore exporters competitive each other in price and quality of their products and not in amount of received grant. In other words, the Consensus OECD eliminates market distortions which resulting from the providing of official support for export credits. This document contains the rules of export support, namely rules of insurance of export credit and investment risks and rules of export financing. Basic provision of this Arrangement concerning the methodology of determination of the

riskiness in the consumer countries, respectively in the country of buyer's residence, and determination of the rules of premium rates. [7]

1.4 The export credit insurance with state support in the Czech Republic

Act No. 58/1995 Coll., on insurance and financing of export with state support, regulate the export credit insurance with state support. The state support is provided by special institutions, so-called **export credit agencies** such as: **export credit insurance**, which covering unmarketable risks, and **export credit institutions (banks)**, which financing export credits. According to Act No. 58/1998 Coll. Export Guarantee and Insurance Company (EGAP) provides the insurance of export credit risks and Czech Export Bank (CEB) offers preferential export financing. This Act lays down the rules of operation of EGAP and CEB.

It is significant, that through this law the state guarantee for the obligations of EGAP of the insurance of export credit risks and for the obligations of CEB of repayment of financing funds and for the obligations of the other operations of export bank in the financial markets. State support in the framework of the export credit bank, in practice means that export bank can gain financial resources in foreign financial and capital markets under more favorable conditions than commercial banks and those "cheap" credit sources can distribute through direct financing or refinancing to the economy. According to this law, the state support of export has following forms: insurance of export credit risks, supported financing and refunding interest gaps. The Act also sets that state support of credit insurance is relating only to insurance territorial risks and unmarketable commercial risks. [1, 5]

2. State crisis strategy for export support

The point is that EGAP and CEB provide such a structure of insurance and banking products which would be a real help to the exporters in overcoming their difficult sales situation. And not only that, EGAP must have a sufficient insurance capacity in order to satisfy clients in insurance in the appropriate scope and on the full limits ordered by the OECD consensus. In response to slowing economic growth the Czech Republic adopted **anti-crisis measures** that should be implemented within the framework of fiscal policy. For reasons the Czech economy is export-oriented, the given measures focus mainly on the elimination of risks in export and aim to ensure the adequacy of state support of export.

2.1 The increase of EGAP insurance capacity

The Czech government place emphasis on active proexport policy in its anti-crisis measures, which should help exporters to reach credits during entering of foreign markets. Thus the government has **increased CEB core capital** by 1 billion CZK so the credit restrictions are now lower.

A significant form of support is also **increase of insurance capacity of EGAP**. Insurance capacity represents the upper limit of insurance involvement in an insurance company. Export insurance company is not allowed to accept higher export credit risks than its insurance capacity is. EGAP can insure particular export credit risks to a value not exceeding 20 % insurance capacity, which is set for the underwriting year in the Law on State Budget. EGAP is obliged to have the permission of the Ministry of Finance and the Ministry of Industry and Trade in order to insure particular export credit risk to a value not exceeding 40 % of insurance capacity. The permission of the government is necessary in case of risks which exceed 40 % of a capacity.

The national budget for the year 2009 bargain for the increase of insurance capacity from 120 billion to 150 billion although no direct subsidies are necessary. The increase of EGAP's insurance involvement during the last two years has been driven by the significant boom in insurance figures in 2007. The reason is the insurance of large business cases. Only smaller cases dominated until 2006 and a status of the insurance involvement has not been changed since 2002. Now it is obvious that large amounts which will affect the involvement will keep its value on a higher level than during previous years.

The increase of the insurance capacity is a result of the insurance of huge business cases and a rapid approach march to the 120 billion limits. The enhancement reflects to the expectations in EGAP prospectus for 2009 that the amount of newly insured export credits, guarantees and investments will not exceed the figures in 2008. The new value of capacity (150 billion) should be enough for the cover of expected growth in involvement due to new insurance contracts. The rise in the capacity enables to fulfil a predicted demand of exporters for the period of few years without additional budget expenditures. [10, 11]

2.2 Insurance products of EGAP

In term of the offered products seems the supply of EGAP like satisfactory and accordant with the world. EGAP is now offering these kinds of insurance:

1. Insurance of a Short Term Export Supplier Credit (B)
2. Insurance of a Short Term Export Supplier Credit Financed by a Bank (Bf)
3. Insurance of a Medium and Long Term Export Supplier Credit (C)
4. Insurance of a Medium and Long Term Export Supplier Credit Financed by a Bank (Cf)
5. Insurance of an Export Buyer Credit (D)
6. Insurance of a Confirmed Letter of Credit (E)
7. Insurance of a Credit for Pre Export Financing (F)
8. Insurance of Investment of Czech Legal Persons in Foreign Countries (I)
9. Insurance of a Credit for the Financing of Investment of Czech Legal Persons in Foreign Countries (If)

10. Insurance of Prospection of Foreign Markets (P)
11. Insurance against the Risk of Inability to Fulfil an Export Contract (V)
12. Insurance of Bank Guarantees Issued in Relation to an Export Contract (Z)¹

This structure (also internally diversified in some products) in principle covers needs of exporters. The important step of EGAP in response to financial crises was the introduction of these **new products**:

- Insurance of prospection of foreign markets of a newly built production capacities in foreign country, which covers the risk of repayment of credit. This product is not based on guarantees of exporter or investor but it is based on revenues of a project. The credit reimbursement is distributed to irregular instalments and allows the prolongation of deadline for repayment up to 14 years.
- Insurance of credit for financing of investment for developer projects abroad. It allows the adjustment of insurance conditions to the specific needs for constructors of multifunctional trade and housing objects in foreign countries.
- Insurance of credit for financing of commercial result application of science and research for export created as a support of implementation of the research and development results into production intended for export and for a support of export with high added value.
- Insurance of prospection of foreign markets against risk of loss as a result of the failure of prospection creates better conditions for exporters when they look for new markets, in case of paying initial cost when entering a new market, marketing etc. It is designed especially for small and medium-scaled enterprises.

2.3 Additional anti-crisis measures

EGAP, with the view to worldwide selling crises, takes additional steps focused on increase of the insurance cover up to maximum which is acceptable in accordance with the OECD Consensus. These steps are:

1. **Temporary increase of insurance** cover of all export credit types from 95 % to 99 %. This brings lower export risk, lower costs for coinsurance.
2. **Permanent increase of insurance of letter of credit** cover from 80 % to 95 %, i.e. decrease of coinsurance from 20 % to 5 % in order to lower bank coinsurance, accelerate administration of short-term financing in foreign bank and enhance a limits of foreign banks in Czech banks.
3. **Discount of the production risk insurance** by 30 % and discount up to 50 % in synchronization with the export credit insurance. This pursues an aim of low costs for exporters.

¹ Dostupné z: <<http://www.egap.cz/pojistne-produkty/index-en.php>> [cit. 20. 5. 2008].

4. **Discount of the investment insurance** in case of synchronisation with the credit for financing of investment insurance and a investor's deposit which mean a fall of investor's costs.
5. **The simplification of the insurance** of a credit for pre export and insurance of bank guarantees SME mode. This brings the decrease of costs for small and medium-scaled enterprises.

2.4 The amendment to the insurance and export financing with state support law

An important anti-crisis measure is the novel which was accepted by the government on 28th April 2009. A key change of the Act No. 58/1995 Coll., on insurance and financing of export with state support, let commercial banks provide also state supported export credits through the **“mechanism of equalisation of interest rates”**. It will significantly increase an overall financing situation in Czech export sector.

Another significant change included in this novel regarding export insurance is in the change of an attitude towards the export of goods characterized as “national” or **“national interest”**. We can see the transformation from the support of direct export to the support of national interest export. That allows long-term enterprise of Czech subjects on the markets and creates a potential for additional Czech exports. The amendment also enhances the possibilities for the insurance of export and investment credits for the foreign companies which are directed by Czech companies.

Conclusion

The measures seem to be logical in the view of state support for exports. However it may have only limited impact with regard to the character of present crisis. The world demand has fallen which has affected also Czech exporters. What to do now? It is necessary to stimulate the interest of foreign customers for Czech goods and services though the credit activity of banks (especially CEB) and though the EGAP insurance products. Generally are these measures (regarding EGAP and CEP and on the other hand government) considered as positive because they tend to unlocking of credits which are important for the support of export. This crisis is mainly about the demand crisis and the mentioned measures can help to reduce the negative impact on exporters and their businesses.

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Price Regulation of Infrastructure Natural Monopoly: Evaluation of It's Effect

Abstract

In a broad sense infrastructure is reasoned as the whole of economic resources, and from its functioning depends the level of active economical activity. An industry or activity is said to be a natural monopoly if production is most efficiently done by a single firm. So, if the entire demand within a relevant market can be satisfied at lowest cost by one firm rather than by two or more, the market is a natural monopoly.

Most of the natural monopolies are public utilities or in other words – infrastructure enterprises.

Countries economic activity should be assured by providing infrastructure services. Because some of infrastructure services providing subjects may have natural monopoly features, it's governmental regulation becomes important, seeking to protect customers from the monopoly power.

In this paper the price regulation of infrastructure natural monopoly is analyzed, it's effect for customers and economics evaluated.

Key Words

infrastructure, natural monopoly, regulation

JEL Classification:

H54, D42, G15

Introduction

Infrastructure creates the base for the state's economic activity. The economic theory and world experience shows that the activity of infrastructure branches play important role in the economic development.

Infrastructure services providing enterprises often have natural monopoly features. The most of the natural monopolies arise in the sectors, which provide infrastructure services, needed by society. They used to be state owned or their activity was administered by state. After the evaluation of non effectiveness of such activity organization and possibilities to employ new technologies, in the developed countries the reorganization and privatization of the infrastructure enterprises began. Though having delivered the natural monopolies of the infrastructure into the private hands, the governmental regulation of these natural monopolies, seeking to protect society from the abuse of natural monopoly, became very important. Seeking not to harm the effectiveness of the natural monopoly activities from the one side and to protect society from the abuse of natural monopoly from the other side, economically reasoned and effective governmental regulation is needed. This regulation should ensure the provision of the social economic infrastructure services and economically fair price for

them. It is important to evaluate the effect of the infrastructure natural monopoly price regulation, because it affects not only customers, but the whole economy of the state as well.

- Scientific issue. Country's economic activity is assured by providing infrastructure services. As some of infrastructure services providing subjects may have natural monopoly features, it's governmental regulation becomes important. Price regulation is often used regulation method for the infrastructure natural monopolies. The price should ensure companies vitality and cover its costs, but from the other side it should be acceptable for the customers.
- Subject of the study. The social economic infrastructure subjects, having natural monopoly features and its price regulation.
- Aim of the study. To motivate why evaluation of the infrastructure natural monopoly price regulation is so significant.
- Methods of the study. Statistical and literal data analysis, comparative analysis, mathematical methods for statistical data analysis.

1. Infrastructure and state economy

The infrastructure concept itself describes its importance. Infrastructure: "infra" means base and "structure" means structure, position (from Latin). So it creates the base for the "structure", which we can describe as the economy as a whole.

The hypothesis about infrastructure significance for economic growth is formulated so: developed infrastructure increases production volumes of enterprises and decreases costs because of increased production. Theoretically it is a case, when infrastructure as free given factor of production directly or non-directly positively influences productivity of private factors. [1]

Infrastructure impacts economic growth by increasing productivity and by ensuring services that improves the quality of life. Infrastructure increases enterprises production volume in two ways.

- infrastructure services (transport, water, electricity) are inputs of intermediate production and any decrease of the input costs increases the profitability of production, in that way it permits to increase the volume of production, revenue and /or employment;
- infrastructure services increases productivity of other factors of production (work and others) – for example, permitting to switch from manual to automate operations, shortening the time needed to report about work, improving informational flow transferred in electronic way. [1]

The figure – 1 shows us how infrastructure, business and population are interconnected. Infrastructure supplies business and population with its products and services. Using these products and services business creates its products and services for population, other businesses and some of them are used then by infrastructure companies.

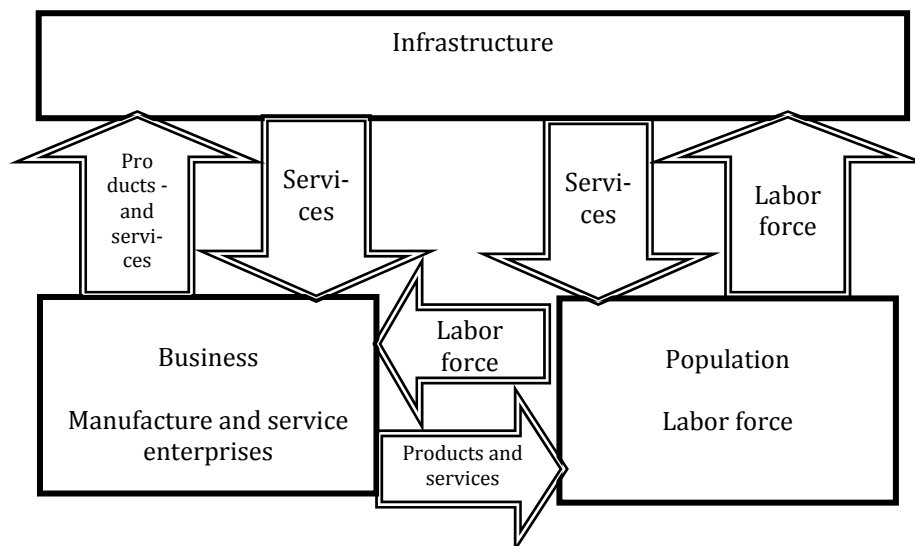


Figure-1: Link between infrastructure and business also population

Source: own

In the year 2000 the cost for the main infrastructure services in the household expenses in Lithuania composed 29,70 percent, in the year 2007 they compose 32,90 percent. It shows that the great part of the household expenses goes for infrastructure services (see Tab.1).

Tab.1 Household consumption expenditure for infrastructure services in Lithuania (percentage value from all household consumption expenditure)

Year	Accommodation, water, electricity, gas, other fuel	Public health	Transport	Communications	Education	Total
2000	13,50	4,40	7,60	3,60	0,60	29,70
2001	13,40	4,60	7,40	4,50	0,70	30,60
2002	13,20	5,30	7,10	5,00	0,60	31,20
2003	12,70	4,90	8,60	5,20	0,80	32,20
2004	12,20	5,20	8,80	5,00	0,90	32,10
2005	12,00	5,10	8,80	5,00	1,20	32,10
2006	12,00	5,00	10,30	5,00	0,90	33,20
2007	12,00	4,80	10,40	4,90	0,80	32,90

Source: [8,9,10]

Infrastructure branches are important for the macroeconomics, because its gross value added compose one third of the states gross value added and from the year 2000 to the year 2002 has increased by one percent but until the year 2007 decreased by 4,2 percent (see Tab.2). Transport, storage and remote communications (12,24-13,37 percent), create the greatest part of infrastructure gross value added, the next is education (4,30 – 6,10 percent).

**Tab. 2 Gross value added of infrastructure branches
(percent from total gross value added).**

Year	Supply of electricity, water and gas	Transport, storage and remote communications	Education	Public health and social security	Other municipal, social, personal service activity	Total
2000	3,80	12,24	6,10	3,40	3,30	29,10
2001	4,10	12,33	5,90	3,10	3,20	29,20
2002	4,10	13,37	5,70	3,00	3,30	30,00
2003	4,60	13,36	5,20	2,70	3,10	29,50
2004	4,40	12,67	5,10	2,70	2,80	28,50
2005	4,00	12,68	4,60	2,70	2,60	26,58
2006	3,50	12,77	4,40	3,00	2,50	26,17
2007	3,10	13,00	4,30	3,00	2,40	25,80

Source: [8,9,10]

2. Government and infrastructure branches

Most of the infrastructure enterprises are natural monopolies. [11] The natural monopoly is such an industry branch in the economy, where fixed costs are so high that it is not profitable for the second enterprise to enter the market and to compete. [15] The peculiarity of this activity is comparatively low annual return, comparing with high partition of own capital in gross expenses. In the time of crisis stock capital of this branch, because of its large amount cannot be transferred to more profitable branches. It is also impossible to decrease it when economic activity in the country is falling down and remarkable decrease in price is totally unfavorable. The infrastructure features do not allow infrastructure branches to develop in the competitive market successfully all the time, therefore centralized state regulation is needed. Even if energy or gas production is in private hands its distribution process according to the fixed tariffs should be submitted to government regulation. Government regulation seeks to fix prices close to marginal costs to encourage the monopolist to increase production to the level that enterprise could reach acting under perfect competition conditions. [11]

In the last decade the change in government role for infrastructure provision was noticed. It was also noticed in the market economy countries, that government drifts away from the role of infrastructure owner and administrator and pays more attention to the new regulator role which regulates services that are provided by private sectors. [5]

Privatization of the infrastructure enterprises is not negative phenomenon itself, but while implementing it the assurance of state regulation for enterprises is needed to avoid license. Promoting privatization of the infrastructure enterprises the government tries to decrease budget deficit, originate possibilities to eliminate monopoly and create competitive conditions. [5]

**Tab.3 State and municipal budgets expenditure for infrastructure branches
2000-2003 year (thousand EUR).**

	2000	2001	2002	2003	2004	2005	2006	2007
Total (thousand EUR)	1308039,27	1402527,22	1762502,61	1907692,97	151272,59	1784006,00	2319570,00	2655931,00
Defense affairs and services	177071,07	202829,88	245292,23	273513,38	270545,35	363214,20	422270,62	476985,63
Education affairs and services	783167,57	854176,90	917844,36	945951,40	1054796,69	1134876,91	1294586,71	1485421,10
Health affairs and services	175824,84	171496,18	180974,28	207591,23	75410,39	86186,86	363430,84	405790,08
Recreational and cultural affairs and services	110068,64	110886,82	125631,66	138449,08	112168,67	199460,73	238982,85	287614,40
Fuel and energy affairs and services	24999,71	25468,32	33400,14	33246,73	-	-	-	-
Transport and communications	36907,44	37669,14	259359,94	308941,15	-	-	-	-
The state budget expenses that falls to infrastructure branches (percentage value)	47,70	49,00	52,20	52,70	37,20	36,20	38,40	37,50

Source: [8,9,10]

The expenses of Lithuanian Republic government budget for some infrastructure branches increases (see Tab.3). The government should be interested in decreasing expenses of the budget, by promotion effective activity of infrastructure branches that requires less assignment from the state budget. Definitely not all infrastructure branches can function without government subsidies. These are social infrastructure branches: social security, education and etc. Government expenses for national defense increases every year.

Evaluating restructuring possibilities of the infrastructure the government can find restructuring ways inducing more effective activity of infrastructure enterprises and also decreasing deregulation expenses. [5] The government trying to control natural monopoly can choose different strategies. It can tax excess profit, it can give licenses or privileges for managing natural monopolies or it can control prices. The government has to choose cost effectively regulation methods or system that gives opportunity to reach objectives.

There is a wide range of forms of regulation to deal with natural monopoly (often can represent infrastructure enterprise). These basic regulation methods for natural monopolies can be excluded:

- economic regulation, which primarily addresses the problems of natural monopoly power;
- social regulation, which addresses problems of market access and affordability;
- common business regulation, which include regulation that is common to all industries.

Here we pay attention to the economic regulation, namely price regulation. Customers are very sensitive for the price changes, especially price increase. As above mentioned, infrastructure products and services are production factors and expenses for them are some part of company's costs. Costs changes change prices for final goods and products. This is producer's part. From the other side, final customer (private persons) consumes infrastructure goods and services, which often are essential. Therefore price changes for infrastructure goods and services can affect states economy from both sides: producers and customers. It can reduce consumption, what is not beneficial for the economy.

3. Impact of the infrastructure prices over products and services prices

Talking about infrastructure importance for the whole economy we have highlighted, that these services are essential for all economic subjects: legal economic subjects and individual consumers. The increase of the infrastructure service prices can cause the increase of other products and services prices. In the short run the price change of the infrastructure services is not so significant for the change of other products and services prices. In the long run the price change should be measured and products and services prices should be changed respectively. In the economic literature often oil prices changes are highlighted. According to our study, oil is an infrastructure product. Further we try to analyze the impact of oil, electricity, gas and water prices changes to the producers prices and consumer prices.

To perform this analysis, the authors of this paper used the econometric method of the multiple regressions. This method enables us to find a relation between multiple m independent variables ($X_1, X_2, \dots, X_m$) and one dependent variable Y and to prove the strength of this relation. [2] The mathematical calculations were made with the statistical program "Statistica". [13] Whereas there are no statistical data about concrete

prices for oil, electricity, gas and water, in our analysis we used the changes of these prices reflecting instrument – appropriate price indices.

The relation of price indices for the oil products, electricity, gas and cold water (independent variables x_1 - x_4) with the price indices for the producer price indices of industrial production (independent variable y_1) and consumer price indices (independent variable y_2) was measured.

$$y_1 = f(x_1, x_2, x_3, x_4),$$

$$y_2 = f(x_1, x_2, x_3, x_4),$$

were y_1 - producer price indices for the in Lithuanian market sold industrial production (2000-2009 (4 months)), y_2 - Lithuanian consumer price indices (2000-2009 (4 months)), x_1 - Lithuanian producers price indices for the in the domestic market sold refined oil and gas products (2000-2009 (4 months)), x_2 - Lithuanian producers price indices for the in the domestic market sold electricity (2000-2009 (4 months)), x_3 - Lithuanian producers price indices for the in the domestic market sold gas(2000-2009 (4 months)), x_4 - Lithuanian producers price indices for the in the domestic market sold cold water(2000-2009 (4 months)).

Analyzing the dependence of the producer price indices of industrial production from the price indices of the oil, electricity, cold water and gas, the multiple regression model test showed, that price indices of the cold water remains insignificant in this model. The insignificance of this variable may mean that either water is relatively cheap in the production process or its small amount in the production is needed and therefore water price changes do not affect the producer price indices. After the rejection of this independent variable there was a strong correlative relation between variables found (determination coefficient $R^2=0.984$). Regression equation can be described as follows:

$$y_1 = 30,53 + 0.106x_1 + 0.462x_2 + 0.122x_3$$

This analysis shows that the prices of Lithuanian producer industrial products are depending from the oil, electricity and gas prices.

After the analogically made calculations with consumer price indices and price indices for oil, electricity, gas and cold water, were determined, that variables of price indices for cold water was insignificant. The insignificance of this variable may mean that water are relatively cheap in the production process or their small amounts in the production is needed and therefore water price changes do not affect the consumer price indices. After the rejection of this independent variable there was a enough strong correlative relation between variables found (determination coefficient $R^2=0.98$). Regression equation can be described as follows:

$$y_2 = 34,03 + 0.012x_1 + 0.575x_2 + 0,063x_3$$

These calculations prove that relation between prices for infrastructure services and prices for other products and services exists and could be analyzed deeper.

Conclusion

Infrastructure creates the base for the state's economic activity. Infrastructure services providing enterprises often have natural monopoly features. Infrastructure, business and population are closely interconnected. Statistical data shows, that the great part of the household expenses goes for infrastructure services. Infrastructure branches are important for the macroeconomics, because its gross value added compose one third of the states gross value added. Natural monopoly characteristics of the infrastructure cause the need for some of the governmental regulation. We pay our attention to the price regulation.

Customers are very sensitive for the price changes. Costs changes change prices for final goods and products. From the other side, final customer (private persons) consumes infrastructure goods and services, which often are essential. Therefore price changes for infrastructure goods and services can affect states economy from both sides: producers and customers. It can reduce consumption, what is not beneficial for the economy.

Analyzing the dependence of the producer price indices of industrial production from the price indices of the oil, electricity, and gas there was a strong correlative relation between variables found (determination coefficient $R^2=0.984$). Regression equation can be described as follows:

This analysis shows that the prices of Lithuanian producer industrial products are depending from the oil, electricity and gas prices. After the analogically made calculations with consumer price indices and price indices for oil, electricity, gas there was a strong correlative relation between variables found (determination coefficient $R^2=0.98$). Regression equation can be described as follows: These calculations prove that relation between prices for infrastructure services and prices for other products and services exists and could be analyzed deeper.

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Tacit Knowledge Sharing and Organizational Culture Model of Competitive Values Framework: A Theoretical Research

Abstract

Tacit knowledge sharing is considered to be the factor which allows to facilitate decision-making and to increase competitive ability and effectiveness of organization. Even if coded knowledge is easier to diffuse, the role of tacit knowledge is often essential for being able to use coded knowledge. Coded knowledge can even be unusable without the augmentation of tacit knowledge. The role of organizational culture is highly relevant for tacit knowledge sharing, which is social activity, face-to-face interaction and therefore can be influenced only through culture. This paper represents a theoretical research about how the types of organizational culture according to the Competitive Values Framework model are supportive for tacit knowledge sharing. The Competing Values Framework consists of four culture types: clan, adhocracy, market and hierarchy. Clan culture is found to support tacit knowledge sharing all factors described refer to clan culture values and description. Adhocracy culture is the second culture type most supporting tacit knowledge sharing. Market and hierarchy hardly do so, and organizations willing to increase tacit knowledge sharing will have to increase the presence in their culture of clan and adhocracy types. These findings provide with insights, which put us closer to better understanding what factors to use to change organization in the direction of "high" tacit knowledge sharing. The article does not claim the final truthfulness of these conclusions, but more calls for further practical research to validate or disclaim them as well as provide with the extent of validity of these conclusions, which the author will carry out. This paper is made within grant-maintained project of GA ČR (Czech Science Foundation): Reg. No. 406/08/0459, "Developing Managerial Tacit Knowledge".

Key Words

knowledge management, tacit knowledge sharing, organizational culture, competitive values framework

JEL Classification:

M 10, M14, D80, D83

Introduction

Tacit knowledge, an important notion in knowledge management and organizational effectiveness, has already been studied in connection to organizational culture [3, 5, 14, 15, 16]. Many of these investigations reported high relevance of the role of organizational culture in tacit knowledge sharing. This paper represents a theoretical research about how the types of organizational culture according to the Competitive Values Framework are supportive for tacit knowledge sharing.

The article reviews literature on what factors in culture support tacit knowledge sharing in organization [15, 16, 17, 18, 19, 20, 21, 22, 23]. This review then is compared to the four types of organizational culture description according to the Competitive Values Framework by Cameron and Quinn [1] – clan, adhocracy, market and hierarchy. Based on these comparisons conclusions are made about which types support tacit knowledge sharing.

The results of this study are yet theoretical and need to be further researched by practical studies. Nevertheless, they can have definite impact on knowledge management, as they illustrate what culture supports tacit knowledge exchange more. These findings provide with understanding which instruments to use in order to change organizational culture in the direction of “high” tacit knowledge sharing.

1. Tacit knowledge and its influence on organizational effectiveness

Knowledge can be seen in a spectrum where on one extreme end we find the completely tacit and unconscious knowledge and on the other end the completely explicit, structured and coded knowledge (Polanyi in [2]). In this dualist system tacit and explicit co-exist in a synergetic relationship. Tacit knowledge can be understood as action in contrast to theoretical information, like for example to be able to cook without a recipe or to have an intuitive feeling of the right decision. Tacit knowledge is obtained by internal individual processes for instance experience, reflection, internalization or individual talents, and therefore it cannot be managed and taught in the same ways as explicit knowledge [3].

In contrast to tacit, explicit knowledge is stored mechanically or technologically, for example in handbooks or information systems. Tacit knowledge is kept only in people's minds. It is impossible to lecture tacit knowledge, or find it in databases, textbooks, manuals. Tacit knowledge is found just inside human body and mind. Halpin-Herrard [3] writes: “Different methods like apprenticeship, direct interaction, networking and action learning that include face-to-face social interaction and practical experiences are more suitable for supporting the sharing of tacit knowledge”. Conversion of tacit knowledge to explicit or at least the ability to share it offers greater value to the organization, and the reasons to this will be explained later in this paper.

Explicit knowledge is important, but for true excellence in a job it is necessary to master higher levels of knowledge - the unstructured and intangible tacit knowledge [3]. Explicit knowledge is for everyone to find and use but tacit knowledge separates the masters from the common [4]. An organizations core competency is more than the explicit knowledge of "know-what" it requires the more tacit "knowhow" to put "know-what" to practice [5]. Due to tacit knowledge work is run smoothly and has increased quality. Tacit knowledge often characterizes a master of his/hers profession [3].

The efficiency of making decisions, serving customers or producing is improved by the use of tacit knowledge. Also the accuracy of task performance is improved by the use of tacit knowledge [6]. In the world of today where the significance of time is increased

while the length of it is decreased experts can achieve major time saving improvements by using tacit knowledge. Even if coded knowledge is easier to diffuse, the role of tacit knowledge is often essential for being able to use coded knowledge. Coded knowledge can even be unusable without the augmentation of tacit knowledge [5, 7]. One can learn the importance of service quality by reading textbooks but not learn a "smiling attitude" by reading about it.

2. Organizational culture and tacit knowledge

2.1 Organizational culture – theoretical reflections

Organizational culture has many definitions. For the purposes of this paper we will take the following concept by Edgar Schein: "A pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems".

Organizational culture is an important phenomenon, because it influences the behavior of all individuals and groups within the organization. Culture impacts most aspects of organizational life, such as how decisions are made, who makes them, how rewards are distributed, who is promoted, how people are treated, how the organization responds to its environment, and so on [8].

Organizational culture encompasses the taken-for-granted values, underlying assumptions, expectations, collective memories, and definitions present in an organization. According to Cameron and Quinn [1], "It represents "how things are around here." It reflects the prevailing ideology that people carry inside their heads". Organizational culture transmits a sense of identity to employees, transfers unwritten and unspoken guidelines for how to cope with things in the organization, and it develops the stability of the social system that they experience [1].

2.2 Competitive Values Framework model of organizational culture

One of the highly useful for the assessment of organizational culture model of culture types, Competing Values Framework, was proposed by Cameron and Quinn [1]. It is described as extremely useful in organizing and interpreting a wide variety of organizational phenomena. It corresponds to well-known and well-accepted categorical schemes that organize the way people think, their values and assumptions. These similar categorical schemes have been proposed independently by a variety of psychologists, among them Jung [9], Myers and Briggs [10], McKenney and Keen [11], Mason and Mitroff [12], and Mitroff and Kilmann [13]. This congruence of frameworks occurs because of an underlying similarity in people at the deep psychological level of their cognitive processes [1].

The Competing Values Framework consist of two dimensions, that form four culture types: clan, adhocracy, market, hierarchy. Cameron and Quinn write in their book "Diagnosing organizational culture" [1]:

"Hierarchy Culture

The organizational culture compatible with this form is characterized by a formalized and structured place to work. Procedures govern what people do. Effective leaders are good coordinators and organizers. Maintaining a smooth-running organization is important. The long-term concerns of the organization are stability, predictability, and efficiency. Formal rules and policies hold the organization together.

"The Market Culture

Market culture indicates a results-oriented workplace. Leaders are hard-driving producers and competitors. They are tough and demanding. The glue that holds the organization together is an emphasis on winning, goals reaching. The long-term concern is on competitive actions and achieving stretch goals and targets. Success is defined in terms of market share and penetration. Outpacing the competition and market leadership are important.

"The Clan Culture

The clan culture, is typified by a friendly place to work where people share a lot of themselves. It is like an extended family. Leaders are thought of as mentors and perhaps even as parent figures. The organization is held together by loyalty and tradition. Commitment is high. The organization emphasizes the long-term benefit of individual development, with high cohesion and morale being important. Success is defined in terms of internal climate and concern for people. The organization places a premium on teamwork, participation and consensus.

"The Adhocracy Culture

The adhocracy culture is characterized by a dynamic, entrepreneurial, and creative workplace. People stick their necks out and take risks. Effective leadership is visionary, innovative and risk-oriented. The glue that holds the organization together is commitment to experimentation and innovation. The emphasis is on being at the leading edge of new knowledge, products, and services. Readiness for change and meeting new challenges are important. The organization's long-term emphasis is on rapid growth and acquiring new resources. Success means producing unique and original products and services".

These culture types are useful for the assessment of organizational culture, and as organizational culture is very important factor, that influences tacit knowledge sharing inside organization, understanding what culture types support tacit knowledge sharing will facilitate knowledge management and organizational change. Reflections on relationships between culture types and tacit knowledge sharing are presented below.

2.3 Organizational culture and tacit knowledge

Organizational culture is found in literature as one of the most important notions connected to tacit knowledge. Some authors consider organizational culture as a form of tacit knowledge. For instance, Haldin-Herrgard [14] proposes the following systematization of tacit knowledge regarding to:

- extent of abstraction in intangible and tangible and actors involved into individual and collective
- competencies it effects on into mental, emotional, social and practical.

In this categorization culture consists of both intangible and tangible forms of knowledge but can easily be recognized by an uninitiated. Some even more general forms of epitomes (types) of tacit knowledge can be found in culture. Culture is also said to be the most extensive form of social tacit knowledge. Irrespective of the extension of culture (national or organizational) the foundation of culture is in tacit knowledge on how to act, values, language, etc.

Regarding the issue of tacit knowledge sharing, there exist an opinion that organizational culture is an inherent factor for transfer. According to O'Dell and Grayson [15], people and culture are the key to share tacit knowledge because of the following reasons.

1. First, learning and sharing knowledge are *social activities*. They take place among people.
2. Second, *practices embedded in people, culture, and context are complex and rich*. Descriptions are thin and pale. (Think of the difference between a map and the journey itself). Dialogue and demonstration can help enrich the learning, so it is a personal and face-to-face activity.
3. Third, to ensure practices and knowledge not only transfer, but transfer effectively and make a difference, you have to *connect people* who can and are willing to share the deep, rich, tacit knowledge they have.

It is important not only to know that organizational culture can be both the form of tacit knowledge as well as the key factor supporting tacit knowledge sharing, but also to know what aspects of culture support tacit knowledge transfer.

3. What factors of organizational culture support tacit knowledge sharing

From the review of relevant literature [15, 16, 17] the following common features of pro-sharing culture can be distinguished:

3.1 Learning through teaching and sharing

According to O'Dell & Grayson [15], *mutual obligation* is one of the most powerful social forces. Inside an organization, once people start *helping* and *sharing* with one another, the effort becomes a self-perpetuating cycle. They are the vehicles by which the rich, tacit knowledge gets shared among people who feel an obligation to help each other. Haldin-Herrgard [3] mentions, that different methods like *apprenticeship*, *direct interaction*, *networking* and *action learning* that include face-to-face social interaction and practical experiences are more suitable for supporting diffusion of tacit knowledge.

3.2 Common areas of interest and expertise. Continuous exchange and creation of new knowledge as experimentation occurs.

Reagans and McEvily [17] say that there is a positive relationship between the level of common knowledge, common issues and problems and ease of transfer. *Only supportive, collaborative culture and eliminating traditional rivalries can build effective knowledge management.* [15] Of course, all this assumes a basic level of modern organizational skills, such as collaborative work, using problem-solving paradigms, and effective listening. Organizations that have not mastered these basic skills are not going to be able to do business at all. So knowledge management works best in healthy, sophisticated firms, or in small firms that have the luxury of starting out with such positive skills and norms.

3.3 Personal relationships and trust.

Gabriel Szulanski [18] found that one of the strongest predictors of best practice transfer was the *strength of the relationship between the source and recipient*. The potential adopter of a best practice (the recipient) has to believe that the source is credible and knows what he or she is talking about. The *source* has to be generous enough to devote the counseling and communicating time the recipient needs in order to really understand, adapt, and implement practice.

Alony, Whymark & Jones [16] say, knowledge sharing can occur over dyadic relationships. The ties over which knowledge is exchanged have been found to impact on the activity of knowledge sharing [16]. Reagans and McEvily [17] say that both tacit and explicit knowledge are easier to transfer over strong ties. Hansen [19], asserts that tacit knowledge is easier to transfer over strong ties and weak ties are more efficient when it comes to explicit knowledge sharing. Tie range of ties is another factor positively affecting knowledge sharing [20]. These ties are potentially a source of nonredundant information [17, 19, 20, 21].

Ardichvili et al. [22] have conducted an exploratory research, to identify what impedes personal motivation to share knowledge over an online forum. The study identified trust as an important factor. A description of two kinds of trust in this research complies with the definitions of both kinds of trust measured by Levin and Cross [23]: benevolence-based trust and competence based trust. Benevolence-based trust means "trust that the

other members will not misuse the posted information". Competence-based trust means "trust [the knowledge source] to be a source of reliable and objective information" [22, p. 72].

4. Four culture types and tacit knowledge sharing

According to the reviewed literature, we can assume that tacit knowledge sharing is most natural and inherent in the Clan culture and partly – in Adhocracy culture. In general, tacit knowledge sharing is high when the personal factor is high. The importance of personal, face-to face interaction, good relationships, open communication and exchange, as well as common interests, are all features of clan culture and at the same time tacit-knowledge sharing supporting factors.

4.1 Clan culture and tacit knowledge sharing

Clan culture seems to be the most fostering tacit-knowledge sharing. Underlying values, directing the culture of clan, are flexibility and discretion and internal focus and integration. These values are very good basis for supporting natural tacit-knowledge sharing, because the focus of organization on its internal environment together with flexibility result in such phenomena as shared values and goals, cohesion, participativeness, individuality, and the sense of "we-ness".

Considering the leadership factor, leader of a clan culture is a mentor or a parent figure. He is ready and willing to share his experience and to pass best practice. He builds team, supports and creates warm climate. Certainly, in such conditions it is easier to learn, to openly ask "stupid" questions and honestly tell about a problem. In such culture the feeling of being obliged to help each other is an inherent characteristic and creates common space for diffusion of expertise.

Taking the question of organizational effectiveness into consideration, it is obvious that the criteria of effectiveness of the clan culture include human resource development and teamwork. These factors are also connected with high tacit knowledge sharing. In this culture type one of important believes is that involvement and participation of employees foster empowerment and commitment. Cameron and Quinn write: "Committed, satisfied employees produce effectiveness". In other words, committed, satisfied employees are open to communicate and therefore share more of their experience, expertise and understandings, that in turn produces effectiveness.

Management skills important for Clan culture include managing the development of others, managing interpersonal relationships and managing teams. Manager living in such kind of organizational culture is ready to spend his time to communicate his answers to the questions of his colleagues and makes sure, that they really understand, adapt, and implements practice.

4.2 Adhocracy culture and tacit knowledge sharing

The second culture type fostering tacit-knowledge sharing is adhocracy culture. Underlying values, directing the culture of adhocracy, are flexibility and discretion and external focus and differentiation. Ambiguity and information overload are typical for this kind of culture. It is obvious, that tacit knowledge sharing is high when there is flexibility in ways to share, freedom in expression and differentiation in how to diffuse and accept it. All these values support importance of learning. Organization with strong adhocracy culture focuses on external positioning with a high degree of flexibility and individuality. Effective leaders in organizations dominated by the adhocracy culture tend to be entrepreneurial, visionary, innovative, creative, risk oriented, and focused on the future. Such kind of leadership, when includes understanding the importance of sharing expertise and experience, supports tacit-knowledge sharing. Value drivers, such as transformation, innovative outputs and agility, are better realized in practice with high tacit-knowledge diffusion. If tacit knowledge is understood by leaders as a resource that always brings something new, and is included in the vision, it becomes a very important factor making organization more effective.

Tacit knowledge sharing fosters creative solutions to problems and cutting-edge ideas, which are dominant effectiveness criteria in adhocracy culture. The underlying operational theory is that innovation and new ideas create new markets, new customers and new opportunities. As tacit knowledge sharing is an important part of innovation process and creating new ideas, it also plays a significant role in this type of culture. Management skills crucial in this type of culture are managing innovation, managing the future and managing continuous improvement. All these activities to great extent depend on tacit knowledge sharing, and the higher it is, the better they are preformed.

4.3 Market culture and tacit knowledge sharing

Market culture is oriented towards the external environment instead of internal affairs. The major focus of market is to conduct transactions (exchanges, sales and contracts) with other constituencies to create competitive advantage. Competitiveness and productivity are core values. In such kind of environment, where rivalry is more emphasized than unity, it is hardly possible, that tacit knowledge sharing will be naturally high. Aggressive and decisive leader, whose focus is on winning and external competitors, barely pays attention to creating relationships and warm climate. As market culture in its pure state is focused on getting things done, hard work, productivity and accomplishing things, there is scarcely as much emphasis on helping each other, as in the clan and adhocracy cultures. Tacit knowledge sharing is supported only by the sense of a part of a team, good and long relationships between members, willingness to share, when the competitors are perceived to be outside in other teams and organizations. These features are actually related to clan culture. Therefore, tacit knowledge sharing (in contrast to the deepness of quantity of tacit knowledge in each separate member) is barely natural part of market culture.

4.4 Hierarchy culture and tacit knowledge sharing

Hierarchy culture in its pure state supports tacit knowledge sharing probably the least out of all the four types of culture within the Competitive Values Framework. Hierarchy culture emphasizes internal focus and integration with stability and control. Control and efficiency produce effectiveness and there is little space for personal factor. Typical metaphor for this kind of organizational culture is mechanism, and the parts of a mechanism do not teach each other or support each other, they just do their job. Like in market culture, there is probably a lot of tacit knowledge inside this culture but hardly a lot of tacit knowledge exchange. Pure hierarchy is stable and not flexible or diverse. Internal orientation is more focused on procedures and rules, than on people like in clan culture. Documents and instructions contain explicit knowledge and distribute it openly. In contrast, implicit knowledge is in people, and if there personal factor is not important, there is hardly much exchange of practices and experiences. In order to raise the diffusion, it is necessary to add the clan culture proportion in the overall culture of organization.

Conclusion

Tacit Knowledge is an idiosyncratic, subjective store of knowledge and practical know-how gathered through years of experience and direct interaction within a domain or profession (Wagner and Sternberg 1985, in Guinipero et al. 1999:43). It is important to share tacit knowledge, because it allows to facilitate decision-making and to increase competitive ability and effectiveness of organization. Organizational culture is the key to transfer tacit knowledge, because it is social activity, face-to-face interaction, which can be educated only through culture.

The article represents a theoretical research of the question which kinds of organizational culture according to the competitive values framework support tacit knowledge sharing and in which ways. Clan culture is found to support tacit knowledge sharing all factors described refer to clan culture values and description. Adhocracy culture is the second culture type most supporting tacit knowledge sharing. Market and hierarchy hardly do so, and organizations willing to increase tacit knowledge sharing will have to increase the presence in their culture of clan and adhocracy types.

The article does not claim the final truthfulness of these conclusions, but more calls for further practical research to validate or disclaim them as well as provide with the extent of validity of these conclusions. The author plans to conduct this research on several organizations in Czech Republic. This paper as well as future research is made within grant-maintained project of GA ČR (Czech Science Foundation): Reg. No. 406/08/0459, "Developing Managerial Tacit Knowledge".

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The Interrelations between Customer Relationship Management and Market Orientation in High-Tech Companies in the Czech Republic

Abstract

In recent years, market orientation (MO) and customer relationship management (CRM) have been frequently explored topics in the field of business management and practical marketing. CRM and MO imply influence on the company results. In spite of a systematic interest in MO and CRM since the eighties, there has been practically no attention paid to the interconnection between them. This study carries out some important interrelations between market orientation and customer relationship management. It links the general point of view, supported by a literature search, and the exploratory point of view ascertained in high-tech companies in the Czech Republic. The factual links between CRM and MO result from data obtained by a research project supported by the Czech Science Foundation (GA CR). The research project No. 402/07/1493 named 'Research on implementation of market orientation in high-tech firms' is led by Doc. Ing. Vladimír Chalupský, CSc., MBA. This study uses the data from above mentioned research, but it examines a different topic (relations between CRM and MO).

It is generally agreed that CRM should be understood as management philosophy, accepted by everyone in the company, and that CRM should not be simply understood as software. The concept of CRM is defined as organizing an active relationship with a customer, but there are evidences that customer relationship management is not only about customers, it is also about employees, suppliers and other interested parties. CRM is trying to achieve a competitive advantage, therefore, competition analyses need to be developed. This is the same as in the market orientation.

The results show that CRM and MO have many identical bases. In addition, more CRM principles were founded in market oriented high-tech companies than in the others.

Key Words

market orientation, customer relationship management, MO, CRM, high-tech companies

JEL Classification:

M31

Introduction and a brief developmental overview

Customer relationship management (CRM) and market orientation (MO) have been under permanent focus of both theoreticians and practitioners in recent years. Interestingly, these two concepts are still analysed separately. The purpose of this study is to reveal the interconnections between MO and CRM.

The concept of CRM is defined as organizing an active relationship with a customer. CRM aims for permanent development of long-term relationship with customers in order to create a situation of two winners ("win-win") using a relationship strategy of "what you give is what you get". It is based on the exchange of information, emotions, and actions, during value development using different strategies [18].

Although CRM by definition is customer-oriented, in practice the philosophy of CRM drives its positive influence to the relations with employees, suppliers and all the other interested groups [19]. This study is in complete agreement with such a wider understanding of CRM. The work of Hommerova (2009) indicates that 86 % of respondents consider CRM to be an entrepreneurial strategy or philosophy and 14 % of respondents consider it to be about technology [7]. It seems to be a positive finding, because CRM sometimes falls short of expectations when focusing on the mechanics rather than increasing the value of the customer relationship [6].

Although the literature on CRM is less concerned with competition monitoring compared to the literature on MO, the CRM targeted effect is still a competitive advantage. The main values of MO have to last. However, the actual tools, which a market-oriented company uses to create an information base and respective reaction to it, are subject to permanent dynamic development. Business culture may only be a source of competitive advantage when it generates a value, is unique, and not easy to imitate [22]. Although the field of CRM has been systematically analysed since the 1980s, there is little attention paid to the interconnection between CRM and MO.

The concept of MO has its origin in a managerial approach known as "marketing concept". This comes out of Drucker's (1954) marketing characteristics as "all enterprising seen from the customer perspective" [5]. Kotler (1977) used the term "marketing orientation" [12]. The term "market orientation" was first mentioned in the work of Wadinambiaratchi (1972) [21]. In the late 1980s, research began in the area of MO analysis. The work of Kohli and Jaworski (1990, p. 1) has suggested "a market-oriented organization is one whose actions are consistent with the marketing concept" [10]. They also include the following definition: "Market orientation is the organization wide generation of market intelligence pertaining to current and future customers needs, dissemination of the intelligence across departments and organizations wide responsiveness to it." [10, p. 6]

The literature today presents a number of approaches to define MO. There are basically two branches of market orientation interpretation. One interpretation defines MO as a corporate culture. The other interpretation characterizes market orientation as a specific kind of company behaviour. Narver and Slater (1990, p. 21-22) compromise MO as follows: "Market orientation contains three elements of behaviour – customer orientation, orientation on competition and interfunctional coordination (and two decision criteria – long-term orientation and profitability)." Market orientation is understood as a culture concentrating on profit generation, creation of values for customers and includes orientation on the other stakeholders [14].

1. Applied methodology

This study involved a systematic analysis of available literature in the sphere of MO and CRM. With that, a compilation, analysis and synthesis of existing approaches and theoretical principles was processed. CRM and MO bases were compared and identical principles were identified.

Data from research project No. 402/07/1493 named 'Research of the market orientation implementation in high-tech firms' were used. The research project has been supported by the Czech Science Foundation (GA CR) and is led by Doc. Ing. Vladimír Chalupský, CSc., MBA and his team of co-workers.

Research was focused on the analysis of factors supporting or hindering the application of MO within a specified group of companies (high-tech production oriented companies in the engineering industry). "High-tech" in this research means the description of companies developing the most updated available technology, particularly in the high-level technology sector. This description goes along with a high prestige. It is mostly about companies in the information technology sector, biotechnology and nanotechnology sector. [23]

Those who responded the research were mostly from middle management, especially managers from the marketing or commercial fields. Addressed companies included small to large-sized organisations from the Czech Republic.

A questionnaire was developed in advance with questions measuring the level of CRM. The intention was to keep the questions concise and unambiguous. After piloting, there were 57 questions divided into thematic parts: analysis of the external environment; analysis of customers, distributors, competitors, and suppliers; analysis of internal environment; information about the performance of the company. The respondents marked only predefined response boxes. A seven-point Likert-type scale ranging from 1 (absolutely disagree) to 7 (absolutely agree) was used to help the respondents express their opinion.

Data were collected during the years 2008 and early 2009. Web questionnaires and face-to-face interviews were used. A total of 115 responses were received. Some respondents were from the same company, so the arithmetic average was used to obtain the number of 88 companies. The final number was 69 companies with fully completed questions. Although the data are the same for the previously mentioned research and for this paper, this study examines a different topic (relations between CRM and MO) and uses only one mutual question: the market orientation level in companies.

Every question was designed in such a way that a higher point on the scale meant a higher inclination to MO. The mean level of market orientation was established for each company. The companies were placed in ascending order and divided in two parts – highly market-oriented {1} and less market-oriented {2}. Sequentially, the answers and interconnections between questions representing CRM were observed for each group ({1} and {2}) separately. Microsoft Excel was used for computational analysis and graphic outputs.

2. Results

There were 69 companies analysed. Exactly two-thirds of companies were highly market-oriented (the mean level of MO higher than five). This means 46 highly market-oriented and 23 less market-oriented companies. The lowest MO level was '3.51' and the highest was '6.64'.

If the company is specified as a CRM company (a company with the CRM concept), it shows '5', '6' or '7' (agreement) as an answer to each of the following questions [2]:

1. We are regularly monitoring the requirements of our current and potential customers.
2. Tailor-made approach to the customers is applied.
3. We ascertain the satisfaction level of our final customers regularly.
4. We know how our customers perceive our products.
5. We are regularly monitoring the requirements of our distributors.
6. We regularly discuss problems with our distributors.
7. We are regularly monitoring our competitors' development and their marketing policy.
8. We regularly analyze how suppliers meet our requirements.
9. We implement acquired information in our decisions.
10. We offer products reflecting the latest requirements and wishes of our customers or our distributors.
11. Each employee knows his abilities and responsibilities.
12. Each employee is aware of the main goals of our company and how he can contribute to them.
13. We prefer teamwork and cooperation.
14. We observe information exchange between individual departments of our company.
15. We preferred long-term goals to short-term goals and a certain level of market share to financial goals.
16. We make ethical business decisions.

The results show that from 46 highly market-oriented companies there were 20 with the CRM concept, from 23 less market-oriented companies there was only one CRM company.

Kopřiva (2001) observes that there are five CRM levels (Table 1).

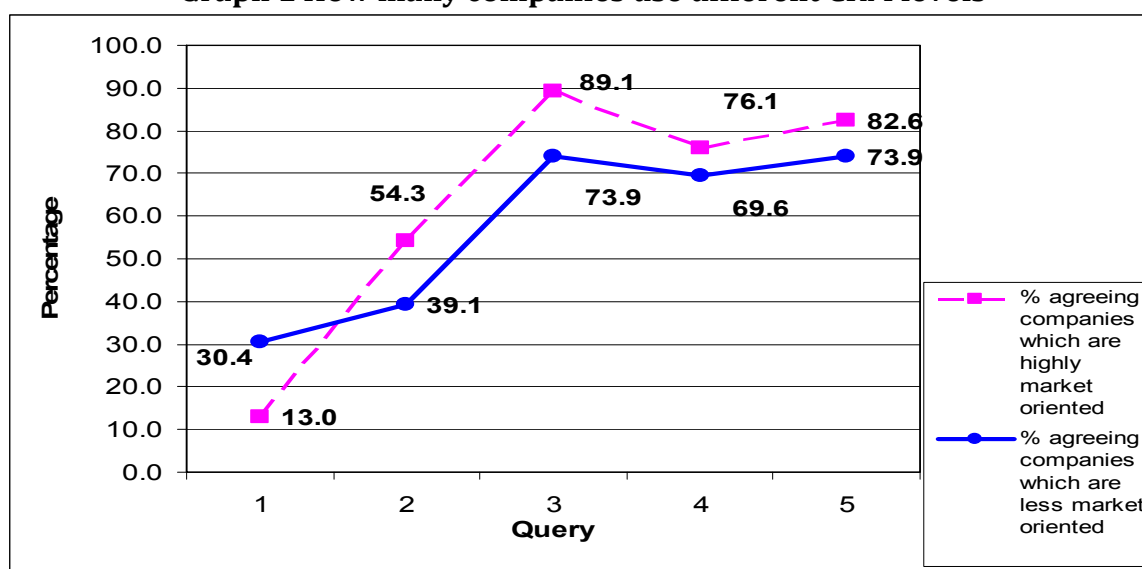
We placed these levels to the questionnaire. Graph 1 and Table 2 show the results.

Table 1 CRM levels

Query		CRM level
Number	Description	
1	Communication with customers is established and developed at the time when it is needed. Previous contacts are not filed.	Chaotic
2	Customers are separated into segments, contacts in different segments are closely regulated.	Segmented
3	Customers are centrally filed, customer profiles are gathered.	Centralized
4	Individual customer needs are monitored; every customer has his administrator.	Individualized
5	Consistent processes are exercised in each locality, but determined by individual customer needs.	Globally Individualized

Source: [11]

Graph 1 How many companies use different CRM levels



Source: [2]

Table 2 CRM levels of CRM companies

Query		% agreeing CRM companies
Number	Description	
1	Communication with customers is established and developed at the time when it is needed. Previous contacts are not filed.	14.3
2	Customers are separated into segments, contacts in different segments are closely regulated.	66.7
3	Customers are centrally filed, customer profiles are gathered.	95.2
4	Individual customer needs are monitored; every customer has his administrator.	85.7
5	Consistent processes are exercised in each locality, but determined by individual customer needs.	90.5

Source: [2]

3. Discussion

As stated above, from 46 highly market-oriented companies there were 20 with the CRM concept. From 23 less market-oriented companies there was only one with the CRM concept. These results support our opinion that MO and CRM could cooperate very closely.

CRM upgrade must be done level by level within the five levels defined in Table 1 [11]. However, these levels should be mixed in practice. Queries number two, three, four, and five are expected to be related in a linear way (upwardly) with the CRM orientation [11]. It may be right in certain respects, but we did not expect it to be obvious. Table 2 supports this opinion that CRM levels are related with the CRM orientation, but not in a linear way. Table 2 also shows the presence of an upward trend. It was supposed that the first query should show more frequented appearance among non-CRM oriented companies (and less market-oriented companies). Figures in Table 2 and Graph 1 clearly demonstrate that this assumption was right.

The evidence (Graph 1) seems to be strong that the highly market-oriented companies are much more interconnected with CRM than the less market-oriented companies.

It is remarkable that the less market-oriented companies show the increasing CRM level as well. The reason why the less market-oriented companies show the increasing CRM level should be that the high-tech companies are naturally market-oriented. This statement results from the fact that 95.6 percent of the analysed high-tech companies achieved the average MO level higher than '4'. The scale usually begins with '1', but our results begin with '3.51'. The results show that absolute disagreement was very rare. As a result, the scale does not include the minimum values and the lowest response corresponds to '3.51'.

These findings support the conclusion that MO and CRM are very closely related. In the following text, the theoretical conclusions drawn from the comparison of the concepts of CRM with the concepts of MO are illustrated. In the first instance, the systematic interest in the concepts was developed in the late 1980s. There are several common features between MO and CRM.

MO and CRM have long-term focus and are not just about short-term results. Moreover, profitability is a goal number two for CRM (the first goal is a satisfied customer). Kohli and Jaworski (1990) argued that profitability was found to be a result of MO, rather than a part of it [10]. MO is closely connected with the corporate culture [4] and the main priority is to create superior value for customers [14]. The same applies to the CRM concept [20].

MO, as well as CRM, is based upon the customer perception of value. CRM focuses particularly on the loyalty of the company towards customers [22] and this is founded in the practical use of market orientation. CRM emphasizes an active relationship with a customer, but it is not only about customers, it is also about employees, suppliers and other interested parties [16]. Developing and keeping relationships with the customers and the attention paid to other stakeholders is unavoidable in MO as well.

There is a necessity of decentralization of implementing powers and responsibility. For instance Wessling (2003) states that people closer to customers should make decisions [22], which is definitely true of MO - Jaworski and Kohli (1993) identified a negative relation between centralization and market orientation [10]. According to Jaworski and Kohli (1993), a certain level of risk tolerance on the part of senior managers, and their willingness to accept occasional failures as a normal part of trading, is useful for market orientation [10]. This recommendation also applies to CRM [22].

MO and CRM are considered to be a motivating factor with a positive effect on employees [1]. When MO and CRM are appropriately applied, employees are able to better identify with corporate goals and culture. Kohli and Jaworski state that a greater degree of MO leads to a greater “spirit“, satisfaction from work and the bonding of an organization and employees [17]. Ethical and moral aspects are required in both concepts [13; 22].

Supporting the function of technologies, aiming for shared and unified interpretation of information and spreading across the company are notorious. Continuous learning, observing the surroundings, monitoring of competition and orientation of processes are acknowledged [3; 22]. Innovation and brand orientation are emphasized in both concepts [18; 15; 6].

Javalgi, Martin and Young (2006) revealed the interrelation of market research, market orientation and CRM. They make clear that market research is the functional link between marketing management and the main customer basis. Market oriented companies take the information gained from market research and transform it into market intelligence which is then spread across the company. The positive effects of combining the market research, market orientation and CRM can be observed in the examples of different companies such as VeriFone, the Ritz Carlton Company, Federal Express, Hallmark Cards. The practical effects may be summarized in two conclusions. To make firms providing services on today's hypercompetitive markets possible to compete, they must be market oriented. In gathering data necessary for market orientation, the key role has the market research that may also enhance the practice of CRM. [8]

4. Limitations and future research

The conclusions must be considered within the limitations of this study. Several of the identified limitations point out opportunities for future research.

This study focused only on the high-tech companies in the Czech Republic. Therefore, conclusions for the whole business may be drawn after the comparison of experiences across business sectors from different countries.

After the literature search, identical principles of MO and CRM were identified. That is why questions for determination of CRM and MO were sometimes similar. This should be limitative but we suppose these concepts to be similar.

Conclusions

This work is aimed at putting forward the relationships between MO and CRM. A brief summarization of theoretical and managerial contributions of the study in terms of some advice for future research and praxis will be done.

In the new hyper-competitive economy, customer orientation has become a central issue for companies. MO and CRM are useful concepts and help companies to achieve success. This study finds that there are both theoretical and practical relationships between the concept of MO and the concept of CRM. The data seem to be strong that the highly market-oriented companies are much more interconnected with CRM than the less market-oriented companies. It is becoming apparent that the relations between MO and CRM are much more important than thought before and they require systematic analyses.

When we harmonize the positive aspects of MO and CRM, we could uncover barriers negatively affecting implementation of these concepts and we could help companies to achieve competitiveness and a better performance more effectively.

Further research should propose a methodology of company management based on the symbiosis of MO and CRM. As the implementation phase is the critical one where theoretical concepts fail most often, major focus should be put on the practical 'step by step' implementation.

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Comparison of Chinese-Czech Name Culture: An Influence of Culture on Brand Building

Abstract

In modern business conditions, the brand is essentially important for success in market. Building a strong brand name in an unfamiliar market is an effective way helping the company to win. As a special cultural phenomenon, name reflects the differences in history, religion and culture of different countries. The paper attempts to compare the name culture between Czech and Chinese and give advice on how to build an adaptable brand name in this rapidly changing marketplace. Comparing name culture between Czech and Chinese, It reveals that name has the nature of cultural symbol, which is the key of national history and cultural development. Chinese have a nearly superstitious worship to language. But to Czech, a name is just nothing more than a symbol. Between Czech and Chinese, different attitudes to the names of emperor and saint indicate different ways when facing authority. So in the eyes of many Western companies, including Czech, the market in China is difficult to understand and highly unpredictable, and vice versa. Successful brand is an important strategic instrument of an enterprise. When localizing brand names, firms have the opportunity to add benefits to the names to make them more attuned to the culture. The most effective way for a company to build a strong brand name in an unfamiliar market is to adapt itself to the culture.

Key Words

brand building, brand name, name culture, Czech, China.

JEL Classification:

M14

Introduction

As the world's economies move toward free markets, it has been argued that only the best-managed and strongest brand names will survive (Ourusoff et al. 1992). A strong brand name enables the company to earn above-average return by creating a loyal consumer following, which protects the firm from competitive encroachments on its franchise. A brand name is the foundation of the product, an asset to the company, and an important consumer cue, and it is critical to the success of a new product (Kohli and LaBahn 1997; Lubliner 1993).

As firms expand abroad, a key decision that must be made is the degree to which the brand name will be standardized or localized to adapt to the local market conditions. A brand name is a complex symbol that represents a variety of ideas or attributes, not only by its sound or its meaning but also through the body of associations it has built up and acquired as a public object over a period of time (Gardner and Levy 1955).

When a brand is expanded into a foreign market, a careless choice of a new or translated brand name can have negative effects on the product as well as on the company.

In the long term of human history, name deeply represents social culture of a nationality. China and Czech have remarkable differences in the aspects of people, area, language, culture and so on, which make differences in name of the two countries.

The most visible difference in the form of Czech - Chinese name, including given name and surname, is that Czech surname is after given name, while Chinese surname is before given name. Actually, this difference is not only in form, but also originates from a substantial reason. In China, surname originates much earlier than given name, while in Czech, the situation is opposite. Besides, there are surely differences in some other aspects.

This paper discusses some name cultural differences through which it gives advice on how to build an adaptable brand name in this rapidly changing marketplace.

1. Different Features of Given Name between Czech and Chinese

Czech people are Slav, whose culture and language are deeply influenced by Christianity, Roman culture and German. There are several features of Czech given name that we can concern about.

1. From about 16 century, the form of Czech name was “local name + Christian name” and this phenomenon existed until the beginning of last century. But now people usually use one name.
2. The number of Czech given name is fixed, about five or six hundred, each of which has its own “name day”. People can’t name themselves freely but should choose from those on calendar.
3. Czech people usually choose given names that sound graceful.
4. A son sometimes has the same given name with his father (of course they also have the same surname). What can be distinguished is their different birth code. And in their family the son is often called by nickname (like Jakub-Kuba) with positive emotion.
5. Names for female usually have obvious marks that can be easily recognized.

In Chinese, name is written in character as “名”. The part “夕” looks like a moon, which means at night and the part “口” looks like a mouth, which means calling someone. An ancient Chinese linguist named Xu Shen said in his work that name came out because people talked in the midnight when they couldn’t see each other. This type of name was first used inside each clan separately. After a long period of time, society developed and communication among different clans became more and more, then formal names came out.

There are following features of Chinese given name different from those of Czech given name referred above.

1. The form of given names is fixed, with one or two characters.
2. The number of Chinese given name is unlimited. Chinese can name themselves with any character they like.
3. Given name usually has positive meaning, for good hope, for memory of someone or something, for morality, and so on.
For example a given name “Yiying” has two characters (“怡” and “颖”), “Yi” means comfortable and “ying” means smart.
4. These given names are concerned about their sounds, having rhythm but not similar to some words with bad meaning.
5. There is special family tree nomenclature in China. Like “Yiying” mentioned above, “Yi” is a nomenclature for the same generation in the family tree. This whole generation members are expected to use “Yi” as their second name.
6. In traditional view, Chinese girls were always given names with tender meaning, like “Juan” and “Fang”, which mean soft and sweet odor. But today neutral names are used so commonly that you can never tell it’s a girl’s or a boy’s name.
7. Chinese given name is strongly influenced by the times.

2. Different Features of Surname between Czech and Chinese

Now we will compare the Czech and Chinese surname in the aspects of derivation, origin and source.

2.1 Different derivational meanings of the surnames in the two languages.

In western language, there are two situations that surname is defined from family relationship, or described the relationship with name, not that with family. Czech is the latter. In Czech language, surname is “příjmení”, in which “pří-” means next to, and the whole word means next to the name or leaning to the name.

In China, surname is written in character as “姓”. The part “女” means woman, and the part “生” means bear. The ancient Chinese linguist Xu Shen in his work “Shuo Wen Jie Zi” (Explanation of Characters) said “surname” indicated a woman bore a baby, after which the baby got his surname. That means the origin of surname is related to woman and birth. People who had a same mother share a same surname. So in Chinese dictionary, “surname” is explained as “a name symbolizing the family system”. Here surname has nothing to do with name.

2.2 Differences in the origin of surname between Czech and Chinese

In Czech, the origin of surname not only is much later than in China, but also had a totally different reason. In ancient time, Czech people just had their names, which were enough for small country population living in wide stretch of land. There was almost no chance possibility of “a same name used for two persons”, so surnames were not needed. From the 9 century, more and more people had same names because castle-centric cities (like Prague) were established after Czech dynasty set up and the population became larger and larger. The limited name number couldn't meet the growing great need. New law had found in 18 century that everyone should have his surname.

In China, “surname” represents the mother-directed family in the view of word origin. It indicates that “surname” originated very early, even dated from matriarchal clan society. It came out with definite functional objective. The Chinese dictionary “Ci Hai” said surname is used to differentiate one family from others. This was necessary because people coming from a same clan couldn't get married with each other. Marriage should be hold between two different matriarchal clans.

2.3 Differences in the source of surname between Czech and Chinese.

The important function of Czech surname is to distinguish people who sharing a same name. The main sources of the surname are:

1. Using father or mother's first name, like “Petrů” (child of Petr) and “Janů” (child of Jan).
2. From the place where they lived or were born, like “Hora” (hill), “Louka” (meadow), “Hájek” (little wood) and “Dolina” (valley)....
3. From the shield-shaped emblem of their house. For example “Růžička” (little rose), there should be a rose-shaped emblem on the host's house.
4. From the personal feature. For example “Kučera” (he had curly hair), their ancestor must have curls.
5. From the mind or behavior feature. For example “Mrhač” means “waste of money”.
6. From an event or interesting story. For example “Vyskočil” (He jumped out.), it's said that one day in a bar, some people were drunk and began to fight. One of them was very scared and jumped out of the window. From then on this surname came out.

Research from Chinese surname used nowadays indicates there are several sources as follow:

1. Expressing the worship to mother or totem. These are the oldest surnames, like “Jiang”, “Yao” (Characters are “姜” and “姚”, with the part “女”, which means woman.), “Ma” and “Niu” (Characters are “马” and “牛”, which mean “horse” and “cow”).).

2. From the name of the fief given by ancient emperor. Like “Qi”, “Song”, “Cao” and “Chen”, they are all from the names of old cities in ancient China.
3. From the name of the place where people live, like “Dongguo” (east of city wall), “Ximen” (west of city gate), and so on.
4. From the title of official position. For example “Sima”, “Shangguan”, “Wang” are official positions in ancient Chinese government.
5. From the ranking of their ancestor. For example “Ji” means “the third son in family”.
6. From the transliteration of the surnames of Chinese minority nationality, like “Yuwen”, “Ding”, “Shi” and so on.

2.4 Differences in the form of surnames between Czech and Chinese

No matter what the Czech surnames mean, generally in form they are one word, which can be monosyllabic or multi-syllable.

In terms of the part of speech and morphology, Czech surname can be nouns (like Kačer, Kozel and Socha), adjectives (like Bílý, Mokrý and Suchý), or past tense of verbs (like Sehnal and Nekvasil).

In Czech, after marriage the wife may use her husband’s surname, which is changed into feminine. Or contrarily, husband gets his wife’s surname, or both of them use their own surnames. As it’s known, the first situation is the commonest.

Generally speaking, Czech surname is permanent, but sometimes people change some surnames because of their vulgarness (e.g. Kokotek—Kotek) or mistakes made by birth register official.

From the record of the work “compilation of Chinese surnames”, there were 3470 monosyllabic surnames, 2085 hyphenated surnames, and 175 surnames with more than three characters. Nowadays many of these surnames are only found in literature. The monosyllabic surnames are mainly used by the Han nationality, and others are used by minority nationality from transliteration. Today about 3000 monosyllabic surnames and 250 hyphenated surnames are used by Chinese people. Generally no new surname appears.

Chinese women don’t change their surnames after they get married.

2.5 The revelation from comparing

Name is special cultural language that contains national social history and cultural spirit. It’s one of the important cultural mirror image of the nationality development. Comparing name culture between Czech and Chinese, we can get some helpful revelation.

1. Language is not only a means of recording culture. As a particular language, name has the nature of cultural symbol, which is the key of national history and cultural development. The name of Czech shows that the Czech history is a history of Slavic nationality continually making a stand and fighting against Teutonic nationality.

Chinese name also has obvious marks of the times. For example in the North and West Dynasty (A.D.420-589), a time of believing Buddhism, people used names like "Yao Puti", which means bodhi. And in period of great proletarian Cultural Revolution (A.D.1966-1976) people used names like "Wang Weidong", which means defending his country.

2. Language embodies the thinking feature of national culture and meanwhile it forms a framework conditioning and conducting the developmental direction of the cultural thinking of nationality. It also has an instructional function to help forming ideas.

In Czech, surname is after given name either in origin or in form, which can even have a chaffing meaning. Czech people are not as respectful to surname as Chinese. In their opinion, surname is just ramification of given name for differentiating one person from others. They are not endowed much sacred signification."

Chinese surname is in front of given name either in origin or in form, which means Chinese attach great importance to surname. Surname represents family, while given name represents individual. That is to say, the role of family is much more important than individual in the eyes of Chinese.

In the process of historical development, with the family-symbol function of surname being more and more emphasized, Chinese thought of patriarchal clan system was prevalent, and the notion of carrying on the family line was strong. Intellectuals study hard eager to standing out to bring honor to the ancestors. Chinese ordinary people have a strong thought that no offspring is a very serious mistake showing they are impious. By analogy, Chinese are more collectivism and people incline to follow the crowd which can make them feel safe enough. There is a proverb that the gun hits bird who takes the lead. Surname is for differentiating one family from others, and names should be ranked by family tree. Ethics and morality are looked upon as of great importance.

3. Chinese have a nearly superstitious worship to language. For example, Chinese attach very much importance to the meaning of the names they give to their children. Believing the power of names, they try to choose graceful, propitious ones, avoiding sordid and inauspicious; they choose basing their good hopes, like "Yaozu" (to bring honor to the ancestors) and "Zhaodi" (to bring a new brother to the family); they choose menial nicknames for children, who are wished to be far from threat....But to Czech, a name is just nothing more than a symbol, so what of no meaning?
4. Between Czech and Chinese, different attitudes to the names of emperor and saint indicate different ways when facing authority. Czech people use the saints' names to express their respect. Even Virgin Mary can be used for their little daughters. While in Chinese feudal society, the names of emperors, saints and meritorious ministers were sacrosanct. These names neither be used nor be called directly by ordinary people. Even today Chinese people avoid using names of the leaders and famous celebrities.

3. An Influence of Name Culture on Brand Building

In the eyes of many Western companies, including Czech, the market in China is difficult to understand and highly unpredictable. Many search for patterns in the market to help their brand-building activities, and vice versa.

For instance, “Škoda” is a famous brand of car belonging to Czech company. “Škoda” is named after a person, and it means “pity”. According to the discussion above, obviously if translated directly into Chinese, the brand would lose its market. The company should have a creation or at least transliteration, as it does now, to avoid the negative influence on customers’ understanding. On the other hand, a TV brand “ChangHong”, having established its production base in Nymburk of Czech Republic in 2006 means “long rainbow”. However, it shows Chinese phonetic writing directly, which is not so easy to be read correctly by Czech customers. That may influence sales in the marketplace.

Conclusion

Successful brand is an important strategic instrument of an enterprise. It efficiently transfers to customers the meaning of product and makes its identification easier. Cultural diversity makes it difficult for firms to standardize brand names globally. However, there is still great potential for growth. When localizing brand names, firms have the opportunity to add benefits to the names to make them more attuned to the culture. The most effective way for a company to build a strong brand name in an unfamiliar market is to adapt itself to the culture.

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Problems of Missing Values in Marketing Researches

Abstract

The simple definition says the marketing research serves to recognition of customers. It is a sum of methods and procedures which are supposed to lead to recognition of customers' needs, desires, expectations and satisfaction. This paper is focused on one of the final phases of marketing research which is processing of data obtained from it. The substantial problem being found during the data treatment is missing values. Usually, a part of responders do not answer all the questions which we ask to them. There are many reasons why it happens. Responders do not understand the question, do not find a suitable answer among offered answers, can forget to answer some questions or do not have enough time for filling in the whole questionnaire. The paper gives a list of methods suitable for processing the data file with missing values. We focus on such methods which are useable without a need of the special statistical software. The choice of a certain method depends on various factors. The most important factors are type of a variable and a variability of a sample. Both samples with a high variability and samples with a low variability are researched. The used methods are compared then in term of their impact on sample properties. There are presented the methods suitable for work with ordinal, interval and ratio variables. Each of them has its own characteristics which cannot be missed out by a choice of the method. Lastly, the paper deals with the problem whether it is better to replace missing values or to work just with the data truly obtained.

Key Words

arithmetic mean, marketing research, missing values, respondent, variability, variable

JEL Classification:

M31, C81

Introduction

Present world is continually and very quickly changing. Specialists talk about a new type of economy in this context (New Economy) which is based on the information society. Knowledge is the essential condition of success. This economy has got an important impact on all spheres of business, and it is also significantly changing the role of marketing. Marketing has to response to continually running dynamical changes in the market where a new competition continuously rises, the price wars are taking place, and new distribution channels are being found. These factors lead to creating new approaches in firms with focusing on a customer.

Marketing research is more or less used for recognizing customers' opinions and desires. Undoubtedly, a correctly carried out marketing research is a source of irreplaceable information about the market. This is the reason why marketing research

should be carried out before every considerable decision in the marketing strategic planning sphere.

The data obtained from a marketing research are not possible to be processed without utilizing statistical data analysis methods. We have to point out that the statistical methods and tools used in this sphere are often new, and specially set for activities connected with marketing research. Marketing researches have their special characteristics. A typical feature is a very low occurrence of numeric data. They mostly use nominal or ordinal scales.

1. Types of Missing Values

Only valid and credible primary data of high quality contribute to making correct decisions. Factors that can significantly influence the quality of research outputs are the missing values. It is impossible to eliminate the occurrence of missing values, especially, in large researches. The number of missing values depends on a quality of a survey, especially, in the case of questionnaire survey which is the most frequently occurring form of marketing research.

We can divide the missing values into two groups. Firstly, the missing values are defined by the user as missing values. It means that the user determines what is supposed to be missing value. It can be non-response (and it is not important why the responder did not answer the question), illegible, or incorrectly signed answer (so, it is not clear what the responder wanted to say), or the answer “I do not know” (if it is not one of the unique values in the scale). We can also consider categories with low occurrence frequency or categories dismissible for monitoring a certain problem. Missing values can be outliers also which can have a negative influence on some statistical characteristics values. Secondly, missing values are a system of missing values that arise from various ways. They can arise from the process of data input. It means that no value was entered, or a forbidden value was entered (division by zero).

In most cases, the reason of non-responses is that the responder is reluctant to share some information. In the few last years, the argument about personal data protection has been used. But it is also possible that the responder did not understand the question, or was not be able to choose an answer from the offered ones because no one is able to describe his feelings perfectly. Sometimes, the responder does not have enough time to fill in the whole questionnaire or he loses an interest in its filling in. Some responders need not be available during the survey. There are also some responders who give wanted information but falsify the state of researched problem intentionally or unintentionally.

2. How to Work with Missing Values?

Due to the occurrence of missing values in data files, a non-sampling error arises. It is necessary to point out the difference between the non-sampling error and sampling error. The sampling error arises from a sample survey owing to the variability of the

researched variables and due to the fact that we research just one of all the existing samples. The non-sampling error leads to more or less significant bias which is considerably independent on the sampling technique. It also arises in the case of population surveys. The non-sampling errors have got a tendency to increase due to sample size increasing. Some experts assert that the non-sampling errors produce greater bias of final outcomes of a marketing research than the sampling errors whose minimization is one of the corner stones of statistical inference.

It is necessary to choose the optimal technique for work with missing values that can minimize the non-sampling error to eliminate loss of information. Firstly, we have to make a decision whether to leave data as they are, or not. Leaving data as they are requires utilization of special mathematical calculation procedures and special statistic methods. The main problem is not to reduce the sample size but to reduce the possibility of biased data

Another possibility is replacing missing values by concrete values. It means an estimation of missing values based on the rest of obtained values. We can choose one of several methods in accordance with the concrete situation, data properties, etc. An easy way is to replace missing data with the arithmetic mean computed from the rest of the really obtained data. But this procedure has some limitations. It is not a suitable method if we miss a lot of data, or, in case of large data variability, or if there are outliers. Substitution of missing values with the median, mode, maximum or minimum is very similar. This procedure is also suitable for a nominal variable. We use the least frequently occurring value instead of the minimum etc.

Another and more difficult possibility is a replacement of missing values with the group mean. Firstly, it is necessary to subdivide raw data into subsets defined by the identifier (other variable). We calculate the arithmetic mean (or mode) for data in a single group. The missing value in a certain group is then replaced with the arithmetic mean calculated for the data in this group. Eventually, we can substitute it by a value randomly chosen. It is evident that the main point of this procedure is finding a suitable identifier that allows group the data into subsets. The essential requirement on the identifier is to obtain a group with a high inner homogeneity.

Another procedure of missing data imputation is the hot-deck imputation. This method allows filling in missing values on an incomplete record about a responder using values from similar record which is complete in the same data file. If the similar record is not available, we can repeat the procedure for another variable or choose the record randomly. When repeating the measures, we can use the last value carried forward technique. Missing values are substituted by the last observed value.

The list of frequently used methods of imputation missing data can be supplemented by the regression substitution method. The parameters of the regression model are estimated on the basis of existing data. This method is suitable just for numeric variables.

Many statistical packages contain modules for missing data analysis. There are many techniques and procedures that deal with missing data. The important question is how to sign missing values. There are big differences among particular programmes. E.g. the

missing value is sign as a dot in the programme SYSTAT. Another way is not allowed. The number -32768 has got the same meaning like deletion of a value in the programme STATGRAPHICS. So, there is only one possibility how to sign missing values for all the variables. If the different missing data coding is in the imported file, we can recode all the missing values by a suitable procedure at the same time. Missing values are replaced by the number -999 in the programme STATISTICA. But this number can be changed according to our needs.

Most programmes contain basically two methods of data deletion. First of them is listwise deletion. It excludes all cases which do not have data on all variables in the list of variables. It leads to an undesirable reduction of a sample size. This method is usable only when the number of cases with missing values is small in relation to sample size (e.g. less than 5 % in case of large samples). The reduction of a sample size can lead to bias. The second method is called pairwise deletion. The idea of this method is to take into account all the cases that are available. It means, we delete just the cases with missing values for the current calculation not all the cases with at least one missing value. The disadvantage of the method is that different calculations use different samples with different sizes. This method is suitable for small samples or if the number of missing values is too big.

The special statistical packages for missing value analysis also exist, e.g. the procedure in the programme SPSS called Missing Value Analysis. It allows find out if the missing values are randomly distributed, if pairs of variables in which the missing values occur together exist, testing differences between responders' answers and non-responses etc. These problems are not included in the commonly used programmes but only in the special statistical programmes.

3. Application of Missing Value Analysis Methods on Data from Marketing Research

We have to take into account all the factors and conditions which can influence results of treating data from marketing research. If some data are missed it is not possible to determine the uniform, generally useful procedure for work with them. This paper focuses on methods suitable for treating ordinal, interval, and ratio variables. There are presented methods usable without a need of a special statistical programme that might not be commonly available. We have simulated a marketing research in 100 randomly chosen families in order to evaluate the effectiveness of several missing value analysis methods. The marketing research focused on purchasing non-alcoholic drinks. We were interested in a number of family members, average amount spent on non-alcoholic drinks a week, and the influence of advertisements on these costs. First two variables are interval and ratio, the third one is an ordinal variable. Especially that type of a variable is one of the most important factors in the missing value analysis.

Another important factor is the data variability. That is the reason why we have simulated two types of samples – with a low and high variability. Then, we created samples with five, ten, fifteen, and twenty missing values in term of the previous criterion. A factor that also has a significant influence on work with missing data is the

type of missing value. It is naturally not possible to learn it in the real situation but when we simulate the research it is not problem to find it out. We supposed an absence of a certain number of the smallest and greatest values. Furthermore, we supposed the “common” situations and determined missing values randomly.

Firstly, we treated the interval variable “average costs on non-alcoholic drinks per a week”. Three methods used for working with missing values were applied on these data, and then compared. These three methods are signed as Method 1, Method 2, and Method 3. Method 1 means that the missing values are deleted. Method 2 supposes replacing the missing values with the arithmetic mean calculated from obtained values. Method 3 consists of replacing the missing values with an appropriate group mean. The arithmetic mean is a criterion used for the comparison of impacts of application of these three methods. Methods 1 and 2 naturally lead to the same value of the arithmetic mean. But when replacing the missing values with the arithmetic mean, the sample size is not reduced, and the data variability decreases.

In order to replace the missing values with the group mean, we had to subdivide the sample into subsets according to the variable “number of family members”. This circumstance is very important because creating subsets according to a variable can improve the quality of results. But the important condition of a results quality improvement is achieving greater homogeneity in created groups than in the sample as a whole. It means that we have to know if the variable depends on the sorting factor. We suppose here that costs depend on the number of family members and therefore the subdividing according to this variable will have a positive impact on results.

Two tables were created. Table 1 contains results from the sample with a high variability and table 2 from the sample with a low variability. Three missing value analysis methods were used in three situations – we missed the smallest values, largest and randomly chosen ones. The sample with a high variability has got the range of 1430 CZK, its coefficient of variation is 51.6 %, and the arithmetic mean equals to 580.35 CZK. The sample with a low variability has the range of 300 CZK, its coefficient of variation is 26.2 %, and the arithmetic mean equals to 327.15 CZK.

Table 1 Deviations of the original arithmetic mean from the arithmetic mean after application of Methods 1, 2, and 3 (in CZK) – sample with a high variability

Number of Missing Values	Missing the Smallest Values		Missing the Largest Values		Missing Randomly Chosen Values	
	Method 1 and 2	Method 3	Method 1 and 2	Method 3	Method 1 and 2	Method 3
5	-26.334	-2.464	33.666	12.5	9.455	-0.996
10	-53.372	-5.25	56.85	27.387	10.794	2.599
15	-78.944	-29.737	80.174	35.95	-9.297	-4.849
20	-103.275	-38.368	103.912	45.2	12.917	0.367

Source: own

As written above the arithmetic mean computed from the whole data set serves to comparison of used methods. Therefore, we watch deviations of this original arithmetic mean from the arithmetic means computed after application of Methods 1, 2, and 3. We want to point out here that the absolute value of deviations is important for the comparison of impacts of used three methods.

Table 2 Deviations of the original arithmetic mean from the arithmetic mean after application of Methods 1, 2, and 3 (in CZK) – sample with a low variability

Number of Missing Values	Missing the Smallest Values		Missing the Largest Values		Missing Randomly Chosen Values	
	Method 1 and 2	Method 3	Method 1 and 2	Method 3	Method 1 and 2	Method 3
5	6.218	-1.336	8.676	1.162	1.721	1.461
10	-11.794	-2.15	16.872	7.511	-2.072	-0.682
15	-18.203	-3.947	24.738	10.884	-1.791	-0.529
20	-25.225	-6.386	32.462	14.282	3.15	2.553

Source: own

Generally, it is possible to assert that the sample with a high variability has got much greater deviations of the original mean from the “new” mean after application chosen methods than the sample with a low variability. This result was expectable. Without reference to this circumstance we can observe similar features and tendencies in the deviations behaviour. When increasing the number of missing values, the absolute value of the deviations increases as well but just for the examples with missing the smallest and largest values. When we miss randomly chosen data, absolute deviations oscillate in a certain, and not very wide range. When replacing the missing values with the group means, the absolute deviations are considerably smaller than in the case of replacing with the overall arithmetic mean or deletion of missing values. This result is valid for all the three situations mentioned above. Generally, the replacement with the group means leads to results improvement in comparison with the mean substitution, or deletion of missing values.

The presented methods for replacing the missing values have their advantages and disadvantages. The mean substitution is a very simple method but, as mentioned above, the use of it is connected with some limitations. The biggest disadvantage is that the method does not respect the data variability because the variance of the variable is reduced. Furthermore, it does not respect the correlation structure of data. It can lead to bias of results, especially in case of the multiple variable methods application. Deletion of the missing values does not lead to the data variability decrease but the original sample size is reduced, and it can be a big problem in case of small samples. The group-mean substitution can be considered as the method with the best results. But application of this method depends on an existence of a suitable sorting variable. When we carry out a large survey with a lot of searched variables there are real conditions for application of this method.

The second treated variable is an ordinal variable. The values of the variable are answers to the question: “How much is your decision on purchasing of various brands of non-alcohol drinks inspired by an advertisement?” The answers create a five-point scale from “not inspired at all” to “inspired strongly”. We cannot suppose that a subdivision of families according to the number of family members will bring some benefits because there is no reason why to suppose dependence of a relationship to an advertisement on the number of family members. On the other hand, in multiple-member families it is possible to suppose a mutual influence among these members which can lead to similar opinions.

The character of the five-point scale is a little different from the previous two variables. Table 3 containing results for the ordinal variable is changed. We can see the situation with randomly chosen missing values only. The data variability is naturally limited by the scale range, the maximal range is 4 points. The overall arithmetic mean in the sample with a high variability is 2.82 points, the coefficient of variation is 67.1 %. The arithmetic mean in the sample with a low variability is 3.8 points, and the coefficient of variation is 14 %. Moreover, there is presented Method 4 which consists in substitution of missing values with the mode. With regard to the unique characteristics of the ordinal variable we can suppose that this method will bring some profits.

Table 3 Deviations of the original arithmetic mean from the arithmetic mean after application of Methods 1, 2, 3, and 4 (in points)

Number of Missing Values	Sample with a High Variability			Sample with a Low Variability		
	Method 1 and 2	Method 3	Method 4	Method 1 and 2	Method 3	Method 4
5	0.0516	-0.0131	0.14	0.0105	0.0207	0.00
10	-0.0689	0.0018	0.12	-0.0111	0.0091	0.03
15	-0.0977	0.0077	0.19	0.0000	0.0109	0.02
20	-0.0675	0.0001	0.31	0.0125	0.0138	0.03

Source: own

As we can see in the Table 3, it is evident that the absolute deviations do not depend on the number of missing values explicitly. Absolute deviations oscillate in a certain range. The group-mean substitution seems to be the most effective method for substitution of ordinal variable missing data. In the opposite site, the mode substitution is not considered to be a suitable method because it leads to the greatest absolute deviations. Our hypothesis was wrong. The results of the Methods 1 and 2 are similar to results of the Method 3 in the sample with a low variability. So, we cannot assert that the group-mean substitution gives us more benefits than mean substitution or deletion of missing values. The mode substitution seems to be the most unsuitable method in this case.

Conclusion

When working with the data set with the missing values, we have to be really careful about the choice of methods used for working with the missing data because in some cases even approved methods need not give meaningful and true results. We have to evaluate the concrete situation and choose an appropriate method. Firstly, it is necessary to decide whether to delete or replace the missing values. There is no simple rule but it is possible to formulate some general recommendations. When we miss a lot of records from one responder, or one variable misses a lot of data from many responders, it is possible to recommend deletion of the responder or variable from the data set. On the other side, the values whose absence is random should be replaced. The reason is a partial elimination of information loss. The important factor in the process of decision making is certainly the sample size. The smaller the sample size the more problematic the deletion of the missing values. It leads to another undesirable loss in the sample size which can diminish the statistical power of the analysis. Thus, the data substitution is recommended in case of small sample sizes.

It is also necessary to think over appropriate methods used for the data treatment beforehand. The missing values substitution is especially complicated when we consider using multiple variable methods. The choice of incorrect methods can lead to a biased correlation coefficient or Pearson's R. If supposing an application of one variable analysis, the decision is easier, and we can expect a reduction of biased results due to the substitution of the missing values.

The conducted simulation shows that the type of a variable is very important for working with missing values. The group-mean substitution evidently led to better results than mean substitution in the case of an interval variable in both the samples – with a low and high variability. On the other hand the difference between these two methods is not substantial in case of an ordinal variable. The group-mean substitution did not even lead to the results improvement. The mode substitution did not bring positive results either. The absolute deviations were greater than after the application of other methods in both types of samples.

The dependence of absolute deviations on the number of missing values is also a very interesting problem. It is showed in the situations when either the largest values or the smallest values are missed in the cases of an interval variable. Then we can watch increasing deviations connected with the increase in the number of missing values. But when the randomly chosen values are missed, the increase in the number of missing values does not lead to the increase of absolute deviations. This assertion is valid for both ordinal and interval variable. Absolute deviations oscillate in a certain range whose width depends on the suitability of the used missing data substitution method.

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The Importance of Internal Marketing Communication to Build a Stable Business

Abstract

Marketing is a set of activities that help to business succeed in a competitive environment in order to satisfy the customer and take advantage of its own profit. Activities based on the instruments of the marketing mix provide the path to partner - for the customer, but also to the cooperation and loyalty. Get a partner to work means to know partners, what they want and need, to meet their requirements within a reasonable ratio of price / performance, to solve the problems associated with the use of the product or service it, to offer comfort not only associated with the use of but also the product acquisition and its restoration. Marketing Management is a company focused on its external and internal customers for all their partners, with which it cooperates on the principle of mutual benefits. Management and conduct of business come from marketing strategy that takes into account these relations and applies marketing philosophy not only outwards from the company, but also inside. Within the application of internal marketing company may use the analogy of knowledge of general marketing practices in building relationships with their employees.

Marketing is a philosophy which must be contained in the base business and that leads the company changed to market opportunities for their own prosperity in terms of satisfaction - the benefit of all stakeholders, including key partners - employees. Most companies in the segment of small and medium-sized with the concept of internal marketing are not working at all. Management is primarily concentric marketing focused on customers and possibly other external partners. Article shows the use of marketing communication tools in the process of building a stable business.

Key Words

internal marketing communication, internal PR

JEL Classification:

M31, M12

Introduction

At a time of adverse economic conditions, increasing competition and a decline in demand in the context of economic recession, it is necessary to adapt the entire company to new conditions. To be able to quickly adapt itself, the company must be stable and efficient. The company stability and effectiveness is based on a stable and efficient staff that is properly led, managed and motivated. One of the most important incentives attributed to a successful employer is the functioning internal marketing, represented primarily by the internal marketing company communication.

Most companies in the segment of small and medium-sized ones do not deal with the concept of internal communication at all. Management is primarily concentrated on marketing focused on customers and possibly other external partners. Definition of

marketing and marketing activities entrepreneurs understand especially towards their customers, but marketing is a philosophy which must be included in the base of the business which leads the company to converting the market opportunities to their own prosperity in terms of satisfaction - the benefit of all stakeholders, including employees. It is advantageous, if not only the firm itself but also employees perceive marketing as a set of activities that help them to succeed in a competitive environment in order to satisfy the customer and take advantage of their own profit. Marketing activities based on marketing tools (marketing mix) help the company to encourage partners to make business but also towards the cooperation and loyalty. To gain a partner for corporation is possible for those who know their business partner well, know what he wants and needs. Those can meet their requirements within a reasonable ratio of price / performance, can solve the problems related to the product use or service, but also can offer a comfort concerning not only the usage but also the product acquisition and its rehabilitation, can meet their expectations.

Properly managed marketing company is a company focused on its external and internal customers, on all their partners, on all with whom it cooperates on the principle of mutual benefits. Business management and conducting is therefore a subject to the chosen marketing strategy that takes into account these relations and applies marketing philosophy not only outside the company but also inside. Applying the internal marketing in the company may well use the analogy of knowledge and practices of general marketing which certainly help the process of building a company-employee relationship, strengthens loyalty and staff stability, thus strengthening their own stability and competitiveness.

1. Personnel marketing

Amstrong (2000) defines the concept of marketing personnel work as a part of personnel work which is aimed at meeting the needs and interests of the company (management) in shaping the workforce. Based on the citation Theodor Levit (1983) "Organizations must learn to think about themselves rather than in such a way that it produces goods or services, but that it buys the customers by doing things that encourage people to want to deal with it." This principle applies to the HR market, respectively. A company needs to shape the workforce according to their interests by doing things in such a way that it would want to cooperate. For this purpose the company recruits personnel manager to fulfill these needs. Personnel manager then uses marketing tools in all activities:

- survey to detect the standpoints and views of workers, but also a labor market survey,
- the analysis of results,
- creation of offers to employees, their cost (benefits, budgets, price performance ratio) and distribution,
- creation of appropriate communication for the "purchase" of workers (the products under social program such as company contributions to the sport). [1]

Professional literature aimed at marketing does not usually separate internal marketing [2] more specifically focusing only on the internal Public Relation. [4] Human resources in general emphasize the importance of general, formal, informal, horizontal, vertical and team management communication as conflict prevention and the cultivation of healthy relationships within the company which most obviously affect the employees' cooperation and stability. [5] Linking these directions leads to the creation of internal marketing content. Because internal marketing can not be limited only to communication but it must be a part of corporate strategies including building relationships with internal partners - employees.

In the years 2005-6 an investigative research was carried out in approximately 800 Czech enterprises. This survey was carried out under the author's thesis. The obtained material served as the data of the managers' views and the company's solution of the internal communication process. The most important results are summarized in the book "Internal communication in company" [Holá, 2006] by author.

The survey of internal communication also shows that is very difficult to accept this form of marketing for many firms and managers in the segment of small and medium-sized companies. [6] Understanding it is based on a corporate culture based on partnership with employees and it is not well established in these firms. The problem is that for the company, it is very difficult to define its offer to its employees. What is the product - offer? What is its essence? What is the aim of accepting it? How is the objective measurable? What is the price? How is what the company offers received by its employees and what are the company's expectations? These are questions worth searching the answers. For example in the preparation of specific product offered in the context of social policy business e.g. additional week of vacation, pension insurance, contribution to the sport, the prestigious training, sports or social events and others. If a company offers something like this, management should know how to "sell" it to the employees. Is it that what is being offered, employees want and expect? If a firm offers something that is not valued by employees, it's a great waste. Only a survey can tell what would be incentive for staff and a feedback indicates that the product is suitable and fulfilling its purpose. And then a suitably chosen communication mix can encourage staff to demand the prepared products. The problem is also to define the company's offer in general terms without something extra. But the offer essence lies in the offer of employment, meaningful work, in the security based on employment prospects and prosperity of the company. This offer must be simultaneously routed to staff that are able to work, to contribute to the prosperity and prospects of the company and his/her own.

2. Internal marketing

It is important for the company management to be aware of the fact that employee's priority is the suitable employer. Credible, perspective employer offers the expected salary, but also some kind of security and prospect. Employer who offers to its employees a meaningful work under certain conditions in accordance with their demands for self-fulfillment is more interesting than others for employees and this employer can choose better people for own business and so far can be more competitive. Therefore, management must clearly declare what kind of an employer the company

wants to be and how does it want to meet the needs and interests of its employees. For its plans the company needs the right people at the right positions. Does the company want to be the best; it must strive for the best staff and seek their stability. In all the earlier mentioned the internal marketing can be of a great help. The basic element provides the two-way communication. That way the employer is aware of its employees' needs in return of their efforts and loyalty. This seems to be the only way to learn whether the products meet the staff policy of the company and fulfill the purpose and objectives set by the management.

The same communication mix that managers commonly use in external marketing communication can be employed in internal marketing communication as well. In internal marketing communication the same communication mix can be used the managers are used to in external marketing communications. Experience shows that the company addresses the internal marketing rather intuitively, the most commonly practiced is only the internal PR.

What then is the specific use of marketing communication inside the company? Classical 4P marketing mix (product, price, place, promotion) should be an appropriate management tool. Its appropriate use, with an emphasis on communication (advertising, PR, sponsorship, sales promotion, personal selling, direct marketing, viral marketing) can be successfully applied.

It is a pity that despite the marketing communication in its base is not determined in terms towards the external public, majority of managers primarily perceive its focus on external partners. Nevertheless it means just the change of a target group (simply instead of focusing on customers switching to focus on internal customers, employees) and change of a product or service and appropriately selected communication. It can be based on the fundamental objectives of corporate marketing communication which are generally known:

- convince customers to accept the product or service, positively and successfully influence their purchasing decisions,
- highlight the distinctive features of products and services, highlight the good values which convince the customer to prefer the product or service over competing products,
- consolidate long-term quality and lasting relationships with customers and the public, to get loyal partners for their cooperation. [4]

Back to the question, what is the product that the company offers to its employees? Mainly it is the proposed co-operation - employment. The company wants its people to work for it and offers something in response: prospective well-paid employment or self-realization and job security, mutual credibility, different advantages, high reward for hard work or all together. Briefly, this may be what the company presents the texts in their advertisements when searching for employees. However, it is necessary to provide the text reflecting the actual company offer to potential as well as to existing employees, but the majority of the company management is not able to define itself. [6]

Most small and medium-sized companies have not clearly defined and declared personnel policy and have not been dealing with the culture of the company yet.

The product, which the company wants to "sell" to its employees, may be anything limited just by specific objectives like: increased efforts in the campaign, the acquisition of new social benefits to enhance loyalty, participation at company events, anything that will help mutual cooperation leading to better results of the company.

3. Tools of communication mix

Therefore, if the firm is able to specify what it wants to offer to its employees (in exchange for working effort and loyalty), what it wants to sell, as well as in the current mix of communication tools at their disposal, which are complementary. The main forms of marketing communication which the company implemented within most of their customers can be very good, fully applicable by analogy to the company employees. The different forms of combinations can cover the whole internal marketing communication. Examples of use can be an overview of the specific tools listed in Table 1.

Tab 1: Specific use of tools and forms of communication mix

Advertisement.	Advertisement. Promotion of new campaigns, new employee benefits, an invitation to the corporate action on the bulletin boards, intranet or a corporate magazine, etc.
Sales promotions	Marketing materials and articles (corporate T-shirts) in special campaigns, internal training, discounts on purchases of corporate or other products and services, etc.
Public Relations	Regular business meetings and sporting or social events, regular assessment, errands managers, regular reporting on the achievements of the company and generally what is going on in the company intranet or e-mail, in a magazine, etc.
Sponsoring	Employee benefits, contributions to culture, sport, business and sport team, the benefits of corporate clothing, etc.
Direct marketing	News, intranet presentations, on-line contact, posters promoting of changes or new products, etc., managers communication.
Viral marketing	Spread good news through informal communication staff.

Source: own

4. Internal Public Relations

PR activities are part of marketing communication aimed at major groups of external and internal public, customers, suppliers, other professional or general public, but also at employees or other owners, identifying the whole group as stakeholders. The largest group of internal public is staff and the internal PR which is a part of internal marketing and should be targeted preferably.

PR is based on a company communication strategy which includes the entire communications company with all partners. Communication strategy is based on company strategy and is a mean for its fulfillment. Communication strategies are understood as a summary of the fundamental objectives and means of achieving them. Table 2 summarizes the examples of basic communication strategies.

Tab. 2 The examples of communication strategy creation

Partner	Target	Means (via)	Tools	Measurability
Existing customers	Loyalty, the turnover and gross profit	Customer satisfaction with products and provided services	CRM systems, regular meetings, product training, regular visits	Regular purchase, annual sales, gross profit, customers' feedback
Potential customers	Arouse interest in the products and services	Desired image and reputation of companies, products and services	Means of marketing communication mix	Number of new customers and their turnover
Employees	Positive relation to the company, forming the desired working positions (of performance and behavior), reinforcing loyalty to spread the reputation of the company, to meet the information needs of work, coordination of work, teamwork	Satisfaction, a high degree of self-motivation, belief in the prospect of the company and in his own career in the company	Internal PR, management of work performance (eg regular evaluation), the fulfillment of information needs (internal workshops, intranet, meetings), communication standards at the beginning of the new workers, functioning feedback	Performing the tasks, the achievement of the objectives, specific performance, turnover, satisfaction measurable shifts in time series (anonymous surveys and evaluation)
Associated companies	Beneficial cooperation with the serious and necessary partners, building the company's reputation and desirability of permanent trade relations (suppliers, banks, freight forwarding companies, agencies, offices, etc.)	Serious and professional approach to the partnership based on moral principles, trust and respect of partners, mutual satisfaction, in cooperation	Providing information about the company (website, printed company profile) regular contact, extract application and regular meetings, additional PR activities	Cost of services and quality of services (the ratio of price / performance), payments and economic indicators of trade relations
Other public, media, competitors, population	Building a desirable image and reputation, the spread of reputation, offer the potential cooperation partners and employees	Desirable image and reputation of company, products and services	Public Relations, behavior of company (management), spread of reputation by staff	Monitoring of views and attitudes regarding public image and reputation of the company

Source: own

All activities that are commonly used for external PR communications can and should be used as well inwards. Only thus they may be consistent in coordination of all activities such as the sales campaign (as the event information to customers and other external

public must be informed and the staff must know that action is not only held but the commitment should know the meaning and benefit of the whole event for business) and only re-thought out strategy can create the same, transparent image inside and outside the company. It is very important when customers and employees perceive the company alike. An example of a use of the same activities for external and internal PR shows Table 3.

Tab. 3 The examples of external and internal PR activities are shown in the table

External PR activities	Internal PR activities
Press Conference Press Release Annual Report Company Profile Website, Extranet Chat, Customer Competition Viral Marketing	Regular reporting on the position of firms in the market, what is happening in the business, strategies, plans and their implementation through regular corporate or team meetings, e-mail or regular news features on the intranet Annual Report, Company Profile, Intranet Chat, Competition for Staff Supported Informal Communication
Regular meetings with partners	Regular meetings with partners with employees, Discussions
Professional, social and sporting events	Internal trainings, Briefings, social and sporting events for employees
Case studies, articles about products or business personalities, successful projects, references	Case studies, articles about products or business personalities, successful projects, references via company journal, boards or intranet
Sponsoring	Sponsoring of employees' activities, social benefits for employees
Company open days	Managers open day

Source: own

5. Internal Public Relation clearly help building confidence

Notwithstanding the application of internal marketing communication, every company must establish and develop their communication with employees. It must start by providing sufficient information and continue building open mutual communication among partners wishing cooperation. The information must be unambiguous and truthful; otherwise it would spread doubts, rumors and negative information. It is necessary to work mainly with positive information for strengthening positive company image. Good awareness creates the employees' confidence and open atmosphere. Providing that the management succeeds to build an open atmosphere allowing space for feedback and employees feel that the company appreciates them and their internal cooperation is mutually advantageous, the moment for internal employee's motivation arises. If employees trust the company, they are willing to work more and better. They believe that firm prosperity brings prosperity to their personal life.

The role of internal PR is also in providing enough openness and information to give employees the ability to change their views and actively influence them. Sometimes even the necessity to overcome prejudices and distrust might appear. Employees may enter the company having already some idea about the company, with the prejudices and the negative evaluation of the company. For the internal communication management, in this case internal PR, the prevention and feedback is very important. Feedback provides not only the reflection of internal PR work, shows whether such activities are effective

or not, but shows also the starting points and may change the objectives of communication. Feedback can detect hidden problems, may indicate the way of achieving the desired relationship, shows what is important for employees and may lead to their satisfaction. It is important to note that the solemn information will not bring anything; only working with information can provide a lot. It is important to unleash possible uncertainties and restlessness that may become a very negative attitude if not appropriately eliminated in time. It is important to listen to the employees, to discuss with them and create long-term positive relationship the same way as with customers.

Conclusion

All employees (including managers) need enough information and communication for better identification with the corporate objectives which have raised a confidence in company business and would convince them of meaningfulness of their specific work in the functioning company. Sophisticated internal communication based on internal marketing, using tools of internal PR both can affect the staff working moral, the relationship of employees with the company and the reputation of being spread through. The beginning of everything, however, is based on the principle that there is a need to treat employees as internal partners (i.e. internal customers) who should meet their own needs associated with the global company performance and lead them to the common goals.

It is important that company management is constantly working on creating and maintaining positive employee relations for the company. It is not only about awareness, but also the influence of views and attitudes. People in business are the most important asset for the company, the aim of any management is that employees work and behave as it is desirable and loyal. It is very difficult to achieve this. It is not difficult to teach employees what to do and how, but it is difficult to convince them to want to!

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Sustainable Tourist Industry as a Long-Term Prosperity in the Development of a Territory

Abstract

The tourist industry plays a significant role in territory development. It became one of the most significant worldwide industrial branches and creates 11 % of the world's GDP. For a long time no sufficient attention was paid to its impact, which is comparable with the impacts of any other branches of industry. Only the remarkable development of tourism in recent years, linked with the rising standard of living in advanced countries, has drawn attention to the necessity to solve questions of its permanent sustainability.

A significant part of income for the state and local budgets is formed by the tourist industry revenues. Another benefit of the tourist industry to the development of territory is also the generation of new working positions. Last but not least, tourism contributes to the exploring of new designations, natural and cultural heritage of other nations, helps to better understand their mentality, customs and traditions and thereby it can develop the idea of a peaceful coexistence.

On the other hand, due to a huge uncoordinated development of tourism, certain locations can be affected by environmental damage and excessive exploitation of natural resources (especially non-renewable), and because of different customs and manners there is a rising threat of conflicts between the natives and the visitors.

Mentioned facts suggest that it is necessary to deal with problems of sustainable development in the field of tourism.

The sustainable development of the tourist industry helps the expansion of territories, considering gentle exploitation of natural and cultural values. It also leads to a long-term prosperity of the actual region, without threatening satisfaction of needs for future generations. The way to achieve a sustainable development of the tourist industry is to develop ecologically friendly forms of tourism.

Key Words

tourism, environment, defensibility, eko-mark

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M31

Introduction

The travel industry at present is an inseparable part of our lives. Since the second half of the 20th century travelling has become a more financially manageable activity of human beings, which has led to a gradual construction of extensive holiday resorts. However, the development of industry and commerce within the frame of tourism has started to leave first marks on the natural landscape. In many cases the development of tourism has caused extensive environmental damage, and that is why the target of tourism at the present time is not only pleasure for travellers, but also a tendency to eliminate ecological damage caused directly by the tourist industry.

Sustainable development is a definition, which appeared in the ecology for the first time in the seventies of the 20th century. It is a crucial message that the economic development should respect ecological principles. Massive development of tourism in recent years, connected to a rising standard of living in advanced countries, relates and refers to necessary solutions to the questions about its sustainability.

Sustainable development of the tourist industry is defined as a provision of requirements of participants in the tourist industry in a way that helps to develop the territory, with respect to gentle exploitation of natural and cultural values and leads to a long-term prosperity of the region, without endangering the satisfaction of needs for future generations. Sustainability of tourism is then defined on the basis of environmental, social and cultural courtesy. Persistent sustainability deals not only with the environment, but rather with the relationship between the environment, society and economic systems. Accordingly, it is about finding a certain compromise between current economic prosperity – and related standard of living – and protection of the environment. The effort to persistent sustainability is also one of displays of a company's social liability. Companies working in sectors of the tourist industry, accommodation, catering and leisure time may operate in these regions: they can be socially responsible, their target can be the sustainable development of the actual area and they may protect the environment. However, most commonly they talk about the persistent sustainability in connection with the travel industry. A permanently sustainable tourist industry means tourism, which is vital, but minimizes impact on the environment and contributes to both, the host community, and the tourists.

Methodology

During the processing of the contribution several methods of information survey were used. The most important part was retrieving the information in professional literature and on the Internet.

1. Contribution and negative impact of tourism development

Contributions of the tourist industry for the development of territory:

- The tourist industry generates new job opportunities and a subsequent possible prevention of natural environment devastation by the locals (e.g. poaching, illegal felling of forests, etc.).
- Income from the tourist industry forms a significant part of revenues of the state budgets and regional budgets or other territorial units.
- Income from entrance fees to national parks, caves and other landmarks is used for financing environmental protection.
- Taxes and fees (e.g. income taxes, fees for fishing or shooting licence, spa fees, rental of leisure amenities etc.) help to finance conservation of natural resources.
- The tourist industry contributes to the exploring of new designations, natural and cultural heritage, helps to better recognize and understand mentality of

different nations, their customs and traditions thereby can develop the idea of a peaceful coexistence.

Negative impact of the tourism development:

- In case, where the amount of visitors in the region exceeds its bearing capacity and the environment loses the ability to deal with excessive exploitation, and this effect can lead to weakening or destruction of tourism.
- Taking over agricultural land and forests connected with the development of holiday resorts, facilities for tourism and sport, and access roads.
- Damage to the natural environment (ski slopes, ski lifts, uncontrolled hiking and bicycling), that causes devastation of the natural wildlife.
- Stress on natural resources – increased water consumption, more rubbish, higher amount of pollutant emissions (exhaust fumes in protected landscape areas etc.).
- Increased noise level, dust pollution etc., which may cause conflict situations with the natives.
- Disturbance of animals by the presence and improper behaviour of visitors.

All these mentioned matters indicate that it is necessary to deal with problems of the sustainable development in the field of tourism. [1]

2. Attitude of customers in the sphere of activities related to persistent sustainability

Most suggestions to increase the interest of organizations in persistent sustainability have come from a theory about a "green" customer, who wants to buy environmentally and socially friendly products. Depending on the approach of the organizations, such customers present a potential threat on the one hand and opportunity on the other hand for the marketing specialists.

One extreme is a "dark green" customer, who considers questions of the environment or persistent sustainability to be a significant everyday element of his/her lifestyle and whose decision is greatly influenced during shopping. These customers are willing to suffer for their conviction, for example to boycott certain products or pay higher price.

The second extreme is a "light green" customer, who considers these questions only marginally. The customer is only interested in certain problems and is not willing to do more than occasionally make some smaller sacrifice to support his/her conviction.

There are also groups of customers, between these extremes, who are not interested in the above mentioned problems at all. This implies that there is no compact market segment of green customers, but more likely a whole row of different segments according to intensity and kind of interest in green questions. Therefore, every tourist trade organisation, which wants to obtain a competitive advantage with the help of green activities, must be sure about focusing on a certain segment. [2]

3. Motivation of companies to protection of the environment and the sustainable development

Reasons of organizations operating in the field of tourism and related services for taking part in the existing problems can be divided into three major groups:

1. **Legislative reasons and obligations towards the customers.** These are motives from the outside environment. The company is bound to the observance of specific limits (restrictions of acceptable noise, air pollution, sewage treatment etc.) set by a legislature of a certain country. In some cases the companies approach the measures voluntarily, to avoid increased pressure of national institutions after eventual implementation of restrictions. Obligations towards the customers mean that for example an existing travel agency requires the fulfilment of specific criteria related to the environment, in order to demand hotel services.
2. **Urging for saving costs.** The implementation of selected procedures that are environmentally friendly and at the same time cost-cutting. These are for example technologies that help to cut the consumption of water, heat, power etc.
3. **Marketing motives and image improvement.** Apparently the most important motive is the effort to obtain a competitive advantage by using the "green" marketing strategy. The companies believe that involvement in the area of green issues could help them to win new customers willing to spend even more. Another motive can also be the improvement of image of the organization in the eyes of other members of professional organisations, investors, public servants and media.

There is a generally small stress of consumers on organizations in the sectors of the tourist industry, leisure time services, accommodation services and catering, to behave more environmentally friendly or to be more involved in the matter of the sustainable development. Clients of the hotel networks only rarely make complaints relevant to the impact of the hotels on the environment, or people travelling by planes are not too concerned about the impact of air traffic on the environment. Interests of the customers are focused rather on the quality of experience from their own holidays than on the issues of the environment. One of the few spheres, where the increasing pressure of the customers became evident, is the poor quality of the environment in some destinations of the tourist industry. [4]

4. Protection of the environment and better persistent sustainability in the hotels

The development of new accommodation facilities can be adapted for the needs of the environmental protection in many directions. One of them is environmental conservation of wild animals and the guarantee that the construction of the facilities will not have a bad influence on the local water resources by draining too much of their capacity. It is advisable to keep a suitable size of the accommodation for the actual place and use local traditional building materials and architectural styles that match the

landscape and the surrounding area. Advantage of the cost reduction can be obtained by a row of other operational measures, such as e.g. implementation and utilization of recycling systems, instalment of water saving facilities, sole usage of economic light bulbs, or not using bleached and dyed fabrics, etc .

Next to these operational measures, there is an opportunity to introduce "green" products, which will address customers interested in environmental issues, such as:

- Offer of organic food products in restaurants (organic groceries)
- Offer of hotel rooms, which are in every way environmentally friendly
- Offer of weekend hotel package, based on "green" themes, e.g. stays where the hotel guests can participate in working on local projects of environmental conservation.

If the hotels want to achieve any objectives in the area of environmental protection, they need the support of their employees. All hotel staff must be properly trained and certified by appropriate authorities. Permanently sustainable hotel can find and keep good staff, which means good working and salary conditions and equal opportunities for everybody. [3]

5. Eco-hotels in the Czech Republic

Accommodation facilities, which have taken measures to protection of the environment and established their own so-called "eco-mark", are recognized as Eco-hotels or Green hotels.

Eco-mark is a trademark that guarantees the visitor the elimination of a negative environmental impact. Accommodation facilities can obtain the mark after an accomplishment of strict standards and criteria. Accommodation facilities have the chance to obtain the European certificate "The Flower" (see Fig. 1), or home Czech mark called "The Ecologically Friendly Service" (see Fig. 2). Both marks are equal and guaranteed by the Ministry of the Environment. The eco-mark for tourist accommodation services is intended for providers of all sorts of accommodation facilities or camping sites. It was created in order to evaluate accommodation services and at the same time it serves as a reference aid for tourists, who respect the environment and require high-level services.



Fig. 1 The EU eco-mark – The Flower

The Ecologically near Service logo can be presented to those service providers, who can prove that they act according to principles of reducing the negative impact on the

environment and with respect to health of their customers. This is not a new eco-mark on our market, but it is another direction of the National program of environmental marking, established in 1994.



Fig. 2 Eco-mark of the Czech Republic – The Ecologically Friendly Service

By obtaining the eco-mark, the companies send a clear signal to their customers to expect not only high-level services, but also a pleasant environment and mainly, by using their services the customers can do something for the quality of the environment. This is one of the most important marketing instruments to communicate and to differ from the competition. Besides the fulfilment of ecological criteria it also has economic purpose: the companies will save on power, energy, water and materials. One of the significant means of communication is to put the companies into official catalogues and databases published or managed by the European Commission or by the Ministry of the Environment.

The EU eco-mark – The Flower – which is also awarded in the Czech Republic, has recorded the biggest success right among the providers of the accommodation facilities. So there are around 50 camping sites and over 200 hotels and boarding houses with the eco-mark across the EU. [3]

Providers of the tourist accommodation facilities were among the first ones in the Czech Republic, who took the opportunity to obtain the eco-mark. The following providers have the right to use the eco -mark (The Ecologically Friendly Service or The Flower):

1. *Hotel Adalbert, Prague* – This three-star hotel became the first ecologically friendly hotel in the Czech Republic
2. *Autocamp Oasa, Staňkov u Třeboně* – ecological camping site with disabled access was the first one in the Czech Republic to get the EU award – The Flower.
3. *Sporthotel Zátoň, Zátoňské Dvory near Český Krumlov* – Four-star family hotel located on the bank of the Vltava river.
4. *Mamaison Residence Belgická st., Prague* – Four-star residence designed in a harmonic feng -shui style.
5. *Boarding house Jelen, Vranov nad Dyjí* – Three-star boarding house with the touch of contemporary atmosphere.
6. *Educational centre Veronica, Hostětín* – accommodation in rooms furnished with natural materials, with view of the apple bio- orchard.
7. *Chateau Mcely, Mcely* – luxury hotel, in 2008 they won the prestigious World Travel Awards in the category of green hotels and became the best world's "green hotel".
8. *Hotel Irida, Plzeň* – Four-star family hotel.

9. *Boarding house Jana, Děčín* – two-star boarding house with the certificate "Bikers welcome".
10. *Hotel Adria, Prague* – luxury four-star hotel with its tradition since 1914.

6. Shapes of sustainable tourism

At the present time the travel agencies offer not only mass form of travelling, but also a new tourist sector starts to build up its place, which is mainly specialized in ecology and an ecologically friendly way of spending holidays together while learning about traditional methods of country life. The most frequent shapes of the sustainable tourist industry are *countryside tourist industry* and *eco-tourism*.

Eco-tourism is the fastest developing economic branch. Generally, its principles can be defined as environmentally friendly travelling, with respect to local culture. Besides the gentle approach to travelling, the eco - tourism also seeks a deeper recognition of the world, we live in, because learning leads to understanding and mutual tolerance. The eco-tourist can be described as a tourist, who cares for the environment, understands the possibility of its damage, and therefore when travelling the tourist chooses suitable transport, prefers organic products, local production and services, and supports the local residents. The tourist is interested in the sustainable development and tries not to disturb the visited countryside and wilderness areas.

Countryside tourist industry is an activity developing outside the recreational areas and tourist centres. Activities proceed in accordance with the countryside, landscape and country environment. Development of this tourism is connected with the rural development, creation of tourist routes and bicycle lanes, with the farm development and alternative agriculture. The countryside tourist industry in the Czech Republic can be divided into two specific forms. The first case is in our country a traditional phenomenon of weekend life in a cottage, and the second form presents short term stays in the country. A specific form of the countryside tourist industry is formed by agricultural tourism and eco-agricultural tourism.

Agricultural tourism appeared in Europe at the beginning the seventies of the last century, at the time, when intensive industrial activity negatively developed mainly in big cities. The characteristics for this type of tourism are not only the immediate exploitation of the countryside, but also a direct relation to agricultural works. This type of tourist industry allows holidays to be spent on a farm and provides the holidaymakers the possibility to participate in farm works relating to agricultural production or animal husbandry and to recognize techniques of original food production, or eat food grown and produced on the farm. This form of the tourist industry has expanded very quickly in certain countries (e.g. Italy, France, and Ireland), however in the Czech Republic it is only at the very beginning. For agricultural entrepreneurial subjects, the agricultural tourism is an additional source of revenue, which brings them stability of their existence. They can make a profit on their own products, as well as on the accommodation capacity and the farm environment. That way they create conditions for management of less productive or even endangered agricultural farms and companies. Border areas of Germany and Austria are very popular. A specific form of agricultural

tourism is **eco-agricultural tourism**, provided at certified, ecologically oriented farms, which produce organic products and are located in a healthy environment.

7. New trend in the tourist industry – Responsible Travel

At the present time, a new term - "Responsible Travel" occurs more frequently in the world of tourism. It means the effort to minimize the negative impact of this branch not only on the environment.

The tourist industry is, due to the dependence on ground transportation and mainly on the air transport, one of the main sources of ecological imbalance on our planet. This branch produces approx. 5 % of world emissions CO₂, as it was announced at the Climate Change and Tourism conference organized by the United Nations Organization together with UNWTO in October 2007. However, apart from the landscape the tourist industry has also negatively influenced humankind. The rising number of tourists led in some cases to crossing the borders of ethic standards (e.g. Thailand has become the world number one country of so - called sex-tourism). Disturbance of cultural values of the residents in recreational areas pays a high price for the economic modernization.

According to the environmental aspects it is possible to differentiate between two kinds of tourism – hard and soft. The so-called hard tourism is characterized by indolence and passivity of the travellers and by a fast means of transportation to the furthestmost places for the purpose of recreation. The soft tourism presents a gentler alternative to the environment. The survey executed last year by the Lonely Planet server, shows that 84 % of all respondents (from the total number of 24 500) intend to reduce in the future their environmental impact linked with travelling, 31 % of the respondents have already done that. UNWTO this year launched a campaign with the target of stimulating the investors to the implementation of ecologically friendly measures and also appeals to the travellers to reduce their "ecological footprints".

Every one of us can travel according to the principles "Responsible Travel", and thereby can directly contribute by a small part to the improvement of the conditions round the world. It is recommended to find out, before going on holiday, as much information about the destination as possible, as well as about the locals and their culture, to learn a couple of phrases, take only necessary belongings (avoid future rubbish), consider transport possibilities and choose, if possible, the most ecologically- friendly way. According to the survey mentioned above, up to 70 % of travellers consider eco - criteria when choosing the means of transportation, more than 90 % will consider it in the future. Quite a number of opportunities arise during the actual travelling, how to behave responsibly towards the environment and the planet itself (selecting a transport company, accommodation, catering and even for example a souvenir shop). It is advisable to always prefer the local entrepreneurs, services, products and articles.

Conclusion

Problems of the environment and the persistent sustainability are actual subjects all over the world. However, their meaning considerably varies in different countries. Many countries place emphasis only on physical environment, while other countries deal also with the social and economic impact of the tourist industry.

Sustainable development is ranked among global problems. Changes in the sustainable development of tourism represent the effort to respond to new suggestions in the tourist industry that result from the membership in the EU and from changes that went ahead after we became part of the Schengen Area. Other changes are related to the effort to maintain the competitive advantage in the national and international scale, and to reach the international standards. Existence of different international projects is also an impulse for the sustainable development of tourism.

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Selected Aspect of Creation Development Strategies for Using the Method Dynamic Strategic Balance

Abstract

Appropriate strategy uses all the resources that the region offers. It can reveal hidden resources and to create optimal conditions for increasing the competitiveness of the region. Regional strategies becomes essential and a special document in the creation of the future territory of the municipality or region, as is to the body when it considered the creation of the main direction for future development in the form of a vision, mission and objectives. Options, which gives him the current position, or threats that, may occur. Processed documents differ in content and order processing. The difference stems from the different documents of different needs of different priorities and specific conditions of each municipality, which is for the purchase of Development decided to document. At present, the procedure used to making a strategic plan usually based solely on the results obtained using situational analysis, which are derived from the strengths and weaknesses of the region. For the vision is set and the priority areas for further development of the territorial unit. The main deficiency, which may be attributed to this methodology, is the utilization of new approaches to modern management. Continually use the same methods in creating strategic plans.

The method is called "Dynamic strategic balance" and its author is I. Fišer. Method is used for creating the strategy in enterprises. I adapted this method, so that has applied for a regional strategy. This method puts emphasis on the anticipation of possible opportunities and threats which may affect the future development of the region. Questions and hypotheses are checked continuously after they are elected by the creators of the strategy, which from all sectors which are represented in the region; decide which area to focus in the future, which is promising for the region. Based on this information are created in the field of economic development targets.

Key Words

region, scenario, strategy, development plan

JEL Classification:

R58

Introduction

As a result of growing competition and increasing requirements for more efficient management of the Regions took place and take place in developed countries and tourist destinations of intensive efforts to ensure that they became strategically managed regions. Pathways to strategically controlled regions are due to different regional conditions different. According to specific regional conditions arise differentiated ways to create goals and priorities, and different strategies of regional development. The regions may be organized as a regional competitive compact unit or for the purpose of competitive cover important features of development require the creation of national

cooperation. To create successful growing regions, there is no universal recipe, because each region offers different potential and resources. The issue of making regional strategy is starting to get to the forefront the interests of politicians and experts in the Czech Republic. It develops the demand of the various regional development bodies (regional authorities, municipalities, micro, etc.) after the processing of development strategies. For their preparation is used for a number of management methods. The practice is used very well known and popular method of SWOT analysis. This analysis, however, is subjective and due to its frequent use is becoming a conservative method. For this reason, are beginning to apply new methods to help create an appropriate development strategy to help achieve the vision and set of individual goals.

One of method that is currently used for developing a strategy in enterprises is a Dynamic Strategic Balance. This method is suitable for application in developing a strategy of territorial units. The aim of this contribution is to highlight the possibility of using this method in developing the strategic development of regional strategies. The paper is briefly described, possible applications of this method in the selected territorial unit Praděd Euroregion.

1. Dynamic Strategic Balance (DSR)

As mentioned in the introduction, the most for the creation of strategic plans using SWOT analysis. When applying this method is usually based on the strengths and weaknesses and to a lesser extent there is an emphasis on potential threats to the region can meet. The rapid and comprehensive guidance in the overall future development and then to create a specific vision to form a new method called „Dynamic strategic balance“ (hereinafter referred to as DSR), which by Ivan Fišer [1]. This method has been applied only in companies, but after consultation with the author and the smaller the adjustments could be applied to create forecasts of future development in the region. The methodology of this method consists of several steps, with the first step, as its author states, is sought and formulated the main issues hypotheses and assumptions, which we believe is true. Are searched for link between the assumptions, the alternative scenarios are formulated and the search for their interaction. The dynamics of strategic balance sheet is that the strategy is investigated in its initial stage in the development of key components sector forecasts. Questions and hypotheses are checked continuously after they are elected by the creators of the strategy, which from all sectors which are represented in the region will decide which area to focus in the future, which is promising for the region. It is based on information's in creating economic development targets. Method DSR has a total of nine on consecutive steps. The first five steps form the so-called split scenario. In each of these scenarios are described in the simplicity of all the factors that can positively or negatively affect the future development of the area. In the first scenario, it is important to evaluate what the selected area or the offers in the region as tourism and vice versa in this area is demanded by customers, but in the current menu is missing. Furthermore, it is necessary to determine the assumptions and what could cause the operation of the field such as global warming, the process of European integration, globalization, foreign competition, etc. with those factors are then described in greater detail in the second scenario, and that is the scenario development process. Other processes include, for example logistics, increasing cooperation with private and public sector, the growth of innovative potential, changes in the

environment, etc. The third scenario focuses on the development of the territorial allocation of clients. This scenario should capture the development and deployment of key prospective customers, the deployment of operations, particularly manufacturing and services, the location of the attractive tourist destinations in the region for both domestic and foreign visitors, the territorial allocation of potential business seats (use of brown fields and green fields) in the region to attract a new investor improve the conditions for the development of new small and medium sized enterprises. In this scenario follows another, which takes into account the issue of financing the development of the region in relation to the examined area. It should capture all the possibilities and forms of financing, which can be used to finance and support development activities associated with the future development of selected sectors in the region. The regions have a large number of means and methods through which may compensate for structural, economic or specific areas of their disability. Individual regional disability can be compensated through a series of support programs, grants and funding activities of government policy. The fifth scenario deals with the development of competitiveness. Its content should be evaluation of the competitiveness of the region depending on the development of its potential (human resources, economic potential, tourism, environment, technical infrastructure, etc.). This scenario should be made a comparison of the attractiveness of the region to clients (both domestic and foreign) investors, as compared with competing regions.

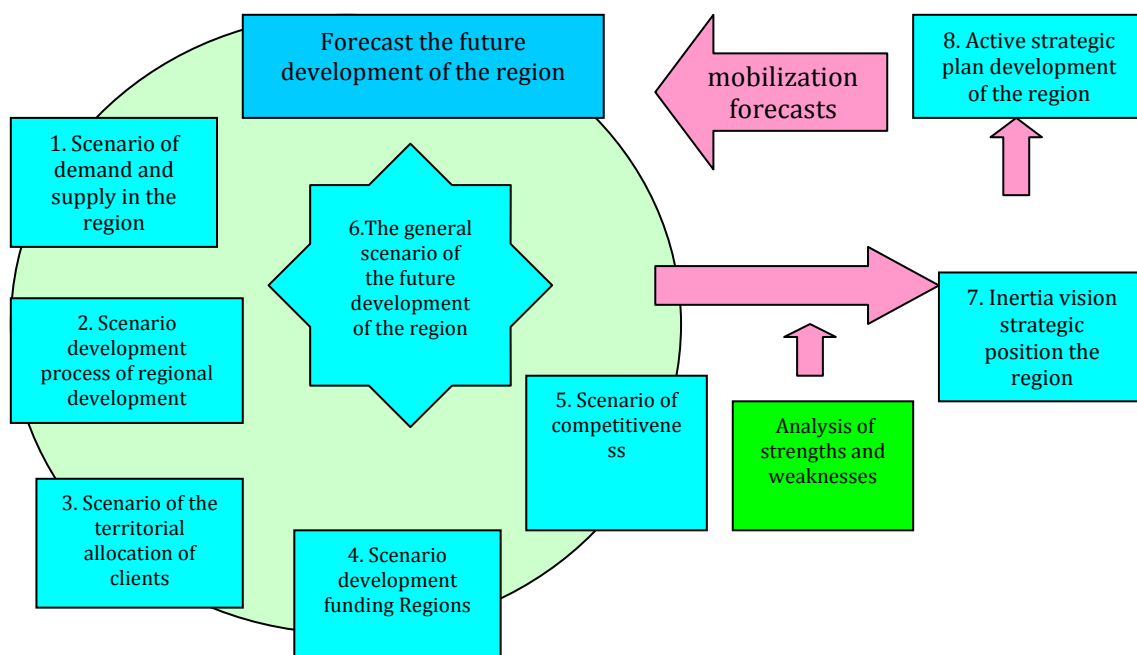


Fig. 1 Diagram of Strategic dynamic balance for the region

Source: FIŠER, I. + own processing

From these premises and sub-scenarios is to create a comprehensive development scenario for the selected sector, to enable the sector to estimate the current position, which is in the region on the basis of previous analysis considered to be crucial for the further development of the region, and is likely to ensure their future development. It is appropriate, through simulations to estimate the impact of the proposed scenario, which will be submitted to the actors involved in the formation of strategy. This scenario follows the general description of inertia term strategic position the region in which they are taken into account all the strengths and weaknesses, which were based on all

previous analysis detected. Based on the set of inertia perspective is a strategic plan which should include the priority objectives that will achieve the development of the selected region or sector (industry).

Significant advantages that dynamic method brings strategic balance, according to the author of these methods:

- “Faster and more comprehensive treatment of DSR than in the case of hitherto known methods, including partial SWOT analysis.
- The method encourages creative thinking and keeps up to date active strategy, reduces the fear of decision-making for uncertainty, insecurity and risk, and quickly leads to the adaptability and flexibility of strategic management.
- DSR provides system support manager thinking similar to the systematic methods of decision analysis.
- Method DSR emphasis focusing on dynamic thinking in the future”¹.

Important strategic advantage of the dynamic balance is in the interconnection of various elements in the natural logical framework. In addition, it allows for strategic manager to acquire new information and experience to change the existing strategic balance sheet, and to quickly and without major cost.

Among the significant side effects of this method, the author states the following:

- “Significant shift towards strategic thinking in a global context, the strengthening.
- Constant vigilance and creativity strategic team.
- Continuous and an effective system of information support the creation of strategic decision-making inside and outside the region.
- Strengthening the motivation of intensive and activities of all participants involved in the creation of regional strategies”².

2. Use of DSR in the Euroregion Praděd

To apply the method of DSR was chosen area, which for the development of the region appear to be crucial and it is the economic development potential. The first scenario showed that the selected region Euroregion Praděd has selected to offer, but also a lot, factors that increase the demand for this potential. For the creation of forecasts, the further development of this area was important to summarize all factors that could endanger the future, but also those that could help on the contrary, ie. opportunity. These external factors have been forecast based on PEST analysis, which was carried out

¹ FIŠER I. *Dynamická strategická rozvaha*. In Moderní řízení č. 4, 30-33 s. 2007, ISSN 0026-8720.

² FIŠER, I. *Dynamická strategická rozvaha*. In Moderní řízení č. 4, 30-33 s. 2007, ISSN 0026-8720.

in this first scenario. At the end of this scenario are summarized priorities, which need to be addressed in the Euroregion.

The second scenario is characteristic of all processes that are central to all the set priorities. Among these processes, the mobilization of natural and cultural potential, the quality of human resources development, regional cohesion, development of infrastructure, cross-border cooperation, stabilization of administrative structure of regions, promotion of public-private partnership, residents of the availability and promotion of environmental protection.

The role of the third scenario was to make the territorial allocation of the sector in the region, on the lessons learned showed that the region is crucial to select only those sectors that could increase productivity in the future the region and thus its competitiveness. Of the identified findings show that tertiary sector (trade and services) plays an important role the region and then the manufacturing sector. Geographical allocation of the most important employers in the area of secondary potential Bruntál is in the district. Primary and tertiary sector has the largest representation in the district of Jeseník.

The fourth scenario dealt with the possible funding of future activities. What resources can be used and where you can get? In the last sub-scenarios have been taken into account factors that could help to increase the competitiveness of the region. The development of the competitiveness of the region has a wide range of factors influence. The main factors that may affect the competitiveness of the territory are considered as follows:

- support development of SMEs,
- research and technological development, the emergence of innovative centers, scientific and technological parks in support firms with innovative potential, cooperation with universities,
- establishing incubators to help emerging SMEs,
- formation of industrial zones, the acquisition of strategic investor, foreign direct investment,
- cooperation and clustering enterprises,
- technical infrastructure, human capital and the social (social) capital.

Great importance is the mutual combination of these factors, which together can create a "favourable local environment". On that occasion should once again be stressed that the strength of the region in a competitive fight people significantly increase their skills, efficiency of public institutions, technical and civic amenities areas, the availability of a territorial unit, and compliance with the principles of global competitiveness, which include:

- creating a stable and predictable legislative environment,
- creating flexible and adaptable economic structures,
- investment in traditional and technological infrastructure,
- support of private savings and domestic investment,

- promoting of aggressiveness on international markets (exports), but also the attractiveness for foreign direct investment,
- focus on quality, speed and transparency of government and administration,
- maintaining the relationship between the level of wages, productivity and tax,
- maintaining social networks by reducing the disparities in wages,
- investment in an education, particularly at secondary and tertiary level and in lifelong learning workforce.

The objective of this scenario was not to specify all activities that are needed in the Euroregion Praděd to increase its competitiveness, but only to indicate the possible variants. For the precise definition would be necessary to make a thorough analysis. For its elaboration should be a team of experts from the region. The team should include representatives from government, private, from the non-profit organizations. This analysis would involve the implementation of the benchmarking with selected domestic or foreign regions, which are considered to be economically advanced regions. The result should be the discovery of potential opportunities that could be applied in terms of the Euroregion. Another task of the Action Group would be to obtain information on new global trends and either of the participation in fairs, from the information provided on the Internet, from professional domestic and foreign professional journals and publications, etc.

Once the first five scenarios were carried out a complete summary of the information received and generated a comprehensive scenario. This scenario would should be brief and clear. In practice, the complete processing of this scenario is appropriate to make the session a discussion of all actors involved in the formation of sub-scenarios, and which is presenting the results of the previous sub-scenarios. On the basis of new facts may be in this step is regulated by some of the previous scenarios, or to create new variant scenarios. As part of the general scenario, in addition to the above by a summary of selected issues, this would be appropriate to perform causal analysis to identify the relationship between cause and effect. For a simpler definition of the relationship between the problems it is possible to use the so-called "problem tree".

The next step is a method DSR inertia perspective strategic position the region. In this step were defined objectives and tasks that need to meet to improve the current position of the Euroregion. To improve the current position of the region is needed to continue the activities that are already under way and which appear in the future as positive. In Praděd Euroregion is such as to completion of infrastructure, expand its service offer in the field of tourism, increase the existing regional marketing support, deepening cooperation with destination management of the region, with the Economic Chamber, the offices work with businesses and residents of the region, with educational organizations, an increase in cooperation of Czech and Polish companies, etc.

In determining the future development, it is important to take into account also what is the economic and political situation in the country, what are the government measures to reduce regional disparities in the country, what strategies have created a higher territorial unit, regions, micro-, but also by the Member community in the Euroregion.

Development strategy should include the determination of the vision, objectives and sub-strategies, which would be evaluated as much detail as possible problem areas,

including economic potential of the region, human resources, infrastructure, environment, tourism, etc.

For sub-strategies should be selected activities that are consistent with the development strategy of the region. Any action is necessary to develop the project, which will be based on financial plan and timetable for implementation of each activity. If is sufficient resources (financial, personnel, information, etc.) may be implementation and promotion of the tasks. Following the completion of projects it is necessary to reverse control. If it was found that the projects did what was expected from them, it is then necessary to update the strategic plan.

Conclusion

In the end of this contribution, I would like to stress that the creation of an appropriate strategic plan is needed not only to choose the appropriate strategic approach, but also create a high quality team of workers at its processing will be involved. The very important is corporation public sector cooperation with the business community and residents of the region, because they can significantly contribute their suggestions and recommendations on the creation of appropriate development strategies. The presented method of dynamic strategic balance, in addition, that can help create a strategic plan, moreover, contribute to the strategic thinking of all involved in the creation of scenarios can become more flexible, dynamic and, to some extent, freedom.

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Problems of Estimation of Enterprise Competitiveness

Abstract

At the analysis of published paper on competitiveness questions we have ascertained a number of problems, which are needed to be solved: How should be company's competitiveness estimated, if its production positioned at the different markets or segments of market? What is the basis of comparison for values of different competitiveness factors? How can be values of competitiveness criteria and factors concerning a basis of comparison received if competitors' data is a trade secret? Which factors should be added into estimation of competitiveness so that the calculation takes into account conditions of current economic environment?

According to our views, the first question can be solved by the separation of research spheres into SBUs (Strategic Business Units). In other words, it is necessary to separate the research of company competitiveness into several parts according to quantity of business units. For solving the second and the third questions it is needed to observe a number of requirements for comparison objects: comparability of scales; comparability of targets; availability of data. If one follows the given requirements, usage of competitors or a leader of the market as basis of comparison will be difficult. As for usage of average market rates like the basis of comparison is devoid of sense, because, in that case, competitiveness will show opportunities to maintain the average values, but not to compete.

According to our views, one can solve this problem by usage as basis of comparison not outer data, but the ability of the company to realize its targets concerning each SBU. These targets are expressed in achieving of a certain competitive position.

Key Words

competitiveness, competitive position, factors of competitiveness, partnership level, model of estimation, base of comparison

JEL Classification:

M13

Introduction

During last years, problem of organisation competitiveness has being drawing attention of the big number of economists, first, in connection with considerable growth of competition intensity and, secondly, in connection with absence of practical recommendations about its estimation.

Methods which have already appeared in Russia in days of market economy, unfortunately, are based on the Soviet methods of technical and economic valuation of a production, i.e. they are based on indicators of progressiveness and efficiency of resources usage and not include any other factors.

Application of different foreign (European, American and act.) methods is also rather difficult. Mostly these methods and recommendations have been created on the basis of comparison of similar indicators of competitors work. In other words, managers of an enterprise should know resources and equipment usage effectiveness of their competitors, what is competitor prime costs, profitability, capital intensity, their expenses for updating and production advancement etc. to estimate competitiveness of investigated enterprise. Receiving of such information is rather inconveniently, moreover, in some situations, absolutely impossible. Some information on competitors can be received as a result of marketing researches. Such information is represented by qualitative but not quantitative values and is gathered in indirect, instead of in the direct ways. So this information is not always enough to draw a real situation. As for usage of average market rates like the basis of comparison, it is devoid of sense, because, in that case, competitiveness will show opportunities to maintain the average values, but not to compete.

Developing of integration and growth of cooperation level between companies has created one more problem for competitiveness estimation. Most methods do not take into account factors which characterize external environment of investigated enterprise. In our opinion competitiveness estimation will no full enough, if it don't contain indicators of partnership and integration.

1. Model of enterprise competitiveness estimation

In our opinion, the decision of the first given problem(basis of comparison) is possible to find in a following direction. At first, it's necessary to estimate company's competitive position in the market before starting enterprise competitiveness estimation. Today, there are various methods for this purpose, in particular, cluster analysis which allows to group enterprises according a number of common signs.

Certainly, a competitive position, first of all, is estimated for the market. However, usage of only this indicator has repeatedly caused criticism of economists. For cluster analysis one has offered to use indicators which characterize strategic and tactical factors of manufacture development as signs of definition of a competitive position. These indicators are: level of production updating, level manufacture and marketing innovations, reliability of distribution channels, image of the enterprise, the reached degree of quality and width of production assortment, level of advertising activity, efficiency of an applied price policy. Clusters of enterprises, which have a certain competitive position, are defined by parity of the reached level of strategic and tactical factors.

Competitiveness of the enterprise in the most general sense is an ability to compete in definite purpose target. Such purposes can be: achievement of the set share of the market, deducing of the new goods on the market etc. Competitors are those enterprises which work in one market and pursue the identical targets.

After definition of the cluster and designation of wished competitive position in the base market, the organization should to calculate requirement for resources, the organisation

of manufacture and management which are necessary for achievement of a desirable competitive position. In other words, if the direct competitor sells today more, then we do, what is necessary for the enterprise to take of competitor's position. One can define competitiveness level of the enterprise through comparison of settlement values with the fact sheet.

Let's make a reservation that a number of economists are identify concepts «competitiveness of the enterprise» and «a competitive position». We adhere to the point of view of those economists which divide them, and who consider that the competitive position is that result which is reached by the enterprise owing to the possibilities and level of their usage, , i.e. owing to the reached level of competitiveness. If we operate with terms of the system activity analysis of the enterprise, competitiveness is that we have on "input" (resources) and in "process" of industrial activity (level of resources usage). On "exit" is the finished goods, which sells provide to us this or that competitive position. The competitive position of the organisation reflects current position of the enterprise in the competitive environment, and competitiveness reflects potential possibility of the enterprise to take of this or that competitive position.

If we adhere above stated position, the mechanism of competitiveness estimation can be presented to sequences as it is shown on fig. 1.

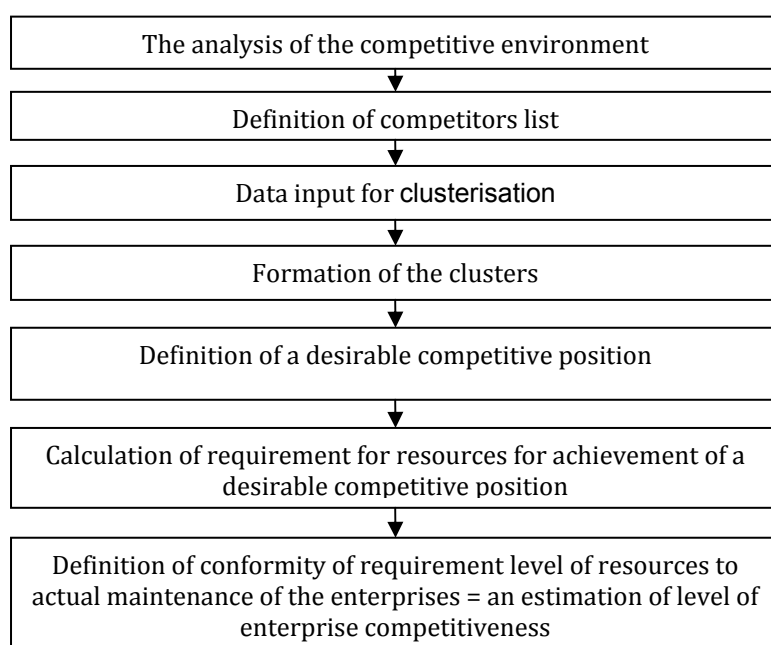


Fig. 1. Sequence of evaluation stages of enterprises competitiveness

The offered approach of usage the necessary requirements for achievement of a desirable competitive position as the base of comparison at an estimation of competitiveness of the enterprise, in our opinion, will solve above designated problem.

2. Partnership level like a factor of enterprise competitiveness

The problem of increase of ability to the consent, to partnership, ability to understand not only own, but also the general interest becomes the major question for modern economy. The Corresponding member of the Russian Academy of Sciences, professor G.B.Klejner, has named this ability like «concordability» (ability to agree).

Ideas of the organisation of partnership and the competition organisation do not stir each other at all.

Competitors unite today for carrying out of advertising campaigns, especially when there are no money to spend them independently. They unite in financial and industrial groups, alliances and holdings, because it becomes practically impossible to survive independently in conditions of a rigid intensive competition. At first sight, the competition contradicts to ethics of partnership. However, last time, institute of social partnership develops actively. An example of such partnership we can name the «social responsibility of a stock exchange». The social partnership concept co-ordinates closely principles of social responsibility and economic efficiency. Other example of partnership is the system of franchise developing in our country.

British economists, A.Uilson and K.Charlton, have defined the term «partner communications» as teamwork of two and more organisations on usage of resources for achievement of results, which are inaccessible to these organisations separately. This work will be as more effective, as these relations are more durable, reliable and deeper.

The long-term partnership will allow more precisely planning of expenses and time of projects realization. It will allow to carry out any obligations concerning time and quality and to avoid set of risks in the field of supply and production sale, because partners well know each other for long years of teamwork.

Joint planning and the activity control, creation of incorporated structures characterise depth of partner relations.

Dynamics of partner relations, in our opinion, does not assume constant change of structure of partners, but it is expressed in continuous expansion of spheres of interaction, working out and introduction of new ways of an establishment and development of partner communications, penetration by means of partners on the new markets. Reliability of partnership is characterised by quality of treaty obligations, and efficiency of partner relations is valuated through minimisation of damage from short shipments and infringements of arrangements, through introduction of optimum schemes of payment and conditions of performance of contracts.

Possibility of communications duplication assumes, that there are more than two partners in a certain segment of activity of the enterprise. This reduces risks of drawing of damage in case of the termination of activity of one of partners. So, as the basic criteria providing increase of competitiveness of the enterprise, in the field of

partnership it is necessary to consider durability, reliability, depth, dynamic, efficiency and possibility of duplication of partner relations (fig. 2).

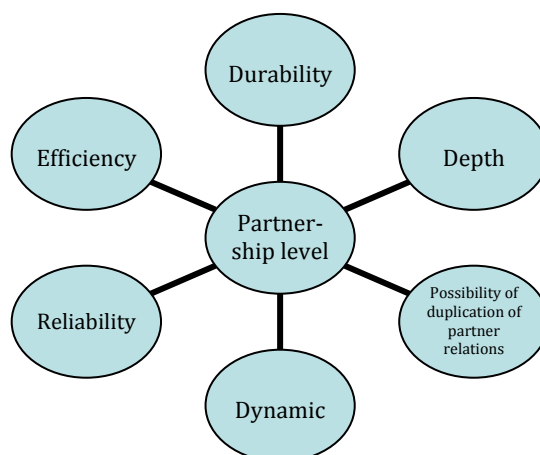


Fig. 2. The basic criteria of an estimation of level of partner communications as factor competitiveness of the organisation

By each criterion the scale of points for reception of a quantitative estimation can be offered. The complex indicator of partnership level should be defined as arithmetic-mean weighed private indicators. So, partner relations level in an estimation of organisation competitiveness (ΠC) can be defined by the formula:

$$\Pi C = \sum_{k=1}^6 \left[\sum_{j=1}^m \left(\sum_{i=1}^n K n_{kji} \cdot \Delta n_{ji} \right) \cdot 3\Gamma_j \right] \cdot 3K_k$$

where, $K n_{kji}$ – value of k-th criterion for i-th partner in j-th group; Δn_{ji} – a share of i-th partner in total amount of j-th group; $3\Gamma_j$ – the importance of j-th group of partners; $3K_k$ – the importance of k-th criterion.

Weightiness of the criteria characterising level of partnership and groups of partners depends on a stage of life cycle business-unit for which the estimation of competitiveness level is spent. So, for example, at a growth stage the high importance is got by effective relations with suppliers of raw materials and the intermediaries participating in process of production realisation. From the point of view of criteria estimation, the most value is got by dynamics and efficiency of partner relations. At a stage of production introduction, relations with consumers and suppliers of financial resources are most significant.

Conclusion

So, in our research we have offered a number of ways for decision of most acute problems of competitiveness estimation for enterprises. Of course, above given problems are not only existing for competitiveness estimation. There is a problem of dynamic estimation, very interesting is a question of estimation of competitiveness for

organization with two and more business-units. All these themes are reason for further research.

Anyway, we have approved our methods in the process of consulting of several textile enterprises. Some results of our research were rather unexpected. For example, one of enterprises which had low level of competitiveness according to method given by Faskhiev C.A. we examined concerning its competitiveness on market of upholstery fabric. Investigated enterprise has shown rather high partnership level. Also managers of the company informed us that they want to realize strategy by capturing just 5% of the market. After short estimation we revealed very high potential of this enterprise for such strategy.

Monitoring of all results has shown, that accurate results we calculated only when all research was made in connection with strategy of the company and wished competitive position.

Maintenance of enterprises managers with the effective tool of management with competitiveness will allow to raise rates of development of textile manufacture which is one of the major industries, producing consumer goods.

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Suggestions by Municipalities on How to Deal with Regional Disparities in the Czech Republic

Abstract

The aim of this report is to evaluate suggestions by municipalities that should help to decrease regional disparities in the Czech Republic, collected within the scope of the questionnaire research implemented by the research team of the Faculty of Economics of Technical University in Liberec under the project WD-30-07-1 titled as "Innovation Approach to Analysis of Disparities on Regional Level". Representatives of municipal authorities of the Czech Republic consider the incorrectly set conditions for budgetary allocation of taxes to be the most significant aspect causing regional disparities. More than half of the resources of municipalities is represented by tax incomes, the amount of that is out of the municipalities' control. Municipalities are suffering from a lack of financial means not only to conduct their regular activities, but especially to cover investment activities. One of the possibilities how to get a sufficient financial resources are extra financial resources from subsidies from public budgets at central or regional level as well as subsidies from abroad (especially from the European Union funds). As the procedure of getting subsidies from these sources is rather complicated, the municipalities suggested (in the collected questionnaires) to simplify the whole process or to discontinue it completely. The municipal authorities representatives are further convinced that regional disparities are supported by depopulation of rural areas, migration of young people to bigger towns, insufficient transport serviceability and low level of housing facilities. Young people are not provided with an adequate social and health care, solid network of pre-school and school facilities and sufficient amount of diversified leisure-time activities.

Key Words

disparity, tax yield, housing facilities, support of young people

JEL Classification:

R11

Introduction

In 2007 the Faculty of Economics of the Technical University of Liberec has initiated the research project No. WD-30-07-1 „Innovation Approach to Analysis of Disparities on Regional Level“ awarded by the Ministry for Regional Development, the main aim of that is to define measures for decreasing of interregional disparities in the sphere of economic development of the Czech Republic [1]. In order to achieve this, amongst all it will be necessary to identify the key factors that characterize the problematic development of the particular regions. In accordance with the law on municipalities, strictly defined competences were assigned to particular municipalities. However these competences prevent the municipalities from effective involvement in dealing with

regional disparities. Within the scope of the research project the municipalities got an opportunity to suggest measures and actions that could help them to reduce these disparities or eliminate them completely.

1. Literature research

The Ministry for Regional Development approved 23 projects focused on the issue of the regional disparities in various dimensions. Therefore another source of information were the vocational articles in the E+M (Economy and Management) periodical. Especially the following articles have been used to gain some more information concerning the regional disparities: "I. Jáč - "Evaluation of the questionnaire project focused on the innovative solution of disparities"; "M. Prskavcová and P. Řehořová - "Methodology for performance assessment of the Czech Republic municipalities"; P. Rydvalová - "Possibilities of regeneration of the selected economically weak regions". See the Resources section for references to other vocational articles used. Another source of relevant information was the magazine "Regional Disparities - Working Papers" issued by the Technical University of Ostrava, Czech Republic.

Authors of this report have reviewed multiple legislative regulations and standards that relate to the issue of dealing with the regional disparities and financing of municipalities. They especially researched laws that determine the rules for allocation of tax revenues to municipalities.

2. Overview of methods used

The aim of this report is to evaluate the result of an extensive questionnaire research that relates to the part I: Supplementary section, the part of that was also question No. 7 with the following wording "Make other suggestions how to deal with the situation in your municipality or how to solve the issue of economically weak regions in the Czech Republic". Authors of the questionnaire wanted to find out what measures and tools would particular municipalities in the Czech Republic use to deal with the regional disparities. In order to achieve the preset goal, a methodology was developed that is based in the following steps:

1. research of the legislative resources in the field of state and municipal authorities;
2. relevant primary data were acquired by collection of information by means of the questionnaire research;
3. the methodology of preparation and execution of the pilot and full-area questionnaire survey is described in details in the vocational article of M. Prskavcová and P. Řehořová "Methodology for performance assessment of the Czech Republic municipalities" published in the E+M (Economy and Management) periodical, 4/2008, pages 77-82;
4. responses from particular questionnaires were processed in form of table using Microsoft Excel application;

5. code of the region as well as code of the municipality was noted for each municipality - moreover the municipalities were identified by codes according to their population (municipalities were sorted according to their population, similarly to the sorting within the framework of the budgetary allocation of taxes);
6. because of the selected methodology of processing, the collected data could be sorted according to particular regions and their respective population, using Microsoft Excel application
7. for further processing the total of 79 types of collected responses were sorted into 11 categories the content of that is similar or identical;
8. some empiric methods were applied and the collected data were processed by means of the basic statistical methods.

3. Results

The basis for research focused on the issue outlined in the question No. 7 were the results of the extensive questionnaire research implemented by the research team of the Faculty of Economics in 2008. Table No. 1 shows overview of return rate of the questionnaire in the particular regions. From the total of 6 249 questionnaires distributed, 1 357 completed questionnaires were returned by the respondents, which means a return rate of 21,72%. As for particular regions, the highest return rate (58,33%) was recorded in the Ústí nad Labem region, while the lowest return rate was recorded in the Karlovy Vary region (6,78% only).

Table No. 1 Overview of the questionnaire research response (rate of return) in absolute and relative numbers

Region	Number of municipalities in the region	Number of returned questionnaires by regions	Returned questionnaires in %*	Returned questionnaires in %**	Municipalities that responded to the question No. 7	Percent rate of those who responded to question No. 7 ***
Capital City of Prague	1	2	0,03	x	2	X
Central Bohemian region	1 146	211	3,38	18,41	80	37,91
South Bohemian region	623	132	2,11	21,19	41	31,06
Plzeň region	501	105	1,68	20,96	29	27,62
Karlovy Vary region	354	24	0,38	6,78	8	33,33
Ústí nad Labem region	132	77	1,23	58,33	27	35,06
Liberec region	216	52	0,83	24,07	15	28,85
Hradec Králové region	448	82	1,31	18,30	32	39,02
Pardubice region	452	95	1,52	21,02	27	28,42
Vysočina region	704	143	2,29	20,31	36	25,17
South-Moravian region	672	162	2,59	24,11	42	25,93
Olomouc region	397	105	1,68	26,45	37	35,24
Zlín region	304	71	1,14	23,36	23	32,39
Moravian-Silesian region	299	81	1,30	27,09	36	44,44
Total	6 249	1 357	21,72	x	435	32,06

Note: * Number of returned questionnaires for the region as compared to total number of municipalities in the Czech Republic. ** Number of returned questionnaires for the region as compared to total number of municipalities in the particular region only. *** Number of returned questionnaires in regions

containing response to question No. 7 as compared to total number of questionnaires returned in the particular region.

Source: authors' primary data

In the part I (Supplementary section) of the questionnaire, the question No. 7 was asked - "Make other suggestions how to deal with the situation in your municipality or how to solve the issue of economically weak regions in the Czech Republic". In total 442 municipalities responded to this question. Despite we got 442 questionnaires back, in 7 of them the municipality could not be identified and therefore sorted based on the population.

In the Czech Republic the most frequent are municipalities with population within the range from 301 to 5 000 (in total 3 488 municipalities). However the municipalities with population within the range from 301 to 1 500 prevail in this category (in total 2 888 municipalities with 1 910 686 inhabitants). On the other hand the smallest number of inhabitants live in municipalities with population under 300. In this category the smallest portion represent municipalities with less than 100 inhabitants (only 539 municipalities with 38 388 inhabitants).

This situation is well demonstrated in the table No. 2 too, showing the number of responses from the addressed municipalities in particular regions. The most responses were received from municipalities with population within the range from 301 to 5 000 inhabitants (272 responses), while the least responses came from the category of municipalities with more than 30 000 inhabitants (8 only).

Table No. 2 Number of responses to question No. 7 by particular regions and their population

Region	Number of inhabitants (population) in municipalities			
	under 300	301 – 5 000	5 001 – 30 000	over 30 000
Capital City of Prague	0	0	0	2
Central Bohemian region	25	53	2	0
South Bohemian region	21	19	0	1
Plzeň region	13	14	2	0
Karlovy Vary region	2	6	0	0
Ústí nad Labem region	6	17	3	1
Liberec region	5	9	1	0
Hradec Králové region	11	19	1	1
Pardubice region	11	14	1	1
Vysočina region	15	21	0	0
South-Moravian region	13	29	0	0
Olomouc region	10	25	1	1
Zlín region	3	19	1	0
Moravian-Silesian region	3	27	5	1
Total	138	272	17	8

Source: authors' primary data

In total 79 types of responses were received from the addressed municipalities. For the purpose of further processing, the responses were allocated to 11 categories (as shown in the remarks under the following table No. 3).

Table No. 3 Responses by particular categories

Region	1	2	3	4	5	6	7	8	9	10	11	Total
Central Bohemian region	15	9	16	34	6	10	4	4	8	5	3	114
South Bohemian region	9	5	7	13	3	9	10	2	3	3	1	65
Plzeň region	7	2	8	10	4	4	2	0	2	0	0	39
Karlovy Vary region	0	0	3	4	0	0	1	0	0	0	0	8
Ústí nad Labem region	12	0	6	9	6	1	1	0	8	1	2	46
Liberec region	7	0	1	10	1	1	0	0	0	4	2	26
Hradec Králové region	4	6	11	13	5	2	2	1	1	0	2	47
Pardubice region	4	8	8	9	6	2	1	2	4	3	3	50
Vysočina region	4	4	6	15	4	3	0	2	9	0	5	52
South-Moravian region	14	2	9	14	2	7	7	3	6	0	1	65
Olomouc region	4	0	12	8	3	1	0	0	4	3	3	38
Zlín region	6	3	8	14	0	3	1	0	7	2	1	45
Moravian-Silesian region	9	5	8	14	4	6	5	0	8	1	3	63
Total	95	44	103	167	44	49	34	14	60	22	26	658

Note: 1) The issue of subsidies in the Czech Republic and EU; 2) Support of business enterprises and industrial development; 3) Extension of technical facilities of municipalities; 4) Change of budgetary allocation of taxes; 5) Support of housing development in municipalities; 6) Support of agriculture and rural development; 7) Support of leisure-time activities; 8) Young people preference; 9) Improvement of ethics of politics; 10) Landscape development and improvement; 11) Improvement of education and welfare (social services).

Source: authors' primary data

Within the scope of 11 categories, the municipalities suggested the following areas to focused on in order to at least partially or completely eliminate the regional disparities.

3.1 The issue of subsidies in the Czech Republic and the European Union

To finance their activities, municipalities use their own resources (approx. 6% of their incomes), tax incomes (about 43%), subsidies (about 39% of their total resources) and non-tax incomes (about 12% of their total resources). Almost half of the resources of municipalities is represented by tax incomes that are not under control of the municipalities themselves. They only may affect the income from the real estate tax (exclusive tax income). Municipalities may apply for investment and non-investment subsidies from public budgets at the central level (state budget, including state departments, state funds, National Fund, etc.), from budgets at the regional level (other municipalities, e.g. contributions for compensation of operational costs of schools), from regional authorities. Some resources may be obtained from own funds of the municipalities, while some subsidies may be obtained from abroad. For some of the municipalities the subsidies represent quite important income that allows them to carry out such activities that would not be feasible without a certain kind of financial support.

Municipalities suggest to cancel the subsidy policies and allocate the means directly to their budgets, in order to make the system of subsidies and donations in the Czech Republic, but also in the European Union, more simple. Then the municipalities would have an equal and fair access to subsidies and political competencies of the municipality representatives would not play any role in granting of subsidies.

3.2 Support of business enterprises and industrial development

The municipalities are well aware of the fact that most of their incomes come from taxes. Within the scope of the budgetary allocation of tax incomes, the municipalities are receiving certain part of the income tax of natural persons, income tax of legal entities, value added tax as well as taxes and charges related to certain activities and services and environmental charges, local fees and charges, administrative fees and real estate tax. In this respect the municipalities suggest improved support of small- and medium-sized enterprises, support of industrial development, diversification of production and establishment of industrial zones.

3.3 Extension of technical facilities of municipalities

Representatives of municipalities who pointed to this category suggest to improve the technical facilities of municipalities, build waste water treatment plants, sewer systems and drinkable water treatment plants. Municipalities also emphasizes a necessity of improvement of transport and other infrastructures in their areas, to improve transport serviceability and especially safety of road transport in general.

3.4 Change of budgetary allocation of taxes

Municipalities are coping with a lack of financial means. The largest portion of their incomes come from tax revenues. Therefore the most of the municipalities suggested to change the current budgetary allocation of taxes and to distribute the taxes according to the actual place of operation of particular companies, not their registered offices. The municipalities confirmed that if they get more financial means, they could reduce their indebtedness significantly.

3.5 Support of housing development in municipalities

In some of the municipalities no housing development has been implemented for the past few years. Therefore the municipalities are suggesting improvement of housing development in their areas and to have more financial means for acquisition of lands from the current owners (in cases when there is a lack of unoccupied lands to be used for the housing development purposes in the municipalities).

3.6 Support of agriculture and rural development

The vast majority of responses to question No. 7 was received from municipalities with population less than 300 and within the range from 301 to 1 500. These municipalities are usually situated in rural areas and therefore they are more or less focused on agricultural activities. Therefore these municipalities suggest intensified support of rural areas and agriculture in general, own production of food by private farmers and agricultural entities. In order to wipe off the difference between towns and small

villages, creation of employment opportunities should be supported in these small municipalities and local authorities should attract experts who would be reasonably paid as well for their work. Those municipalities who are constantly dealing with a lack of financial means come with various suggestions how to get some resources. They for example suggest to finance some of the activities in their area from resources of inhabitants so the loyalty of inhabitants and the interpersonal relations will be improved. Municipalities would get a sufficient financial means for repairs of their assets and could participate in maintaining their landscape as well as to develop their land-use plans.

3.7 Support of leisure-time activities

Especially small municipalities suggested to deal with the regional disparities by improvement of travelling, agro-tourism, recreation, leisure-time activities, sporting activities and by establishment of new cycling paths and routes. Many of them recommend to support development of culture, establishment of clubs and associations, or to get more financial means for reconstruction and maintenance of cultural relics and monuments. Within the scope of leisure-time activities the municipalities suggest to improve the support of extension of various services.

3.8 Young people preference

Number of inhabitants of rural areas has been constantly decreasing. Therefore the municipalities suggest to prefer young people above all. It is necessary to create job opportunities for them and provide them with some guarantees to make them move to rural areas.

3.9 Improvement of ethics of politics

Quite a lot criticism was addressed to politicians. According to the opinion of some municipalities the government only cares about big towns, while small villages and municipalities are on their agendas during the election period only. The attitude of government to municipalities should change, cooperation with municipalities improved and the government should increase rewards of municipalities for execution of certain activities. Labor offices should not be cancelled and their activities transferred to municipalities, bureaucracy should be eliminated to minimum, administrative demands reduced, legislative should change (especially in the field of allocation of taxes to municipalities), restitutions should be finished, especially restitutions of the church assets, also privatization should be finished. Distribution of subsidies should not be subject to influence by regions. Granting of subsidies should be subject to decision of experts, not politicians. Municipalities in frontier areas should be supported even more. Town quarters should get more competences to become more independent. In certain regions of the Czech Republic the under-average payrolls should be increased. Corruption should be eliminated and so should be illegal work. Some municipalities even suggest to cancel social benefits for unemployed people.

3.10 Landscape development and improvement

Sustainable development of municipalities and regions may be achieved by supporting of environmental projects, improvement of the share of alternative energy resources, utilization of brownfields, support in removal of environmental burdens, improved waste management, finishing of elimination of after-flood damage.

3.11 Improvement of education and welfare (social services)

According to municipalities it is necessary to improve the availability of education, to increase subsidies for building and maintenance of nurseries, kindergartens, special apprenticeship training schools, to create better conditions for employment of people above 50 years of age and seniors. It is also necessary to pay attention to solution of racial issues, minorities, inadaptible groups of people and settlement of new areas. Some municipalities call for change of the social policy and to limit accessibility of alcohol for young people by various means.

4. The most frequent responses to question No. 7

Table 4 shows the most frequent responses by the municipalities. Most frequently the municipalities mentioned change of the budgetary allocation of taxes, improvement of transport serviceability, simplification of the system of getting subsidies in the Czech Republic, improvement of technical facilities of municipalities, building of waste water treatment plants and sewer systems, improvement of housing development and simplification of system of getting subsidies from the European Union funds.

Table No. 4 - The most frequent responses of municipalities to question No. 7

Region	Response 4	Response 2	Response 17	Response 1	Response 14	Response 18	Total
Central Bohemian region	33	10	5	9	5	3	65
Capital City of Prague	1	1	0	0	0	0	2
South Bohemian region	14	5	7	3	2	4	35
Plzeň region	10	3	1	5	4	2	25
Karlovy Vary region	4	1	0	1	0	0	6
Ústí nad Labem region	9	2	5	2	5	5	28
Liberec region	6	0	3	1	0	3	13
Hradec Králové region	12	7	3	2	5	0	29
Pardubice region	9	4	1	1	3	1	19
Vysočina region	14	3	2	2	4	2	27
South-Moravian region	14	5	7	3	2	4	35
Olomouc region	8	5	1	4	2	3	23
Zlín region	13	3	1	2	0	2	21
Moravian-Silesian region	14	3	4	4	2	3	30
Total	161	52	40	39	34	32	358

Note: 1) Improvement of technical facilities, building of waste water treatment plants, sewer systems; 2) Transport serviceability; 4) Change of budgetary allocation of taxes; 14) Support of housing development; 17) Simplification of the system of getting subsidies in the Czech Republic; 18) Simplification of the system of getting subsidies from the European Union funds.

Source: authors' primary data

5. Discussion

The majority of suggestions were sent by the municipalities concerning the issues related to their financing. The current system of distribution of tax incomes is not considered as satisfactory for them. Municipalities with small number of inhabitants are disadvantaged by the Act on Budgetary Allocation of Taxes. Another problem of small municipalities is getting subsidies. In most cases the municipalities are not able to prepare the applications for subsidies and are discriminated by the fact that they do not have a sufficient financial coverage prior to initiation and in the course of implementation of their investment projects - subsidy is provided only after the investment project is completely finished.

Conclusion

The aim of this report was to point to a possible solutions of regional disparities that causes some of the regions to be economically poor. Within the scope of an extensive questionnaire survey implemented by the research team of the Faculty of Economics of the Technical University of Liberec some of the municipalities contributed by submitting their suggestions and proposals for measures that could mitigate or completely eliminate the regional disparities in future. The research revealed that the suggestions by the municipalities are often identical to actual intentions and aspirations of particular regions or measures prepared by the government. These measures especially cover restructuring of economics, improvement of general infrastructure, intensified focus on international and cross-border cooperation, support of small and medium enterprises, extension of industrial zones, modernization of transport infrastructure, etc.

There are quite significant differences in the fiscal policies amongst small municipalities and large towns with small municipalities being disadvantaged. These municipalities are then more dependent on subsidies and because of the complex system of applying for subsidies and its administrative demands this situation cannot be considered as satisfactory. The solution can be found in adjustment of budgetary allocation of taxes and improvement of motivation of the entrepreneurial environment with the aim to improve tax incomes on the one side and support of voluntary pooling of municipalities (grouping) to provide for implementation of more demanding development projects with lower dependence on subsidies and bank credits on the other side.

The project team decided to prepare a complete description and carry out evaluation of the disparate regions, i.e. regions that require a concentrated support by the state by means of improved methodical procedures. To assess the level of development of particular regions and municipalities, statistical data were used that represent so called "hard" indicators. In order to make the complex characteristics of the municipalities more complete, a questionnaire especially focused on so called "soft" indicators was prepared. The purpose of the questionnaire survey was to get a representative opinion by the representatives of the municipalities concerning their economic situation.

Proposals by municipalities concerning the possible solution of the regional disparities will be presented on the occasion of vocational seminars and conferences. The results

will be provided to the regional economic chambers and representatives of regional authorities - departments for development, as well as to chiefs of the particular municipalities (mayors). The results of questionnaire survey and proposals/ comments by the municipalities will be used for preparation of the proposed measures that should facilitate elimination of regional disparities.

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Internet Communication of Automobile Brands in the Czech Republic

Abstract

The automobile market is characterised by an escalating competitive struggle. To be successful in this sphere of business means knowing how to carefully evaluate and resolve the risks and changes which are involved in the modern marketing of the car industry. Also the communication of car brands has to reflect the range of changing facts. The impact of changed competitive conditions and the appearance of new customer segments is at present bringing to the foreground the necessity of conceiving of the positioning of car brands by a new method, and focussing more intensely on customer perception and the satisfaction of their needs and ideas. A basic criterion of the success of a car brand is the high level of awareness of it, a positive image, a long history, a level of trust in the brand on the part of consumers, and effective communication. One of the communication channels used by all automotive manufacturers and dealers is the Internet. This article presents the results from content analysis of web sites of 10 of the most significant car brands in the Czech Republic. It also refers to the fact that the technique of desk research allows us to get a sufficient amount of valid information, with a low expenditure for the objective examination of the presentation of brands in a competitive field of the other best selling car brands in the Czech market. The research showed that websites of car brands are characterised by a high level of professionalism and unambiguously comprise one of the basic sources of information on the companies and their products. In this respect the initial hypothesis of the contents analysis was confirmed, i.e. that brand-based internet presentations are in accordance with the perceived high quality of their products. However, the research also showed how little the internet is understood on the part of auto manufacturers as regards its multi-layeredness and multi-functionality. With the odd exception it was shown that the perceived potential of the internet on the part of car brands corresponds rather to an idea of a static advertising medium.

Key Words

car brands, marketing communication, internet, web presentations, content analysis

JEL Classification:

M31, M39

Introduction

The automobile market is characterised by an escalating competitive struggle. To be successful in this sphere of business means knowing how to carefully evaluate and resolve the risks and changes which are involved in the modern marketing of the car industry. Changes to customer demands over the last few years have put a huge downward pressure on prices, while increasing the quality required and shortening the developmental cycle of car manufacturers. As well as this the manufacturers have to react to a host of official regulations and ensure they are in accordance with sector-

based standards. There has been a drop observed in customer loyalty to car brands. As a consequence of the global financial crisis there has been a significant drop in demand and thus production on previously traditional car markets. These and other aspects have considerably impacted on the strategy of marketing communication of individual car brands. One of the communication channels which is used without exception by all important car brands is the internet. The most basic and widespread method used by companies communicating on the internet involves company websites. This paper presents the results from content analysis of web sites of 10 of the most significant car brands in the Czech Republic. It also refers to the fact that the technique of desk research allows to get a sufficient amount of valid information, with a low expenditure for the objective examination of the presentation of brands in a competitive field of the other best selling car brands in the Czech market.

1. The role of a brand in the automobile industry

Brands generally provide people with functional and emotional orientation points for their purchasing conduct. In the car industry the role of the brand is fundamental. Car brands mediate certain values and so impact on consumers' purchasing decisions. While for some the basic priority is appearance and design, the image of the car brand or its technical parameters, for others value for money is the deciding factor, along with service costs, safety and reliability.

Alongside tradition, technical solutions, design, quality and innovation is the undeniably complex system of managing brands, which is perceived as a basic success factor and also as a tool for the realisation of industrial positioning. The creation of a strong brand position has become one of the main tasks of the strategic planning of all important car brands. However, when positioning car brands it is not possible to proceed in accordance with the familiar scheme of brands, e.g. in the case of goods with a fast turnover, i.e. the creation of a brand position using only the tools of marketing communication, especially advertising and sales support. Car brands rely for their differentiated identity above all on their technical parameters and their creators, i.e. engineers, technicians and designers. As early as the development phase of a new product or model the car industry is working with the requirement of not-interchangeability of the brand and its competitive potential. It therefore applies that the car itself is the key to introducing the brand to the general public and creating its image. Another added value of a brand is created by production, marketing and sales, whose task is to reinforce by development the specifics of a brand created, and to make the brand intelligible and attractive to the consumer. The impact of changed competitive conditions and the appearance of new customer segments is at present bringing to the foreground the necessity of conceiving of the positioning of car brands by a new method, and focussing more intensely on customer perception and the satisfaction of their needs and ideas. A basic criterion of the success of a car brand is the high level of awareness of it, a positive image, a long history, a level of trust in the brand on the part of consumers, and effective communication.

When introducing a brand onto the market an irreplaceable role is played by traditional advertising. Leading car brands in this sphere tend to concentrate on utilisation of traditional media over finding unusual methods or forms of communication. This is

because the purchase of a car is still regarded as an investment, and therefore the choice of communication channels and the method of advertising are subordinate to the attempt not to devalue the value of the product being offered. Other components of the communications mix involve the copious utilisation of various sales support initiatives (reductions, test drives, etc.), activities in the sphere of public relations, and to a lesser extent direct marketing, especially in the form of direct mail. Personal sales are of extraordinary significance, since the communication between the salesman and the customer at the point of sale is often decisive in respect of a consumer's final decision.

2. Application of the internet in the communication of brands

One of the communication channels which is used without exception by all important car brands is the internet. This communication platform has undergone dynamic development over the last few years and offers companies a host of possibilities as to how to use it. Internet marketing differs from traditional marketing above all in the sphere of communication – the possibility of the global operation of this medium, two-way communication and interaction, speed and continuity, the scope of information, the possibility of individualising the communication contents, minimising the costs of communication, the possibility of updating information quickly, etc.

As a global communication platform in general the internet offers companies many possibilities [1]:

- space for presentations of companies and their products (corporate websites)
- a source of information
- a tool for managing customer relations
- an effective and new commercial channel
- management of the logistics chain, a new distribution channel
- the management of internal company processes

The most basic and widespread method used by companies communicating on the internet involves company websites. Company web presentations oriented on the external public have become a regular tool of corporate marketing communication, serving to inform existing and potential customers and other of the company's interest groups, allowing the creation of relationships with various target groups, and creating an environment for two-way communication. In order to ensure repeated visits to websites it is necessary that they be attractive, feature interesting content, be clear, and that the information given is current and easily accessible. It should be noted that a target group on the internet differs considerably from the population at large. Internet users are more focussed on the acquisition and utilisation of information. They are better educated and show a greater tendency to communicate with those offering the products or services on the internet. One of the main objectives of company websites is to present the company, i.e. to provide information on the firm, its products and its activities. Another task of websites is to increase awareness of a company and its brand or brands, assist improve the company image, and allow for two-way communication with selected target groups.

In order that web presentations meet all the objectives created for them, they must be visible, accessible and user-friendly. The visibility of a website is one of the most important factors impacting on its success, the effectiveness of marketing objectives and a return on the money invested in the website. A very visible web presentation is not lost on the internet, has a high visit rate (ideally generated automatically without the need for further expenses), and visitors are generally interested in the products or information on offer, a fact which is already implicit in the method by which they get to the company's website. The accessibility of the site is another of the modern techniques monitored when creating the site. Respect for the rules of website accessibility ensure it is without barriers, i.e. independent of monitoring equipment, hardware and the physical state of the user. However, user-friendliness is a set of many rules improving the interaction of the visitor and the website. On a user-friendly website the visitor more effectively moves around, navigates the site more easily, and more quickly finds the requisite information. User-friendly sites are clear, intelligible, easy to control and offer a pleasant user experience. The correct lay-out of information also relates to the user-friendliness of a website. A well designed website structure is the basis of user-friendliness, as is respect for all navigational elements (home page, site map, etc). Only in this way can the requisite logic and intuitiveness of navigation be attained [2].

3. Contents analysis of corporate web presentations of automobile brands

One of the methods by which the quality of web presentations can be analysed is a content analysis. As a desk research technique it is a low-cost way of acquiring sufficient valid information for further consideration and can be used as a tool for examining the competition. This method was used by the author of this article within the framework of an individual IGA Škoda Auto University research project entitled "Brand management in the automobile industry", and focussed on the collection and evaluation of analytical materials from the corporate websites of the best-selling car brands in the Czech Republic. The aim was to acquire sufficient information for an objective assessment of the presentations of individual brands in the competitive field of other best-selling brands on the Czech market. Data collection was carried out from March to May 2008 and related to the internet presentations of the 10 best-selling car brands (Škoda, Ford, Renault, VW, Peugeot, Hyundai, Citroën, Toyota, Kia, Opel), i.e. nine importers and one domestic car manufacturer.

4. Results of the analysis

Of great significance in terms of repeated user visits to a company website is the homepage. This is always the most expressive and eye-catching page on the site, for which reason it was paid close attention during the contents analysis. In this respect we can conclude that the homepages of individual brands differ considerably, both in respect of graphics, the lettering, the placing of logos and slogans, etc., and from the point of view of the overall size of the page (the need to scroll up and down). In this way brands clearly present an original and unrepeatable corporate identity. However, there also exist elements common to all, above all adverts for new models using banners,

which are used by all the brands analysed without exception, and the graphic design of the basic (1st level) navigation, mostly found on the top strip of the homepage. Direct access from the homepage is usually to the vehicle configuration and other interesting topics (car salesrooms, news, leasing, contact details, and the site map).

The most eye-catching and expressive element of the homepage is always a large, often dynamic banner drawing attention to the most up-to-date news on the brand (with the exception of Hyundai, where the main banner draws attention to the most reasonable price offers). These basic banners have a dominant status on the entire homepage and approximately 1/3 of the page is devoted to them. The brands are thus unambiguously revealing their endeavour to demonstrate to consumers their innovations and use the internet as a way of presenting their news immediately, without having to wait for official market premieres at traditional car salesrooms. Corporate web presentations thus become a place where many premieres of new car models are held. This fact is confirmed by the outputs from in-depth interviews with experts, i.e. motor journalists, which were also undertaken within the framework of the IGA ŠAVŠ research project referred to.

As far as the effective operation of websites is concerned, intuitiveness and predictability are generally required. Websites are intuitive when they use regularly used connections, while predictability is attained through intelligible and consistent user navigation. In the case of the car brands analysed it was found that the sites are sufficiently intuitive and basic navigation on all homepages is relatively simple, logical and well set out. Topics link up to each other in a specific way and flesh each other out in more detail. They are common to all the homepages and most are located on a strip at the top of the page. What's more, the more interesting and most frequently visited sections of the site are highlighted on the homepage in independent sectors. This element is especially used by Škoda, Renault and Opel, as well as other brands to a certain extent. This involves bricks or boxes in which those sub-topics which the user probably visits most often are independently listed, or which the brands wish to publicise most and to draw attention to. As far as the information value of the homepages are concerned, i.e. the amount of balanced information which the user expects, the homepages examined usually draw attention to new models, special offers, quality, elegance, safety and the state-of-the-art technology of products. Apart from Citroën and Renault company slogans always feature.

Individual brands also attempt to come up with something original, and so in the majority of cases it is possible to find a journey planner, ring tones or games for mobile telephones, screensavers and wallpaper for PCs, the possibility of ordering test drives or downloading commercials, etc. A laudable effort is made by Škoda, which in a section entitled "Playful Skoda" creates a separate site for children of various age categories in English and Czech, which features not only games, but offers young people ways of improving knowledge of road safety and ecology. From the point of view of marketing usability the most interesting element is clearly the configuration, which allows for the simple and fast assembly of a car according to customer requirements, including a resolution of the question of financing and a link to a specific dealer. With the exception of Kia all the brands examined offer this practical aid. The configuration also services car brands as an effective instrument of market research, by means of which customers communicate their preferences and ideas. For instance, Škoda Auto says that after the

introduction of a new model onto the market it registers 10,000 visitors to the configuration every day [3]. So this is an interesting instrument which can attract attention and increase the visit rate of corporate websites. A favourite of foreign sites is an instrument allowing for comparisons between vehicles selected. However, Czech automobile websites do not offer this possibility.

The analysis also showed that every car brand sets out somewhat different corporate values on its website and draws attention to differing client perceptions. Even here, however, we can see attributes common to all the brands examined, and these are the following: top quality, safety, dynamism, spaciousness, and equipment linked with comfort. The question of innovation places a large role in the car industry. In this respect it was discovered that all the brands under examination focussed on innovation. Several drew attention to it directly with a link to specific cases (VW, Škoda, Ford, Peugeot – TSI engines, adaptive headlamps, solid particle filters, the use of alternative fuels,), while others only generally referred to the manufacturer's innovative approach to its products (especially to ecology, improvements to road handling, etc.)

Attention was also paid to the communication of sales support activities. This oft used tool of marketing communication is frequently cited as one of the main causes of a reduction of customer loyalty to a single brand. The analysis showed that the following forms of sales support appeared across the presentations of brands: price offers, special service inspections and maintenance, extended guarantees, special terms of financing, the possibility of test drives, and ex-company cars and second-hand cars. The basic arguments used by the car brands in favour of the sales offer are as follows (in order of frequency used): safety, price deals, economy, spaciousness, quality, innovation, environmental friendliness, variability and design.

Corporate internet presentations also represent a suitable platform for the implementation of activities in the sphere of public relations, e.g. by creating a special section for journalists in which press reports and annual reports are published, announcements, the approach taken to certain questions, and other information. As part of communication with the general public a newsletter may be used or the possibility of discussions at electronic conferences or discussion forms. In this respect the brands analysed have considerable room for improvement, since none of them feature a special section for communication with the media. Only in the section entitled "News" or "About the company" do they publish news items, extracts from the press, press reports, etc. VW, Renault and Hyundai give a link to their newsletter, while others offer the opportunity to subscribe to the newsletter on condition that the user registers and fills out personal details (Ford, Renault, Hyundai, VW).

The question was also examined as to whether the brands use the possibility of two-way communication with customers. It was found that the tools used for introducing dialogue are mainly links to telephone info-lines or info-emails, where users are provided further information. One of the brands surveyed offers a questionnaire, which in general is a simple matter for the customer to fill in and is a way for a company to display its interest in customers' opinions or to make it possible for a customer to ask to be sent information materials.

Conclusion

The internet has been in commercial operation in the Czech Republic for fifteen years. At a time when more than half of the Czech population is connected to the internet, it is clear that the internet has become one of the most promising instruments of modern communication. The car brands surveyed are clearly aware of this fact, and their websites are characterised by a high level of professionalism and unambiguously comprise one of the basic sources of information on the companies and their products. In this respect the initial hypothesis of the contents analysis was confirmed, i.e. internet presentations of automobile brands are in accordance with the perceived high quality of their products. The research showed that brands use an appropriate combination of facts and emotional information, and lay emphasis more on the commercial side of the presentation than on the provision of floods of technical information.

However, the research also showed how little the internet is understood on the part of auto manufacturers as regards its multi-functionality. With only minor exceptions it was shown that the perceived potential of the internet on the part of car brands corresponds rather to an idea of a static advertising medium. The internet presentations of the brands analysed lack to a considerable extent interactivity promoting the maintenance of relationships with customers or even the possibility of initiating an ongoing dialogue with internet users. In the future it will be essential to extend their understanding of the website as an integral and important part of a brand's communication mix. Instead of a simple presentation automobile brands' websites should become a fixed part of the marketing mix and a significant communications channel with all of the brand's interest groups. Only in this way will it be possible to utilise to the full the potential which the internet offers.

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Marketing Orientation in the Practice of Polish Enterprises with Particular Emphasis on Promotion

Abstract

The competitive environment of Polish economic entities, which keeps changing intensively and frequently in an unpredictable manner, results in the need to search for the new, or improving the already applied concepts of running a business and facilitating market success. Marketing orientation in enterprise management is one of them.

The objective of the hereby paper is to identify the type of Polish enterprises orientation. For this reason the paper presents: 1) factors of success related to the opportunities of meeting clients' needs more effectively than it is done by the competition, including the role of marketing research, 2) company arrangement from the point of view of meeting company tasks, 3) instruments of marketing competition, and promotion in particular.

Additional objective of the study is to identify research nature and scope, as well as the institutions dealing in the analysis of Polish enterprises marketing orientation.

Research methodology was mainly based on critical analysis of professional literature and reports by institutions dealing in the analysis of Polish enterprises marketing orientation.

The summary presents marketing profile of an average Polish company, the reasons for such state of the matter and ways for its improvement are pointed to. This part also includes comments on the situation in research carried out in the field of Polish enterprises marketing orientation.

Key Words

marketing, marketing orientation, promotion

JEL Classification:

M00

Introduction

Enterprises, which plan to function successfully at the market and obtain their set targets, both economic and non-economic ones, have to assume the necessity of taking up certain, defined attitudes towards their environment and market behaviours. Depending on the characteristics of such behaviours and attitudes, the following approaches related to the functioning of an enterprise at the market, and in professional literature referred to as orientations may, among others, be distinguished. They are as follows:

1. Production orientation (focus on production), once accepted results in concentrating an enterprise attention on production, and solving problems related to it, with main focus on implementing such solutions, which facilitate

obtaining high production capacity and effectiveness (owing to economies of scale).

2. Product orientation (focused on a product) which proves that the product and its attributes, such as technical and quality parameters, constitute the centre of interest for an enterprise. It is based on an attitude that clients choose better and more innovative products, therefore it is worth investing in their improvements (profit resulting from higher quality).
3. Sales orientation (focus on sales) assumes that the most important problems of contemporary enterprises are difficulties in meeting sales targets, therefore one should concentrate on stimulating sales by the application of proper methods and tools for activating it (profit resulting from effective sales).
4. Marketing orientation (focus on client's needs) which does not reject the importance of concepts, briefly discussed above, in an enterprise success, and also puts emphasis on selecting from them and integrating the already tested methods of functioning at the market. Besides it carefully considers clients' needs and expectations, as well as performs their detailed recognition, which allows to provide clients with products and services characterized by quality and value they require (profit resulting from clients' higher satisfaction).

The focus on marketing, as the means for obtaining market advantage, in the reality of Polish enterprises functioning, has appeared relatively recently – after 1989, and accompanied systemic transformations of Polish economy oriented towards marketing economy. Wider opening of economy, manifesting itself in foreign competitors entering Polish market, who have been applying marketing strategies successfully for many years, resulted in an increased awareness of Polish companies regarding the significance of management in marketing. The role and power of marketing instruments, in the overall nature of economic processes, has become noticeable, as well as their improved efficiency and effectiveness. It seems that in this context marketing orientation should represent the dominating philosophy of most Polish enterprises [1] functioning, while their key objective should consist in creating and establishing suitable marketing strategies.

The objective of the study is to identify the type of Polish [2] enterprises orientation. Therefore the article describes as follows:

- success factors related to possibilities for meeting clients' needs to a greater extend than the competition, including the role of marketing research,
- the system of company organization from the point of view of meeting marketing tasks,
- instruments of marketing competition with particular emphasis on promotion.

The additional objective of the study is to identify both nature and scope of research, as well as the institutions dealing in the analysis of Polish enterprises marketing orientation.

Research methodology

The article is of review-cognitive nature. Research methodology was mainly based on critical analysis of professional literature and reports by institutions dealing in the analysis of phenomena in the field of marketing. Data presented in the article originate from secondary sources. In the process of collecting them the following research procedure was applied:

1. searching for secondary sources,
2. selection of secondary sources,
3. obtaining and analyzing secondary sources,
4. information/research results selection,
5. graphic and descriptive presentation,
6. conclusions.

The following criteria constituted basis for secondary sources selection:

- source credibility – research published by the following institutions was selected for analysis: Cracow University of Economics (before: Academy of Economics), Warsaw School of Economics, Warmińsko-Mazurski University in Olsztyn, Poznań University of Economics (before: Academy of Economics) and the Institute of Internal Market and Consumption in Warsaw;
- sample representation regarding its number and the manner of its selection – a few hundred of enterprises selected on random basis constitute the most frequently encountered research samples, both nationwide and regional Polish research was analysed;
- adequate structure of the sample as compared to the structure of general population represented by Polish businesses – attention was paid to such research which covered small, medium and big companies and focused on industry and service sector of Polish economy;
- availability of research results – results published in prestigious Polish journals and at Internet portals of Universities in the period of 1998-2006 [3];
- research complementarity – facilitated clear interpretation of results from the point of view of article objectives.

The studied enterprises represented main branches of Polish economy, related to both industry and services sector. Due to the fact that the research sample was diversified, the due analysis was based on basic marketing mix concept by E. J. McCarthy (4P) [4]. The diagnosis does not take into consideration changes occurring in the environment of Polish enterprises, due to limited scope of the hereby article. However, it has to be kept in mind, that the type of orientation accepted by an enterprise results from the influence of both internal and external factors. Secondary data were presented in more detail owing to the results of direct observations and free interviews conducted in the period of a few recent years by the article Authors, also during scientific conferences in this research field, at workshops, during postgraduate studies or trainings for entrepreneurs.

1. The perception of market success factors by managers of Polish companies

The results of numerous research at Polish market indicate that it is common, for the surveyed managers, to believe that company success depends on a good product from the point of view of technical parameters (this is confirmed by investment structure research, which in 63% relates to productive capacity increasing and product quality upgrading), as well as their favourable price. One may assume that the level of marketing orientation development is reflected in the position occupied by marketing components in the ranking of factors responsible for an enterprise success. In 2005 enterprises agreed that the most important components of success were as follows and in the listed sequence: quality of goods and services (18,8% indications), satisfaction of final recipients (13,1%), internal costs (10,2%), company market image and the brand awareness (8,8%), and also the pricing policy (6,7%). Table 1 illustrates the details.

Tab. 1. Factors of success indicated by managers of Polish enterprises in 2005 (by the number of three most important success factors indicated)

Factor	Importance (% of indications)	Factor	Importance (% of indications)
Quality of goods (services)	18,8	Enlarging and/or modernizing production potential	3,1
Satisfaction of final recipients	13,1	Work efficiency	3,1
Internal costs	10,2	Improvements in distribution and customer service system	3,1
Company market image and brand awareness	8,8	Sales at foreign markets	2,7
Pricing policy	6,7	Sales at domestic market – market share	2,5
Sales advertising and promotion	6,0	New types of activities	2,2
Knowledge about clients' needs, competition, company own market position	5,7	Human resources policy	2,1
Modernization and rationalization of goods range offer	4,3	Implementation of production capacity at the company disposal	1,9

Source: [13].

It is worth noticing, that in the ranking of success factors, innovation and modernization oriented activities are not the most important ones. However, high positions are taken by such variables as: quality, satisfaction of final recipients, internal costs covered by the company itself. Research referring to success factors have been conducted systematically for the last 10 years, by the centre affiliated with the University of Economics in Kraków. The analysis covers two periods, i.e. 1998 and 2005. These time spans are significant for certain positive changes. They indicate dominating increase of marketing oriented factors, among which the following should be included: satisfaction of final recipients of goods (services), market image of a company and brand awareness, as well as the knowledge about customers' needs, competition and the company own market position (picture 1).

It should be noticed that in recent years the significance of market research, as the success influencing factor, has definitely increased, however, its role in the functioning of enterprises is still minor (5,7% indications). This means that a small percentage of Polish companies investigates its environment in a professional way, including outsourced agencies specializing in market research (about 5%). Most of them conduct their advertising campaigns based on general knowledge of the market and clients (micro – 80,0%, small – 73,0%, medium – 77,0% and big – 50,0%) [5]. Company own research constitutes the majority of activities in this domain (81% of studied companies) and is performed by implementing commercial (sales) results analysis methods and observations, which has been registered in micro, small and medium-size companies. Big companies, on the other hand, apart from the analysis of their sales and observations also perform panel and survey research, as well as physiological tests, audio- and telemetric advertising research, by means of outsourced units. These outside research agencies conduct quantity analyses most frequently (68% total expenditure on outsourced research), as compared to quality ones (20%). Companies value personal type of methods more (e.g. interviews) and they still do not often employ the Internet resources for their analyses. It is also very rare to perform market experiments, e.g. tests of a new product, which seems indispensable when targeting a foreign market [6].

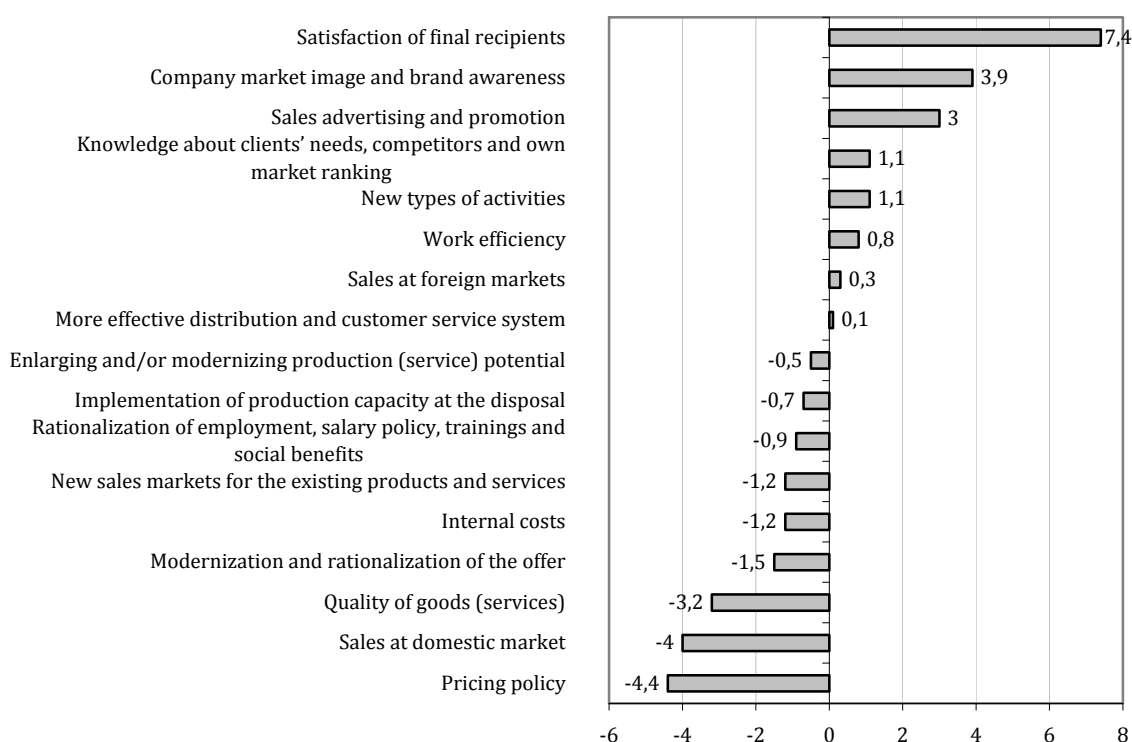


Chart 1. Factors of success indicated by managers of Polish enterprises in 1998 and 2005 – comparison of changes

Source: [13].

The subject of marketing research, carried out in Polish companies, is usually focused on the following factors [7]:

- size, dynamics and profitability of company turnover (about 60%),
- frequency and clients' satisfaction level (about 45%),

- image and level of knowledge about a company and brand awareness (almost 40%),
- customers' needs and preferences, as well as the reasons of losing them, mainly by means of analyzing complaints and negative opinions (35%),
- market share and market position of an enterprise (25%).

One may observe certain diversification in this domain, depending on the size of an enterprise. For example, company image assessment is more important for big and micro-size companies, than for small and medium sized ones.

Sources of information constitute another issue related to market research. The major ones are the following: fairs, exhibitions, promotional events, the media, including the Internet and professional journals, surveys conducted by the company itself, statistical yearbooks, opinions of distributors and trade agents.

At this point it should be emphasized that recently the importance of media and mainly the Internet has been increasing extensively, as far as the sources of obtaining information by Polish companies are concerned.

2. Marketing instruments including promotion

While analyzing the application of marketing instruments – product, price, distribution and promotion, one may assume that Polish enterprises influence the market to a greater extend by means of price and promotion, and to a lesser extend using a product and its distribution. The characteristic features of product strategy are the stage of product life at the market and its structure in a marketing perspective. Market observations and research indicate that the majority of products, considered as the leading ones by companies offering them, (regardless of company profile) are in their maturity phase. On one hand, it confirms original observations referring to low level of innovation in Polish enterprises and on the other, it proves that there exists real danger for an enterprise, i.e. market saturation and slowly decreasing sales. This is mainly caused by offering a product in its basic version, not distinguishing itself from these available at the market, moderately attractive and not meeting client's expectations. The following activities are quite rare to encounter:

- guarantee prolongation,
- guarantee broadening,
- brand awarding,
- brand changing,
- product packaging change.

At present, the focus of entrepreneurs is concentrated on product quality improvement and the extension of product range diversification. It offers wider opportunities for creating an expected product, that would meet the requirements of product safe usage in the future, which would facilitate the prolongation of product life cycle at the market.

The analysis of policy, carried out by enterprises with regard to prices, indicates that while deciding about the price level enterprises take mainly costs and the competition's offer into consideration. They follow customers' expectations to a lesser extent. Adjusting prices to customers' requirements takes the form of trials and mistakes strategy, mainly by means of experimenting in the area of prices diversification, by implementing rebates, bonuses and cash discounts. Observations indicate that in many cases price level is not fully adequate to product quality, even though Polish entrepreneurs when asked about the level of their prices declare that they are average for high product quality.

While analyzing activities related to distribution one may notice that the vast majority of Polish enterprises does implement direct channels (about 2/3), which results from their size and type of activity (SME sector and service oriented companies are the dominating ones). Nevertheless, certain changes are worth noticing in indirect distribution. On the basis of manufacturers' and trade agents' behaviours analyses it may be indicated that:

1. Polish producers may count on bigger support in products' distribution from trade agents, who:
 - upgrade the level of customer service,
 - care more about interior design of the place in which sales occurs,
 - present bigger activity in relation to products better promoted by their producers.
2. While looking for trade agents producers pay their main attention to such attributes as:
 - flexibility in negotiations,
 - professional preparation of orders,
 - skilful organization in handling deliveries of goods,
 - sales efficiency,
 - interest in promotional campaigns,
 - attractive payment deadlines,
 - low margins.
3. Franchising is becoming more and more attractive as distribution strategy. Diversification is observed from the point of view of product type. At Polish market there dominate franchising systems in relation to footwear and clothes (72% of all franchise agents).
4. Trade agents appreciate cooperation in the domain of deliveries from these producers who:
 - present more attractive product range offer,
 - implement orders professionally,
 - offer lower prices,
 - carry out active promotion of their products,
 - are flexible in negotiations,
 - organize trainings and social events.

Managers of Polish enterprises are of the opinion that promotion represents one of crucial factors influencing success (as indicated in table 1), the significance of which keeps growing in recent years [8]. Main attention is focused on the structure of most frequently implemented instruments and forms of promotion, types of advertising

campaigns analysis in the media, characteristic features of individual sales strategies, and also on using the Internet in marketing activities conducted by an enterprise. According to declarations expressed by companies the following tools are implemented in promotional activities (in the presented sequence) [9]:

- advertising in the Internet,
- individual sales,
- consumers' sales promotion,
- commercials in local mass media,
- sponsoring projects,
- fares and exhibitions,
- commercials in nationwide mass media,
- PR.

Having analyzed the share of particular media in overall expenditure on advertising, certain tendencies [10] do manifest themselves, namely:

- TV still represents the most popular medium and for years its share has been at a stable level,
- the second position is taken by magazines, which slowly lose their importance,
- the third on the list are daily newspapers and their market share is relatively stable,
- and the medium which registers the fastest share increase is the Internet.

Polish commercials and advertisements are dominated by simple, easy to understand language (sometimes metaphorical), presented at the background of music and sometimes the whole commercial is made into a song. Information about products' advantages are often presented by experts, or take the form of lectures, advice by older individuals, stories based on life situations, cartoons, pastiches of well known movies, soap operas and books. Sometimes commercials are endorsed by famous and popular actors or sportsmen (depending on products' category). Polish advertising campaigns highlight: advantages gained owing to the presented product; obtaining value for many, i.e. low price combined with good quality; new solutions (ingenuity); health orientation; efficiency; safety; etc. There are often encountered symbols referring to tradition or history (proverbs, play of words understandable only for Poles, famous historical persons). There are also frequently exposed certain family values, like respect for the elderly, contact with nature (rural elements). Sense of humour characteristic for Polish advertisements is quite simple and refers to Polish national stereotypes' parody [11].

Polish enterprises do notice an increasing importance of the Internet with reference to consumers' decisions [12] and try to adjust communication channels, at their disposal, to this trend. Enterprises use the Internet most often in case of promotion, purchase, logistics, accounting and human resources management. Among the Internet tools implemented by Polish companies the most popular ones are www sites and e-mails, which are used in order to:

- present company products,
- provide general information about a company,

- inform about points of products' sales,
- enable clients to place orders,
- provide clients with support and assistance,
- provide information for the media.

3. The position of marketing in the organization of enterprises

Establishing a unit, in a company organizational structure, for the purposes of marketing, may play the role of an incentive for stimulating different types of marketing activities. The introduction of marketing activities into a company by means of organizational changes is an expensive solution, therefore it can be applied by medium-sized and big enterprises.

The studies conducted based on a representative sample of medium and big entities indicate that the characteristic phenomenon among Polish enterprises is the absence of distinguishing marketing functions as a separate organizational unit. Most often these functions are performed directly by employees representing top company management, i.e. the owner him/herself, the executive manager, management board member (57,2%). The distinguishing of marketing functions, in the company structure, is noticed in 33,4% of researched enterprises. About 11% have [13]:

- separate marketing and sales units,
- sales unit also performing marketing activities,
- marketing unit performing all marketing functions including sales.
- 7% of businesses follows the strategy of outsourcing marketing activities from outside entities.

Final Remarks

The analyses carried out so far allow to present the profile of an average Polish company, and the characteristic features of its strategy, influencing the market:

1. In a statistical Polish company the role of marketing is limited and mainly comes down to promotional activities, as well as price manipulations, and overall, professional market research oriented towards recognizing expectations of potential consumers and their satisfaction measurement, are used at a smaller scale.
2. An average Polish company presents low level of professional marketing knowledge, which is confirmed by its activities limited to partly unreliable and ineffective methods of carrying out market research and lack of economic indicators application in marketing activities monitoring.
3. Its product is innovative only to a small extend, frequently of a no-name type, represents maturity phase and additional services are rarely added to it.

4. While specifying prices Polish company applies mixed methods incorporating costs and the level of prices set by the competition, which results in small price adjustment to customers' preferences.
5. It applies traditional sales policies in distribution, and still does not perceive the Internet as an intensely developing channel.
6. It applies quite rich and diversified tools as the promotion-mix, although poor implementation of the Internet still persists as the weak component of promotion policy.

The limited scope of marketing activities applied by Polish enterprises results, among others, from:

- concentration on short-term targets,
- poor financial condition,
- focus on low functioning costs,
- relatively limited marketing knowledge,
- preference for transaction oriented approach in business.

Nevertheless, the research results illustrated by the hereby paper indicate successive introduction of marketing orientation components to the practice of company management. However, in the context of present economic crisis, it may be expected that this process will be slowed down. Specialists in marketing forecast the necessity for extensive savings, especially in the promotion sphere, which is confirmed by deteriorating situation at the market of advertising services in Poland [14]. Accepting the cost oriented approach in conducting business will require the extension of the so far applied set of effectiveness measures for marketing activities by modern ones, offering a chance for marketing costs optimization, as well as the choice of most effective and efficient instruments influencing the market. At present ROI (return on investment) (e.g. in PR) is the most often applied economic measure. Additional tools are suggested, such as: ROO (return on objective) (return on the implementation of a certain marketing objective), or ROMI (return on marketing investment).

Managers of Polish companies should follow changes in the approach to marketing activities. *The Economist* (supported by *Google*) presented, at the beginning of 2009, the vision of strategic and tactic marketing activities development, for the nearest future. Client orientation will constitute a major concept, consisting in assisting a client at every stage of consumer value chain, which results in subjecting all internal processes to an efficient customer service (customer-centric orientation). It requires partnership marketing concept implementation. Therefore, Polish enterprises should undergo market functioning philosophy change, which may be illustrated by means of transforming the product – client relation into a company – man oriented dependence.

Attention should also be paid to the fact that research regarding Polish companies marketing orientation presents neither systematic nor periodical nature – they are carried out sporadically. Availability of their results is difficult because of the absence of an institution specializing in this domain. Research in the discussed area is not of complex nature, since researchers pay the least attention to detailed diagnosis of Polish enterprises pricing and distribution policy which results in limited scope of marketing orientation research in Poland.

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Economic, Environmental and Social Issues and Corporate Governance in Relation to Measurement of Company Performance

Abstract

In her paper, the author analyzes the integration of economic, environmental and social issues and Corporate Governance in relation to measurement of company performance, as well as its continued success (Sustainability of Success). Disregarding such aspects of performance in the unified reporting (Corporate Sustainability Reporting) by company managers may result in creating further and even deeper problems. Corporate Governance enables the creation of structures supporting the establishment, control and achievement of company goals. As regards the economic, environmental and social aspects and Corporate Governance in relation to measurement of company performance, also the Corporate Sustainability Reporting is gaining importance. Corporate Sustainability Reporting has become a mainstream business activity. There the Board of The Global Reporting Initiative concluded that the root causes of the current economic crisis would have been moderated by a global transparency and accountability system based on the exercise of due diligence and the public reporting of environmental, social and governance (ESG) performance. Aim in her paper is propose the Corporate sustainability reporting tools designed for the environmental performance, economic and social performances and corporate performance of governance – Corporate Social Responsibility (CSR), Global Reporting Initiative (GRI) – appear as essential at present. The 'Reporting' will thus produce one of the greatest value "products", even if intangible in nature, i.e. information.

Key Words

performance, corporate governance, economic, environmental and social issues, corporate, sustainability, reporting

JEL Classification:

A19, G34, H11

Introduction

Currently most companies have to cope with the effects of drop in international market demand, increase in input prices, increasing complications in relation to obtaining new loans, and ways in which the mentioned developments affect sales, profitability and productivity of companies. Long-term sustainability and further development of a company should remain the first priority even under the current conditions characterized by cost cuts.

One of the possible approaches is to also take into account successful solutions to economic, environmental and social issues and corporate governance in relation to

measurement of company performance, as well as its continued success (Sustainability of Success). Disregarding such aspects of performance in the unified reporting (Corporate Sustainability Reporting) by company managers may result in creating further and even deeper problems.

Reporting tools designed for the ESG performance together with Corporate Social Responsibility (CSR) and GRI – appear as essential at present. The overall company performance plays a key role in its corporate strategic policy and sustainability of success. The creation of reliable methods of company performance measurement where concurrent acting of multiple factors is in play can be considered a prerequisite for success not only in decision making, but also with regard to corporate governance, comparison possibilities, development of healthy competition environment etc.

Sustainability is ensured by the balance between three basic pillars of corporate management – **economic, environmental and social**. Currently, the following topical issues present themselves: *“What is the interrelationship between the economic-environmental performance, social performance and Corporate Governance?”*, *“Is it possible to also count on the Sustainability of Success (long term viability) additional pillar?”* etc.

1. Sustainability and the Triple Bottom Line

Sustainable development is regarded as a comprehensive set of strategies enabling the satisfaction of social, material and spiritual needs of people through economic tools and technology while respecting environmental limits. To make this possible in the global scale of the contemporary world, it is necessary to re-define their social and political institutions and processes at the local, regional and global level. [Rynda, 2006]

“Our Common Future”, the principal report on sustainability, establishes the concept and offers the first definition of sustainable development: “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” [Gro Harlem Brundtland, 1987]

Sustainable development is therefore unthinkable not only without the balance in the environmental respect; the balance in the social and economic areas is of equal importance.

In theory, sustainable development should improve the quality of life of each individual without exerting natural resources exceeding their capacity. The route toward sustainable development requires that companies, governments as well as individuals change their consumption and production behaviour and policies and, at the same time, it requires a change in practices. Companies have to find an innovative way that will be advantageous while improving the environmental condition of production processes and products.

Sustainable development is characterized by three dimensions: economic, social and environmental. For a company it means operating with a view to the so-called triple-

bottom-line where a company concentrates on all three pillars of sustainable development – Fig. 1.

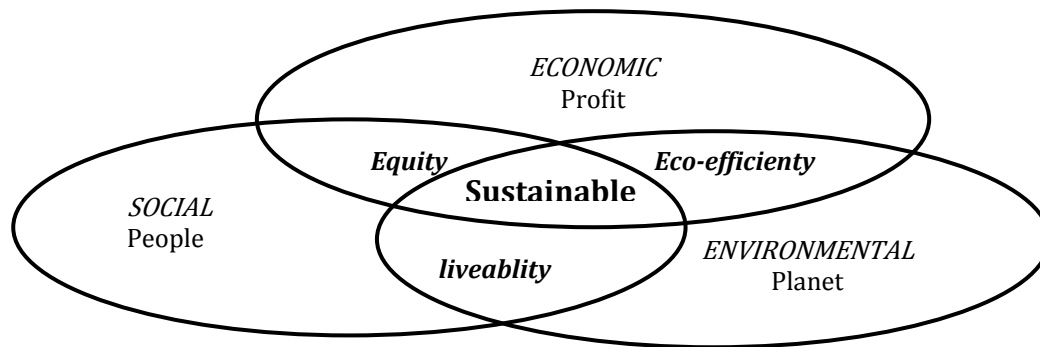


Fig. 1 Dimensions of Sustainability

[Elkington, 1997]

At present companies take more responsibility for the environment and it has transpired that environmental initiatives bring economic benefits as well. Introducing cleaner technology, optimising technology reducing use of resources and environmental management systems such as ISO 14001 lead to a sound improvement of the environmental condition of a company. The integration of quality and environmental management systems created new opportunities form companies, such as lower resource consumption, improved relationships with external investors including local communities, offices, etc.

Companies perceive the life cycle as an indispensable tool for products throughout their lifetime both in relation to environmental impacts as well as in the economic sense (for example reducing material waste leads to reducing costs) and from the market point of view by improving competitiveness.

The summit in Rio de Janeiro in 1992 (WBCSD) introduced the term “eco-efficiency” which underlines the connection between environmental improvement and economic benefits. This means that so far the modern understanding of companies in terms of responsibility has been focusing on environmental initiatives or improvement of economic benefits. Much attention has not been paid to the social aspects of sustainable development in companies but examples such as connection between environmental improvement and safety and protection at work indicate a more positive approach that leads to an integrated management system including also social aspects.

2. Corporate Governance

Corporate Governance has attracted major interest of both the specialist and general public mainly in relation to the scandals at the beginning of the century. After the collapse of the Enron, WorldCom and Adelphia companies on American capital markets, similar events concerning e.g. the Parmalat company also took place in Europe. The focus of the ongoing discussions is particularly the role and failure of Corporate Governance in the mentioned companies. Investors, major and small, require greater transparency and better availability of information about companies and seek to gain a

greater influence on the way of self-governance and behaviour of the public companies. [Kavalíř, 2005].

Corporate Governance is understood as the key element in achieving economic performance and growth ensuring increased trust of the investors. It covers a wide range of relationships between the company management, governing bodies, shareholders and other parties with justified interests [Klířová, 2001].

Corporate Governance enables the creation of structures supporting the establishment, control and achievement of company goals. It provides for creating appropriate initiatives for members of the governing bodies as well as the management. It creates conditions for shareholders and other parties with justified interests for effective monitoring of the company. It is assumed according to OECD Principles [2004] that an effectively working system of Corporate Governance within a company as well as across the whole economy will help create trust necessary for the existence of free-market economy. As a result, the price of capital will decrease and resources will be used more efficiently by companies. Corporate Governance encompasses a widely varying range of areas, which is also manifested by an effort to create a concise definition of the term. Lack of unification in the terminology used is illustrated by the following quotations: *"A system governing and controlling companies. Statutory authorities are responsible for the company management. Responsibility of the authority includes establishment of strategic goals of a company, governance aimed at achieving the goals, supervision of management and providing information to shareholders on the performance of the asset manager's duties."* [Cadbury, 1992]. *"The process through which companies respond to the rights and wishes of the interested parties (stakeholders)."* [Demb, Neubauer, 1992].

Plenty of companies in the Czech Republic have implemented and certified an Environmental Management System (EMS) as a part of integrated management system (quality, environment and occupational health and safety management). Therefore, the environmental, economical and social data and information are being monitored, codified, registered and aggregated into key performance indicators. This fact indirectly indicates that in the case of such need the company is able to aggregate these data and incorporate it into the corporate sustainability or environmental report. [Hřebíček et al., 2009].

Today many organisations become aware of the fact, that the traditional resources, connected with the industrial age, are not the only one, which has to get appropriate attention during the contemporary transition to the knowledge society and to the knowledge economics. The knowledge is becoming one of the strategic resources of the organisations, which should ensure their stable growth of performance and competitive advantage. Therefore its management is acquiring more and more importance. Today has the knowledge really the potential to become one of the strategic resources for the companies. It can assure for the companies stable growth, performance and competitive advantage.

Functioning Knowledge Society would be helpful for companies. There is a complicated answer to the question How to reach that the basic precondition for the concept of knowledge society would be the capacity of an individual to get oriented in the

information sources, search there information with efficiency, interpret them and put them into context, perform creative processing and create from them the knowledge.

The Global Reporting Initiative (GRI) has served as an essential and very useful means in improving the standardisation of company reporting, companies continue to have differing degrees of compliance with the GRI and sometimes differing interpretations of the best means to apply the standards to their reporting. To be comparable across all companies, and thus useful for mainstream investment analyses, it is important that environmental, social and governance (ESG) information is transformed into consistent units and is presented in a balanced and coherent manner. [Greenwald, 2007].

The corporate sustainability reporting and sustainability performance of a company would thus be defined by the integrated achievement of economic, social, environmental and corporate governance performance measures. Sustainability performance is, however, often understood as performance in environmental and social terms, thus excluding economic performance .[Schaltegger, Wagner, 2005].

As regards the economic, environmental and social aspects and Corporate Governance in relation to measurement of company performance, also the Corporate Sustainability Reporting is gaining importance.

3. Environmental, social and governance (ESG) performance

Corporate sustainability reporting tools designed for the environmental performance, economic and social performances and corporate performance of governance – Corporate Social Responsibility (CSR), Global Reporting Initiative (GRI) – appear as essential at present. The 'Reporting' will thus produce one of the greatest value "products", even if intangible in nature, i.e. information. This, however, needs to be used effectively. The overall company performance plays a key role in the general development of a company. The creation of a reliable method of company performance measurement where concurrent acting of multiple factors is in play, can be considered a prerequisite for success not only in decision making, but also with regard to general corporate governance, comparison possibilities, development of healthy competition environment etc.

Great importance is attributed to the defining of Key Performance Indicators (KPIs) in the economic, environmental, social and governance areas and subsequent measurement of sustainable development.

For environmental, social and governance (ESG) performance data is necessary to determine Key Performance Indicators (KPIs). These Key Performance Indicators are organized to the four pillars (economics, environmental, social and Corporate Governance) and fifth pillar Sustainability of success.

1. **Integration Economic Performance** - Financial Reporting (final accounts, annual reports of a company): *Sustainability Accounting* is an important tool which processes, analyzes and evaluates all three pillars of sustainable development in their interaction and context with the aim of improving the company performance:
 - Environmental and Economic Performance;
 - Environmental and Social Performance;
 - Economic and Social Performance;
2. **Integration of Environmental Performance** – Environmental Reporting (environmental protection expenses , wastes, charges, air pollution, waste water discharge, cross border agreements etc.). Voluntary tools (EMAS, ISO 14 000, cleaner production, LCA etc.):
3. **Integration of Social Performance** – Social Reporting (social and health insurance accounts, other reports on the complete labour cost, sick leaves due to illness and accidents, time sheets and many others): Concept Corporate Social Responsibility; Safety and Health Protection at Work; Health and Safety Management System;
4. **Integration of Corporate Governance** – Reporting to GRI (profile, management approach)
 The development of Corporate Governance regulation in the Czech Republic (CR) uses a dualistic model: mechanism of written law enforcement, in CR mainly the Commercial Code, and self-regulation mechanism, characterized by self-imposed observing of the required rules. This mechanism is primarily implemented through the code of company governance and due diligence principles. The company is governed by a body of shareholders – the general meeting reported to by the board of directors as an executive managing body and by the supervisory board as a surveillance authority.
5. **Sustainability of success.**

If the performance and competitiveness of the companies on the current markets should increase, then it is necessary to develop a complete system of ESG-factors evaluation, based upon the cooperation of the interbranch teams, which can contribute to the growth of the total performance of the company. The ESG-introduction will be indisputably reflected by the performance of the companies, in the growth of the offered value and care for the market from the side of the customers, increase of their satisfaction and loyalty on one side and improvement of the company image and its partners in the business, with augmentation of their position and welfare on the second side. The system for performance evaluation ESG offers for all much higher development dynamics, as up to now.

4. Quantitative and Qualitative models for the ESG

Decision-making is based on a qualified assessment (measurement) of a situation determined at the same time by multiple factors (indicators), primarily in their horizontal development. In pursuit of an outstanding informative force an emphasis is

currently placed not only on the absolute data, but in the first place on the change data and analyses of changes of these changes. That is, dynamics of systems is the focus of attention. Appropriately applied vertical analyses then add further dimension to the conditions for decision making. In this conjunction other methods have to be discussed: logical and empirical methods, methods of qualitative and quantitative research such as in particular modelling of asocial statistics.

The process of creating models of real situations (in general, not just in economics) may be called "*real phenomena modelling*". The more real situation aspects the model embraces, the more exactly it describes it. Such a model, however, may not be suitable for understanding context and achieving clearness, processing and further manipulation (obtaining results within a reasonable time span, formulation of conclusions; possible uncovering of strengths and weaknesses of facts or inappropriate use of ICT). Modelling may be categorized from different points of view. For example if the focus is on description, this may be of verbal, visual, quantitative, qualitative or analytic kinds. If the focus is on character, this encompasses deterministic and stochastic, static, dynamic and other approaches. [Chvátalová, 2005].

Modelling and optimization of vaguely described and prohibitively complex systems in a realistic environment must necessarily be based on vague and sparse knowledge. The very reason is that the interdisciplinary nature of problems under study must integrate different knowledge items and different types of uncertainties.

Conventional methods of optimization and consequently decision making have very limited areas of applications if realistic tasks must be solved. Those traditional algorithms use conventional mathematics i.e. equation based models. Such models are information intensive. It means that the classical models are heavily simplified. This shows that classic models are very simplified, this due to the need of using rationale, mainly **qualitative models** together with "**fuzzy logic**". Ecosystem modelling has a rich history firmly based in general systems theory [Jorgensen, 2000], and social theorists can trace the ancestry of their soft systems approaches to general systems theory, see e.g. classical works [Kauffman, 1993; Peterson, 1993]. Among the social theories that have drawn heavily on general systems theory, and which explicitly consider the relationship between society and the environment, is the theory of ecological communication [Grant, 2002].

Qualitative models seem to be particularly suitable for long-term predictions of unsteady state behaviour of complex systems. Preliminary implications of qualitative models are that a democratic transition will almost always occur with an economic growth or with sufficient economic contraction. Such a transition occurs more slowly when the gains from development are unevenly shared among citizens. The methodology of common sense reasoning will be used to formalize this fact and derive implications for different stages of transition. Particular emphasis will be placed on taxation policy in its entire complexity. The inclusion of heterogeneous aspects, political-economic dynamics policy choices produces rather complicated models. The result will be a qualitative definition of a vector optimization problem

Qualitative models illustrate how society's understanding of complex interrelated subsystems is reformulated and how understanding finally is converted into environmental actions represented by a specific project.

To understand the description an elementary knowledge of qualitative reasoning is inevitable. Suppose there are only three qualitative values:

Increasing, constant, decreasing

A qualitative scenario of a qualitative model is specified if all its n qualitative variables

$$X_1, X_2, \dots, X_n$$

are described by the qualitative triplets

$$(X, DX, DDX)$$

where DX and DDX are the first qualitative and second qualitative derivatives with respect to the independent variable t (which is usually time).

There are such qualitative relations, which are known so vaguely that the second derivative is unknown (unpredictable). Therefore the following examples characterize the basic feature of a qualitative information item

if X is decreasing then Y is increasing

if X is increasing then Y is decreasing

From the previous surveys it is obvious, that the measurement of the environmental and social ESG-performance of the company is not sufficiently developed, as this activity requests active team cooperation inside and outside of the company (managers and employees at various management levels). There is especially fundamental connection of various activities inside and outside the company, entry of the activities with interdisciplinary character and need for the information company as a whole.

Therefore the task of setting up environmental, social but also Corporate Governance performance is often characterised by many variables, which have also qualitative features and can only be evaluated upon the basis of human estimation, which of course includes various types of knowledge. If we want to achieve valid results and make correct decisions then the comprehensive analysis has to include economics, environment, sociology and Corporate Governance.

Conclusions

The dynamic development of CSR and *Reporting* in the CR takes place in an era where investors want more than just a good product or an attractive sound of a brand. Moreover, the growing demand for and offer of the reporting corresponds with the rapid development of information society. We need to take into account market trends and

issues affecting society, analysis of risks and opportunities. Relevant data to be used in global research in this field is very difficult to obtain (experiments are difficult to control or repeat), and the same is true of monitoring the impacts of comprehensive external effects.

Significant are the levels of ESG performance and company overall performance. Strategically important activities may improve the corporate governance, sustainable activities and CSR, they create the intangible value of the company. Responsible sustainable development of corporate resources is the basis for the target company strategies. The main executive message clearly explains why the responsible and sustainable development of corporate resources is the basis for comprehensive company strategies.

The environmental, social and Corporate Governance factors (ESG-factors) create the core of the company and commercial strategy, they are included in the everyday operations, challenge for success, indicator of danger and risks and incentive for a chance. And they should of course become part of the voluntary company reports about evaluation of the relations among the environmental and economical evaluation of the performance, social evaluation of the performance and relation to the Corporate Governance. The ESG-factors can also enter directly into the setting of legislation, government's interventions, social aspects, creation of value.

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Theoretical Principles of the Expected Deadweight Loss Change in a Globalizing World Economy

Abstract

Deadweight loss is considered to be a negative element of imperfect competition. Its size depends on the form of imperfect competition, market scale and technical-economic level of companies. The new phenomenon of a significant size has become the globalization process, which has been expanding the market area and has been leading to changes in market structures.

The hypothesis of this paper is a condition that the monopoly reality always signifies higher deadweight loss. It means that the price is higher in monopoly and there also is a greater restriction on the amount of production than in oligopoly. The situation will be the same even if globalization leads to market expansion and oligopoly can operate there.

Three forms of imperfect competition are compared: monopoly, cooperative oligopoly (cartel), oligopoly with dominant firm, and their consequences for economy.

From the theoretical point of view, globalization influences demonopolization in terms of creating competitive environment by oligopolization which leads to reducing the negative effect of deadweight loss. The condition is to keep domestic competition on the newly globalized market even if the domestic companies were in the competitive environment just a part of the competitive edge.

Moreover, there can be identified a new problem in the case of increased market globalization in which exists only one monopoly company as well as in the main market with the same technology. This problem is called "social opportunity loss".

Key Words

globalization, imperfect competition, monopoly, oligopoly, social opportunity cost

JEL Classification:

D21, D42, D43

1. Theoretical background

Theoretical background of this article is based on the idea of deadweight loss (a negative element of imperfect competition) which means that there is a supply-side advantage in the market maximized by monopoly. This is a situation where a monopoly reduces the amount of production below the level that would be optimized in the market and increases prices over the market price in the interest of maximizing its profit.

However, the imperfect competition does not have to be expressed only by monopoly. It also might be a form of oligopoly or monopolistic competition. The fact, which one of the mentioned forms will be realized, depends on some factors. It depends on a technical-economic level of companies but also on the size of the territory in which the company can offer its products (actually on the amount of people who are its customers).

Technical-economic development of companies' leads to monopolization but companies' expanding into new areas, primarily in the context of globalization, leads to the opposite effect - demonopolization. It is a demonopolization leading to reality not to a perfect competition but to oligopoly which can be either cooperative or oligopoly with a dominant firm.

The hypothesis of this paper is a condition that the monopoly reality always signifies higher deadweight loss. It means that the price is higher in monopoly and there also is a greater restriction on the amount of production than in oligopoly. The situation will be the same even if globalization leads to market expansion and oligopoly can operate there.

2. Deadweight loss in cooperative oligopoly – cartel

In terms of both forms of oligopoly, the next consideration supposes that demonopolization will not go through monopoly fragmentation and thereby reducing the existing technical-economic level. Cost curves would shift up and to the left. If the technical-economic level is unchanged, the cost curves are in their original positions and demand will increase through the market globalization.

If a monopoly was itself in the enlarged market, it would produce the quantity Q_M at the price P_M . Cartel in the form of duopoly would demand the price P_K and would produce the quantity Q_K . Both situations are shown in the figure 1.

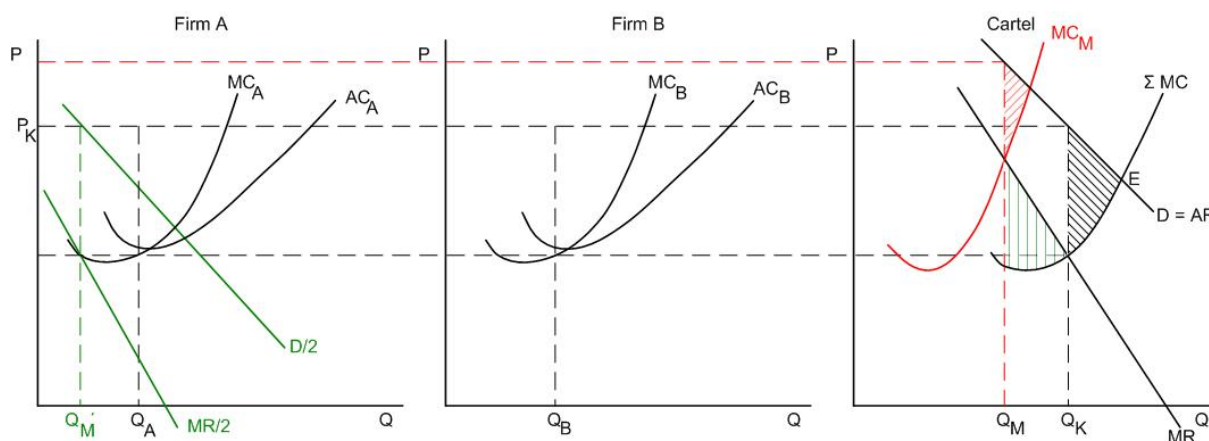


Figure 1: Monopoly and cartel comparison

Legend: P – Price, MC – marginal cost, AC – average cost, D – Demand curve, E – Equilibrium, AR – average revenue, MR – marginal revenue, Q – Quantity; Index information: M- variable related to monopoly; A – variable related to a company A; B – variable related to a company B; K – variable related to cartel, MCM represents MC_A in the situation of enlarged market through globalization, P_M' ; Q_M' - monopoly reality in a situation of no enlarged market through globalization. The diagonal hatching area indicates deadweight loss.

Source: own layout

In the case under consideration, the price reduction can be noted in connection with globalization but it is only relative. If the size of the market did not change in terms of its extension (doubling), the monopoly A (which is a part of a cartel now) would sell with

regard to half demand at the price P_M , which is randomly equal to the price P_K . The quantity Q_M is the half of the current Q_K .

The deadweight loss reduction does not seem to be important in monopoly and oligopoly comparison. There comes a question if deadweight loss is actually a relevant criteria for evaluating economic disadvantage caused by imperfect competition. It is not possible to answer the question in detail within this article but at least to indicate.

Figure 1 shows that in the event of enlarged size of market as a result of globalization, there still would be only one monopoly company with the same technology as in the main market. It would create a new problem which has not been called in the economic theory yet. If the economy produces less than the optimal quantity of products which satisfies the market, and sells them for higher price than market price, then there is a deadweight loss. If a company produces smaller quantities of products than it is optimal for it, it leads to lost opportunity cost. If a company produces smaller quantities of products as a single monopoly company than it could as an oligopoly, then there comes a new problem of “social opportunity loss”. It is captured in Figure 1, in the part K by horizontal hatching.

In addition, the problem of deadweight loss is that the less the technical-economic potential is used, the smaller the surface of deadweight loss is. It is shown in Figure 2 in comparison between monopoly technologically backward (A) and progressive monopoly (B).

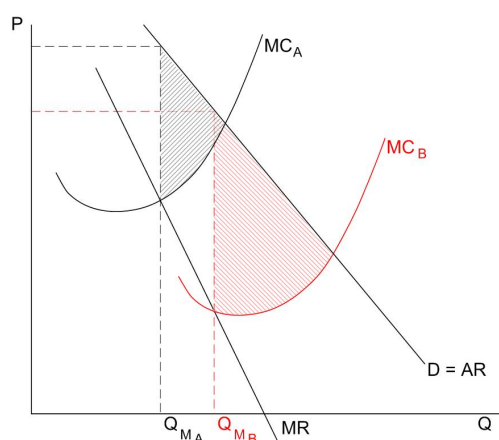


Figure 2: Link between marginal cost and deadweight loss

Legend: see Figure 1

Source: own layout

3. Deadweight loss in oligopoly with a dominant firm

The next consideration will come up with the same situation. There is one monopoly compared to oligopoly which represents a coexistence of a dominant firm and competitive edge of firms in the enlarged market through globalization. See Figure 3.

The following Figure 4 allows a comparison what the monopoly price would be before the enlarging world market in comparison with the current oligopoly price.

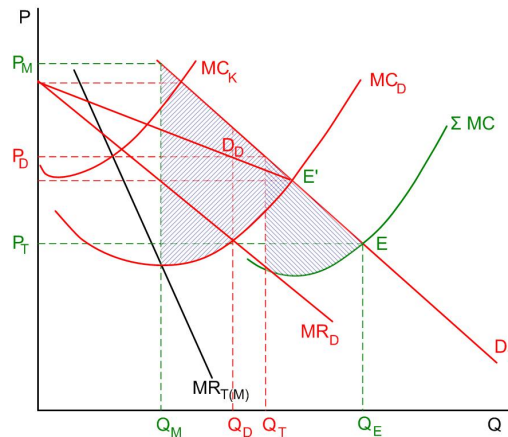


Figure 3: Comparison of opportunity lost of monopoly and oligopoly with a dominant firm

Legend: see Figure 1; Deadweight loss caused by monopoly are hatched horizontally, diagonal hatching illustrates Deadweight loss caused by oligopoly. Index information: T – total value; D – variable related to dominant firm; L – variable related to the competitive edge of firms.

Source: own layout

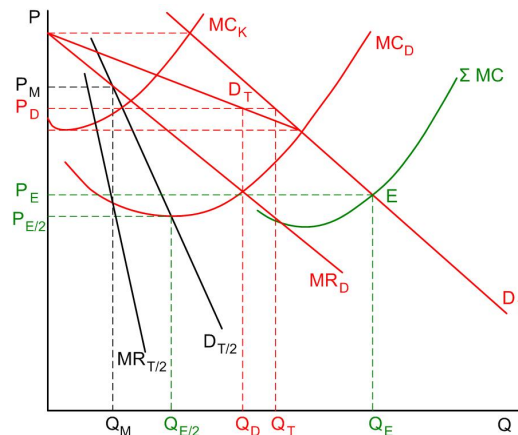


Figure 4: Comparison of monopoly price and the current oligopoly price before the enlarging world market.

Legend: see above; P_M – monopoly price in „half-size“ market (before the market enlargement as a result of globalization)

Source: own layout

The Figure 3 convincingly shows that deadweight loss caused by oligopoly (diagonally hatched) is smaller than they would be at the same demand by monopoly (horizontally hatched surface). Oligopoly is willing to sell larger quantities at a lower price.

Figure 4 then shows that double market expansion in the context of globalization, which moreover creates oligopoly markets from monopoly markets. The globalization will also lower price despite increasing demand level. The logical result of this progress is reducing the area of deadweight loss in oligopoly (shown in Figure 3).

Conclusion

Finally, we can say that the hypothesis at the beginning of this article has been proved. It means that the globalization process leads to market expansion. From the theoretical point of view, globalization influences demonopolization in terms of creating competitive environment by oligopolization which leads to reducing the negative effect of deadweight loss. However, the condition is to keep domestic competition on the newly globalized market even if the domestic companies were in the competitive environment just a part of the competitive edge. It means that these companies would have higher levels of cost and backward technology than in the other form to which globalization allowed to enter into a new market. In the case of cooperative oligopoly, the conclusion is not so clear. Therefore there arises an idea of dealing with the mentioned phenomenon "social opportunity loss" in detail.

Acknowledgement

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Globalization and Innovative Factors of the Enterprises Development

Abstract

Globalization processes determine in many ways the development strategy of the national economies. These processes act as a result of the existing system of the labor differentiation, industrial developments complication, etc. Globalization called forth the mobility level of the production factors, thus at the present development stage, one of the main macroeconomic tasks is creating conditions and forming legal and economic mechanisms for the effective functioning of enterprises.

Problems of the national economy effective development at the levels of the macro- and microeconomic environments are analyzed in the paper. The necessity of forming favorable investment climate and science and technical state policy that would ensure support of the priority sectors of the national economy, science intensive production and technology is substantiated. The assessment of the state structures' role in using different tools, securing the increase of the national economy effectiveness, is provided.

Factors of innovation enterprise development in conditions of globalization and strict competitive pressure from companies that possess larger financial and production opportunities are revealed in the paper. Tools of forming the state policy in support of innovative processes in the national economy were reviewed. The realization of this policy may significantly influence the competitive environment development. Lines of the effective development of the enterprise innovative activity and the increase of its competitiveness in conditions of globalization are determined.

Key Words

globalization, innovative activity, competitive environment, monopoly, oligopoly

JEL Classification:

D42, D43, F19, O31, O33

Introduction

Endeavor to integrate into the world economic system and decide difficult social-economic, financial and technological problems together are signs of globalization among the majority of countries. Activities activation of such international organizations as the World Bank, the World Trade Organization and a number of other structures and also holding regional summits of the heads of the industrially developed countries should be regarded as a reaction to these processes. It is globalization processes that lead to the fact that the finance crisis which took place in 2008 influences more or less economic systems of all the world countries.

1. Macro- and microeconomic tasks of creating conditions for an effective development of a national economy

Globalization called forth an increase in mobility degree of such production factors as capital, labor resources, etc. In consequence of the financial crisis, the volume of financial support to the production decreases that, in the first place, has a negative impact on the processes of creating science intensive products. Thus, at the present stage one of the core macroeconomic tasks is creating conditions and forming legal and economic mechanisms of the effective functioning of an enterprise.

Forming conditions for the effective development of the national economy at the macroeconomic level means creating favorable investment climate in the country. Macroeconomic conditions for the effective development of the country's national economy in conditions of the global economy is linked, first of all, with scientific and technical policy of the country that will secure support for priority sectors of the national economy, science intensive production and technology. In order to achieve this goal, the state stimulation of different tools that secure the growth of national economy's effectiveness in the best way is needed.

Stimulating mechanism of the investment mobilization into the real sector of the national economy may be secured at the expense of activating such mechanism as administration of state guarantees, customs and tax facilities, development of the risk insurance system, etc. Besides that, support and stimulation of the processes of creating competitive durable goods, in the first place, in those industrial sectors that have a high innovation and intellectual potential and also support the national safety. In the conditions of the crisis the realization of all these activities is impossible without the state support of the bank systems, including stimulating processes of crediting science intensive sectors of the economy, etc.

Globalization significantly influences the microeconomic level as well, because at this level effectiveness factors are formed, at the first place, at the expense of using up-to-date technology of business processes management, including both the development and production of high-technology goods, and its sales sphere.

2. Influence in economic environment to increase activities effectiveness of economic players

However, the competitiveness emerges only in a competitive environment. An imperfect competition as a monopoly is not such environment. Thus, to secure the economic effectiveness of activities of different organizations it is necessary to influence the monopolization processes, slowing down their negative impact on the market.

Obviously, it is impossible to restore the perfect completion environment at once, but it is possible to influence the market to reorganize the monopoly into a more competitive form of the imperfect competition. Such form, for instance, is an oligopoly. An oligopoly can be divided into two main variants – a cartel, the so-called cooperative oligopoly, and

an oligopoly with a dominant firm. The second variant contributes the most actively to the competition development. In the existing economy, real conditions have formed for effectively using this variant. Moreover, the state support for small and middle-sized firms that virtually function in tight cooperation with a dominant firm, which is often a former monopoly, significantly consolidates such environment.

According to the figures that we cite, it is possible to distinguish all advantages and perspectives of the economic environment development. In figure 1 the comparison of a monopoly with a cooperative oligopoly is given, on the second – a monopoly with an oligopoly and a dominant firm.

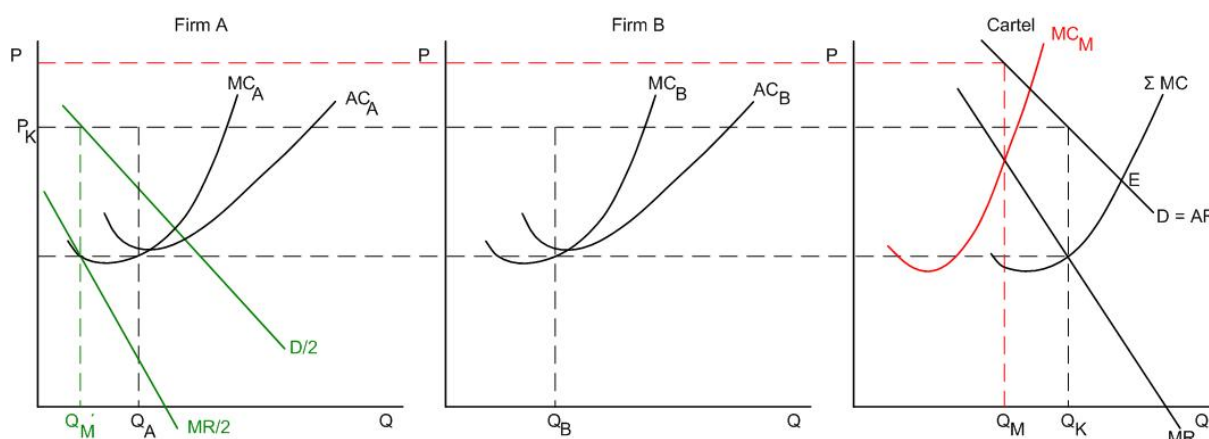


Fig. 1 The comparison of the monopoly with the cartel (the cooperative oligopoly)

Legend: P – Price, MC – marginal cost, AC – average cost, D – Demand curve, E – Equilibrium, AR – average revenue, MR – marginal revenue, Q – Quantity; Index information: M – quantity referring to the monopoly; A – quantity referring to the company A; B – quantity referring to the company B; K – quantity referring to the cartel, MC_M represents MC_A in the situation of enlarged market through globalization, P_M ; Q_M – the real status of the monopolistic firm in the situation of the non-extended market globalization.

Source: the author's figure plotting

According to the figure, if there had been only the monopoly left in the extended market, it would have produced the quantity Q_M for the price P_M . The cartel would have produced the quantity Q_K for the price P_K . In the reviewed case, the influence of the globalization on the price decrease is distinctly traced back, but this decrease is relative. If the market size had not changed, the monopoly A, being a part of the cartel K now, would have been selling its goods, taking into consideration the decrease of the demand by half, for the price P_M' , which in this case equals to the price P_K , and the quantity Q_M' equals to the half of the existing Q_K .

According to the figure 2, the two times increase of the market capacity due to globalization will lead, despite the demand increase, to the output price decrease and the production volume growth. Besides that, the increasing market capacity contributes to the forming of oligopoly markets out of monopoly markets.

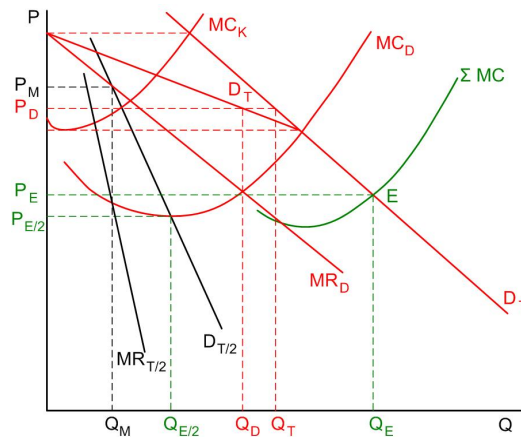


Fig. 2 The comparison of the monopoly with the oligopoly with the dominant firm

Legend: P_M – the monopolistic price before the increasing market capacity due to its globalization; P_E – the equilibrium price; Q_E – the equilibrium quantity.

Source: the author's figure plotting

The advantages of the second variant are obvious. They indicate that by means of proposing by the oligopoly with a dominant firm a lower price against the monopoly and by increasing the number of output for the market an opportunity to support the existence of such market structure emerges. The cartel advantages against the monopoly are insignificant. Moreover, in general, cartel agreements are against the law in both national and transnational economies.

3. Areas of the effective development of the innovative activities of a modern enterprise in the conditions of globalization

A number of processes must play an important role in increasing the effectiveness of the national economy:

- updating scientific and technical basis of enterprises and sectors;
- forming organizational and economic mechanisms and stimuli.

These mechanisms and stimulation must be aimed at the development of the innovation entrepreneurship in the national economy, including the creation of small and medium-sized innovation enterprises that specialize in the knowledge commercialization constructor and technological designing.

To use resources that the national economy possesses in general efficiently it is necessary not to simply activate innovative activities of individual enterprises, sectors and regions, but to aim this activity at creating the so-called “breakthrough” innovations. In modern conditions, “breakthrough” innovations are often created by combining resources of various countries, being a result of globalization influence on the national economies (e.g., the construction of the hadron collider in the field of the nuclear physics). An international strategic alliance is one of the efficient ways of cooperation between enterprises of different countries in the field of innovations. The creation of an

alliance enables to gain the synergetic effect in the field of the innovative activities. Therefore, in the conditions of the globalization the competitiveness of the national economy becomes significantly dependent on an extent of its focus on development factors.

Creating technological innovations that include landmark types of output and its manufacturing technology is the basis of innovative activities of a modern enterprise. However, the market, requiring output of high quality, expansion of its product mix and opportuneness of the delivery to a consumer, demands the adoption of the diversified production. Thus, modern production systems are built as flexible production systems that secure a high level of flexibility and automation of the production process.

In this conditions, the main factor of effectiveness is diversification that includes not only the diversification of the output product mix and using production systems that combine a high level of flexibility and automation, but also changing the mechanism of day-to-day planning and the production processes management. So long as the economy of scale, which is common in the mass production, is almost non-existent, the necessity to reveal factors that secure the efficiency of the diversified production emerges. These factors are, firstly, both the automation of the production processes and constructor and technological preparation of this product creation; secondly, the adoption of the CALS-technology (Continuous Acquisition and Life Cycle Support), securing continual informational support of the innovative product life cycle that assures reengineering of the existing business processes of the enterprise. Reengineering, acting as a method of innovative changes of the enterprise system management, at the same time entails high costs, mostly of the investment origin, because it involves all aspects of firm activity, its functional subsystems. But it is reengineering that enables to crate highly-automated control system, integrating all parts of the life cycle into a single process.

Conclusion

In modern conditions, globalization processes determine significantly the strategy of the development of the national economies, individual sectors and enterprises. These processes are objective occurrences and act as consequences of the formed system of the international labor differentiation, complications of industrial development, etc. Globalization processes lead to the necessity of doing and developing business in the conditions of integration of the entrepreneurial potential and limited resources of enterprises. In such situation, enterprises that aim their activities at innovations have to combine tangible, financial and intellectual resources to solve more complicated entrepreneurial tasks, including tasks that entail creating new products and services that satisfy the market requirements in the best way.

In the conditions of the economic globalization, the competitive environment of enterprises is subject to significant changes. It starts covering not only internal markets, but also international. Macroeconomic system becomes more complex, and its behavior more unpredictable. Thus, innovation activity of enterprises is carried out in conditions of the strictly controlled pressure of the companies that often possess larger financial and production opportunities to comply with the society's request for up-to-date high-quality goods and services. As a result, solving tasks to create legal and economic

framework, favorable investment climate for effective functioning of the innovation-oriented enterprises within the national economy becomes actual.

In order to secure economic efficiency of enterprises' activities, it is necessary to influence monopolization processes, emerging in the modern economy, to slow down their negative impact on market relationships of entrepreneurial subjects. State policy, aimed at support of innovation processes in the national economy, significantly influences the development of the competitive environment in the conditions of globalization. As a result of such development, an oligopoly with a dominant firm may form as a form of imperfect competition. State structures must use the emerged conditions in the existing economy in the most effective way to increase innovative business efficiency and to develop competition on the market. Such state support, in the first place, will consolidate innovative activity of small and middle-sized enterprises that will function in tight cooperation with the dominant firm that is the former monopoly.

At the microeconomic level, in conditions of globalization turbulence and uncertainty of the external environment significantly affect the enterprise innovative activity. As factors that determine the enterprise performance efficiency are formed exactly at this level it is necessary to analyze positive and negative influence on enterprises of the macroeconomic level. Firstly, it is reasonable to point out influence that is typical for the global economy. Taking into account the correlation of this influence with innovative factors of the enterprise development predetermines the efficiency of the competitive strategies realization not only of individual enterprises, but also contributes to committed forming of the synergy effect within a more complex economic system that entails sever subject of the entrepreneurial activity.

Acknowledgements

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Management Development from Czech Managers Point of View

Abstract

This paper shows the partial results of the research that was done within the dissertation work of the authoress (Management Competence Models and Manager's Qualification Development) and the research project Developing Managerial Tacit Knowledge, reg. No. 406/08/0459 supported by GA ČR - Czech Science Foundation. The research is oriented on tacit knowledge transmission and management competence development. This paper presents partial findings acquired through the questionnaires for managers that were focused on management development and experience of Czech managers with training courses. The paper brings the results related to these questions: In which areas of managerial work do Czech managers have problems that can be eliminated by further development (training, education)? What is the experience of Czech managers with training courses organised by training and development organisations? What are the main weaknesses of training courses for managers? Do common training programmes for managers create the conditions where can managerial knowledge be shared and moulded? What is the experience of Czech managers with mentoring? We should mind the answers of managers themselves when trainers prepare training programmes for managers, mould competences of individual managers and share their knowledge with managers. The authoress sees the need to solve this thematic topic in its contribution to the increased improvement of the quality of the professional preparation (i.e. education or formation) of future managers for the execution of their professional duties. If however, we can come up with new observations relating to this field, the results will show themselves in the actual performance of individual managers in their work. This can as a consequence lead to increasing the competitive abilities of individual organisations. This contribution was written within the framework of the GA ČR (Czech Science Foundation) grant-maintained project: Reg. No. 406/08/0459, Developing Managerial Tacit Knowledge, and with the financial support of GA ČR.

Key Words

management development, management competence, training programmes, mentoring

JEL Classification:

M53

Introduction

This paper is focussed on the process of improving and developing managerial competence. The paper shows the methodology and partial results of the research that was done within the dissertation work of the authoress (Management Competence Models and Manager's Qualification Development) and the research project Developing

Managerial Tacit Knowledge, reg. No. 406/08/0459 supported by GA ČR - Czech Science Foundation.

We can understand Managerial Competences as “the ability of a person to behave in a manner corresponding to the requirements of working within the parameters of the given environment of an organisation, and thereby to produce the requisite results.” [5] This conception of a manager’s qualifications is thus oriented on the “outputs” of managerial work and duties.

We see the need and at the same time the resolution of this thematic topic in its contribution to the increased improvement of the quality of the professional preparation (i.e. education/formation) of future managers for the execution of their professional duties. To further develop Managerial Competence and to pass on/transfer one’s knowledge to another is a highly complicated matter. If however, we can come up with new observations relating to this field, the results will show themselves in the actual performance of individual managers in their work. This can as a consequence lead to increasing the competitive abilities of individual organisations.

1. Personal and Functional Management Competence

According to the Management Charter Initiative organisation in Great Britain, “Competence” can be personal (relating to personality) or functional [2].

Personal Competences are actually work performance inputs - where we understand these inputs as knowledge, skill and abilities, values, attitudes and personality qualities and characteristics. These human characteristics create the premises, presumptions and preconditions for Managerial Behaviour. They are however only inputs and do not say anything about the actual ability of a manager to produce the required performance. The relationship between these premises, presumptions and preconditions and the real performance of a manager is indirect [2, p. 61].

For this very reason, we should understand Managerial Competence as output of Managerial Behaviour, that is to say, as so-called Functional Competence. This is defined as: “The ability of a manager to perform to the standards required in employment.” [3, p. 9] It would therefore be useful to pay greater attention to this definition and in greater detail. This definition is about the preparedness of an employee to perform their duties, that is to say, it is all about their behaviour and dealings, and approach and attitudes. It is not therefore about inputs as characteristics of the personality of a manager. The definition talks about the required performance of a manager’s duties, by which we think of their performance in a concrete managerial position, and which the employee is capable of delivering momentarily whenever it is called for [1, p. 13].

Notice too that Functional Competence secretly conceals within itself Personality Competencies. That is why they give integral picture about management competence. Tacit Knowledge is also very closely associated with the so-called Functional Managerial Competence. Tacit Knowledge, according to Mladková [4], originates through the interaction of explicit knowledge and experience, skills and abilities, intuition, personal

notions and ideas, mental models, etc. Unlike Explicit Knowledge, which can be formalised (i.e. we can describe them in words and letters, or depict them graphically through icons and symbols) however, it is very difficult (and sometimes even impossible) to express Tacit Knowledge and to transfer/pass it on to someone else. They are of and have a highly individual and personal nature and character. Tacit Knowledge shows itself in the actual actions, behaviour and performance of managers.

Tacit Knowledge is a part of functional Management Competence and that is the reason why it is quite difficult (or sometimes even impossible) to transmit managerial knowledge.

2. The Methodology

In the following part of this paper the authoress wants to introduce partial results of the research to a reader. This contribution was written within the framework of the GA ČR (Czech Science Foundation) grant-maintained project: Developing Managerial Tacit Knowledge. The subject of research is to find the personality, situational, and experiential factors which influence the forming of managerial tacit knowledge. The research is oriented on tacit knowledge transmission and management competence development. The research has been planned for 3 years and this paper only presents partial findings within the framework of the first research phase.

The whole research is being done through many different research methods. There were used the qualitative research methods complemented by the quantitative research methods as well. This paper presents partial findings acquired through the questionnaires for managers.

2.1 The questionnaire “A” for successful top managers

The aim was qualitative approach to the solved problem. That is why this questionnaire mostly consists of opened questions. It was addressed 451 managers in the Czech Republic. Target respondents were managers that are referred to as successful and are the members of top management of an organisation. Addressed managers were:

- managers placed in the competition for the title Manager of a year 2003 and 2004 organised by Manažerský svazový fond (managerial federation in the Czech Republic)
- managers working in companies that were placed in the chart Top 100 of companies that is made up by the association Czech Top 100
- managers working in companies that were placed at the prominent positions in the competition Subcontractor of a year 2004 organised by agency CzechInvest in co-operation with Association for Foreign Investments
- managers from selected companies acting on Zlín territory (part of the Czech Republic)

The authoress realises that the selection of managers that are referred to as successful, is very complicated. Even the manager's placement at the prominent positions in the mentioned competitions it is not a guarantee of the fact that this manager will be successful in the long term or in another organisation. Nevertheless I consider the selection of respondents as very suitable. The data collection took place in July and August 2005. 30 questionnaires were filled up and sent back. The rate of return was 6.65 %. Average length of being in managerial position was 13 years. Respondents were members of top management of the company, 4 respondents were international managers acting in the Czech Republic.

2.2 The questionnaire "B" for managers

The aim of this questionnaire was quantitative approach to the solved issue. That is why this questionnaire consisted mostly of closed questions. Target respondents were "common" managers in the middle and top management because we wanted to get the overview of opinions and personal experience with training activities especially of "common" managers. As contrasted to the previous questionnaire research, it was not important whether managers were members of top management and whether addressed managers were signified as successful.

The criteria for selection of addressed managers were acting as a manager in the Czech Republic, being a member of top management or middle management, not managing in state apparatus and having at least some experience with training courses organised by training organisations. All the respondents were acting in the Czech Republic; they covered almost each part of the area. Mostly there were managers from industrial enterprises and commercial companies. There were some representatives of services, but no representatives from state apparatus. The average age of respondents is 41 years. The average length of respondents' duties in managerial work is 9 years. 62 respondents were members of top management, 134 were middle line managers.

First of all, the questionnaire was tested on two managers and then the questionnaire research was realised. After previous phone calls explaining the essence of the questionnaire research was addressed 204 respondents that filled in the questionnaire and sent it back. The data were collected from August 2007 till December 2008. 8 questionnaires had to be rejected due to missing or wrong answers of some questions. The results come out from the file of 196 questionnaires.

2.3 Formulated Hypotheses

The hypotheses that were set and being verified were these:

- A main reserve of managers acting in Czech Republic is leadership.
- A mentor (or a person acting as a mentor) can enable to a manager development of managerial competencies.
- Training courses organised for managers pay low attention to individual needs.

3. Partial Results of the Survey

3.1 Reserves of Managers

Managers were addressed with the question: Which area of managerial work do you have problems that can be eliminated by further development (training, education) in? The survey results show that managers with economic education (that dominates among respondents) have the greatest reserves in leadership, communication and presentation skills and the usage of information technology. But in the other places it is the knowledge of foreign languages and the special technical area. There arises a question whether the reason is the fact that addressed managers do not use the languages and the technical issue so much, or it is easier (eventually also faster) to learn these knowledge and skills. These managers have the minimal reserves in the area of economics, finance and time management that is understandable in view of the branch of education.

Managers with technical education have the greatest reserves in the knowledge of foreign languages, then in leadership and time management. They have the minimal reserves in special technical area. These results are not very surprising because it corresponds to the branch of absolved education.

Managers educated in Humanities have their reserves in economic and financial area but leadership and the knowledge of foreign languages are in the second place. There is also surprising fact that these managers have the minimal reserves in the area of information technology. Total results of this part of survey are in the Figure 1.

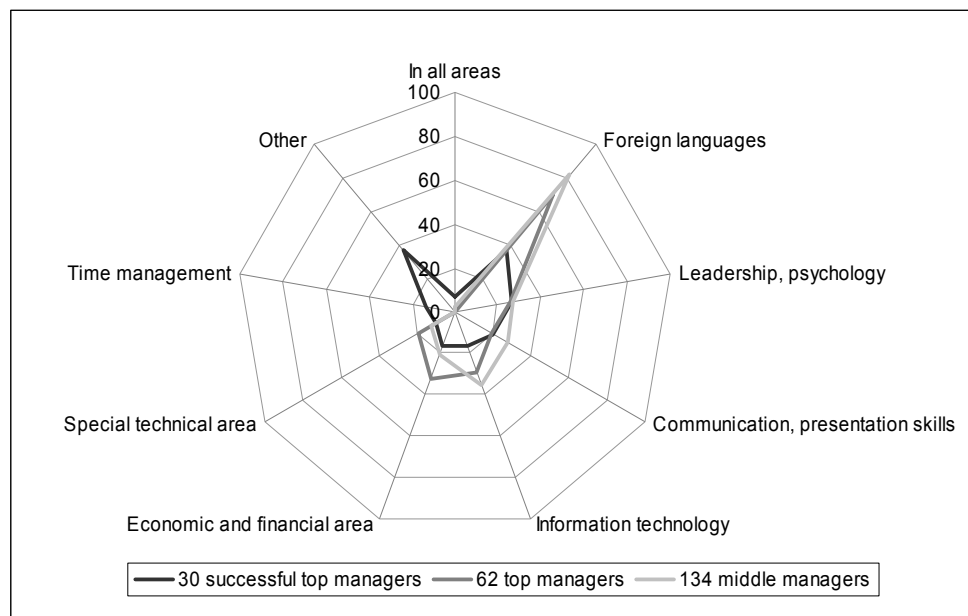


Figure 1 Reserves of Managers

Note: The number of respondents in each group of managers was different; hence there were compared relative frequencies.

Source: own resources

3.2 Can a Manager Learn Everything He/She Needs only by Doing Managerial Work?

Managers very often refuse training activities organised by training and developing organisations because of the fact that managers develop and learn by performing the managerial work. That is why there was the following question in the questionnaire “B”: “Can a manager learn everything he/she needs only by doing managerial work (without passing training courses)?” The answers are shown in Figure 2.

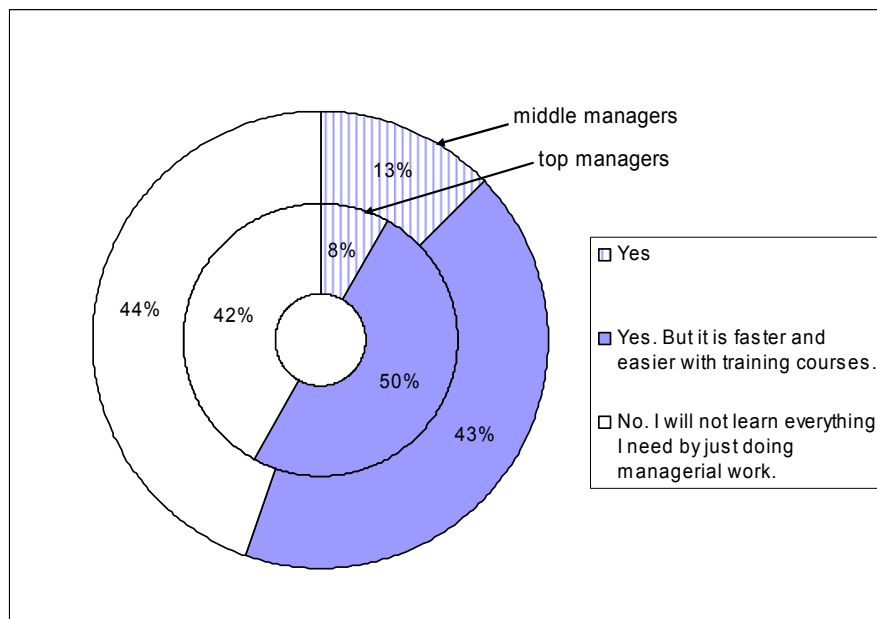


Figure 2 Can a Manager Learn Everything He/She Needs by just Doing Managerial Work?

Source: own resources

The search shows that 44 or 42 % of addresses managers think that they will not learn by doing the managerial work all they need. Next 43 or 50 % of managers think that training courses are faster and easier way of gaining needed managerial competencies as contrasted to just performance of managerial work. This could speak on the side of manager’s attendance at training courses. But we can see it also in this way – 56 or 58 % asked managers is persuaded that they can gain all the managerial competencies they need just by doing their work. The opinions of managers are not united. It is also remarkable that 13 or 8 % of managers do not think that education in the training courses is faster and easier way of gaining needed managerial competencies.

3.3 Importance of Having a Mentor

In the previous part of research it was shown that mentor (or a person acting as a mentor) can enable manager development of managerial competencies. In the questionnaire we have asked managers weather they had a person acting as a mentor in beginning of their managerial work and if they thing it was useful or not.

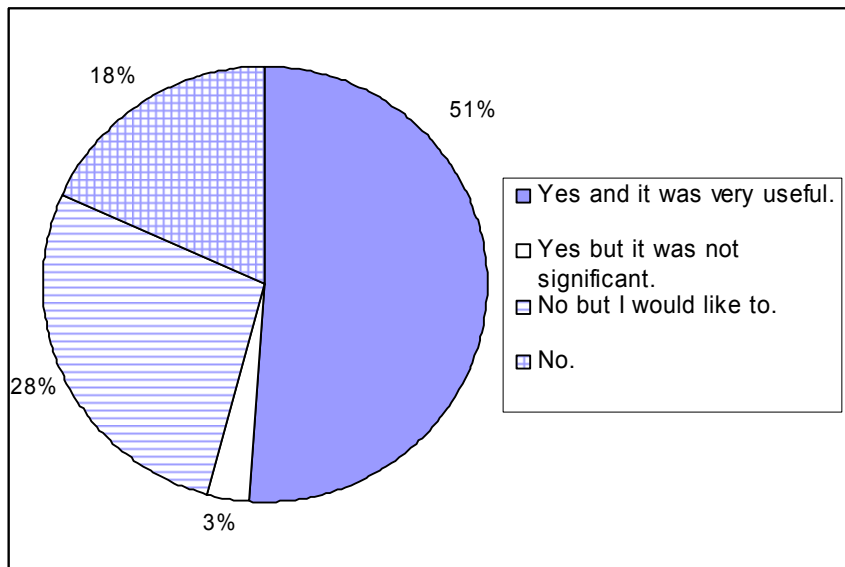


Figure 3 Did You Have a Mentor? Was It Useful?

Source: own resources

As you can see in Figure 3, we can say mentor really helps managers to develop managerial competencies.

3.4 Experience of Managers with Training Courses

Managers were addressed with the question: What is your experience with the courses organised by training organisations? Main results are shown in Figure 4.

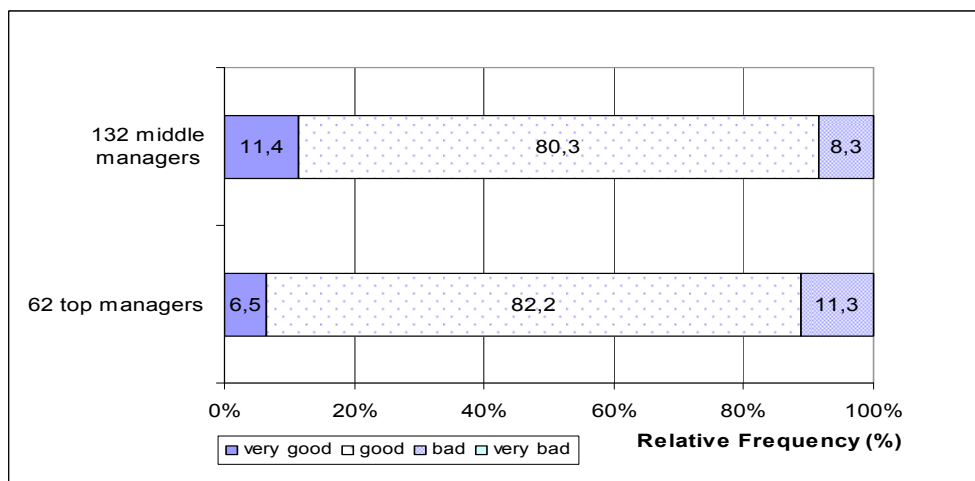


Figure 4 Experience of Managers with Courses Organised by Training Centres

Source: own resources

Managers were also addressed with the question: Try to assessment the absolved training courses – how many percents of your expectation were fulfilled? Maximal value was 95 %, minimal value was 20 %. Arithmetic average is 67 %, modus is 70 %, and median is 70 %.

3.5 Main Weaknesses of Training Courses

When asking for opinions and experience of managers about managerial competence and management development, it was found that:

- There is a lack of training courses that are led by proper training methods.
- Practically oriented training is missing (e.g. best practices exchange, problem-oriented discussions ...).
- There is not close connection of training courses with practical examples.
- Managers must overcome many study obstructions (they are not used to learn as at school, they are often jaded due to their job, they want to see their improvements quite quickly)

The main weaknesses are mentioned in the Figure 5.

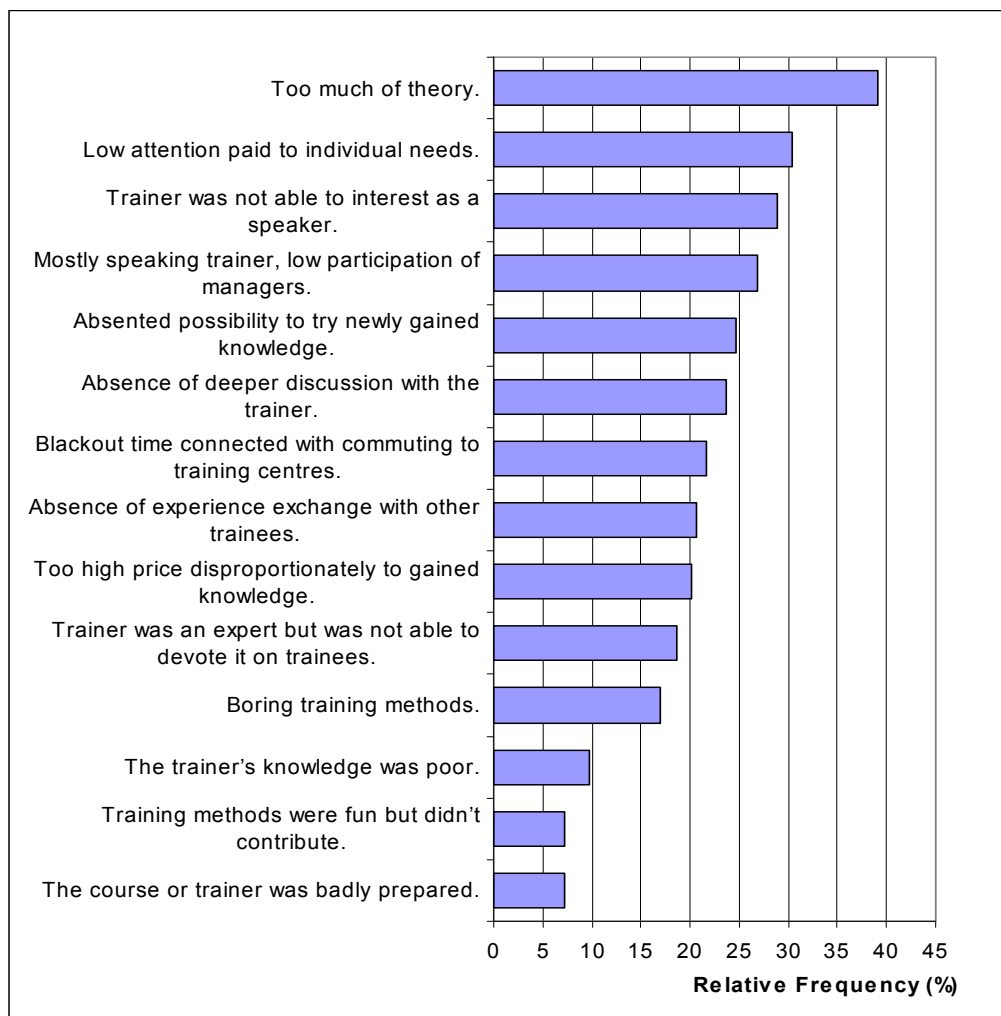


Figure 5 Main Weaknesses of Training Courses for Managers

Source: own resources

Managers mention also that:

- Although there is plenty of training programs for managers on the market, managers say that the supply of relevant courses is insufficient, the structure of supply doesn't consistent with needs of management and the supply is not considered as attractive.
- There is a lack of competent lecturers. Managers often experienced incompetent lecturers. This influenced the results of training process and the motivation of managers to further participation in training courses. Often there was an opinion that it is wasting of time due to communication with people that do not understand the issue but have enough time to speak and write about it.
- Absolved courses give managers only very little inspiration to their further managerial work.
- Managers prefer getting practical experience to joining training courses.

The ratio price/contribution is often imbalanced. Managers expect from courses the contribution for themselves but they expect also the investment return for the organisation there they work. This call for concrete changes in acting of a manager. We think this area is suitable for further survey. It will be useful to know how to enable managers their managerial competence development with respect to their working load and to project proper ways of training courses innovations respecting the demands and apprehension of managers.

3.6 Hypotheses Verification

The hypothesis "A main reserve of managers acting in Czech Republic is leadership." was not accepted. The most significant reserve of managers is knowledge of foreign languages.

The hypothesis "A mentor (or a person acting as a mentor) can enable to a manager development of managerial competencies." was accepted. 51% of respondents has experienced that mentoring was useful and another 28 % of respondents would appreciate such experience.

The hypothesis "Training courses organised for managers pay low attention to individual needs." was accepted. More than 30 % of respondents agreed and chose "low attention paid to individual needs" as the main weakness of training courses.

Conclusion

Managerial tacit knowledge influences the behaviour of a manager and their way of working significantly, and for this reason, is decisive on their success (or failure) – for instance, it speeds up and makes easier the decision-making process. Success in the performance of managerial activities depends upon the quantity and content of their acquired knowledge, their ability to exploit this knowledge and willingness to use such

knowledge. It includes not only a manager's knowledge and wisdom, but their skills and abilities.

We can say that tacit knowledge makes the management development quite difficult. There are some reasons: Tacit knowledge can be successfully transferred only between people who share a context. In addition, certain types of tacit knowledge are only of use to a manager under certain conditions (i.e. contexts). Tacit knowledge formation is supported by good-quality inter-personal relationships, trust and the possibility of having informal meetings.

This paper interprets the results of research that was focused on management development and experience of Czech managers with training courses. As the main weaknesses of training courses were mentioned e.g. too much of theory, low attention paid to individual needs of trained managers, the absence of the possibility to try newly gained knowledge and skills in practice, absence of deeper discussion with the trainer and other managers, missing focus on exchanging of experience and best practices...

In spite of many training courses for managers in the market with management development, managers say that the supply of relevant courses is not sufficient, attractive for managers and the course content doesn't correspond to the needs of managers. Managers have not enough trustworthy references and are not sure when choosing high-quality training institution. Managers very often have experience with trainer with poor competencies and this influences not only the process of management development but also the motivation of managers. Managers prefer gaining of practical experience to training courses.

These facts we should mind when trainers prepare training programmes for managers, mould competences of individual managers and share their knowledge with managers.

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Clustering as a Possible Method of Boosting Rural Development

Abstract

Specialization in clusters is widely believed to be an important instrument for regional development. Seldom is it mentioned in connection with rural development. Yet, some cases from Europe as well as outside the Europe prove that clustering may boost up economic development of previously backward rural areas. According to analysis, several measurable benefits of clustering in rural areas may be identified. Results of several studies demonstrate positive impact on wages within cluster in comparison to those outside. Not only have been wages higher for sophisticated professions, but also younger and semi-qualified workers have benefited from being employed within rural cluster. On the other hand, positive correlation between production technology levels or average skills requirements and wage premium has not been confirmed. Location of industry within the cluster might also stimulate higher rate of return on investment and on equity. Moreover, clusters generate synergy effects in terms of higher productivity due to a larger market for workers with specialised skills, more rapid information flows and knowledge diffusion and specialisation as a result of relations between contracting agencies. Some benefits may be attributed only to several types of industries as e. g. food and wood products as well as tourism. This may be well applied to the Czech conditions as the examples of forest and wood processing cluster in Moravian-Silesian region and Cluster of tourism America suggest. A great potential particularly for rural areas may consists in knowledge clusters as the case of Cluster of Saint Zdislava imply. Indubitably, clustering as a potential strategy for promoting economic performance of rural areas is yet to be discussed in the future.

Key Words

rural cluster, economic diverzification, wage disparities, tourism, agriculture, industry

JEL Classification:

R51, R58, J31, O18

Introduction

Specialization in clusters is widely believed to be an important instrument for regional development. Seldom is it mentioned in connection with rural development nevertheless. Yet some examples can be found both in the U. S. and Europe proving that previously backward rural regions has experienced economic prosperity due to creating concentrated area of economic activities of similar kind [OECD, 2005]. Might this method be applicable generally or are there any common features/characteristics that somehow interlinked rural areas where this strategy has been successfully implemented? Based on several case studies, we will try to evaluate suitability of this strategy as well as its pros and cons for rural areas in general.

1. General Aspects of Rural Economic Growth

Indubitably, significant disparities between rural and urban areas exist all over the world. Socio-economic environment of most rural areas are still noted for a fragile and in the long run unsustainable economic structure. Although rural areas and its development have got into the centre of attention of national, regional, local as well as supranational governmental levels there is still much to be done to make rural areas competitive in recent globalized world.

The rationale for such a focus on rural development is backed up mainly with dates about rural areas extent. According to the EU survey, about 91 % of the territory in EU 27 fit into the rural characteristics with about 56 % of the population living in predominantly and significantly rural areas. What is even more interesting, rural areas generate about 45 % of gross value added in EU 27 and 53 % of the employment [Copus et al, 2006, p. 11]. However, the extent of the area is not the only reason. Being more sensitive to structural changes, rural areas face problems linked with rather mono-structured economy. When hit by general economic decline, rural areas are to be most afflicted.

Development of rural areas is conventionally linked with agriculture. In a sense, agriculture has been traditionally used almost as synonymous with rural. This simplified perception is not acceptable by most experts as well as general public any longer. According to OECD survey, agriculture accounts for less than 9 % of employment in rural regions of OECD countries, and represents the major employer in only 3 % of these regions [OECD, 2005]. The Czech Republic has had even more specific position with its agriculture share on total employment drawing near the EU average (the Czech share dropped to 3,05 % in 2006) [Green Report, 2006]. Nevertheless, this is not to say that agriculture has lost its significance in both rural and national economy. Agriculture will always be of vital importance for each nation existence and its self-sufficiency and interdependence.

Structural changes have brought about decline in employment in both agriculture and industry in rural regions in last two decades, which has its consequences in rising unemployment rate. A question turns up what to do with laid-off workers in agricultural sector. By and large, diversification of agricultural activities both within and out of agricultural farms has been recommended. Especially, development of small and medium enterprises has been suggested with a link to agriculture and local inhabitants. According to some experts [e.g. Dabson, 2004], rural self-employment becomes the most important component of economic development of any rural region to attain sustainable growth of lagging, less favoured areas. Demand for local and culturally specific products and services constitute a great potential too.

Another way how to face unemployment problem represent a sector of services, especially tourism. In some countries, services have become the most important employer in rural areas, which is obviously not the case of the Czech Republic where the first position occupies mostly industry. Tourism provides a high number of work opportunities and at the same time represents certain, yet only limited possibility of employment for underqualified workforce. Economic performance of rural areas can be

boost up by means of various types of tourism, e. g. agrotourism which is based on local resources and interlinked with local amenities and cultural heritage.

In many rural areas, fundamental technical and social infrastructure is still missing, starting with water supply, sewerage, pipeline and ending with cultural and educational facilities etc. All mentioned facts contribute to widening disparities between rural and urban world. People tend to follow work opportunities, which basically lead to depopulation of particularly most remote rural areas. At the same time, contradictory tendencies in movement of population between cities and rural towns and villages become visible, though, such that do not help rural areas growth. Lower prices of real estates drain people out of cities to live in suburbs and/or rural areas. This trend is not much of use to local communities for such inhabitants mostly spend time and money in urban areas and use their rural shelter only to overnight and/or contributes towards unfavourable demographic structure.

Particular economic structure of rural areas has noticeable consequence in the level of wages. Not only diverse the salaries among sectors of economy, but also among particular regions. Whereas metropolitan areas are noted for the highest wages, most remote rural regions have the lowest ones. To back up these statements, dates from the Green report [2002] may serve as an illustration. According to this report, average monthly salaries in significantly rural areas reached only 85,6 % of average wages in the Czech national economy in 2001 whereas in significantly urban areas exceeded by 16,1 % the national average.¹ The level of rural incomes is evidently interlinked with attained education as well. Generally speaking, with increasing rate of “rurality” grows the number of people with basic education or even without education and/or lowers the rate of university graduates. Moreover, it is not a rare situation that rural incomes depend often on state social benefits (e. g. according to OECD, in Estonia, Latvia and Poland represent a main income for one third of rural households) [IAMO, 2004, p. 76].

A typical feature of rural communities is necessity to commute. According to IAMO [2004], about 44% of the rural labour force in the Czech Republic is estimated to commute to urban centres to work, out of which 83% do this on a daily basis. Apparently, commuting increases living costs fundamentally, hence, depresses already lower average wages as well as purchasing power of rural population. This may have repercussions for business climate as well. Investment into rural areas may appear to be more risky in terms of their pay-off period which subsequently restrains business and entrepreneurs’ interest ensued with lower demand for labour repeating itself in a sort of „vicious circle“ that endangers stability of rural settlement.

2. Clusters

Hand in hand with technological development and process of globalization, structure of most rural economies has had to go through an essential restructuring. Therefore, other

¹ used regional dates about salaries are available only for the year 2001

resources of rural income are sorely needed to be discovered. As already stated, reasonable diversification of economic activities in rural regions is mainly recommended to prevent the area from overall decline once a particular sector comes to its decay due to various causes (e. g. changes in consumer preferences, fashion, global effects as growing competition or financial crisis etc.). Lately, clustering has proved to be particularly efficient method of boosting economic development in certain areas.

According to Porter [1997, p. 78], cluster may be defined as geographic concentrations of interconnected companies and institutions in a particular field. It is obvious that no any concentration of companies can be called cluster. To be classified as a cluster, a group of mutually interlinked firms (sectors) as well as institutions have to share a common set of input needs, or rely on each other as supplier or customer [Gibbs and Bernat, 1997]. Their mutual links is what mostly strengthens and boosts up their competitive advantage consisting in e. g. specialization support, easier access to natural resources, average costs reduction and thus utilization of economies of scale, division of labour among firms as well as beneficial co-operation with a range of organizations starting with research institutions and ending with local governments [Leeder, 2005].

Besides agricultural and consequential production, industrial and/or knowledge clusters can be established in rural areas as well, yet having in mind, that cluster strategy is not suitable for every rural region. Different studies prove that clusters in rural areas are noted for rather different dynamic as well as structure from those in urban areas. According to Rosenfeld [2000], they tend to take the form of niche “micro-clusters”, or extension of metropolitan clusters. Due to insufficient infrastructure high-technology industry clusters may be limited only to a few areas adjacent to biggest cities and thus most rural economies are sentenced to underperform in activities in which knowledge forms the only enduring source of competitive advantage [Cortright and Meyer, 2001].

2.1 Case studies – foreign experience

Let us have a look at some practical examples of this kind which comes mostly from the U.S. reality based on Rural Cluster Industry Compendium [RTC, 2003]. Apart from those that are rather place-specific as e. g. Log home cluster in Bitterroot valley in Montana, Gaming cluster in Tunica Country in Mississippi, recreational vehicles and manufactures housing in Northern Indiana, Oil and gas in Southern Louisiana and houseboats in Southern Kentucky some cases are worthy to be mentioned for its basic idea is potentially transferable.

Taking in account what has been said about using local resources and traditional knowledge/skills of inhabitants, Craft cluster in Western North Carolina may serve as an example of good practice. Great variety of shops, studios, classrooms and galleries are scattered around small towns in the Blue Ridge Mountains with about 4 000 craftsmen producing different items originally meant for households. The whole cluster is estimated to generate annually US \$ 122 million in sales revenues [RTC, 2003, p. 8] and of particular importance it is its strong marketing link to agriculture. Besides building on production of local products, the cluster provides craft educational programs, workshops and craft gallery open to the public.

Another interesting example represent Specialty food cluster in Southeastern Ohio that interconnect about 30 food processing companies in informal network. Involved companies employ about 4-5% of workforce of the area and generate annually about US \$ 1,5 million in sales. The general idea of the whole cluster is that each company retains its own recipes while other information as well as resources is shared (as e. g. possibility to use labelling line, services of kitchen incubator etc.). Apparent competitive advantage consists in establishing co-operation with local agriculture farms which supply food producer with fresh local products as well as enabling them to sell their products at local farmers' market. Besides food producers, food distributors, food stores, restaurants and mail order retailers belong to key businesses.

The last but not the least case to be analysed is the Tourism/Experience enterprise cluster in Western Montana. Montana founded its economic success in natural resources, diverse topography and distinctive heritage of wildlife. Obviously, not every region abounds in such extraordinary natural and cultural heritage, yet there is something to learn. The cluster is well organized including transportation, accommodation, subsequent services as well as related souvenir and craft industries. Different stakeholder have established well-working public-private partnership supported by numerous associations and networks and together with the State of Montana and Department of Commerce got involved into both promotion and strategic planning of future action in the region. The state assistance it is not limited only to promotion and planning but also provides linkage to industry particularly using tax to support tourism industry.

To make the whole idea of rural cluster more accessible let us have a look whether this strategy is not purely American-like. Several cases worthy to be mentioned exist in Europe as well. Ceramics cluster in Italian Sassuolo region covers 80 % of Italian tile production and employees cca 25 000 people. The concentration of tile producers and equipment manufacturers led to establishment a chain of suppliers and consulting firms around Sassuolo. To keep up and survive in growing competition firms have learnt that everyone might benefit from mutual interaction to take advantage of new technologies and to solve mutual issues like logistics, energy costs and infrastructure.

Another inspiring example embodies furniture cluster in west central Jutland in Denmark, where over 100 producers of furniture and related wood products have been located in the Salling Peninsula alone, employing approximately 6% of the peninsular workforce. Similarly to above mentioned examples, wood furniture manufacturers take a great advantage of dynamic inter-firm relationships, which helps them easily adapt to demand changes and enables them greater flexibility [RTC, 2003, p. 25 -29].

This paper does not aim to provide an entire list of existing rural clusters all over the world but to discover whether clustering as a strategy might be generally applicable in rural areas and whether some specificity have to be shared by all regions where this strategy has been successfully implemented. Based on above mentioned examples, it is difficult to name fundamental features which would nominate particular rural area as the most appropriate for adopting clustering strategy. Mostly it is due to different sector-orientation of analyzed cases. Apparently, if proper conclusions are to be drawn, we have to focus deeply into one or another sector of economic activity (see 2.3, features of clusters in tourism). On general level, only vague statements can be made. Of most

significance seems to be to focus on historically rooted types of industry or handicrafts and typical knowledge of local people. Picking them up and embracing as much subsequent services, industries and other potential elements of co-operative network as possible contributes to easier access to new technologies and/or new markets.

2.2 Discussion – Benefits of clusters

According to analysis carried on in the U. S. [Gibbs and Bernat, 1997], several measurable benefits of clustering in rural areas may be identified. Results confirm positive impact on wages within cluster in comparison to those outside. Not only have been wages higher for sophisticated professions, but also younger and semi-qualified workers have benefited from being employed within cluster. The average cluster-employed worker is estimated earn about 7% more than other comparable workers, holding other factors constant [Gibbs and Bernat, 1997, p. 22]. Furthermore, wage premium in rural cluster may exceed in certain cases even that one in urban areas. As research has proved, wage premium depends on the type of industry. Only three industries (food, textiles and apparel, lumber and wood products) showed larger premiums in rural areas. On the contrary, positive correlation between production technology levels or average skills requirements and wage premium has not been confirmed. Another interesting finding is that cluster employment seemed to widen wage disparities between the most and least educated workers whereas diminish the gap between younger and older workers. Still positive impact on wage premiums in rural cluster is not to be taken for granted since even in rural communities where this strategy is appropriate higher wages cannot be guaranteed.

Not only can rural cluster positively affect level of wages but it might also stimulate higher rate of return on investment and on equity, as the OECD report claims [OECD, 2005]. Namely in Italy, firms located in clusters attain two and four percent higher rates of return than those outside according to the bank of Italy. Italy has not been mentioned on random screens already twice. Obviously, Italian clusters cannot be reproduced anywhere for their success is mainly ascribed to their rootage in the local context, local traditions and local forms of social and economic organization. However, this may be precisely the lesson to be learnt from Italian experience.

Firms can take other advantages of being in cluster besides those already mentioned. Cluster generate synergy effects in terms of higher productivity due to a larger market for workers with specialised skills, more rapid information flows and knowledge diffusion and specialisation as a result of relations between contracting agencies [OECD, 2005]. Cooperative inter-firm relations give a stable foundation to local network which makes it easier for new firm to start-up. Only limited capital enough just for one productive phase is requisite and risk of failure is apparently lower due to already existing market relationships.

2.3 Situation in the Czech Republic

In the Czech Republic, a program supporting clusters exists within the Operational Programme Enterprise and Innovations (OPEI) such that shows a bigger availability for sector of services in comparison with the former program within Operational Programme Industry and Enterprise. This adjustment may facilitate its use for rural development, particularly in areas building up their development on tourism.

Technical-economic study „Cluster of tourism America“ [2007] summed up several similar features of cluster initiatives in tourism within and outside Europe along which most clusters in tourism outside Europe are spread across the U. S., New Zealand, Australia and several African countries and within Europe are mostly located in Scotland and Sweden. According to this study, typical areas in which cluster strategies in tourism have been implemented differ in its area extent, population density, location as well as its specialization. By and large, the only common feature that all relevant regions possess is that fall into rural category. This statement was used to back up a proposal of establishment of Cluster America in Central Bohemia region. More than 300 entities are supposed to be involved in the cluster (not counting local municipalities) such that grounds their activities in tourism and subsequent services. Obviously, Western Montana Tourism cluster may serve as a source of good practice in this case (see above).

Lately, activities heading towards establishment of wood processing cluster have been crowned in Moravian-Silesian region. With its 33 members, it is aimed to promote wood processing industry mostly by common marketing activities, co-operation with educational institutions as well as with foreign clusters. Having in mind what has been said about success of only selected types of industries within rural cluster wood processing industry seem to possess a great potential for future development.

Currently, another initiative in clustering has arisen in Liberec region such that is purely rural-like. In connection with “School renewal the country Zdislava”, an idea has come up to establish cluster that would interlink several studios of preparatory project works, economic services, inventories, building construction focused on renewal of countryside historical buildings, handicrafts studios etc. [MSOV, 2008]. Its main purpose is to facilitate “The Comprehensive program of building up School renewal the country” which is supposed to be rather high-volume program and thus to a certain extent capital-intensive. All involved studios are assumed to work in mutual co-operation on the same topics (e. g. education in the field of environmental protection, renewable energy resources, renewal of rural handicrafts, etc. - for details see [MSOV, 2008]) to save, reconstruct and urbanize Czech-German-Polish border regions. That is why relevant information has been disseminated to partners along the borderline both in Germany (Zittau, Görlitz) and Poland (Czerna by Jelenia Gora) and it has spurred quite an interest. This cluster initiative is still in its infancy and resembles in many ways, particularly in its main idea, above mentioned Craft cluster in Western North Carolina which has proved to be very successful.

Some mentioned cases appear to blend together both rural and urban world, yet majority of all activities are noted for being linked to rural resources (e. g. forests suitable for wood processing industry as well as for rural tourism) and as such may be counted in rural and/or adjacent areas.

Conclusion

On all accounts; when successful, rural clusters means both important source of economic growth and higher wages for rural workers [Henry and Drabenstott, 1996]. Clusters generate synergy effects in terms of higher productivity, faster information flows as well as higher rate of return on investment. On the other hand, rural clusters may be generally more sensitive to overall economic situation. Once a local economy heads toward economic recession, the impacts on specialized rural clusters can be more severe. This may be exactly the reason why it is so much pointed out to diversification in rural regions. Moreover, clusters of small and medium firms no matter if in rural or urban areas require high degree of commitment to innovations which many Czech firms still lag behind in. For all mentioned cluster initiatives in the Czech Republic are rather brand-new, its drawbacks and/or its benefits can be hardly analysed fully at present. Nevertheless, clustering as a potential strategy for promoting economic performance of rural areas is yet to be discussed in the future.

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Regional Differences in Rental Housing (Un)Affordability Following the Rent Deregulation in the Czech Republic

Abstract

The paper focuses on the development of regional inequalities in rental housing (un)affordability in Czech Republic. The aim of the paper is to identify “model” types of household which are potentially at risk of being unable to afford “adequate” housing in case of no regulation. We examine the development of regional differences in housing “unaffordability” in the period 2000-2007. The share of households at risk of being unable to afford housing is analysed. Due to the lack of relevant data on household incomes and housing expenditures, a new method of housing affordability indicators calculation was developed. This method enables to describe the trend of regional inequalities in housing affordability of “model” types of household using the official regional wage statistics (gross wages) as well as market rent statistics. For measuring housing affordability is used “residual income”. Residual income indicates the sum of resources a household is left with after they have paid their rent and minimum living costs. On the one hand, the findings show that the share of households at risk of housing “unaffordability” decreased and the regional differences are not growing. On the other hand, there is a relatively numerous group of households in each region which can not afford to pay market rent even if they receive social benefits in accordance with the current legislation. The paper shows a potential barrier of migration between regions and potential risk of social exclusion. For example, the families of people working in lower paid occupation categories could find it difficult to live in the more advanced, “more expensive” regions, even though there is a big demand for labour to fill these occupations.

Key Words

housing affordability, rental housing, regional inequalities, social exclusion, Czech Republic

JEL Classification:

R2, J6

Introduction

A decent and affordable housing for all used to be pointed out as one of the main goals of housing policy. However, different elements of the goal were emphasised throughout the past century (Bramley, Karley 2005). Since the 1980s, the concept of housing affordability has been discussed by researchers and academics as well as by practitioners (MacLennan, Williams 1990; Whitehead 1991; Bramley 1994; Hulchanski 1995). Housing affordability used to be defined as “securing some given standard of housing at a price or rent which does not impose, in eye of some third party (usually government) an unreasonable burden on household incomes” (MacLennan, Williams 1990). In other words, households are at risk of housing „unaffordability“ when the

expenditures for securing adequate housing (to total net income) exceeds the reasonable threshold. Of course, the low income of households (or the high prices of housing) is not the only reason for housing affordability problems. Other factors include unsuitable structure of housing stock, discrimination of specific group of households by private landlords or discrimination in mortgage lending. However, this paper primarily focuses on the financial affordability of housing. The aim of the paper is to answer the question whether different types of household are able to afford “adequate” housing.

In several research studies, housing affordability problem was identified as one of the significant factors causing social exclusion (Lee, Murrie 1997; Marsh, Mullins 1998; Marsh 2004). In general, social exclusion is a process of detaching groups and individuals from everyday life of major society. The process of social exclusion is connected with limited social mobility which denies renewing the access to social, economical and political activities of society (Atkinson 2000; Somerville 1998). On the one hand, social exclusion is commonly understood as an exclusion of local labour market or permanent job. On the other hand, social exclusion is defined as the denial – or non-realisation – of citizenship rights and the denial of access to welfare institutions (Somerville 1998). Culture dimension of social exclusion is a marginalisation from symbols, meanings, rituals of the larger society (Madanipour 2005).

The important factor of social exclusion (residential segregation) is a limited social mobility in both vertical and horizontal dimensions; in other words, there is no possibility to climb the social ladder and no possibility to move [Vignal 2006; Coutard et al. 2002]. Potential barrier to migration as a result of housing unaffordability is not only the case of long unemployment, but also the case of some households of employees who, due to high prices of housing, find themselves locked in a poverty trap. This concerns regions with lower job opportunities or localities of cheap housing. Although it is obvious that there are many factor of spatial exclusion (such as ethnicity, cultural specificity, some public interventions, and discrimination on the housing market or discrimination on the labour market, etc.), mapping housing unaffordability is needed to understand the process of social exclusion and to design the instruments for combating this phenomenon.

In the Czech Republic, pronounced regional differences have emerged among regions (especially between Prague and the rest of the country) at the level of the so-called market rent and of the market price of owner-occupied housing since the 1990s [Kostecký et al. 1998; Lux et al. 2008]. Although regional inequalities in household income have also grown in the 1990s, the trend is not the same. Therefore, these developments supposedly contribute to the formation and increase in regional disparities of financial affordability. Owing to the absence of useful aggregate data on incomes and expenditures for different household types in the regions of the Czech Republic, these disparities have not been systematically mapped and analysed.

The objective is to identify the types of households potentially at risk of being unable to afford “adequate” housing, to map the development of potential housing (un)affordability since 2000 and to trace the development of regional differences in the percentage of such households at risk in the Czech Republic. To fulfil the purpose, a specific methodology was used due to the lack of sufficient data. The new simulation methodology can be an inspiration for other transition countries which often face the

same problem of insufficient data from official statistics. In regard to rent deregulation in the Czech Republic and unknown consequences, the paper focuses primarily on the analysis of housing (un)affordability in cases of missing regulation when the households have to pay market rent¹. We can thus identify household types potentially at risk of being unable to afford housing in the near future. A low income household can rarely afford owner-occupied housing; therefore, the objective of the paper is to map the affordability of rental housing.

1. Methodology

There are essentially three basic methods of analysing housing affordability (Garnett 2000): the indicator, reference and residual methods.

- The indicator method uses indicators that measure the financial burden on households represented by expenditures on housing; the indicators usually involve a ratio of expenditures on housing to household income. The indicators can vary depending on how housing costs and household income are defined. The most common indicator, used particularly for estimating the affordability of rental housing, is the indicator of the percentage of net rent or expenditures on housing to total net household income (hereinafter the so-called *expenditure burden*).
- The reference method does not set a threshold for the expenditure burden, but refers to the situation either in another housing sector (e.g. the rent should be set at the level of rent in private rental housing) or to the need to secure housing for certain groups of the population (e.g. the rent should be set at such a level that family households with working household heads, more than one child, and low wages are able to afford it).
- The residual method is based on an evaluation of the amount of so-called residual income, which is equal to the amount of total net household income less expenditures on housing and less the amount of the living minimum necessary to cover other basic living costs of individual household members. For example, Grigsby and Rosenburg postulate that “affordability should be defined so as to ensure that an adequate income, after deducting housing expenditures, is enough to cover the other basic needs of household members” (cited in Hui 2001).

All the indicators used to measure how affordable housing is for various groups of households in different parts of the country must also cope with the fact that an analysis of just housing expenditures does not sufficiently take into account the quality of housing itself, the size of the housing, the protection of tenancy rights, and other costs connected with housing (commuting expenses). The high expenditure burden (which at

¹ Existing market rent is not the real market rent which is to be constituted after rent deregulation. Due to the difficulty of econometric modelling of equilibrium rent [e.g. Lux, Sunega 2003], we use the data on existing market rents.

first glance looks like a problem of housing affordability) for some households living in rental housing need not be caused by the household's low income or a generally high level of housing expenditures, but may just stem from the fact that these households live in housing that is too luxurious and/or too large for the size of their household. Were such households to move to "adequate" housing (which can only be defined normatively usually according to number of household members), then their expenditure burden would fall significantly, to a level that is no longer evaluated as unaffordable or unmanageable. A simple "unadjusted" calculation of the expenditure burden can produce a distorted image of how much pressure a household is really under in terms of housing affordability. The indicators used to measure housing affordability have to tackle this problem; otherwise they reflect distortions in the given housing market rather than genuine disparities in housing affordability.

In the Czech Republic, there are no data files that would enable a simple analysis of regional inequalities in housing affordability, i.e. an analysis of real differences based on information about real households and their real expenditures and incomes. Although it is possible to use the *Family Budget Survey* data file (or the *Statistics on Income and Living Conditions* data file) from the Czech Statistical Office to obtain a national picture of housing affordability, given the size of the sample of respondents and the quality of the sample (a quota sample), it cannot be used for an analysis of regional differences. This, however, is not the only problem. The Czech Republic has no relevant data on household incomes; the *Family Budget Survey* cannot be used for this purpose either. Therefore, in order to model household income, there is no choice but to use other sources.

Regional wage statistics (RSCP) is another source of income data collected by Trexima, Ltd. in cooperation with the Ministry of Labour and Social Affairs. RSCP is statistics on gross earnings of employees. The RSCP survey differs from other earnings surveys in the Czech Republic in several aspects. Mainly, the earnings of individual employees are gathered, not only the overall sums at the level of enterprise or organization. The items of the gross earnings in regions are collected together with personal information of employees such as occupation groups (based on the ISCO¹ occupational classification), age, sex, education level etc., and information on time worked/paid. Beyond the RSCP statistic, the statistics on pension amount and on social benefits or unemployment pay are available, too. The data sets were compiled by the Czech Statistical Office based the data files of the Ministry of Labour and Social Affairs (MoLSA) and partially alone by the MoLSA.

Since 2000, data on the market level of rents in regions and regional towns are available by the price and rent monitoring system of the Institute of Regional Information, Ltd. (IRI). The system monitors (in ordinary advertisements) the offered rents in 335 selected towns in the Czech Republic. The selected towns account for two-thirds of the total population of the Czech Republic. In the period 2000-2006, the survey included 50 000 items of flats and their prices or rents. After eliminating extreme and

¹ The International Standard Classification of Occupations (<http://www.ilo.org/public/english/bureau/stat/isco/index.htm>).

incomparable prices or rents, output data are published in the form of average rents and price indices of a “standard flat”¹.

1.1 Calculating the indicators of housing affordability of rental housing

To map the regional differences in housing affordability, it is impossible to use sample surveys collected by Czech Statistical Office; therefore, an alternative approach was used (Lux, Kuda eds.). We created types of households and types of housing, and an “adequate” type of housing was assigned to each type of household (this is how we addressed the possible objection that it is necessary to take into account the housing consumption, i.e. occupying housing that does not correspond in its size to the size of the household). The criteria used to create household types were selected with a view to the fact that existing wage statistics provide regional data on wage levels in reference to economic activity and occupational category. Types of households were defined on the basis of the following criteria:

- *The economic activity of the household members* – economically active, unemployed, pensioner, parent on parental leave;
- *The category of employment of economically active household members* – divided into ten basic occupational groups (ISCO) according to the occupation of the household head;
- *The size and composition of households* – households of individuals, childless married or cohabiting couples, married or cohabiting couples with one child, married or cohabiting couples with two children, married or cohabiting couples with more than two children, lone parents with one child, lone parents with more than one child.

Various combinations of the above criteria would generate more than two hundred different household types. Such high number of household types is not suitable for analysis. Given that some household types are relatively marginally represented in the Czech population, household types were selected on the basis of an analysis of the 2001 Census (SLDB 2001) data corresponding to the actual share of individual household types in the Czech population after 2001. Beyond this selection, the types of household were selected which are not included in the RSCP survey, in particular the self-employed (14.5% of all Czech households), since it was impossible to estimate their reliable net household income. After unsuitable or marginally represented household types were eliminated from the analysis, 60 household types remained, which account for roughly 66% of all Czech households (selected households included, for example, a household of one pensioner, a family household of qualified workers with two children, or a university-educated professional who lives alone, etc.).

¹ A standard flat is a Category-1 flat with approx. 40% depreciation and a floor space of 68 m² in a standard, not marginal, location.

The types of economically active households were assigned average gross incomes in conformity with regional statistics (RSCP, regional average) and in the case of pensioner households the average pension amount in the region. In the case of households where both partners (spouses) are employed and their type of employment falls into the same ISCO category, the average income in the given occupational category was doubled and then divided into one income for a man and one income for a woman, based on the ratio of women's to men's incomes in the given category and the given region. In the second step, the net income and any potential social benefits (state social support, etc.) were calculated for all sixty types of household in all the regions, and for each of the years in the period 2000-2006. The tax and benefit amounts were worked out in accordance with the regulations (legislation) in effect in the given year, as the method of calculating tax and some benefits slightly changed over the course of the period under observation, the amount of the living minimum was valorised, and so on. If a household was eligible for housing allowance, the benefit was included in the net income of the household.

The following types of housing were defined for the purpose of calculating all the indicators of housing affordability: the four most common flat sizes (1+1, 2+1¹, 3+1 and 4+1). Average regional market rents were calculated using the rent monitoring system of the Institute of Regional Information, Ltd. (Lux, Kuda ed. 2008). However, there are two basic components of housing expenditures: rent, and other expenditures connected with housing (expenditures on energy, heating, water, cleaning, etc.). Other expenditures connected with housing were determined using the *Family Budget Survey*² and they were added to the expenditures on market rent. Finally, the individual types of household were normatively assigned an "adequate" type of housing based on the composition and number of members of the household. Individuals were assigned a 1+1 flat, married and cohabiting partners were assigned a 2+1 flat, two-parent families with one child a 3+1 flat, and two-parent families with two children a 4+1 flat.

1.2 Criteria for determining affordability of rental housing

Two indicators are mainly used for the analysis of rental housing affordability. The first indicator is *expenditure burden*, defined as the percentage of expenditures on housing out of the total monthly household income. *Residual income* is the second indicator which indicates the sum of resources a household is left with after they have paid their housing expenditure and they have covered the minimum living costs of individual household members. To determine the threshold that, when exceeded, indicates that housing is unaffordable for the given household, a maximum expenditure burden threshold or a minimum residual income need to be set. We assumed the maximal threshold of expenditure burden to be 30% (in accordance to Hulchanski 1995). In

¹ I.e. 2 rooms and a separate kitchen.

² Due to the limited sample, the Family Budget Survey makes it impossible to compute expenditures on energy, water, services, etc. for individual sizes of household and individual regions. Therefore, the average other expenditure were calculated only for individual size of household for the whole Czech Republic. The way of calculation can be legitimised because regional differences in other expenditure are irrelevant compared to regional differences in rent levels.

reference to residual income, we supposed the minimum net income has to be higher than the sum of housing expenditure and 1.5 times the amount of the minimum living cost of individual household members (defined by the Ministry of Labour and Social Affairs).

When we compare both indicators, the results are obviously not the same. Expenditure burden seems to be a rigorous criterion, but for the purpose of analysing housing unaffordability, this indicator can be misleading. The reason might be explained by a model example. While the household of a clerk in a region with lower rent level and lower incomes is not potentially at risk of unaffordability in accordance with the expenditure burden threshold, the residual income is lower than that of a household from Prague which could be potentially threatened by unaffordability. The concept of residual income seems to be more acceptable because it sets the exact limit of unaffordability. If a household is under this limit (threshold), it will be improbable to save on other consummation costs and the household will be forced to live in “inadequate” housing. Hence, we use the residual income concept to identify households at risk of being unable to afford adequate housing in this paper.

2. Development of housing (un)affordability in regions of the Czech Republic

Based on the defined housing affordability threshold and the date of EU-SILC¹ survey, there was around 11% of households at risk of unaffordability in 2005. The figure comprised particularly households of the long-term unemployed or households of pensioners. This benchmark calculation has at least two limitations. Firstly, it does not address the objection that occupying housing that does not correspond in size to the size of the household. Secondly, the size of sample makes it impossible to classify types of household in individual regions. Following our methodology and supposing that all household pay market rent and live in “adequate” housing, the household potentially at risk of unaffordability are, not surprisingly, all household fully dependent on social assistance from the state; households of the long-term unemployed, households of single pensioners, single-parent on maternity leave (9 types together) are threatened in all regions. Table 1 shows the list of threatened households in regions and in individual observed years. Remarkably, the list of households potentially at risk includes also households with two employed members in the occupation categories of unskilled workers or service staff in some regions.

¹ The Czech Statistical Office has been conducting this survey every year since 2005 as a national module of the EU-SILC (European Union – Statistics on Income and Living Conditions) survey project. The survey has been carried out on the whole territory of the Czech Republic. Around 4 000 new dwellings enter the survey every year and the dwellings from past surveys are revisited. The sample is obtained by utilizing two-stage probability sampling scheme independently for each of the 14 administrative regions (NUTS3 regions).

Table 1: Types of household potentially at risk of being unable to afford rental housing

Members of household	Economic activity of the head of household	Economic activity of partner	Percentages of households in the Czech Republic	Number of regions where the rental housing is not affordable							
				2000	2001	2002	2003	2004	2005	2006	2007
Individuals, couples and families	Household on social assistance (long-term unemployed, single-parent on parental leave, long-term unemployed living with pensioner)		4,14 %	14	14	14	14	14	14	14	14
Individual	Pensioners	-	14,37 %	12	11	12	12	12	12	13	14
	Service and sale workers	-	1,25 %	2	0	0	1	1	0	0	0
	Unskilled workers	-	0,78 %	5	4	2	2	2	2	1	2
(Married) couple without children	Pensioners	Pensioners	10,96 %	1	1	1	2	2	1	1	1
	Craft and related trades workers	Unemployed	0,26 %	12	11	11	12	10	8	3	5
	Unskilled workers	Pensioners	0,25 %	0	0	0	1	0	0	0	0
Single-parent with a child	Clerical support workers	-	0,26 %	11	10	11	10	7	2	1	2
	Service and sale workers	-	0,47 %	14	14	14	14	13	13	11	12
	Craft and related trades workers	-	0,51 %	6	4	5	6	4	3	0	0
	Unskilled workers	-	0,30 %	14	14	14	14	14	14	14	14
Family with a child	Service and sale workers	Employee	0,41 %	4	1	0	1	1	0	0	0
	Unskilled workers	Employee	0,20 %	11	6	4	4	2	2	0	0
	Technicians	Parental leave	0,19 %	8	3	1	1	0	0	0	0
	Craft and related trades workers	Parental leave	0,52 %	13	13	12	12	8	2	0	0
	Craft and related trades workers	Unemployed	0,22 %	14	14	14	14	14	14	13	13
Family with 2 children	Clerical support workers	Employee	0,16 %	6	2	1	0	0	0	0	0
	Service and sale workers	Employee	0,44 %	14	14	12	12	11	3	2	1
	Craft and related trades workers	Employee	2,82 %	3	0	0	0	0	0	0	0
	Unskilled workers	Employee	0,19 %	14	14	14	14	14	10	5	5
	Technicians	Parental leave	0,23 %	14	13	13	13	12	1	0	0
	Craft and related trades workers	Parental leave	0,62 %	14	14	14	14	14	12	9	0
	Craft and related trades workers	Unemployed	0,28 %	14	14	14	14	14	14	14	14

Note: The table shows all types of household at potential risk of housing affordability in the period 2000-2007. When “the number of regions where the rental housing is not affordable” is 14, then the type of household is at risk of unaffordability in all regions of the Czech Republic.

Source: IRI, Regional wage statistic (RSCP), Czech Statistic Office, author's calculations.

Most types of household at risk of being unable to afford housing could be found in 2000 and also in 2007 in Prague and in Southern Moravia region, followed by Zlín region and Pardubice region. A huge decrease in numbers of threatened household types between 2000 and 2007 is detected in Figure 2. The developed typology enables to compare housing affordability of different households but it does not address the problem of the estimation of how numerous the group of threatened households is. The real share of such households in individual regions was quantified according to the Census 2001¹ and compared in individual years. However, the estimation is not methodologically correct as it is unrealistic to assume that there is no income dispersion (or rent dispersion) among households of this type and that the affordability of all household of the type is the same. Therefore, it is necessary to make approximate estimation to evaluate the regional differences in housing affordability over time. For example, if a type of household is at risk of being unable to afford housing in two regions, this type can be frequent in the first region while marginal in the second region.

¹ Although census is the only data source on quantification of specific types of households in individual regions, the last census was in 2001. Therefore, the structure of households (based on the Census 2001) was compared with other actual data, in particular EU-SILC 2005, even though they make it impossible to quantify types of household on regional level. The results did not show any significantly substantial changes in household structure.

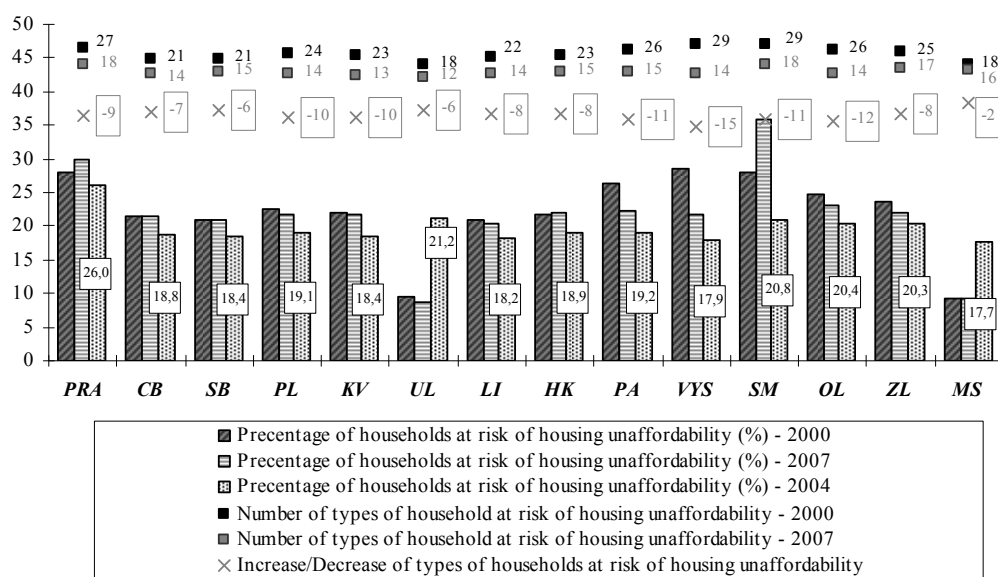


Figure 1: Number of household at risk of housing unaffordability in regions in 2000 and 2007 and percentage of such household in 2000, 2003 and 2007.

Note: Prague (PRA), Central Bohemis region (CB), Southern Bohemia region (SB), Pilsen region (PL), Karlovy Vary region (KV), Ústí nad Labem region (UL), Hradec Králové region (HK), Pardubice region (PA), Vysočina region (VYS), Southern Moravia region (SM), Olomouc region (OL), Zlín region (ZL), Moravia-Silesia region (MS).

Source: IRI, Regional wage statistic (RSCP), Czech Statistic Office, author's calculations.

The share of households at risk of being unable to afford housing to all household in given region in 2000, 2003 and 2007 is documented in Figure 1. Bearing in mind the above-mentioned limitation, it is possible to say that highest share of households at risk of housing unaffordability was in 2003 (21%), then the share decreased to 18% in 2005, and it slightly grew (20%) in 2007. The percentage of such household was very similar in every region in 2007 except for Prague; we find the lowest percentage in Moravia-Silesia region and in Vysočina region, while the highest was recorded in Prague. Most households at risk of unaffordability in Prague are not potentially only unable to cover 1.5 times the amount of minimum living costs after they pay the housing expenditure, but they are potentially unable to cover 40% of the minimum living cost.

The regional differences in the percentage of households at risk of unaffordability were not significant at the end of the selected period (in 2007). To evaluate regional disparities and their trends over time, the *coefficient of variation* was used. When the value of the variation coefficient increases, the regional differences grow accordingly. Although the coefficient oscillated between 26% and 31% in the period 2000-2005, it has gradually decreased since 2006 (Figure 2). An alternative approach to measuring the trend in regional differences over time is to use the so-called β -convergence coefficient (or β -divergence coefficient). The beta-convergence coefficient can be expressed as the Pearson's coefficient of correlation between the relevant annual increase in the value of financial affordability indicator and the absolute value of the indicator in a given year. A positive coefficient value indicates that a relative (year-to-year) increase in the value of percentage of households at risk correlates with the value in the initial year; thus, the percentage of households at risk is increasing especially in regions where the risk is very high (regional inequalities grow). As Figure 2 shows, the

beta-convergence coefficient increased only in the period from 2000 to 2004, while in the following years it was negative; since 2005, regional inequalities have relative sharply decreased.

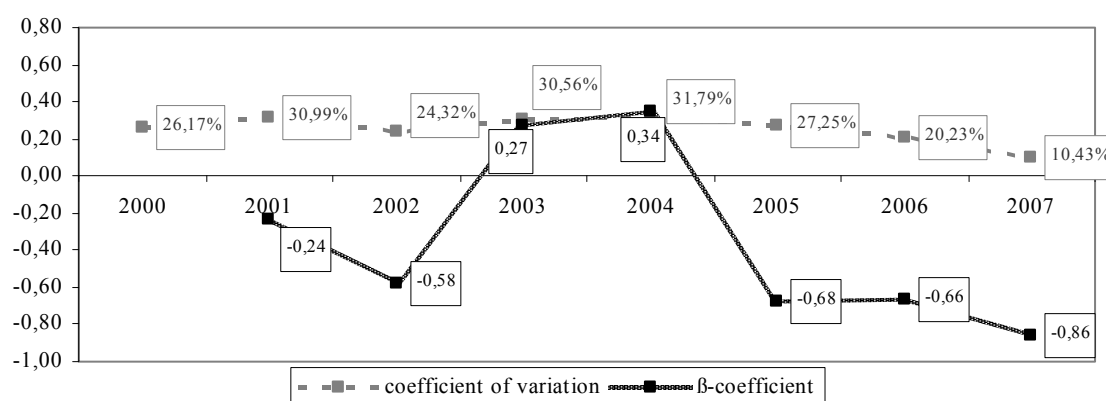


Figure 2: Development of regional differences in share of household at risk of housing unaffordability in the period 2000-2007

Source: IRI, Regional wage statistic (RSCP), Czech Statistic Office, author's calculations.

Examining the differences between particular regions, three clusters of regions stand out. The first cluster is specified by a high share of threatened households together with a high level of market rents (Prague and the second biggest city Brno as a part of Southern Moravia region). The second cluster consists of regions where housing affordability is very high, but which at the same time show the highest unemployment rates (Ústí nad Labem region, Vysočina region, Karlovy Vary region). The third group is represented only by specific region of Moravia-Silesia. By 2006, owing to a sharp increase in rent in this region which was not affected in household income, the region had shifted from the second cluster to regions with lower housing affordability. Therefore, the group of threatened household has extended by many types of household: pensioners, families of unskilled workers with 2 children, single-parent workers of sales or service staff, families of sales or service staff with one income.

2.1 Rent deregulation and potential risk of being unable to afford housing

Using the methodology to identify households at risk of housing unaffordability, the real share of household living in market rental housing was buried. Based on the data of EU-SILC survey, only 3-5% households live in market rental housing as a large number of households live in flats with regulated rent (Figure 3). Of course, the share of household at risk of unaffordability is much lower in regulated housing (3-5% of all households). If all households had to pay market rent, the share of threatened household would be markedly higher and it would even contain households receiving housing allowance. A substantial change could occur especially in regions with a high percentage of regulated rent housing, such as Prague, Liberec region, Ústí nad Labem region, or Moravia-Silesia region (Figure 3).

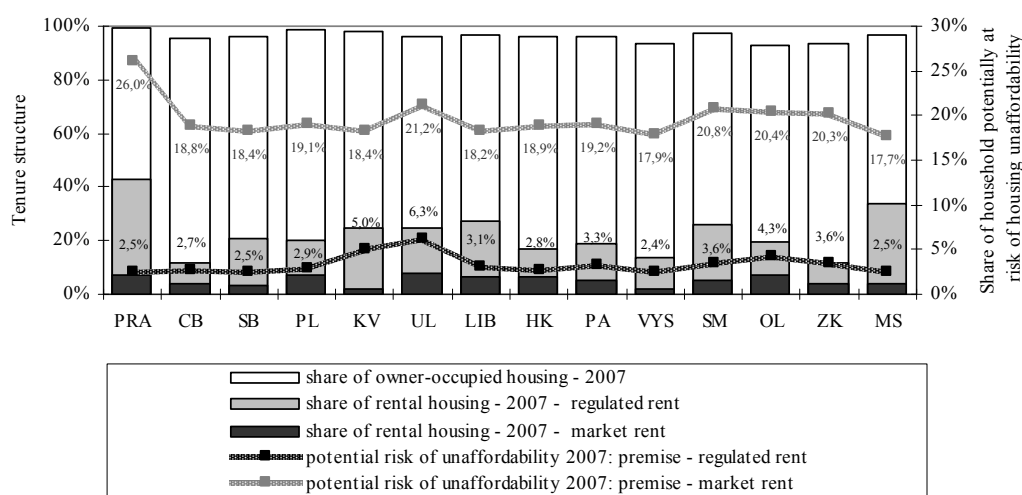


Figure 3: Percentage of household living in “regulated rent” rental housing and percentage of household at risk of unaffordability of market rental housing among regions

Source: IRI, Regional wage statistic (RSCP), Czech Statistic Office, author's calculations.

After the end of the rent deregulation process (or already during this process), a part of tenants is likely to become dependent on social assistance. As a consequence of privatisation of municipal housing over the past ten years¹, there are not enough flats to be used as social housing to cover the housing needs of low-income households. Even if there was no shortage of municipal housing, the rigid income criteria of eligibility to obtain social housing would not solve the social exclusion problem in localities of social housing, the problem of spatial segregation of income groups. Other housing policy instrument is housing allowance which is not connected to certain locality. Our analysis shows that the existing concept of housing allowance will be ineffective after the end of the deregulation process since the amount of housing allowance is based on the prescriptive housing costs which do not affect the regional differences in market rent levels.

2.2 Housing unaffordability of selected types of households

The last part of the paper is focused on the situation of some types of households which were identified as threatened of housing unaffordability, in particular households of pensioner and low income households. Pensioner belongs to the group of household at risk of being unable to afford housing in all regions. In contrast to other types, there is no improvement of housing affordability compared to 2000, and there is a continuous decrease of housing affordability in some regions (Ústí nad Labem region and Moravia-Silesia). This type of household is very frequent and in regard to population ageing, the distribution of household shifts towards a greater share of pensioners (based on the

¹ From 1991 to 2007, the municipalities privatised around 67% of municipal housing stock (Kubečka et al. 2008). The amount of privatised housing stock depends on individual municipality. For example, Ústí nad Labem has privatised almost all flats.

data from the Czech Social Security Administration). In some regions, we can anticipate an increase around 1% of all households compared to Census 2001. As the results from other publications dealing with housing affordability (Sunega 2003, Lux 2002) suggest, pensioners often live in housing that is too large for the size of their household and are not willing to move to “adequate” housing. Hence, the real housing affordability is even lower than the potential one. On the other hand, a relatively large part of pensioners live in owner-occupied houses (37% based on EU-SILC 2005) or owner-occupied flat (31%), and therefore they can dispose of certain property, putting the deregulation process beside the question.

Another group of households at risk of being unable to afford housing includes households of low qualification categories (such as sales or service staff, unskilled workers, craft and related trades workers, machine operators). These households are not threatened in all regions, but there are typically large regional inequalities in housing affordability. In regions where the rent levels of flats are high (Prague, Southern Moravia), the amount of net income of qualified workers is significantly higher than in the majority of other regions, while the income of employees with lower qualification, though also higher than in other regions, is not higher to such significant extent. Hence, such households “logically” decide to remain in regions where housing is more affordable.

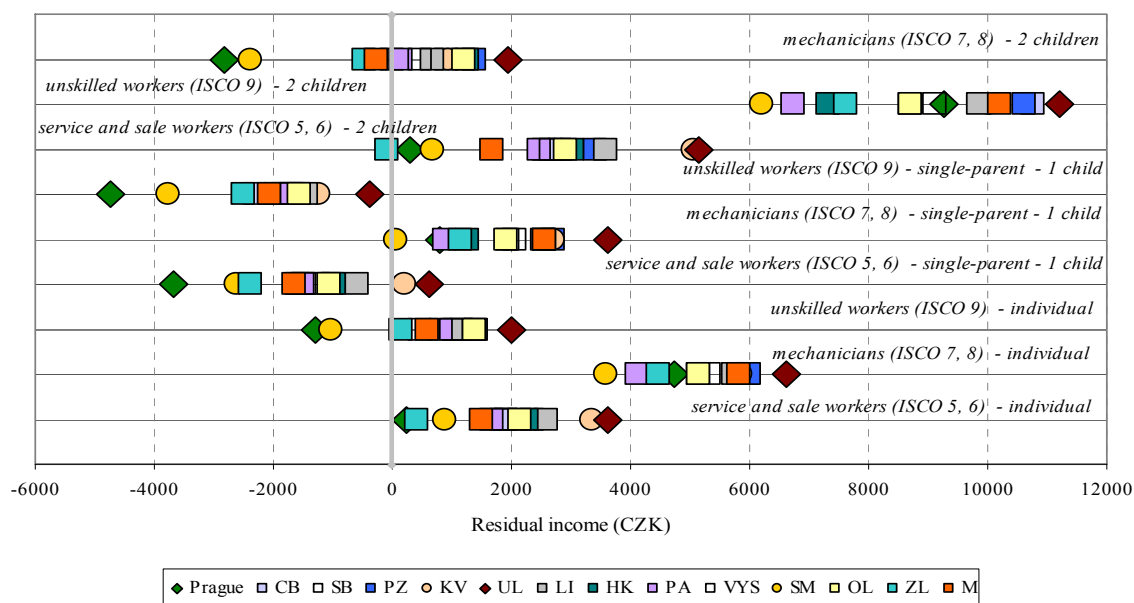


Figure 4: Residual income of low income households of employees in 2007 (interregional comparison)

Source: IRI, Regional wage statistic (RSCP), Czech Statistical Office, author's calculations.

Figure 4 shows values of residual incomes of households of low income employees in 2007. Almost every household would have the biggest residual income if they lived in Ústí nad Labem region or Karlovy Vary region. On the contrary, the minimal residual income would be in Prague where job opportunities are paradoxically the greatest. If a member of household in a region with a high employment rate loses his/her job, it will be difficult to afford to move to other region and, simultaneously, it will be difficult to find a job in this region. This potential barrier to migration between regions can have a

negative impact on the labour market and some households can be locked in regions with high affordability of housing and low job demand. This brings about the risk of social exclusion localities growth in these regions (Ústí nad Labem, Karlovy Vary region, Moravia-Silesia region), especially when the number of unskilled (or low skilled) workers is already very high (2000 – 2007) and some localities of residential segregations already exist there (Sýkora 2007). In regard to rent deregulation and the above-mentioned risks, a hypothesis can be suggested: if the concept of housing allowance did not change, the number of low income localities would increase faster.

Conclusion

Although the rent deregulation is in progress in the Czech Republic, we do not know what potential consequences the end of regulation might bring. Due to lack of sufficient data from official statistics, it was impossible to evaluate housing affordability for individual types of households as well as housing affordability for individual regions. Hence, this paper proposes a specific method of measuring potential risk of housing unaffordability that enables to overcome the problem of insufficient data, which can often be the case in the countries of Central and Eastern Europe. The findings from the analysis of potential unaffordability of rental housing after the end of regulation indicate that potential unaffordability could be mainly (and expectedly) observed among households that are dependent on social assistance from the state (households of the long-term unemployed), households of pensioners, single-parent workers, and sales or service staff (e.g. shop assistants, waiters, etc.). From a regional perspective, it is not surprising that the households facing the highest risk of being unable to afford rental housing live in regions with the highest “market” rents, in Prague and in Southern Moravia region.

From 2000 to 2003, the number of types of households potentially at risk of unaffordability as well as the percentage of these households grew. Up to 2003, the potential risk of unaffordability decreased in general. However, in some regions (Ústí nad Labem region and Moravia-Silesia region), the situation of households of pensioners seems to be worse in 2007 than before. Even though the share of households at risk of housing “unaffordability” decreased and the regional differences are not growing, there is a relatively numerous group of households in each region which cannot afford to pay market rent. This finding looks astonishing as the model households receive all social benefits available, including housing allowance. At present, a relatively gross part of household lives in home-ownership housing, while most of the rest lives in rental housing, paying regulated rent. Since the affordability of “regulated rental housing” is 3-4-times higher than the affordability of “market rental housing”, the end of deregulation process raises the question of implementing an effective instrument leading to housing unaffordability reduction for some household types. The existing concept of housing allowance does not solve the affordability problem in case the household pays market rent. If the existing housing allowance is modified to preserve the share of household potentially at risk of being unable to afford housing after the deregulation process the public social expenditure will grow rapidly. In reference to the deregulation process, the most threatened group of households seems to be renters, even though a part of them lives in owner-occupied houses. We should ask the question whether these household are willing (are able) to move to smaller flats or to cheaper localities, and, at the same

time, whether there is an alternative housing in the neighbourhood to meet the retirement needs.

Although available data and methodology make it impossible to exactly define the risk of social exclusion as a result of housing affordability problems due to local specificity, we can determinate some trends contributing to social exclusion. Potential risk of social exclusion in accordance of housing unaffordability can be particularly anticipated among lower qualified workers. In case of job losses, the unemployed members of households would have serious difficulties to afford to live in the more advanced, "more expensive" regions, even though there is a big demand for labour to fill these occupations. Consequently, these households would be trapped in regions where they have only few job opportunities, even if housing is affordable. When the household does not dispose of property or savings, they would fall in a poverty trap and they would have to live in a locality of cheap housing. The situation can lead to the exclusion of local job market. On the other hand, based on experiences from Western European cities, the localities of cheap and unattractive housing may also emerge in prosperous cities (or towns) with a high demand for low paid jobs in the future.

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The Influence of Macroeconomic Entities on City and Village Budgets

Abstract

This year's deficit of the state budget is estimated to be approximately 120 to 130 billion crowns. According to the Czech Ministry of Finance, this deficit is caused by the drop in taxable income. Therefore the Czech Republic wouldn't meet one of the criteria for adopting the euro currency, which dictates that the ratio of the state budget deficit to the gross domestic product has to be less than three percent.

The trend towards a drop in taxable income was first observed in the fourth quarter of 2008, with the first quarter of 2009 being reported as worse than its predecessor. The deficit in the state budget for the month of March reached 2.35 billion crowns, but an additional 31 billion crowns were allocated to the state budget from the fund which had been reserved for dealing with possible damage caused by the influence of the world financial crisis.

The aim of this abstract is to analyze the influence of macroeconomic entities on city and village budgets, where a large number of the grants are received from the European Structural Funds. However, the grants are supplied in the official currency of the European Union, which affects the public budgets due to the lack of stability of the Czech currency. The goal of this article is to evaluate the influence of the fluctuation of exchange rate on city and village budgets and point out the negative impact made by the decision not to adopt the euro in the Czech Republic.

Key Words

disparity, European Union, funds, donations, exchange rate

JEL Classification:

E52, H72

Introduction

The aim of this paper is to analyze the influence of macroeconomic entities on city and village budgets where a large number of the grants are received from the European Structural Funds. However, the grants are supplied in the official currency of the European Union, which affects the public budgets due to the lack of stability of the Czech currency. The goal of this article is to evaluate the influence of the fluctuation of exchange rates on city and village budgets and point out the negative impact made by the decision not to adopt the euro in the Czech Republic.

1. The Development of Exchange Rate

The exchange rate is one of the basic macro-economical entities that has a fundamental influence on drawing grants from European Union's Structural Funds, especially in the light of the current climate in the Czech Republic (the currency used is CZK, the EUR has not yet been adopted as the national currency). The European Union's Structural Funds' resources are allocated in the EUR currency, unlike the grant drawing, which is conducted via the CZK currency. The following graphs (Fig. 1, 2 and 3) describe the development of exchange rate of CZK to EUR.

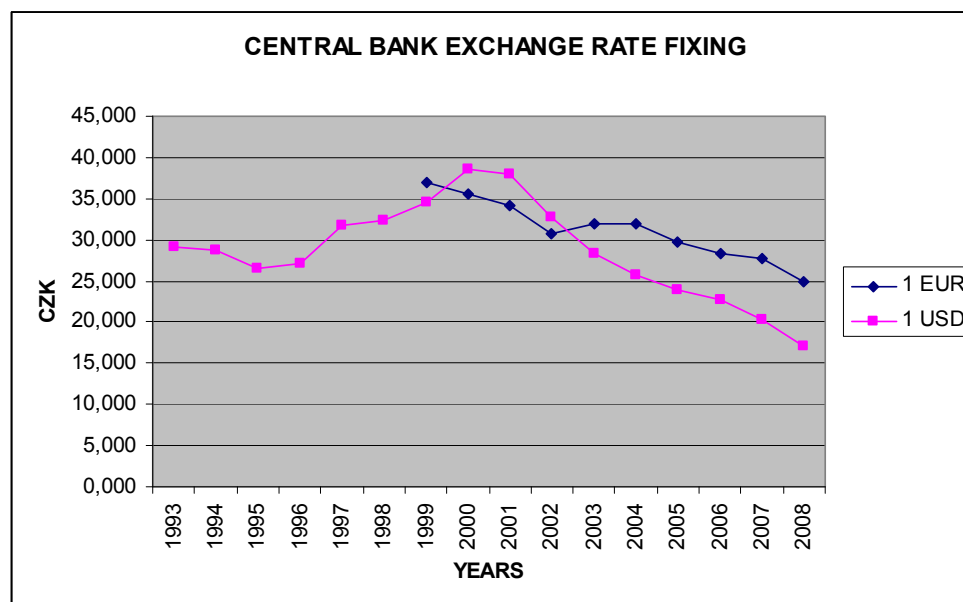


Fig. 1: Central bank exchange rate fixing

Source: [3], internal formatting

The graph in Fig. 1: Central bank exchange rate fixing shows us, that the exchange rate of Czech crown to EUR has dropped from 36.882 CZK / EUR in the year 1999 to 24.942 CZK / EUR in the year 2008. A long-term stable trend towards strengthening the position of the Czech crown against the EUR can also be observed from the aforementioned graph.

To provide a comparison, we also mention the exchange rate of the Czech crown to the USD that has dropped from 38.59 CZK / USD in the year 2000 to 17.035 CZK / USD in the year 2008. As indicated by the data in the graph above, the Czech crown has increased its standing and strengthened its position against both the Euro and the USD.

During the world economic crisis, that began in 2008 and continues to the present time, the exchange rate of the Czech crown to foreign currencies has shown a dramatic fluctuation. The graph in

Fig. 2: The CZK / EUR exchange rate development in the year 2008 describes the fluctuation of the exchange rate of Czech crown to the EUR in the year 2008. The graph below clearly states that the difference between the highest and lowest point reached up to 4 CZK / EUR.

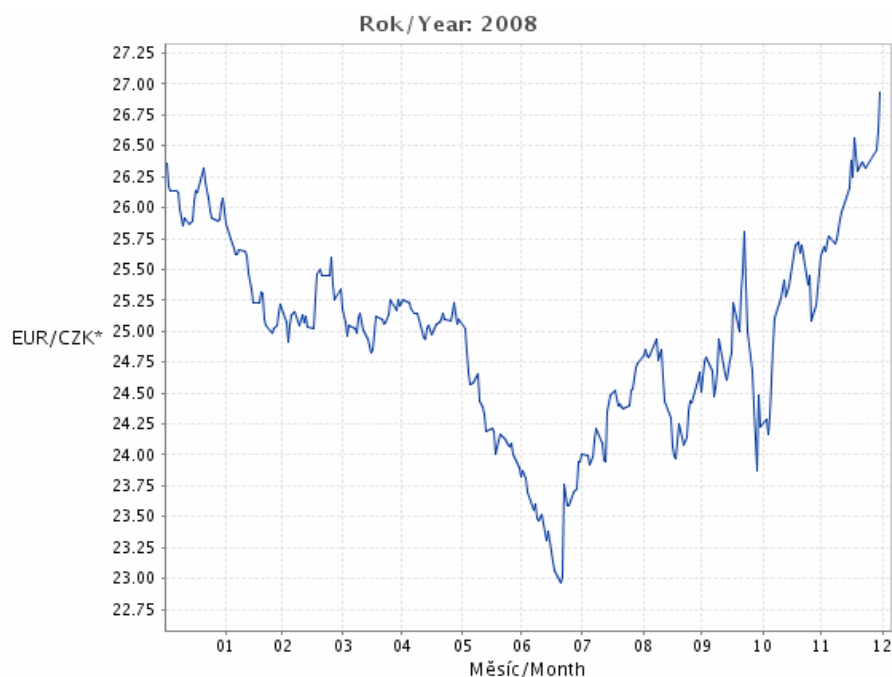
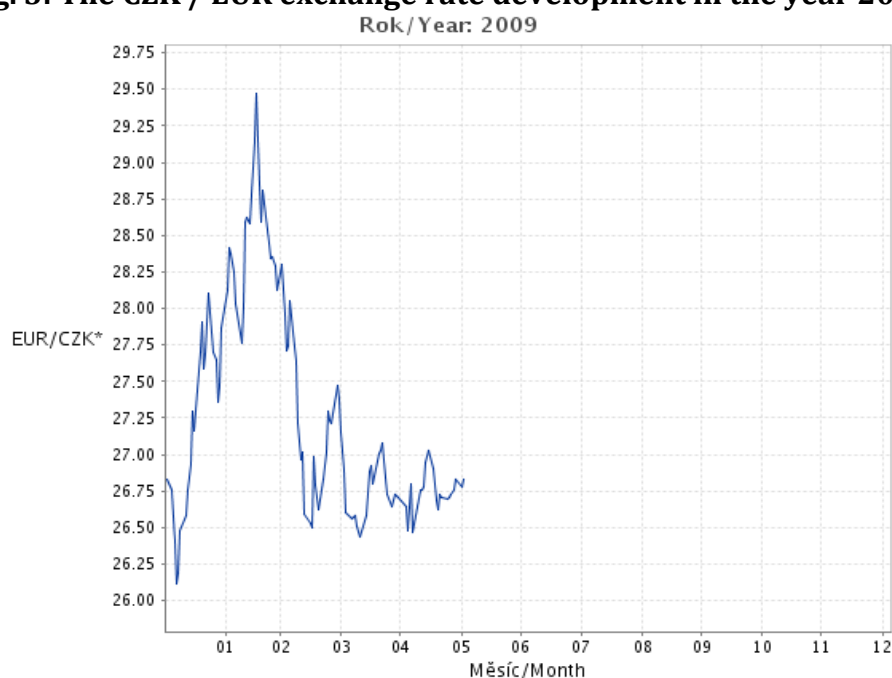


Fig. 2: The CZK / EUR exchange rate development in the year 2008

Source: [4]

The year 2009 seems to suffer from the same fluctuation of the exchange rate of CZK / EUR as its predecessor. The beginning of the year showed some promise, because the Czech crown has strengthened its position to EUR only to weaken during late January and February to 29.47 CZK / EUR (17th of February 2009). From this point onward, Czech crown began to strengthen its position again, but started oscillating during March and April between values 26.50 – 27.25 CZK / EUR.

Fig. 3: The CZK / EUR exchange rate development in the year 2009



Source: [5]

The dramatic fluctuations should continue in the coming days as well.”The source of these fluctuations can be attributed to the statistics that support the worsened progress of the world economic crisis, additional problems of the financial sector or the activities of central banks and politicians,” says Tomáš Vlk, an analyst working for the Patria Company. He does not believe that the Czech crown could possibly escape the outside influence.

The importance of world and region news will continue as well. “We predict the exchange rate value to be around 28.50 with higher volatility and without any clear course,” adds Vlk. Michal Brožka, analyst working for the Raiffeisenbank, concurs: “We expect Czech economy to weaken, which is rather disheartening news for the Czech crown. The development of the whole sentiment towards Central European region will most likely play an important role.” [12]

The Czech economy data, such as the development of inflation, foreign trade, wages, balance of payments or gross domestic product, cannot be ignored either.

2. EU Funds

The regional and local disparity of cities and villages are usually solved by grant and donation programs. When it comes to the financial resources (e.g. who are we drawing finances from and who is asked for a donation) there are multiple choices available. The European Union financial resources can be reached via the according government body (ministry departments, region, city and village resources – Fig. 4). The resources outside European Union can be reached via financial mechanisms such as EHP Norway or EHP Switzerland.

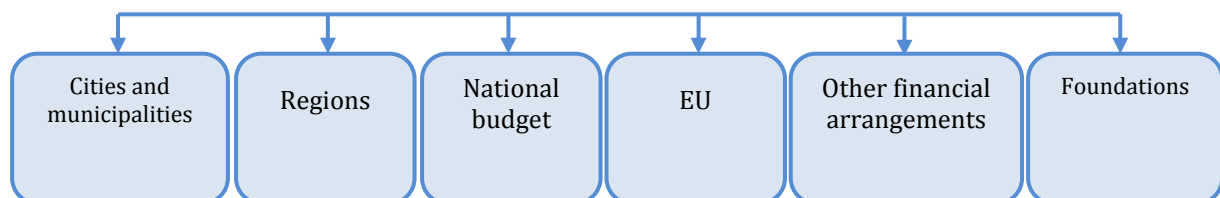


Fig. 4: Donation choices available for the years 2007 - 2013

Source: [6]

EU funds represent the main tool for realizing European economic policies and social cohesion. They are used to distribute financial resources which are designated to decrease economic and social differences between member countries and their regions.

European Union manages three main funds:

- Structural Funds
 - European Regional Development Fund (ERDF)
 - European Social Fund (ESF)
- Cohesion Fund (CF) [7]

The donations in the Czech Republic in the time period of 2007 – 2013 are mainly influenced by the European Union funds, which can be used to improve the overall living conditions of all citizens as well as regional development. The amount that can be drawn is nearing 26.7 billion EUR. The regional support is backed by 26 strategic programs, each of which pursues different goals, themes and regional influence.

The economic and social cohesion policy follows three main goals:

- Convergence, which supports regions (NUTS II), where gross domestic product per citizen is lower than 75% than the average value for the whole EU. The amount allocated for Czech Republic for the thematic strategic programs is 21.23 billion EUR. Regional strategic programs for cohesion support were given 4.66 billion EUR.
- Regional competitiveness and employment supports regions, which do not fulfill the criteria for the “Convergence” goal. Prague, the capital of the Czech Republic, can use two strategic programs to draw approximately 343 million EUR.
- European regional cooperation that supports cross-border regional cooperation. The financial resources amount to 389 million EUR.

2.1 The allocation of resources for programs supported by ROP SV

The regions of Liberecký, Královéhradecký and Pardubický are included in the regional strategic program NUTS II Northeast, from which subjects can draw financial support from the 656 million allocated to the areas, and can use the grants to advance the development of these regions. This regional strategic program is divided into five priority axes which are further divided into twelve areas of support.

- Priority axis 1 – For the development of transport infrastructure a total of EUR 242.9 million was set aside from the EU funds which is 37% ROP SV.
- Priority axis 2 – For the development of city and village districts a total of EUR 223.2 million was set aside from the EU funds which is 34% ROP SV.
- Priority axis 3 - A total of EUR 144.4 million was set aside from the EU funds for the tourist trade in these areas, which is 22% ROP SV.
- Priority axis 4 – A total of EUR 26.3 million was allocated from the EU funds for the development of local entrepreneurship, which is 4%, ROP SV.
- Priority axis 5 – A total of 19.7 million was set aside from the EU funds for technical support which is 3.0% ROP SV.

For the period spanning 2007-2013 a total of EUR 772,303.069 has been set allocated (from both European Union funds and national resources) for the ROP SV program. The Tab. 1 describes how the funds were divided between each individual axis and the specified areas of support. [8]

Tab. 1: The allocation of resources for programs supported by ROP SV

Nr. of Priority Axis / Areas of support	Name of Priority Axis/ Areas of support	Fund	Part of allocation %	Sources EU	National sources	Σ (Sources EU + National sources)
1	Development of transport infrastructure	ERDF	37	242 889 314	42 862 819	285 752 133
1.1.	Development of regional road traffic infrastructure	ERDF	61	147 878 054	26 096 126	173 974 180
1.2.	Support of projects improving traffic area service	ERDF	34	82 866 794	14 623 551	97 490 345
1.3.	Development of international traffic airports	ERDF	5	12 144 466	2 143 142	14 287 608
2	Development of city and village areas	ERDF	34	223 195 587	39 387 457	262 583 044
2.1.	Development of regional centers	ERDF	39	87 051 270	15 361 991	102 413 261
2.2.	Development of cities	ERDF	41	91 505 200	16 147 977	107 653 177
2.3.	Development of villages	ERDF	20	44 639 117	7 877 489	52 516 606
3	Travelling	ERDF	22	144 420 673	25 486 004	169 906 677
3.1.	Development of basic infrastructure and attendant activity in travelling CR	ERDF	92	132 867 021	23 447 123	156 314 144
3.2.	Marketing and coordination in travelling CR	ERDF	8	11 553 652	2 038 881	13 592 533
4	Development of business background	ERDF	4	26 258 304	4 633 819	30 892 123
4.1.	Support of development of business infrastructure	ERDF	85	22 319 557	3 938 747	26 258 304
4.2.	Support of development of company partnership with colleges, schools, other educational institutions and employment office, development of innovation activity in region	ERDF	15	3 938 747	695 072	4 633 819
5	Technical support	ERDF	3	19 693 728	3 475 364	23 169 092
5.1.	Support of ROP activities	ERDF	88	17 443 728	3 078 305	20 522 033
5.2.	Support of region absorbing capacity NUTS II north-east	ERDF	12	2 250 000	397 059	2 647 059
Total			100	656 457 606	115 845 463	772 303 069

Source: [9]

3. Donations from the structural funds of the European Union

The typical lifespan of projects, for which cities and villages ask for grants from the structural funds, is 3 – 5 years. In addition to this time span there has to be added the amount of time in which the project was created. During the conception of this project you have to create an estimated budget and a set of budget criteria in order to determine how financially viable the project will ultimately be. The preparation of the project can be very time consuming and this factor is directly related to the complexity of the project. It can take up to two years in order to finalize the financial aspects of the project.

This effectively means that when planning the financial estimate for the project that you have to plan 5 to 7 years in advance. With projects this advance you have to factor in aspects such as inflation. Due to the worldwide financial crisis and the fluctuations in the exchange rate it is practically impossible to accurately predict the course of inflation. As an example you can use the prediction of analysts from the renowned American banking institute, Goldman Sachs, who in April 2009 predicted that the Czech crown would be a clear winner between other Central and East European currencies. According to these same analysts, the region is going to slowly recover from the global credit crisis. “Even though we are going to see another decline in the value of the currencies over the course of the next three months, our long term prediction has been improved across the board” said the economist Mr. Goldman when asked by Rory MacFargquhar, representative of the Bloomberg Agency in Moscow.

During the course of the next quarter, the Czech currency will weaken to 27.5 CZK / EUR. Despite this trend it is conceivable that the exchange rate will strengthen in favor of the Czech crown and we could see a change from 26.6 to 25.5 CZK / EUR.

It should be noted that three months ago the same analysts from Goldman Sachs did not foresee the future as being as bright as they do now. In January they predicted in the course of six months that the exchange rate of the Czech crown to the Euro would increase to 32 CZK / EUR and in a year's time that the exchange rate would drop to 30 CZK / EUR.

What made them improve their prognosis? According to analysts, what changed the course of events was the fact that leaders of the twenty most important and powerful economies of the world decided to draw more money from the International Monetary Fund. The risks of outflow of capital from the region decreased due to the western banks declaring that they would not abandon the area. According the Goldman Sachs, the economic climate in the USA also began to stabilize. [10]

It is evident from this case that even specialists in the field, who earn their living from predicting the course of the exchange rates of the world's currencies, are not able to make relevant predictions 6 months in advance. Is it therefore possible to now accurately predict the exchange rate of the Czech crown versus foreign currencies in the coming five to ten years?

Tab. 2: Area 1.2 - Support of the projects improving the quality of the regional transport services

Method of announcement	www.rada-severovychod.cz [11]
Date of announcement	2.5.2008
Submissions deadline	30.6.2008 by 12 o'clock
Funding allocation for 5th round on 4.1.from SF (CZK)	537.255.038,- CZK
Total number of submissions	23
Total number of eligible expenses (CZK)	942.936.813,93 CZK
RR donations (CZK)	803.859.558,38 CZK
Number of selected projects	19
Total amount of approved RR donations (CZK)	684.936.443,26 CZK
SF benefit (CZK)	629.402.318,90 CZK

Source: [11] internal formatting

What influence can the fluctuations in the exchange rate of the Czech crown to EUR have on projects developed by villages and cities? As an example we can take note of the sixth round of the announcement of the first axis: The development of transport infrastructure, area 1.2. (see Tab. 2), Support of the projects improving the quality of the regional transport services, where an amount of CZK 629,402.318 was promised to be allocated from the EU structural funds (the exchange rate on the 30th July 2008 was 23,895 CZK / EUR). This amount translates into EUR 26,340.335. If we take into account the exchange rate of Czech crown to EUR, which is 26,820 CZK / EUR, we will receive CZK 706,447.784. In this case we just gained an exchange rate income of CZK 77,045.466, which means that there is a difference of about CZK 4,055.024 per project (assuming that all projects were allocated the same amount of finances). The exchange rate had a direct impact on the difference in the project budget (in this case positive).

What about the opposite scenario? What if there is a project with a certain budget that would not receive a grant of CZK 4,000,000 due to the fluctuation in the exchange rate? How could we bring such a project to successful completion? Where would the city or village get the additional finances needed?

A possible solution for countering the volatility of the exchange rate of the Czech crown to EUR is to negotiate the contract with suppliers in the EUR currency. All following orders and invoices for any work done will then be billed in the EUR currency, as stated in the contract. This solution thus transfers the exchange rate volatility risk from the investor (village or city) to the contracted supplier.

European Union Funds: In Conclusion

Based on the aforementioned information it is apparent that the adoption of the unified Euro currency by the Czech Republic would have a positive influence on the ability of cities and villages to create more accurate budget calculations. Then, as it regards these budgets, the only factor that the subjects in question would have to calculate would be inflation rate, which in the European Monetary Union (EMU) can differ only for 1,5%

from 3 countries with the lowest inflation rate in the European Union, which is considerably less than the volatility of the exchange rate of the Czech crown to EUR.

The villages lose motivation to realize any project connected to financing in a foreign currency. They are afraid of the complications that, due to the limited nature of their budgets, can dramatically influence their future financial management. Based on the aforementioned points we can say that the amount of reserves set aside in the budget plan, to counter the effects of the exchange rate fluctuations, it will negatively impact the financial health of the village and result in widespread insolvency.

The current macro-economic situation unfortunately causes losses in income in both city and village budgets due to reduced revenue collection. The principle behind the European Funds co-financing requires at least 40 % participation from village and city budgets to cover the project costs. This limitation results in the villages and cities not being able to finance their part of the project costs and therefore they will not receive any funding from the European Structural Funds. The final outcome comes in the form of premature cancellation of the project and cities and villages must then return any previously received funding from the European Structural Funds. A simple solution for this situation does not exist. It comes through long term thoughtful investments and reserve funds creation, in the case that cities and villages lack finances.

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Time Series Analysis and Their Development Prediction of Gross Premium Written of Life and Non- Life Insurance in the Frame of the Czech Insurance Market

Abstract

This paper deals with the time series analysis and their development prediction of gross premium written of life and non-life insurance, in the frame of the Czech insurance market by years 2009 and 2010. The time series are defined as a sequence of data points, measured typically at successive times, spaced at time intervals. Data in this modelling are gross premium written of life and non-life insurance at years 1995 – 2008. This analysis doesn't include economic factors (for example: inflation, economic progress, economic recession, economic shocks). The gross premium written is in the analysis of Czech insurance market one of very important economic indicators. The Czech insurance market ranks with small insurance market, but the sum of gross premium written from insurance companies is in sum of year 2008 in the amount of 139 851 960 000 CZK, number of insurance contracts is 25 205 182 and number of employees in insurance companies is 14 770. The Czech insurance market consists of 56 insurance companies and district offices of foreign insurance companies (in April 30 2009). The proportion of gross premium written of life and non-life insurance is 60:40 in the frame of European Union insurance market and 40:60 in the Czech insurance market. In the future the proportion can be assumed that the situation in the Czech insurance market will be the same as in the frame of European Union insurance market. The prediction of future development of gross premium written of life and non-life insurance will be presented in this paper.

Key Words

time series, analysis, prediction, gross premium written, life insurance, non-life insurance

JEL Classification:

C12, C15, C22, G22

Introduction

By the characterising the Czech insurance market we will appear from several basic economic indicators (for example: gross premium written of life and non-life insurance, number of insurance contracts, number of employees in insurance companies, etc.). In this paper very important economic indicator will be analyzed, namely gross premium written of life and non-life insurance at years 1995 - 2008 and their development prediction by years 2009 and 2010. About time series analysis there exist many textbooks, see Hamilton (1994) [3]; Hindls, Hronová and Novák (2000) [1]; Chatfield (2003) [4] and Tsay (2005) [2].

In the first part of this paper elementary characteristic development of time series will be analyzed.

The second part will be aimed at identification of the trend; by means of hypothesis tests acceptable model with prediction by the years 2009 and 2010 will be chosen. The estimate of trend function values will be analyzed by using the statistic program Statgraphic Centurion XV. In the final tables RMSE (root mean square error), I^2 adjusted (adjusted index of determination), t-tests (tests criterion), P-values (critical significance limits) and total F-test will be presented.

1. Elementary characteristic development of time series

For calculation of elementary characteristic development of time series it is necessary to adduce data about development of gross premium written of life and non-life insurance and their percentage proportion (see table 1 and figure 1).

Tab. 1 Development of Gross Premium Written of Life and Non-life Insurance

Year (t)	Gross premium written of life insurance in thousands CZK (y_l)	Gross premium written of non-life insurance in thousands CZK (y_n)	Total of gross premium written in thousands CZK	Percentage share of gross premium written of life insurance in total gross premium written	Percentage share of gross premium written of non-life insurance in total gross premium written	Percentage share check
1995	9341715	24453990	33795705	27,64172252	72,35827748	100
1996	10937216	30187465	41124681	26,5952604	73,4047396	100
1997	12692286	35292424	47984710	26,45068815	73,54931185	100
1998	15089372	40547974	55637346	27,12094139	72,87905861	100
1999	19793331	42990785	62784116	31,52601687	68,47398313	100
2000	22770132	47819214	70589346	32,25717943	67,74282057	100
2001	28281966	52462237	80744203	35,02662104	64,97337896	100
2002	34036346	56624001	90660347	37,54270431	62,45729569	100
2003	41128802	64817070	105945872	38,82058	61,17942	100
2004	44201009	68377194	112578203	39,26249294	60,73750706	100
2005	44954269	72125154	117079423	38,39638755	61,60361245	100
2006	47233389	74889748	122123137	38,67685531	61,32314469	100
2007	54128225	78767841	132896066	40,72974214	59,27025786	100
2008	56909094	82942866	139851960	40,69238214	59,30761786	100

Source: Czech National Bank, own elaboration

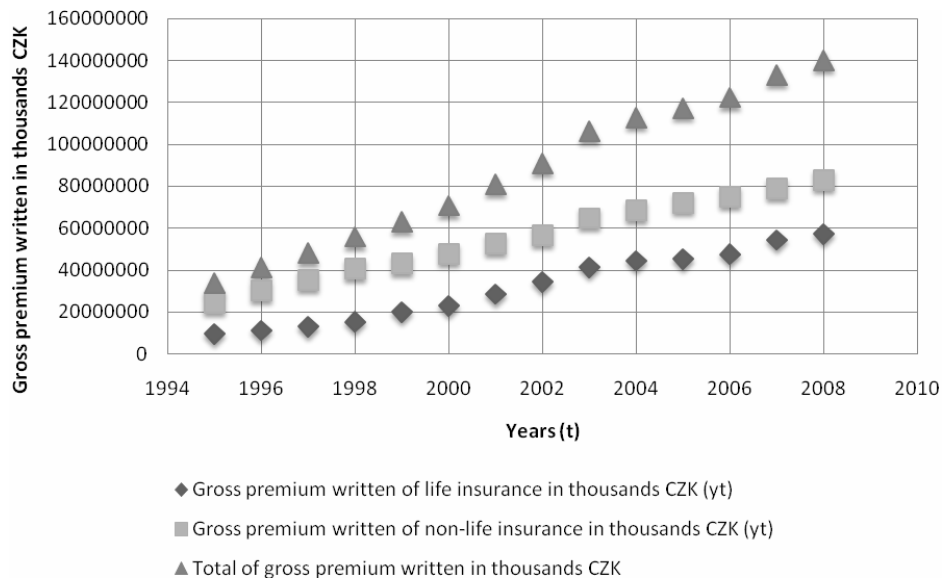


Fig. 1 Development of gross premium written

Source: own elaboration from table 1

The values y_t for life insurance are in the table 2 and for non-life insurance in the table 3. The subscript t in next equations characterises time period (in this paper one year).

The results of next five indicators [1]:

- the first difference (absolute gain, ${}_1\Delta_t$), the second difference

$${}_2\Delta_t = {}_1\Delta_t - {}_1\Delta_{t-1} \quad (1)$$

- the growth coefficient

$$k_t = \frac{y_t}{y_{t-1}} \quad (2)$$

- the growth rate

$$T_{y_t} = k_t \cdot 100 \quad (3)$$

- the increase rate

$$\delta_{y_t} = T_{y_t} - 100 \quad (4)$$

are presented for life insurance in the table 2 and for non-life insurance in the table 3. The average absolute gain (5) and the average growth coefficient (6) belong to the important characteristics [1].

$${}_1\bar{\Delta} = \frac{\sum_{t=2}^n {}_1\Delta_t}{n-1} = \frac{(\cancel{y_2} - y_1) + (\cancel{y_3} - \cancel{y_2}) + \dots + (y_n - \cancel{y_{n-1}})}{n-1} = \frac{y_n - y_1}{n-1} \quad (5)$$

The results of average absolute gain is for life insurance 3 659 029 150 CZK and for non-life insurance 4 499 144 310 CZK.

$$\bar{k} = \sqrt[n-1]{\frac{\cancel{y_2}}{y_1} \cdot \frac{\cancel{y_3}}{\cancel{y_2}} \cdot \dots \cdot \frac{y_n}{\cancel{y_{n-1}}}} = \sqrt[n-1]{\frac{y_n}{y_1}} \quad (6)$$

where n is the number of values (in this paper $n = 14$).

The results of average growth coefficient are for life insurance 1,14912103 (which corresponds to 114,9 %) and for non-life insurance 1,098505547 (which corresponds to 109,9 %).

Tab. 2 Elementary characteristic development of gross premium written of life insurance

Year (t)	Gross premium written of life insurance in thousand CZK (y_t)	${}_1\Delta_t$	${}_2\Delta_t$	k_t	T_{yt}	δ_{yt}
1995	9341715	x	x	x	x	x
1996	10937216	1595501	x	1,170793	117,0793	17,07931574
1997	12692286	1755070	159569	1,160468	116,0468	16,04677095
1998	15089372	2397086	642016	1,188862	118,8862	18,8861644
1999	19793331	4703959	2306873	1,31174	131,174	31,17398789
2000	22770132	2976801	-1727158	1,150394	115,0394	15,03941403
2001	28281966	5511834	2535033	1,242064	124,2064	24,20642094
2002	34036346	5754380	242546	1,203465	120,3465	20,34646389
2003	41128802	7092456	1338076	1,208379	120,8379	20,837889
2004	44201009	3072207	-4020249	1,074697	107,4697	7,469721583
2005	44954269	753260	-2318947	1,017042	101,7042	1,704169242
2006	47233389	2279120	1525860	1,050699	105,0699	5,069863332
2007	54128225	6894836	4615716	1,145974	114,5974	14,59737729
2008	56909094	2780869	-4113967	1,051376	105,1376	5,137558085

Source: Czech National Bank, own elaboration

Tab. 3 Elementary characteristic development of gross premium written of life insurance

Year (t)	Gross premium written of non-life insurance in thousand CZK (yt)	1Δt	2Δt	kt	Tyt	δyt
1995	24453990	x	x		x	x
1996	30187465	5733475	x	1,23446	123,446	23,44596935
1997	35292424	5104959	-628516	1,169109	116,9109	16,91085687
1998	40547974	5255550	150591	1,148914	114,8914	14,89143959
1999	42990785	2442811	-2812739	1,060245	106,0245	6,024495823
2000	47819214	4828429	2385618	1,112313	111,2313	11,23131155
2001	52462237	4643023	-185406	1,097095	109,7095	9,709534331
2002	56624001	4161764	-481259	1,079329	107,9329	7,932875603
2003	64817070	8193069	4031305	1,144693	114,4693	14,4692513
2004	68377194	3560124	-4632945	1,054926	105,4926	5,492571633
2005	72125154	3747960	187836	1,054813	105,4813	5,481301265
2006	74889748	2764594	-983366	1,038331	103,8331	3,833051088
2007	78767841	3878093	1113499	1,051784	105,1784	5,178403057
2008	82942866	4175025	296932	1,053004	105,3004	5,300418225

Source: Czech National Bank, own elaboration

2. Identification of the trend

The results of tests of parameters of individual trend functions are in the table 4 and table 5.

The root mean squared error “RMSE” (7) is calculated as:

$$RMSE = \sqrt{\frac{1}{n} \sum (y_i - \hat{T}_i)^2} \quad (7)$$

The adjusted index of determination (8) is defined by:

$$I_{adjusted}^2 = 1 - \frac{(n-1) \left[\sum (y_i - Y_i)^2 \right]}{(n-p) \left[\sum (Y_i - \bar{y})^2 + \sum (y_i - Y_i)^2 \right]} = 1 - \frac{(n-1)S_R}{(n-p)(S_T + S_R)} = 1 - \frac{(n-1)S_R}{(n-p)S_y} \quad (8)$$

where S_T is the theoretical sum of squares and S_R is residual sum of squares. Test criterion by the prove the hypothesis H_0 has distribution F by $(p-1)$ and $(n-p)$ degrees of freedom.

According to the results of RMSE, adjusted index of determination, t-tests, P-values and total F-test the linear trend is available [2], [3], [4]. The forecast of this model see figure 2.

Tab. 4 Linear, quadratic and exponential trend (life insurance)

Trend	Linear trend	Quadratic trend	Exponential trend
Trend function	$T_t = \beta_0 + \beta_1 t$	$T_t = \beta_0 + \beta_1 t + \beta_2 t^2$	$T_t = e^{(\beta_0 + \beta_1 t)}$
Trend function forecast	$\hat{T}_t = 1926660000 + 3947850000t$	$\hat{T}_t = 3318750000 + 3425810000 \cdot t + 34802,2 \cdot t^2$	$\hat{T}_t = e^{(16,009 + 0,146211 \cdot t)}$
RMSE	2 262 570 000	2 294 330 000	5 380 940 000
$I^2_{\text{adjusted}} (\%)$	98,1551	98,1029	95,6964
$H_0 :$	$\beta_0 = 0$	$\beta_0 = 0$	$\beta_0 = 0$
$H_1 :$	$\beta_0 \neq 0$	$\beta_0 \neq 0$	$\beta_0 \neq 0$
$\hat{\beta}_0$	1 926 660 000	3 318 750 000	16,009
Tests criterion t-test	1,50843	1,55248	219,012
P-value	0,157313 > 0,05	0,148827 > 0,05	0,000000 < 0,05
Test conclusion	Disapprove H_1 , prove H_0 .	Disapprove H_1 , prove H_0 .	Disapprove H_0 , prove H_1 .
$H_0 :$	$\beta_1 = 0$	$\beta_1 = 0$	$\beta_1 = 0$
$H_1 :$	$\beta_1 \neq 0$	$\beta_1 \neq 0$	$\beta_1 \neq 0$
$\hat{\beta}_1$	3 947 850 000	3 425 810 000	0,146211
Tests criterion t-test	26,3178	5,22514	17,0315
P-value	0,000000 < 0,05	0,000283 < 0,05	0,000000 < 0,05
Test conclusion	Disapprove H_0 , prove H_1 .	Disapprove H_0 , prove H_1 .	Disapprove H_0 , prove H_1 .
$H_0 :$		$\beta_2 = 0$	
$H_1 :$		$\beta_2 \neq 0$	
$\hat{\beta}_2$		34802,2	
Tests criterion t-test		0,818551	
P-value		0,430419 > 0,05	
Test conclusion		Disapprove H_1 , prove H_0 .	

$H_0 :$	The linear trend isn't acceptable model.	The quadratic trend isn't acceptable model.	The exponential trend isn't acceptable model.
$H_1 :$	Non H_0	Non H_0	Non H_0
F-test	692,62	337,13	290,07
P-value	0,0000 < 0,05	0,0000 < 0,05	0,0000 < 0,05
Test conclusion	Disapprove H_0 , prove H_1 .	Disapprove H_0 , prove H_1 .	Disapprove H_0 , prove H_1 .

Source: own elaboration

Tab. 5 Linear, quadratic and exponential trend (non-life insurance)

Trend	Linear trend	Quadratic trend	Exponential trend
Trend function	$T_t = \beta_0 + \beta_1 t$	$T_t = \beta_0 + \beta_1 t + \beta_2 t^2$	$T_t = e^{(\beta_0 + \beta_1 t)}$
Trend function forecast	$\hat{T}_t = 21303000000 + 4514820000 \cdot t$	$\hat{T}_t = 19541500000 + 5175390000 \cdot t - 44038,1 \cdot t^2$	$\hat{T}_t = e^{(17,0952 + 0,0890969 \cdot t)}$
RMSE	1 387 380 000	1 259 530 000	4 384 560 000
$I^2_{\text{adjusted}} (\%)$	99,4631	99,5575	95,6515
$H_0 :$	$\beta_0 = 0$	$\beta_0 = 0$	$\beta_0 = 0$
$H_1 :$	$\beta_0 \neq 0$	$\beta_0 \neq 0$	$\beta_0 \neq 0$
$\hat{\beta}_0$	21 303 000 000	19 541 500 000	17,0952
Tests criterion t-test	27,1998	16,6516	381,725
P-value	0,000000 < 0,05	0,000000 < 0,05	0,000000 < 0,05
Test conclusion	Disapprove H_0 , prove H_1 .	Disapprove H_0 , prove H_1 .	Disapprove H_0 , prove H_1 .
$H_0 :$	$\beta_1 = 0$	$\beta_1 = 0$	$\beta_1 = 0$
$H_1 :$	$\beta_1 \neq 0$	$\beta_1 \neq 0$	$\beta_1 \neq 0$
$\hat{\beta}_1$	4 514 820 000	5 175 390 000	0,0890969
Tests criterion t-test	49,0834	14,3789	16,9398
P-value	0,000000 < 0,05	0,000000 < 0,05	0,000000 < 0,05
Test conclusion	Disapprove H_0 , prove H_1 .	Disapprove H_0 , prove H_1 .	Disapprove H_0 , prove H_1 .
$H_0 :$		$\beta_2 = 0$	
$H_1 :$		$\beta_2 \neq 0$	
$\hat{\beta}_2$		-44 038,1	
Tests criterion t-test		-1,88675	
P-value		0,085852 > 0,05	
Test conclusion		Disapprove H_1 , prove H_0 .	
$H_0 :$	The linear trend isn't acceptable model.	The quadratic trend isn't acceptable model.	The exponential trend isn't acceptable model.
$H_1 :$	Non H_0	Non H_0	Non H_0
F-test	2 409,18	1463,34	286,96
P-value	0,0000 < 0,05	0,0000 < 0,05	0,0000 < 0,05
Test conclusion	Disapprove H_0 , prove H_1 .	Disapprove H_0 , prove H_1 .	Disapprove H_0 , prove H_1 .

Source: own elaboration

According to the results of statistic program Statgraphics the predicted values of gross premium written of life insurance with 95 % confidence level will be in the year 2009 in the interval 55 483 400 000 CZK – 66 805 300 000 CZK (with point prediction 61 144 400 000 CZK) and in the year 2010 in the interval 59 282 200 000 CZK – 70 902 200 000 CZK (with point prediction 65 092 200 000 CZK).

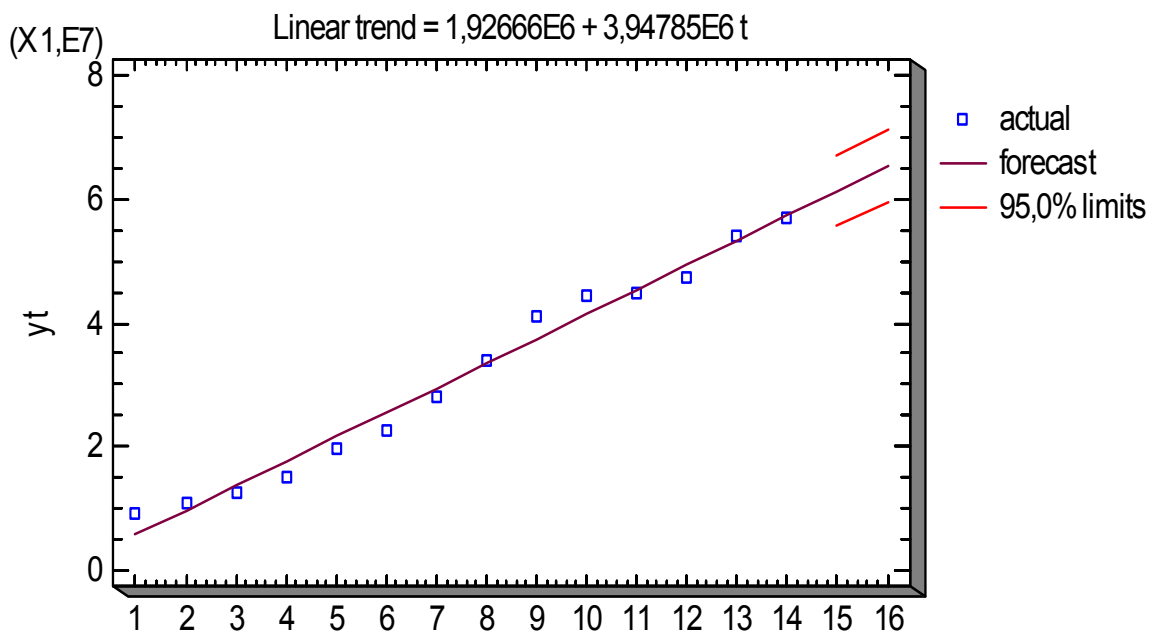


Fig. 2 Time series equalization by linear trend and forecast of development by next two years

Source: own elaboration

The gross premium written with 99 % confidence level will be in the year 2009 in the interval 53 208 100 000 CZK – 69 080 700 000 CZK (with point prediction 61 144 400 000 CZK) and in the year 2010 in the interval 56 092 200 000 CZK – 73 237 400 000 CZK (with point prediction 65 092 200 000 CZK).

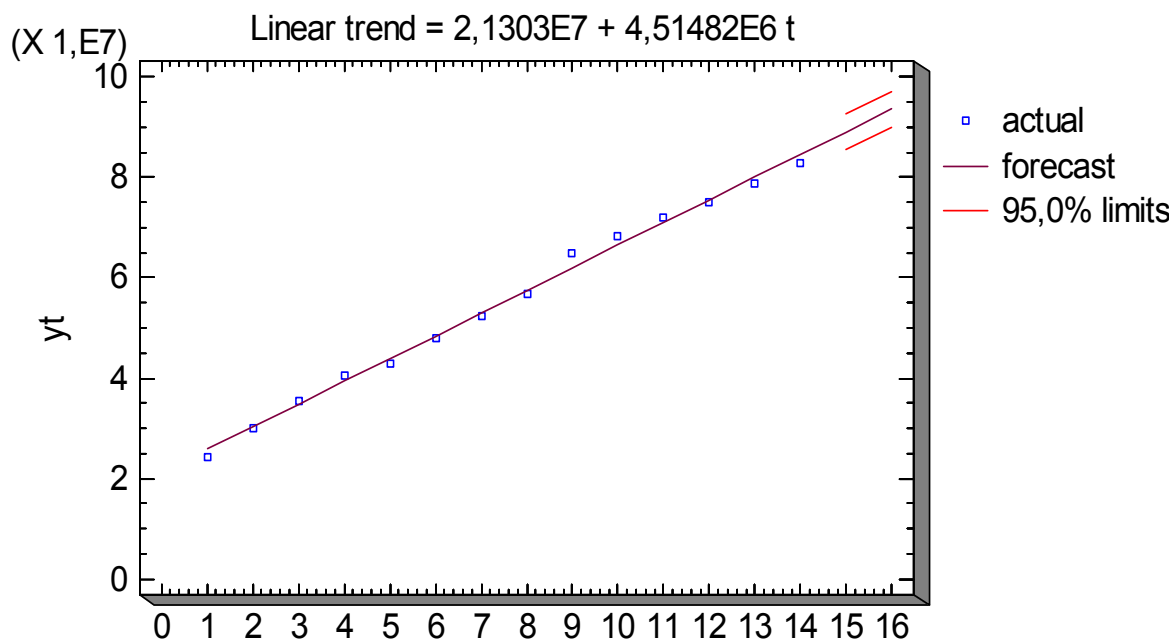


Fig. 3 Time series equalization by linear trend and forecast of development by next two years

Source: own elaboration

According to the results of RMSE, adjusted index of determination, t-tests, P-values and total F-test the linear trend is available. The forecast of this model see figure 3.

According to the results of statistic program Statgraphics the predicted values of gross premium written of life insurance with 95 % confidence level will be in the year 2009 in the interval 85 540 000 000 CZK – 92 496 500 000 CZK (with point prediction 89 025 300 000 CZK) and in the year 2010 in the interval 89 977 500 000 CZK – 97 102 700 000 CZK (with point prediction 93 540 010 000 CZK).

The gross premium written with 99 % confidence level will be in the year 2009 in the interval 84 158 800 000 CZK – 93 891 700 000 CZK (with point prediction 89 025 300 000 CZK) and in the year 2010 in the interval 88 545 600 000 CZK – 97 237 400 000 CZK (with point prediction 93 540 010 000 CZK).

Conclusion

The development of gross premium written of life insurance recorded in the end of nineties and in the beginning of the new millennium dynamic grows (the greatest in years 2003 and 2007). Slight stagnation of this development was in the years 2000 and 2005. According to the prediction grows in gross premium written of life insurance will be preserved.

The development of gross premium written of non-life insurance recorded the most dynamic grows in the year 2003. This analysis doesn't include economic factors (for example: inflation, economic progress, economic recession, economic shocks).

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Stimulating Regional Economy Competitiveness through the Formation of Clusters

Abstract

Clusters are generally perceived as large conglomerations of business organizations, governmental bodies, academic and educational institutions. Many economists believe that extensive clusterization is one of the main instruments to stimulate the growth of regional economies. Moreover, it is also seen as a force to develop and introduce them into the global markets. Traditions and existing business patterns dominate in the formation of various interorganizational relations: industrial regions, business systems, science and technology parks, competence networks, associations, partnerships, clusters, etc. It must be emphasized that all of the aforementioned business structures have at least one thing in common – they are designed to seek after maximum benefits (profits, added value, etc.) through the combination of competition and cooperation, also known as “coo-petition”. Competitive companies inside a cluster contribute to the growing competitiveness of economic sectors, regional and national economies. The competitiveness of cluster companies lies on their productivity, innovativeness and ingenious business solutions. The latter benefits appear as a result of knowledge, skills, competencies, information, know-how, and resources exchange among the companies that belong to the same cluster. Co-opetition also works as a stimulus in the processes of increasing innovation and efficiency. The formation of clusters can be observed all over the world. Regions that are characterized by large conglomerations of cluster companies play the role of economy catalysts. The aim of this study is to analyze the importance and weight of regional clusters in the context of regional economy development. In order to achieve the aim of the study the following objectives have been set: 1) to investigate and systematize different aspects of cluster influence on competitiveness; 2) to analyze the competitive role of clusters on the company, economic sector, regional and national levels; 3) to systematize and evaluate the advanced experience (practice) of developed countries in the formation of regional clusters. The study has been carried out, using the scientific research methods of systematic-logical analysis, and synthesis. It can be deduced that cluster companies can serve as innovators, initiators, competitors, and information carriers. Thus, the concentration of companies in urban and rural regions is a factor of increasing social and economic welfare, for they induce the creation of new jobs, growth of investment and revenue. The formation and development of clusters should become an integrative part of regional and macroeconomic policies of all developing countries.

Key Words

markets, regional economy, clusters, clusterization, competitiveness

JEL Classification:

F01, R11

Introduction

The era of global trade and competition results in a number of economic paradoxes: one of them is globalization vs. localization. It is generally acknowledged that technological advancement plays a vital part in the decreasing importance of traditional allocation of resources. Business organizations are able to share their resources, technologies, and capital via the networks of corporative relations. There is no necessity to operate close to the largest markets in order to serve them efficiently. Globalization forces tend to win over national governments in the leadership battle for influence on national economies and business organizations. The aforementioned reasons propose that localization has lost its relevance in the modern economic environment. Nevertheless, the phenomenon of clusterization manifests a strong impact on national and regional competitiveness. It must be emphasized that even under the conditions of globalization clusters are still associated with local concentrations of companies, organizations, and institutions. All the more – they are characteristic of nearly every national, regional, and urban economy, especially in economically developed countries. This proves the topicality of regional development and localization.

Problem and novelty of the study

The global success of clusters (and similar agglomerations) in the process of regional development has been analyzed in numerous scientific studies [1-16]. The authors, including Bernat (1999), Almeida and Kogut (1997), Porter (1990, 1998, 2000, 2003), Gordon and McCann (2005), Isbasoiu (2007) et al., have greatly contributed to the analysis of regional economies and their competitiveness factors. Even though it is widely acknowledged that regions that are characterized by the appearance of clusters play the role of economy catalysts, there are no scientific studies that analyze the importance of clusters on the regional level in Lithuania. Thus, this study is important as an attempt to systematize the advanced practice of economically developed countries in order to draw the guidelines and stimulate the growth of Lithuanian regions, especially under the harsh conditions of the economic crisis.

Object, aim, and objectives of the study

The object of this study are regional clusters, as a source of competitiveness. The aim of this study is to investigate the importance and weight of regional clusters in the context of regional economy development. Once the aim is achieved, it is possible to draw the guidelines for the formation of regional clusters in Lithuania.

The objectives of this study are as follows:

- to investigate and systematize different aspects of cluster influence on competitiveness;
- to analyze the competitive role of clusters on the company, economic sector, regional and national levels;
- to systematize and evaluate the advanced experience (practice) of developed countries in the formation of regional clusters.

Methods of research

The following scientific methods have been used in order to achieve the aim and objectives of this study: systematic-logical analysis, and synthesis.

3. Conception of clusters and their influence on competitiveness

Clusters are geographically close groups of companies and associated institutions. They are united by common goals, technologies, resources, and know-how. They often form around cities or moderate regions, because of convenient logistics, transport and communications, qualified workforce, and other advantages.

It must be emphasized that clusters affect competitiveness in a variety of ways. First, they increase productivity and innovativeness of companies; second, they contribute to added value, and release the existing competitive potential of companies; and last but not least – they accelerate the creation of new businesses [1,2,3,4]. Clusters also tend to create various competitiveness-related possibilities for both companies and academic institutions (see Chart 1).

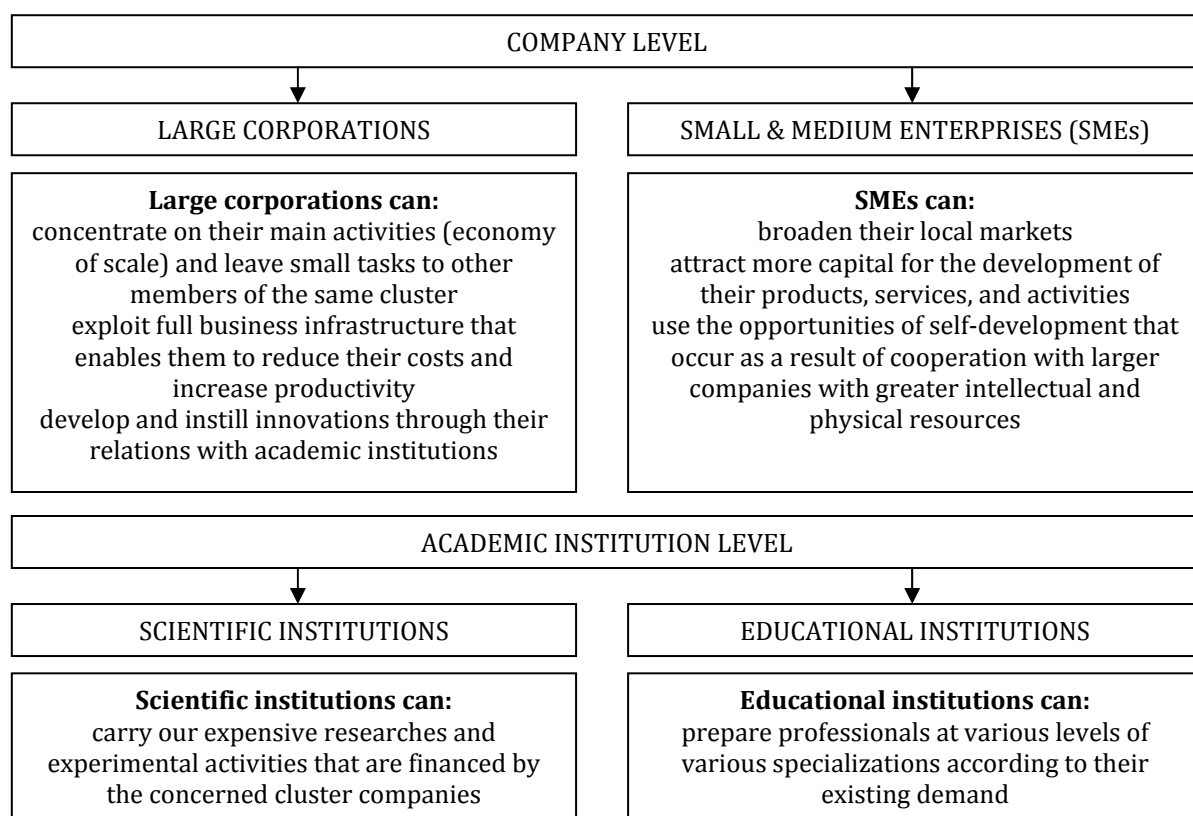


Chart 1. Cluster influence on competitiveness of companies and academic institutions

Created by the authors, according to [5], 2009

It can be stated that various organizations may benefit from being part of a cluster and most of the benefits arise from their cooperative potential.

As clusterization has proven itself to be a powerful instrument of competitive advantage, business companies and organizations in Lithuania have a strategic task to improve their position in the markets of European Union, as well as find their niches on the global scale. Unfortunately, practical experience shows that single companies have to struggle harder in order to be efficient and successful in the long run. They are forced to specialize in one or several activities to be productive; however, they are also in need of substantial business infrastructure in order to implement the economy of scale. Therefore, business organizations and associated institutions believe that the aforementioned problems might be solved by cooperation. It is commonly believed that clusters, as a mode of cooperation, are particularly efficient in the development of regional companies and economies.

According to [3,6,7,8], productive cluster companies increase the productivity of other companies in the same cluster, as well as efficiency of macro systems – economic sectors, regions, and countries. It can be concluded that being part of a successful cluster is beneficial not only to a single organization or group of companies, but also to the large-scale players and economic systems.

4. Formation of clusters: the advanced experience of economically developed countries and prospects in Lithuanian regions

The correlation between innovation, agglomeration economies and regional development has been analyzed by a number of scientists, embracing [9,10,11], et al. All of them emphasize the importance of labour mobility, information exchange, informal communication, and localization, as dominating factors in the competitiveness formation process. It is generally acknowledged that advantages of localization and cooperation tend to surpass the expected costs of clusterization. According to [1,4,12], regional and national competitiveness is dependant on qualitative (or incremental) competition that is determined by the generation of new ideas, services, and commodities. Industrial clusters are typical to cities for they need a certain level of infrastructure – communication channels, roads, logistic services, etc. However, industrial clusters may be beneficial to rural territories, too: they attract investment, generate revenue to the locals, and increase the competitiveness of a cluster-region in comparison to non-cluster regions.

One of the first notional industrial clusters, known as Silicon Valley, was founded in California, USA. This hi-tech cluster, which is considered to be a birthplace of microelectronics, is also famous for being copied by various cities and regions that aim to create their own “silicon valleys” – Helsinki, Tel-Aviv, or Cambridge. Nevertheless, according to [2], most of these clusters either have no internal market, or it is rather insignificant in terms of size. It can be deduced that successful regional clusters have to choose between two options – creating the internal market (local demand) or going global, especially in human and financial capital-susceptive fields.

Various cluster-like agglomerations appear in a number of world regions: Costa Rica, Venice (Italy), Campinas (Brazil), Bangalore (India), etc. Their experience might be useful to Lithuania, since some of them have developed quite recently. As stated in the following scientific studies [13,14,15,16], a strong base of academic institutions can also add to the formation of competitive regional clusters. It is one of the factors that can be controlled, unlike geographic situation, population, and natural resources. It can be added that the aforementioned regions attach great significance to the investment in R&D (research and development) activities, while FDI and R&D indicators in Lithuania are still niggardly competitive in comparison to EU average.

Cluster systems that are based on biotechnology intensively develop in South Sweden, around the cities of Stockholm and Lund [5]. Lithuanian regions may use the pattern of a successful biotechnology cluster in Sweden to build its analogue in Lithuania. During the last years the industry of biotechnology has developed and the turnover of Lithuanian biotechnology companies and laboratories has increased by several times. Lithuanian regions that are incapable of creating and operating a cluster themselves may benefit from cooperation with geographically close regions in other countries: for instance, Helsinki telecommunication technologies cluster, which is dominated by the global company of Nokia, embraces neighbour regions, including some parts of Estonia.

The formation procedure of regional clusters in Lithuania is schematically illustrated in Chart 2.

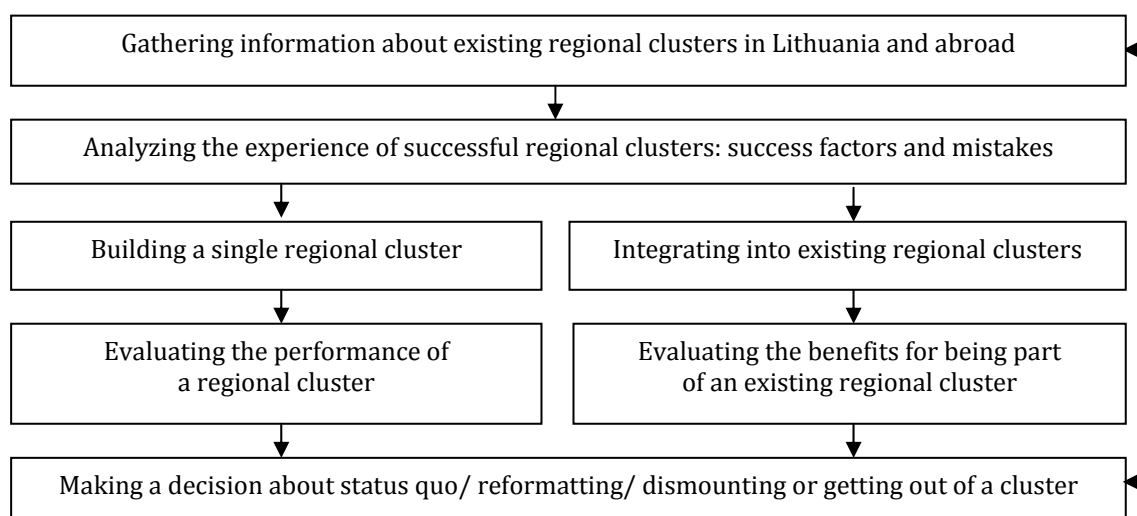


Chart 2. Formation algorithm of a regional cluster in Lithuania

Created by the authors, 2009

According to the chart (see Chart 2), to start a regional cluster formation procedure, it is important to gather all available information about the existing regional clusters in Lithuania and other countries. The analysis of their success factors, possible risks and mistakes could serve as the guidelines for building an efficient local cluster. Before building a cluster, the option to integrate into an existing Lithuanian or international cluster could be considered, too. It is also vitally important to evaluate the performance of a cluster once in a while, in order to find out if it is efficient.

Conclusion

Clusters increase the competitiveness of business organizations by stimulating their coopetition, which equals cooperation plus competition. Coopetition results in higher specialization, while the latter means increased productivity and economy of scale. Because of links between companies and academic institutions, clusters increase the innovativeness, creativity, and ingeniousness of their member organizations. Hereby, the competitiveness of cluster companies, sectors, regions, and countries tends to improve.

Companies benefit from specialization and exchange of information, know-how, skills, resources, and competencies, while clusterized sectors improve their indicators, such as share (%) of GDP, added-value, etc. Regions and countries augment their competitiveness through the development of industry, growing investment, and increased welfare of their inhabitants.

Regional clusters can be formed and developed in a variety of ways. Countries that have a large internal market (such as the US) may develop self-sufficient local clusters that do not depend on the external markets, while countries with a limited local demand may develop clusters that have to consider the option of expanding to the global markets. Countries, regions, and cities, such as Costa Rica, Venice (Italy), Campinas (Brazil), and Bangalore (India) invest in the factors that can be controlled in the process of cluster formation, for instance R&D, human resources (education, training); support the cooperation of companies and academic institutions. Small countries, such as Lithuania, should follow their example in regional cluster building.

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Role of Educational Establishment in System of Competitiveness Increase of Economic Players

Abstract

In the modern society, knowledge and information and also their accessibility and quality are becoming more significant. The main source of acquiring knowledge is education that contributes to the growth of the society's intellectual potential.

There is provided a description of current conditions of an education establishment development in the paper. It is pointed out that significant human, financial and tangible resources are involved in the sphere of the higher education nowadays. Modern education establishments switch to a qualitatively new stage of development. In the first place, it concerns the choice of strategic goals and ways of their achievement.

Factors that increase competitiveness of an educational establishment are analyzed. The solution to the problem of increasing the education establishment competitiveness may be achieved on the basis of forming and effectively using intellectual capital and also on the basis of integrating innovative strategies of higher education establishment growth and enterprises. Innovative development lines of the higher education establishment are suggested in order to form a strategy and increase competitiveness of economic players.

Adoption of innovative factors of development influences all elements of the economic system. An education establishment should react promptly to changing needs of the society. The necessity to conform educational standards to requirements of an employer and society and also to improve education quality at all levels is a new challenge to educational system. It requires educational establishments to fulfill the mission of creating innovative programs of education, forming suggestions on updating educational standards, implementation of reforms in educational system management to improve the quality of education and increase the level of competence, graduates' knowledge.

Key Words

competitiveness, innovations, innovation lines, innovation strategy, higher education establishment, knowledge economy, strategic goals, strategy forming

JEL Classification:

O15, O31, I23

Introduction

Knowledge and information and their accessibility and quality are becoming more and more important in the modern world. For instance, in industrially developed countries more than 85 % of economic growth is ensured by knowledge that is one of the most important resources in information-oriented society. The main source of acquiring knowledge is education which favors the growth of the society's intellectual potential. In an era of globalization and new technologies investments into education are becoming

of vital importance as they act like contribution into the country's future. In creative economy it is education that is becoming the main source of forming competitive advantages of economic players, because it enables to expand the level of competence of different personnel groups.

Scenarios of the world development, worked out by the largest international organization up to now, by all means include improvement of human capital quality that determines perspectives of postindustrial development. At the moment, the humanity enters a new innovation phase of its development that may be characterized as "a phase of establishing knowledge-oriented society". In this society a number of relationships is deepening: knowledge flow between countries; international partnership in fields of science, innovations, education and production; cooperation between corporations, venture firms, research organizations and universities increases.

Institutions of higher education, being a part of Russian economic system, have also been involved into market relationships. However, this process occurred in educational sphere significantly later than in productive industry. Despite this, higher education is still a crucial field of activities and is of high social-economic importance in the country's economic system. It has a considerable influence on forming the intellectual potential, determining the effective development strategy at industries of all home economy branches.

1. Description of current conditions of an education establishment development

The role of education in social reproduction is constantly increasing. For the last years, the number of citizens joining higher education establishments has substantially increased. However, the share of social costs in the GDP that is used for education is still insignificant in the home economy, compared with industrially developed countries.

At the moment, significant human, financial and tangible resources are involved in the educational sphere. Although higher school in Russia is significantly controlled by the government, nevertheless, it has reached a qualitatively new stage of development. It especially concerns the choice of strategic goals and the ways to achieve them. In the last decade, taking into consideration market economy requirements, an independent sphere of business education formed in the home educational system, with the center of gravity in the "Master of Business Education" (MBA) program. Weakening government regulation introduced new elements of management that had not been used before into activities of the Russian educational establishments. State higher educational establishments have gained an opportunity to carry out teaching on the paid basis, go into business, and independently define the volume of service and their value. With increasing opportunities, the responsibility of higher educational establishments for the results of activities and their own prosperity has gone up as well.

Thus, the higher education system is to be considered in the modern environment as a multifunctional complex of the national economy that uses a significant number of different resources. Thereupon, need in the development of efficient management

system of these resources arises. For instance, the financial resources management system of an educational establishment must enable distribution of internal and obtain funds, including budget and non-budget financing, among the establishment's departments and calendar periods in the most effective way. Thereupon, improvement of strategic planning processes is needed for efficient control and education quality monitoring. It is also necessary to create favorable conditions to use efficiently the intellectual capital of the higher education establishment.

To ensure sustainable financial-economic state in constantly changing economic conditions higher education establishments have to continuously monitor the state of the educational services market, evaluate their rank on this market. An emergence of private higher education establishments in the educational sphere has made this problem even more urgent. In the modern environment education has turned into business, resulting in tight competition in the higher school system, and made higher education establishments develop and implement strategic management of organizational-economic and financial innovations.

2. Innovative lines of development of an education establishment

At the moment, the creation of new higher school management mechanism is taking place in Russia, adjusted for new requirements in the education quality and increased financial-economic independence of higher education establishments. This task is complex and multifaceted. Its solution must be aimed at the ultimate result that is need for higher school graduates by concrete enterprises. Thus, within the higher school management mechanism adaptation a particular emphasis must be placed on problems of the effective cooperation of higher education establishments and industrial enterprises. The importance of these issues is determined by the fact that at the moment all the universities face the same question, as commercial enterprises do: how to work more efficiently, economically, "producing goods" that are of market demand. The solution to the problem of increasing higher education establishments' competitiveness may be achieved by forming and effectively using the intellectual capital and also by integrating innovative strategies of development of higher education establishment and enterprises. The methodology of the intellectual capital management and also formation mechanisms of the innovation strategy of higher education establishment development must take into consideration trends of the increasing higher education and industrial enterprises integration.

The development of high-technology production with a high level of science intensiveness of the output and used technology has resulted in changes in education paradigm. Need in securing the continuity of education has emerged in a postindustrial society. The task of a person's continual education is reasonable to solve also by means of integrating innovative teaching methods into organization's practical activities. Such integration will enable to create innovative teaching programs, reflecting processes of scientific and technical accomplishments commercialization at enterprises.

The educational establishment has to fulfill the task of training creative-thinking specialists to secure the commercialization. Innovative training programs must train specialists who has the knowledge of managing processes of creating and commercializing different intellectual property objects. Thereupon, activation of education establishment participation in tightening regional links of educational establishments with industry, business and science will be the priority task. According to the world practice, it is these links that act as the basis of strengthening competitive advantages of economic players.

At the present stage of society's development, forming of knowledge economy issues new tasks in the field of training not only managers and economists, but also specialists in engineering for innovative society. These tasks consist in forming among students a creative approach to formulation processes, constructing and realization of engineering solutions to innovation projects, choice of the best alternative. Graduates in engineering also must possess analytical methods of projects' efficiency evaluation and the most important – project management skills under uncertainty.

Cooperation between education establishments and interested parties must be aimed at search for new approaches of education system improvement to adjust educational process in accordance with requirements of an employer and graduates. Results of such partnership must be implemented in programs and academic curriculum of education establishments, competitive strategies of entrepreneurship subjects, and strategic programs and business plans of regional development. Thereby, strategic programs that become the basis of forming intellectual resources of postindustrial society overall are made.

When forming development strategies, education establishments must take into consideration expectations of entrepreneurship subjects and state control structures in the field of training specialists. In the modern environment, graduates must be capable of rapid adaptation in a new working environment and also possess skills of developing innovative growth programs of an enterprise, region and society.

The cooperation between Russian and foreign higher education establishments plays an important role in the competitiveness increasing of the home enterprises. For instance, international educational projects act as a tool of the national industrial policy realization in the modern environment. While developing such projects, it is necessary to take into account partners' cross-cultural peculiarities that influence the efficiency of the international educational projects realization. Besides, using a set of organizational, economic and managerial innovations in the higher education establishment activities contributes to the solution of the strategic task of the education quality improvement.

The urgency of carrying out a financial analysis of a higher education establishment grows within forming the strategy of efficiency improvement of the education establishment activities. Under conditions of market relationships, the education price is an important factor of securing financial-economic sustainability of the higher education establishment. Thus, it is necessary to ascertain the interconnection between the price, the educational program utility for a consumer, and the higher education establishment competitiveness. Problems with ownership and financial rights of the education establishment, revenue status identification of the higher education establishment

always arise in the non-budget activities sphere of state higher education establishments. Thereupon, it is reasonable to scrutinize thoroughly peculiarities and sources of revenue and credit forming of the education establishment.

In the recent years, Russian and foreign scientists attend the analysis of the world experience of the higher education establishments activities, including issues of applying information technology to educational and managerial processes. Low elasticity of demand and a high social priority of the educational services is specificity of the educational services market. Thus, the higher education establishment management model must be aimed at the functioning efficiency improvement of the higher education establishment at the expense of the resource supply structure optimization. The educational activities quality much depends on resources that higher education establishment possesses and the correctness of their time and department distribution.

However, it is necessary to have mechanisms that determine break-even point for educational activities of the higher education establishment. Without this mechanism it is impossible to optimize the price rate of educational services. Therefore, a cost and result calculation is important not only in the sphere of the educational process, but also in the sphere of the education establishment research activities. An efficient mechanism of distributing non-budget funds, which were acquired due to educational activities, between higher educational establishment's departments is necessary to be created. From the point of view of the educational establishment efficient functioning, automatic systems of managerial calculation and budgeting must be developed, because using these systems enables to cut budgets drawing up period, improve their implementation quality control.

Conclusion

The national economy overall and its entrepreneurial subjects may reach the set goals and be a success in an era of a postindustrial development only on the condition that they possess sufficient creative potential that depends, first of all, of their intellectual resource quality. This resource is formed and improved on basis of the developed strategies of educational system growth. The market economy development dynamics results in rapid emergence of new requirements to knowledge, abilities and skills subject to social-economic development of a society. Thus, in the modern knowledge-oriented society the role of an educational establishment increases not only in forming society's intellectual resources, but also in increase of competitiveness of economic players.

Adoption of innovative factors of development influences all elements of the economic system. An education establishment should react promptly to changing needs of the society. The necessity to conform educational standards to requirements of an employer and society and also to improve education quality at all levels is a new challenge to educational system. It requires educational establishments to fulfill the mission of creating innovative programs of education, forming suggestions on updating educational standards, implementation of reforms in educational system management to improve the quality of education and increase the level of competence, graduates' knowledge.

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Relationship between Single Factor and Multifactor Productivity Measures at the Level of NUTS1

Abstract

Productivity connects input and outputs to the only one indicator, and it in this way measures performance of economies more accurately than basic macroeconomics aggregates. Namely it reflects dissimilarities in the development of sizes and intensity of input and output. The paper at first deals with position of Czech republic in European union by means of differently defined indicators single-factor analysis of productivity in absolute height. The subject of comparison has also been the growth rate of single- factor and multi-factor productivity proportions. Further the paper tries to find answer to question, whether territorial units NUTS1 with high growth of gross added values have also high productivity growth. Consequently it analyses relations between indicators of single factor productivity and total factor productivity (TFP) in connection with development of gross added values upon usage regression analysis at the level NUTS1 within European Union countries, Switzerland and Turkey. For evaluation the development of particular indicator in time series was monitored average growth rate in period 2000 - 2005 and in period 2005 – 2007. During analysis was mainly considered standard neo-classical growth Solow model. From the analyse was found closest dependence among indicators of the capital productivity and capital-labour ratio, namely indirect dependence, so that on annual growth of gross production capital per employee, growth rate of capital productivity declines, as though new investments productivity is small, because the great part from them flow into infrastructure. Another strong linear dependence was developed among growth rate of TFP indicator and growth rate of capital productivity, however not among indicators TFP and labour productivity.

Key Words

labour productivity, capital productivity, total factor productivity (TFP), gross value added

JEL Classification:

D24, E01, E23

Introduction

In accordance with general understanding of efficiency, the positive development of the whole economy, regions respectively, is shown by the growth of values in the ratio of product to the labour provided (labour productivity) or of the ratio of the product and the capital reserve (capital productivity). Statistical measurement is realised in different modifications and depends on type of output and input. Since productivity connects input and output into one indicator, it measures the performance of economy more exactly than macro-economic aggregates. It reflects differences in the development of scale and intensity of input and output.

1. Literary Survey

The economic theory of productivity measurement goes from the work of Robert Solow (1957). They formulated productivity measures in a production function context and linked them to the analysis of economic growth. The standard neo-classical growth models of Solow (1956), the overlapping generations model of Samuelson (1958) have been challenged by the literature on endogenous growth (Romer 1986, Lucas 1988). The neo-classical paradigm considers technological change as an exogenous process whereas the endogenous growth literature makes this process endogenous (Miller, Upadhyay 2002).

Growth theory has two main objectives. The first is identification of mechanisms underlying the process of economic growth and, in particular, the reasons why growth can be sustained in the long run, avoiding decreasing returns to productive factors. The second objective is the explanation of the persistent patterns of geographical inequality in economic performance (Bhattacharjee, Castro, Jensen-Butler 2009).

Productivity is an economic concept: it is the ratio of output to input (Norsworthy, Jang 1992). There are many different productivity measures. The choice between them depends on the purpose of productivity measurement and, in many instances, on the availability of data. The simplest and the most frequently-encountered measure is labour productivity. Labour productivity is defined as gross value added or gross output per worker and per worker-hour (O'Mahony et al. 2008). The capital productivity index shows the time profile of how productively capital is used to generate value added.. The capital input measures the service flows from the level of the physical capital stock (Yasser, Joutz 2005). The importance of all factors of production summarises indicator of total factor productivity (TFP). TFP is empirical indicator of the effect of technical change on productivity and a driver of economic growth (Praag, Versloot 2008).

Table 1: Overview of main productivity measures

Type of Output measure	Type of input measure			
	Labour	Capital	Capital and labour	Capital , labour and intermediate inputs (energy, material, services)
Gross output	Labour productivity (based on gross output)	Capital productivity (based on gross output)	Capital-labour MFP (based on gross output)	KLEMS multifactor productivity
Value Added	Labour productivity (based on value added)	Capital productivity (based on value added)	Capital-labour MFP (based on value added)	-
	Single factor productivity measures		Multifactor productivity (MFP) measures	

Source: Measuring Productivity. Measurement of aggregate and industrial level productivity growth. OECD Manual. Paris, 2001

2. Material and methodology

The aim of this paper is to find which EU states have had a high (low) growth of productivity (single- factor and multi-factor productivity) in the recent years and consider the position of the Czech Republic in the European union. The next aim is to analyze, if the states with high growth gross domestic products (GDP) have high growth of productivity. The last aim is to consider relationship among differently defined indicators of productivity and to analyse development of single-factor and multi-factor productivity.

The tools for this evaluation were the indexes of labour productivity, capital productivity and indexes of total factor productivity (two production factors were taken in consideration: labour (L), capital (K)) and their analysis. The total factor productivity A_1/A_0 index (TFP) was calculated using the indexes of product (Y), capital (K) and labour (L)

$$\frac{A_1}{A_0} = \frac{Y_1}{Y_0} \cdot \left(\frac{K_1}{K_0} \right)^{-\alpha_{Kt}} \cdot \left(\frac{L_1}{L_0} \right)^{-\alpha_{Lt}}$$

where Y_1/Y_0 is the index of the real product (gross domestic product in constant prices), K_1/K_0 is the index of gross reserve of long-term capital, L_1/L_0 is the index of worked hours, the mean number of workers respectively, α_{Lt} is the arithmetic mean of the ratio of compensation to workers on gross added value in the basic and current period, α_{Kt} is the arithmetic mean of proportion of gross operational surplus on the gross added value in the basic and general period and therefore $\alpha_{Lt} + \alpha_{Kt} = 1$ applies.

EUROSTAT was the source of data of the EU member states in 2000 - 2007 in order to secure comparability of data. The output of economy of individual states (Y) was characterized by indicators: Gross domestic product (GDP) at market prices or Gross value added (GVA). To carry out temporal and spatial comparison it is convenient to part from indicators purified from inflation. Therefore macroaggregates in prices of 2000 were given priority. The index of employment was found out by means of the Total employment-national concept indicator (E-NC). Index contain economical active population (persons) without unemployment. Next indicator which is monitoring by EUROSTAT is total employment - domestic concept (E-DC). This indicator is increase by foreign workers in Czech Republic and reduce by Czech workers in foreign countries. For calculation is possible go out from hours worked. The labour productivity has been calculate with utilization different definition of employment rate. On the basis of the indicator of Gross fixed capital formation (GFCF), reference year 2000, capital productivity was calculated. On the basis of the indicator of Gross fixed capital formation and Total employment-national concept another indicator can be determined-the labour employment of capital (K/L).

For the analysis of the rates of surpluses the additive relation was used that is an approximation because only the product of indexes of factors and productivity of production factors equals the HPH index. These approximations are acceptable only for smaller changes (Jílek, Vojta 2008).

For the analysis relationship among indicators was used correlation analysis. The correlation analysis deal with interrelationship dependence. This analysis put more emphasis on intensity interrelationship, than on research cause – consequence (Hindls, Hronová, Seger, Fischer 2007). The power of linear dependence between couple of variables is found out by paired correlation coefficients, which is presented in form correlative matrix symmetrical along main diagonal (Hindls, Hronová, Novák 1999). The independence of indicators means there no possibility of correlation, but between these indicators can be non-linear relations (Hebák, Hustopecký1987). The indicators of intensity represent the force of interrelationship between variables and value the force interrelationship with regard to regression function (Seger, Hindls, Hronová 1998).

3. Results and discussion

Chart no. 2 illustrates progress of absolute value differently defined single factor indicators of productivity including capital- labour ratio, which is closely connected with progress of mentioned indicators regarding the Czech Republic and EU (25 states). The comparison shows that the Czech Republic lagging behind in all monitored indicators. The biggest difference occurs in labour productivity. Czech indicator draws near one third of labour productivity level measured per employee in 2007. The result is even worse per worked hour which takes 27,7% of EU 25 level. Relation of labour productivity (The Czech Republic and EU 25) is getting better from 2000, i.e. growth rate of labour productivity is higher than in EU. That is also showed in the graphs no.1, 2 and in a chart no 3, which makes positive fact. There is no such a big difference regarding of capital productivity. The value of mentioned indicator makes 78, 6% of EU value in 2007. An indicator of capital-labour productivity is closely related with indicators of single factor productivity and says how much EUR of gross fixed capital formation is per one employee. We can also see the mildly increasing value of mentioned indicator regarding The Czech Republic as well as EU 25 in chart no. 2.while the growth rate value of Czech Republic is slightly higher despite the value of the Czech Republic presents 41,45% value of EU 25 in 2007.

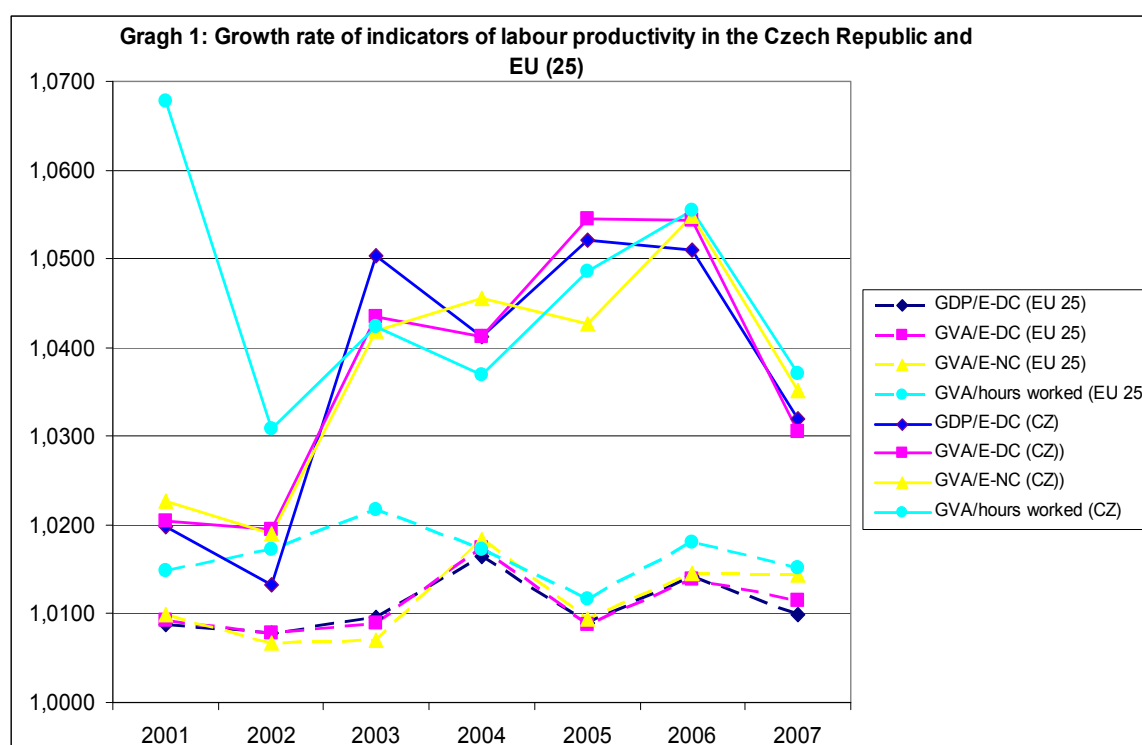
Table 2: Progress of value indicators in prices of reference year 2000

Year	Labour productivity GVA/E-DC (EURO per 1 employee)		Labour productivity GVA/hours worked (Euro per 1 hour worked)		Capital productivity GVA /GFCF (EURO per 1 EURO GFCF)		Capital-labour ratio GFCF /E-DC (EURO per 1 employee)	
	EU (25)	CZ	EU (25)	ČR	EU (25)	ČR	EU (25)	ČR
2000	41539	11279	24,10	5,49	4,32	3,24	9 610	3 483
2001	41925	11509	24,46	5,86	4,38	3,11	9 573	3 695
2002	42256	11735	24,89	6,04	4,46	3,04	9 478	3 862
2003	42636	12244	25,43	6,29	4,46	3,11	9 564	3 932
2004	43381	12748	25,87	6,53	4,44	3,13	9 770	4 073
2005	43762	13444	26,17	6,84	4,37	3,28	10 005	4 102
2006	44367	14174	26,64	7,22	4,25	3,30	10 437	4 301
2007	44880	14606	27,05	7,49	4,16	3,27	10 781	4 469

Source: own

Graph no.1 illustrates year-growth rate of monitored indicators in the Czech Republic and EU 25. It is apparent that the progress of the indicators in the both monitored

locations is distinct. Generally Czech labour productivity is increasing faster than in EU 25. The difference of progress productivity indicators computed as E-DC and E-NC is caused by structure of this indicator. For example there is an obvious difference in growth rate especially in 2005. While labour productivity calculated from employment – domestic concept yearly increases (the increase value was 4,12% in 2004 and 5,46% in 2005) while the growth rate of labour productivity calculated from employment - national concept slows down (value was 4,56% in 2004 and 4,27% in 2005). This discrepancy is made by the fact that national concept in this year increased faster than employment – domestic concept. It means there was a reduction between non-resident working in the Czech Republic and residents working abroad. During next years the difference was stabilized and therefore the both indicators have similar growth rate. The biggest difference of growth rate of monitored indicators (labour productivity calculated from hours worked) is apparent as well as in the Czech Republic as in EU 25. This indicator appears comparing to others as the most accurate because it reduces differences between working time in the particular member states. The growth rate of this indicator in the Czech Republic approximately copies progress of other productivity indicators except the years 2001 and 2002. There are more obvious discrepancies in EU 25. The growth rate of labour productivity calculated from worked hours in all years exceeds the growth rate of other indicators. The biggest differences occur until 2004.



Graph 1: Growth rate of indicators of labour productivity in the Czech Republic and in the EU (15)

Source: own

The next step was focused on single member states of European Union. The area that has been monitoring was concentrated on average year differences of single factor indicator and total factor productivity (TFP) regarding of GDP progress (chart no. 3). There was determined average growth rate in 2000-2005 periods as well as in 2005-2007 periods for progress evaluating of particular indicators because of data clarity and

integrity. It is obvious from chart no. 3 that states like Estonia, Lithuania, Latvia and Romania have reached the highest average amount increase of GDP in the first monitored period. They also have had the highest amount increase of labour productivity. On the other hand they have recorded significant year average decline in capital-productivity, which caused constant TFP.

Table 3: Average growth rate of indicators

geo/time	2000-2005				2005-2007			
	GVA	TFP	Labour prod.	Capital prod.	GVA	TFP	Labour prod.	Capital prod.
AT	101,81	101,29	101,12	101,53	103,43	100,86	101,79	99,80
BE	101,63	100,30	100,96	99,46	102,78	99,52	101,16	97,45
BG	104,71	95,00	103,13	89,99	106,43	95,20	103,25	90,08
CH	101,25	100,71	100,72	100,67	103,36	100,33	101,33	98,43
CY	103,21	99,02	100,16	97,96	104,29	98,63	101,68	95,67
CZ	103,79	101,80	103,57	100,24	106,45	101,93	104,23	99,87
DE	100,83	101,70	100,98	102,76	102,92	99,61	101,72	97,07
DK	100,90	100,35	100,84	99,51	102,35	97,99	100,01	94,61
EA	101,95	100,37	100,40	100,35	103,04	99,54	100,97	97,93
EE	107,67	100,62	106,40	95,14	108,01	100,62	104,70	96,48
ES	103,09	98,97	99,84	97,98	103,96	99,24	100,48	97,86
EU15	101,70	100,56	100,83	100,23	102,88	99,63	101,28	97,65
EU25	101,79	100,68	101,05	100,24	103,05	99,56	101,27	97,55
EU27	101,82	100,71	101,13	100,19	103,09	99,52	101,33	97,39
FI	102,25	100,70	101,38	99,85	104,81	100,70	102,77	98,19
FR	101,61	100,33	100,97	99,46	102,20	99,53	101,04	97,48
GR	104,45	100,46	103,08	98,85	103,61	98,72	101,88	96,81
HR	104,47		104,15		105,12		103,74	
HU	104,12	100,91	103,93	97,59	102,67	103,69	102,41	105,22
IE	105,51	100,72	102,52	99,30	106,18	102,87	102,16	103,48
IS	103,77	100,27	103,12	94,59				
IT	100,90	99,46	99,66	99,30	101,69	99,97	100,12	99,84
LT	107,79			95,49	108,38			90,27
LU	103,62	100,48	102,73	98,77	106,16	102,00	104,25	99,90
LV	108,30	99,10	105,01	92,80	110,46	102,41	106,23	98,76
NL	101,39	101,35	100,57	102,20	103,43	99,27	101,13	97,37
NO	101,89	99,96	101,55	97,89	102,10	96,70	99,94	92,81
PL	102,93	103,22	102,65	103,83	106,30	96,40	102,33	91,44
PT	101,02	103,91	104,70	103,26	101,84	98,24	94,87	100,61
RO	105,76	101,15	105,47	95,57	107,33	97,84	107,07	86,32
SE	102,54			99,89	103,46	98,69	102,88	95,53
SI	103,88	102,36	103,65	100,14	106,49	101,10	104,48	95,83
SK	104,66	101,84	104,29	98,46	110,20	104,89	107,77	101,11
TR	104,61	100,41	104,01	98,06	106,06	99,74	103,77	97,03
UK	102,35	100,04	102,23	99,49	102,93	97,55	101,69	96,57

Source: EUROSTAT

In the same period Germany (0,83%), Denmark (0,9%), Italy (0,9 %) have got almost unchangeable average amount increase of gross value added. They also have achieved almost the same level of amount increase of all productivity indicators except Italy. All Italian indicators of productivity reached less than 1, which means they were declining. The average real value of gross value added was increasing faster in 2005-2007 period.

The average real value of gross value added increased in Latvia and Slovakia the most significantly (more than 10% a year). The both states have one of the highest values of labour productivity. There is also apparent that states which record the highest value of growth rate of TFP increasing their average growth rate of labour productivity and capital productivity which is basically called single factor productivity.

Table 4 illustrates correlation matrix of growth rates of individual indicators at the level NUTS1 in years 2000 - 2007. The highest dependence was measured between indicators capital productivity and capital-labour ratio.

Table 4: Correlation matrix

	GVA/ E-DC	GVA/ hours worked	GVA/ GFCF	GFCF /E-DC	TFP (E-DC)	TFP (hours worked)	GVA
GVA / E-DC	1,00	0,63	-0,33	0,61	0,08	-0,02	0,71
GVA/ hours worked	0,63	1,00	-0,25	0,41	0,00	0,26	0,60
GVA/GFCF	-0,33	-0,25	1,00	-0,93	0,89	0,85	-0,47
GFCF/E-DC	0,61	0,41	-0,93	1,00	-0,70	-0,70	0,63
TFP(E-DC)	0,08	0,00	0,89	-0,70	1,00	0,91	-0,19
TFP(hours worked)	-0,02	0,26	0,85	-0,70	0,91	1,00	-0,18
GVA	0,71	0,60	-0,47	0,63	-0,19	-0,18	1,00

Note: $p < ,05000$ N=180

Source: own

This dependence was indirectly, it means when interannual gross fixed capital formation per employee growth, the growth rate of capital productivity declines (gross added values growth slowly than gross fixed capital formation). Another strong linear dependence (0,89 or. 0,85) was discovered among growth rate of indicator TFP and growth rate of capital productivity, however not among indicators TFP and labour productivity. These indicators are independent. It is necessary to think about discovered dependence between TFP and productivity of capital. In the methodical procedure of calculation TFP has each production factor weight, which take account of importance. The sum of exponents is equal one. The exponent of production factor labour is all right (base on share compensation of employees on the gross added values). Gross fixed capital formation was increase on supplement into one. This supplement cover ratio of sum gross operational surplus products and net taxes on the gross added values. Gross fixed capital formation has overvalued importance (strong dependence).

The medium strong indirectly dependence was found between growth rate capital-labour ratio and TFP (- 0,7). The higher dependence growth TFP on the growth rate of capital productivity imply to indirectly dependence between growth rates of indicators TFP and capital-labour ratio.

Conclusion

Generally, productivity represents one of the basic indicators which pictures produce capability of economy and therefore the attention of this article was focused on it.

Analysis of labour productivity in Czech Republic comparing to EU shows that the value of this indicator is increasing faster in the Czech Republic than average value of labour productivity in EU. This fact is caused by higher economic growth in that states and significant effort of substitution human labour by new technologies but level of labour productivity is approximately one third comparing to average value of EU.

Labour productivity was finding out by various indicators changing in denominator (Employment – domestic concept, employment national concepts and worked hours). Level of indicators and as well as growth rate counted from them differ depending on a definition of the indicators. According to analysis it is certified that the states with the higher increase of gross value added than is average of EU also state above-average growth of labour productivity. At the time there is obvious from progress of indicators that if both indicators of single factor productivity yearly increase then TFP increases as well.

Primary objective of written study was to find out relations between indicators single factor productivity and total factor productivity in relation to progress of gross domestic product. It was used regression analysis to gain results in all member states of EU, Switzerland and Turkey in 2000 – 2007 period. The correlation matrix showed that closest dependence is between capital productivity growth rate and capital labour ratio. The mentioned dependence is non liner which means that growth rate of capital productivity declines when year growth of gross fixed capital per employee increases. The main reason might be an investment structure. There might be seen more investments to building construction and infrastructure in past years but their productivity is not so efficient (gross value added increases slower than gross fixed capital formation). Time effect of investments or acquisition expensive investments carries substantial role. That means there is not in full turned profit. Next strong linear dependence is between growth rate of TFP indicator and growth rate of capital productivity (0,89 or 0,85). This is not supposed to be said about TFP indicator and labour productivity. Capital productivity does not significantly influence TFP with impact on growth labour productivity. According to findings is obvious that some indicators might be substitute and replace.

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Successful Implementation of ERP Systems

Abstract

Information technologies are becoming an inseparable part of a competitive business strategy. One of products of information technologies – enterprise resource planning systems (ERP) – are promptly making their way into the functioning of enterprises. In the present day business world, they have become an important instrument without which the majority of enterprises could no longer function. As practice shows, implementation of an enterprise resource planning system frequently does not justify the expectations of an enterprise, costs much more than expected, and its implementation lasts for a considerably longer period of time than planned. Variety of results of implementation makes it necessary to analyse the process of implementation of ERP and to look in it what should be done for successful implementation.

The aim of this article is to investigate the process of implementation of ERP systems and to establish the factors of success. Implementation of enterprise resource planning systems is a highly complex process which is influenced not only by technical, but also by other factors. The sources describe approximately thirty factors determining the peculiarities of the process of implementation of ERP and its result. The analysis and generalisation all of these factors makes it possible to identify the most important factors determining the success of implementation of ERP. In order to establish the opinion of Lithuanian ERP specialists and users regarding the importance of the factors determining the result of implementation of ERP the survey was conducted.

Key Words

implementation, enterprise resource planning systems, factors of success

JEL Classification:

M15

Introduction

Enterprise resource planning (ERP) systems, which appeared in the 1990s, were considered to be a synonym of competitive advantage. ERP systems are multi-module systems integrating the activities of a variety of functional divisions: production planning, purchasing of raw materials, stock control and sales of products, allocation of human resources and the financial expression of all activities. Creation of an integrated system using a single database and covering all fields of an enterprise's activities became a top priority for information technologies specialists. A new system offered not only a functional, but also a technological advantage: client/server architecture, advanced programming languages, etc.

Enterprise resource planning systems are the principal infrastructure of information systems helping an organisation to prosper under the present day economic conditions.

According to Monk and Wagner [11] the ERP system can help integrate company's operations by acting as a company-wide computing environment. Successfully implemented enterprise resource planning systems create organisational synergy, which provides a stimulus for the development of particularly efficient processes necessary for the success of an organisation. ERP systems affect the structure of the organisation, standard daily procedures, policy, culture, the surrounding environment and managerial decisions. The process of implementation of ERP systems is influenced not only by internal resources (those of an organisation and a system itself), but also factors of the micro and macro environment. Undoubtedly, the process of ERP implementation also has the consequences which are strongly felt not only within the entire organisation, but also outside it. Implementation of enterprise resource planning systems is a complex process influenced by a large number of internal and external components. In order to ensure the successful outcome of this complex process, a clear and weighted methodology of implementation evaluating the critical factors that influence this process and its outcome is necessary.

1. Process of Implementation of ERP systems

Implementation of an enterprise resource planning system is an immense and expensive investment attracting not only financial, but also the most valuable human resources of an organisation. Depending on the ambitiousness of a company's objectives, pressure of the specified time limits and progress of the implementation process, enterprise resource planning systems may be implemented at a fast or slow speed. Fast implementation may last for six months, whereas a slow one may prolong for several years. Implementation of enterprise resource planning systems and changes in business processes may be carried out in several different ways by focusing on technical or strategic aspects. In practice and in theory, it is possible to come across a large number and great variety of the models describing the process of implementation of ERP systems and dividing implementation projects into four to eleven or even more stages, which certainly characterises the complexity of this process [2, 3, 4, 9, 14]. For example in the [9] a four-stage model of creation of information systems and ERP implementation is presented. The implementation model is divided into the following stages: initiation; development; implementation; operation and maintenance.

The initiation stage is identified with the changes in business conditions giving the rise to new information and management needs. This stage is frequently initiated by vendors or distributors of ERP systems seeking to persuade the top management of a company of the advantages provided by the systems. Irrespectively of who initiates this stage, a proposal is made to draw up a *functional specifications document* indicating a company's needs and problems as well as the desired capabilities of an ERP system. Such a document is particularly useful when selecting a suitable system and its vendor.

At the development stage, "filtering" of consumer needs and evaluation of different enterprise resource planning systems takes place. At this stage, an organisation's project team is participating in the demonstrations of a system organised by different vendors and is testing the trial versions of the systems as installed in the organisation. This stage may also involve a testing of the system's capacity, i.e., the work productivity of the system is monitored given the anticipated number of users, planned data volumes and

number of operations. Upon familiarising with the capabilities provided by various systems, an organisation's project team is recommended to draw up requests for proposals document converting the ideas presented in a functional specifications document into a checklist of required features and capabilities. On the basis of this list, a product which most closely meets the requirements is selected. It should be pointed out that not only a product, but also its vendor (builder) is selected, hence, when selecting a system it is advisable to assess a vendor's financial reliability, its experience and determination to adapt the system for a company's needs.

At the implementation stage, the issues of parameterization and use of a system are being solved, detailed documentation of the use of the system in a specific company is being prepared, and the process of the system's modification is being thoroughly planned. The authors of the book especially stress the importance of consultants of the system's builder (vendor) at this stage claiming that system experts must be available over the entire period of implementation.

At the operation and maintenance stage, further improvement and maintenance of a system is carried out. According to the authors, someone needs to be responsible in order to ensure an efficient operation of the system both technically and organisationally. An organisation most frequently appoints a responsible employee or a group of them for the performance of such functions. It is recommended to involve in the process of installation of new system versions also an analysis of the effect of the new versions on the work of system users. At this stage, a close co-operation with a system vendor (builder) is emphasised. It is recommended to share with the vendor the visions of system improvement and to inform the vendor about the bugs detected in respect of the system.

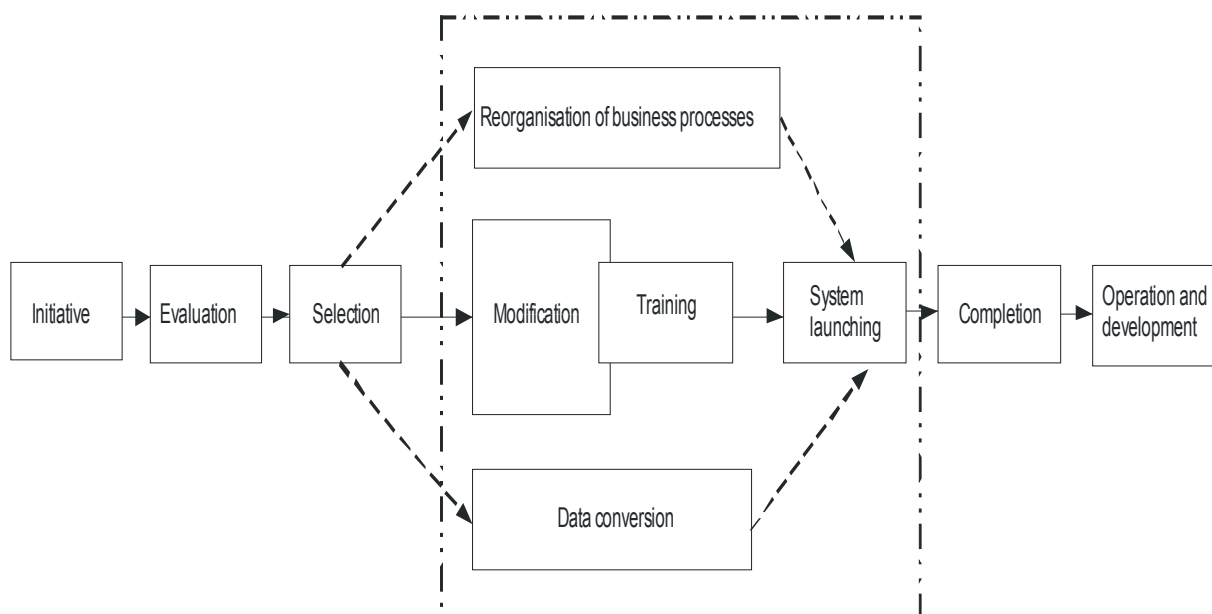


Chart 1. Eight-stage model of ERP implementation

Source: [10]

Having analysed the ERP implementation models presented in various literary sources, M. Makipa [10] draws a conclusion that the majority of them are either too detailed or too general. Therefore, the author proposes his own model of implementation of ERP

systems identifying eight principal stages of implementation of the ERP systems: initiative; evaluation; selection; modification; training; system launching; completion of implementation; operation and development (Chart 1).

Initiative is a stage which is the starting point for all projects. According to Makipa [10], the main element of this stage is the rise of initiative itself. The initiative most frequently takes its root in strategic planning, however, of relevance also are such factors as offers of vendors of information systems, actions of competitors, changes within a branch of business, changes in a legislative base regulating business, and use of the budget allocated for information technologies. The factors which influenced the rise of the initiative are very frequently of minor importance at subsequent stages of a project

The evaluation stage involves such works as needs analysis, evaluation of business processes, search for potential vendors of a system, and evaluation of different systems and alternatives. The author sees evaluation of different alternatives as a complex process, because there often exists a limited number of the alternatives aiming at agreeing a variety of conflicting objects. The complexity of the evaluation process also lies in the fact that the objects under evaluation are subject to both quantitative and qualitative parameters. The evaluation stage can hardly fit into any specified time frame, because this process may last from several days to several years. There is also a risk that a project will be terminated at this stage or postponed until a more favourable time. This is a complicated decision for heads of a company. If a decision to continue the project is taken, negotiations with potential vendors (builder) of systems commence at this stage.

At the selection stage, a product, which is, in the opinion of a company, the most suitable one, is selected and a contract on the implementation of a system is signed with the selected vendor. The contract usually provides for the scope of a project, preliminary budgets and time limits.

Irrespectively of the type of a model to be used for implementation, an ordinary enterprise resource planning system cannot be installed without certain modifications. The degree of modification is most frequently directly proportionate to the size of an organisation. At the stage of modification, localisation of a system, namely, its adaptation to meet specific requirements of country is carried out. The author describes the stage of modification as a cycle consisting of three parts: analysis, configuration, and testing. The cycle continues until the desired result is achieved or the specified time limit expires.

Makipa tends to refer to the stage of *training* as a separate one, although it may commence prior to completion of the stage of modification. The author explains such a decision in a very simple way: modification relates to a system, whereas training – to users. In order to maximise the efficiency of trainings, it is suggested that users be trained prior to launching of a system.

The stage of *system launching* is considered to be among the main and “hottest” stages of implementation of ERP systems. This stage is a fairly confusing one, but it has its own procedures and actions. The stage of system launching also involves a warranty period, during which the detected shortcomings and bugs are eliminated.

The completion stage is initiated upon ascertaining of the quality of operation of a system and full settlement with the builder of the system. At this stage, it is recommended to hold a project completion meeting to review the course of the project, successes and failures of the project. At the completion stage, a project team is dissolved, and its members return to their usual duties or are assigned to perform new duties.

Operation and development form a stage of the longer duration during which a system is not only maintained, but is also undergoing further development, a share of the processes covered by the system is expanded, and new modules and new users are involved.

Implementations of enterprise resource planning systems are large and complex projects involving large groups of human and other resources working within the established time framework and dealing with a number of unplanned circumstances. From the systemic perspective, the following parts of the process of implementation of enterprise resource planning systems are identified: software, organisation's business processes, users, technical resources and OS. The presented components and their descriptions make it evident that implementation of enterprise resource planning systems is a highly complex process which is influenced not only by technical, but also by other factors.

2. Factors of Successful Implementation

The problem of successful implementation of ERP is analysed in the majority of works considering the process of implementation and the factors determining a successful or unsuccessful result of this process [1, 5, 6, 7, 8, 15]. The sources describe approximately thirty factors determining the peculiarities of the process of implementation of ERP and its result. It should be noted that different authors present different factors determining the success of implementation of ERP, although in the opinion of the majority of the authors, two factors are most important, namely, support by top management and the project management. The analysis and generalisation all of these factors makes it possible to identify the 16 main factors determining the success of implementation of ERP [12,13]. The aim of the survey was to establish the opinion of Lithuanian ERP specialists and users regarding the importance of the factors determining the result of implementation of ERP. Respondents of the survey have been divided into two different groups:

- *Experts* (specialists) – this group includes employees of the companies implementing enterprise resource planning systems in Lithuania;
- *ERP users* – project participants of the organisations which have implemented or are implementing enterprise resource planning systems.

The sample of the survey was formed in the way of selection – the expert poll included employees of several companies implementing ERP in Lithuania, and the ERP user interview included customers of one of the companies implementing the systems. The selected sample of ERP experts (41) comprises approximately one sixth of all Lithuanian specialists of business management systems. Experts of ERP implementation consider as

the most important factors determining the success of implementation the management factors relating to such fields as management, planning, implementation and control of projects and organisational changes.

I cut 4 lines in this place.

The before mentioned 16 main factors determining successful ERP implementation could be divided into three categories:

- *internal*, depending on an organisation undergoing the process of implementation of an ERP system (Detailed analysis of the organisation's needs and vision; Clear and measurable goals of the project; Top management support; Management of organisational changes; Reorganisation of business processes; Appropriate and timely training and education of employees; Involvement of employees in the project; Open and continuous communication within the entire organisation);
- *external*, depending on external consultants (Competent external consultants);
- *mixed*, depending both on the organisation itself and on external builder (Optimal balance between a business and technological parts of the project; Thorough and competent planning of the project; Competent project team; Competent management of the project; Close co-operation with the external system vendor; Control of implementation of the project's time budget and tasks; Smoothly organised transfer of data) .

Such an identification of groups of factors enables to consider anew the same factors and to establish the boundaries of responsibility for the success of a project. Internal factors affect the process of ERP implementation through an organisation. Unquestionably, top management support, management of organisational changes, and reorganisation of business processes are internal (organisational) factors. Factors a detailed analysis of the organisation's needs as well as clear and measurable goals of the project could be attribute to internal (organisational) factors. Prior to selecting a proper enterprise resource planning system, the organisation must initiate an analysis of the processes taking place within it, compare the existing business processes against the vision and formulate clear and measurable goals of the project. Open and continuous communication within the entire company will help to conduct a detailed analysis of business processes and develop a clear and all-encompassing vision. Timely training of employees as well as their involvement in the project also comprises the factors depending on the organisation. The organisation must take care of gradual adaptation of its employees to the changing processes and their direct and indirect involvement in the implementation of an ERP system. Knowing well its employees, the organisation must select the most acceptable form of their education and training in order to reduce the employees' opposition to novelties.

Mixed factors affect the process of implementation of an ERP system both through an organisation and through its external builder. Therefore, both parties to a project are responsible for the impact exerted by the factors belonging to this group on the ERP implementation process. Optimal balance between a business and technological parts of a project would at first glance be attributable to internal factors, which depend on an organisation. However, it is important to notice that not only the organisation, but also

an ERP builder needs to understand that these projects are of “non-technical” nature. Consultants of the ERP builder must be not only well aware about the functionality of the individual modules integrated within a system, but also be familiar with the global practice of organisation of business processes, possess knowledge of management and be capable of using it in the process of ERP implementation. An ERP builder must use its competence to assure an organisation’s confidence, which determines a close mutual co-operation. Implementation of ERP systems is carried out through co-operation of both parties, hence it is absolutely natural that both parties must form project teams, thoroughly plan the course of the project, and control the performance of planned tasks. Both parties to a project are responsible for a competent management of the project. The effort of both parties is necessary also in order to smoothly transfer data from old systems into a new ERP system. A system builder is responsible for the provision of patterns and instruments required for the transfer of data, and an organisation is in charge of appropriate preparation of the data.

The sole competence of builder’s consultants attributed to the group of external factors shows that responsibility for the success of a project falls to a large extent on an organisation itself, which influences as many as eight out of sixteen main factors affecting the ERP implementation process.

Classification of factors allows viewing the results of the conducted survey from a different perspective. Upon dividing the factors evaluated by experts into the proposed categories and calculating the scores of each category, it was noticed (Chart 2) that, in the opinion of experts, internal factors, i.e., the factors influenced by an organisation (27,1 points), were considered to be the most important factors determining the success of ERP implementation.

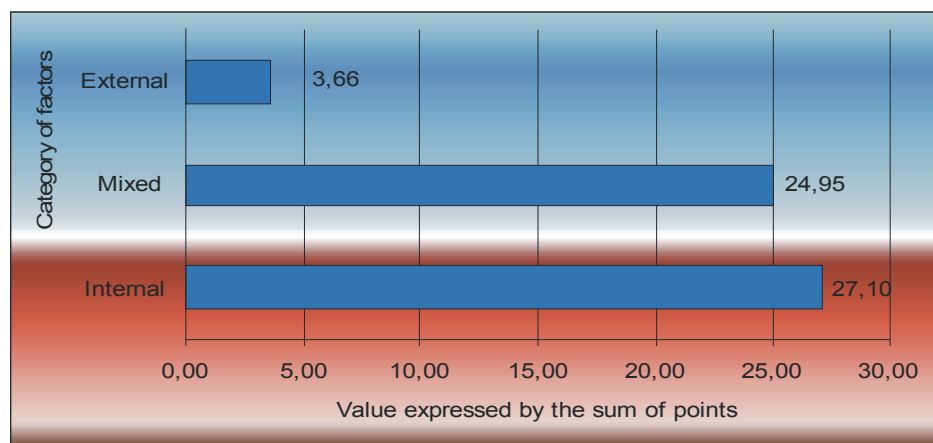


Chart 2. Evaluation of factors according to categories (expert opinion)

Mixed factors (24,95 points) are placed second among the most important factors. External factors, which are independent of an organisation, are placed third (3,66 points). Such an evaluation of categories of factors allows to draw a conclusion that, in the opinion of experts, responsibility for the success of ERP implementation lies to a large extent with the organisation itself.

The results of a survey of users of ERP systems (Chart 3) allow to claim that the users, just as experts, attach the greatest significance to internal factors, which are dependent

on an organisation itself. By comparing Charts 2 and 3, one could notice that the users of ERP systems emphasise the impact of external and mixed factors much more often than experts. This indicates that the users tend to believe that a considerable part of success of an ERP implementation project depends on an external system indicator.

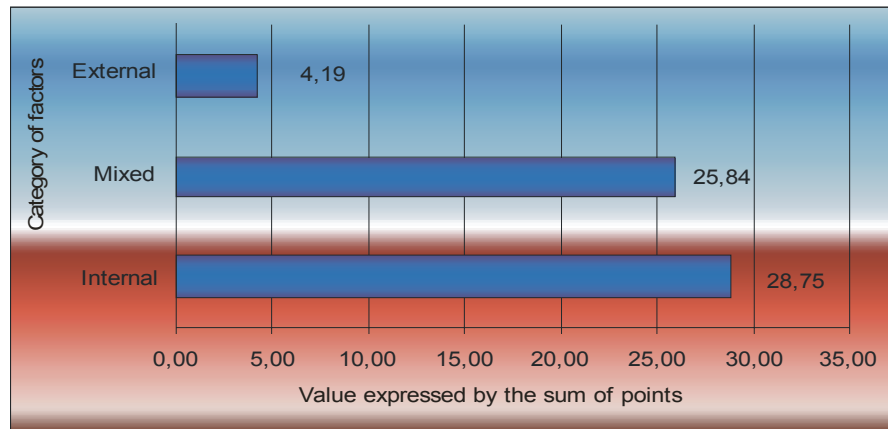


Chart 3. Evaluation of factors according to categories (ERP users opinion)

Such a difference in the opinion of experts and ERP users is not unusual, because in practice the blame for unsuccessful implementations of enterprise resource planning systems is often laid by organisations on external system builders, and by the builders – on the organisations.

Conclusions

1. In the list of evaluation of critical factors of successful implementation as compiled according to the opinion of ERP experts, the first two places are occupied by internal factors, i.e., the factors depending on an organisation itself: clear and measurable goals of the project and thorough analysis of the organisation's needs and vision. This result shows that the appropriate preparation of the organisation for the project of implementation of enterprise resource planning systems is, in the opinion of the experts, the crucial factor determining the success of such projects.

2. The list of critical factors compiled according to evaluations of ERP users is sufficiently close by its contents to the list compiled on the basis of the expert interview, however the ERP users consider the factors stressing the importance of competence of the project team and the project manager more significant than the internal factors depending on the organisation. Such an opinion of the ERP users is not unexpected, because in practice organisations often blame external suppliers of systems for the unsuccessful implementation of enterprise resource planning systems, while the suppliers blame the organisations.

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Versatile Leadership, LVI and Their Application in Škoda Auto a.s.

Abstract

The paper starts with a presentation of the Versatile Leadership model developed by R.B. Kaplan and R.B. Kaiser and of their 360-degree feedback tool Leadership Versatility Index (LVI). Versatility can be generally defined as a mastery of opposites, as the ability to play multiple roles, even contradictory ones, without emphasizing some at the expense of others. The LVI has been designed to help managers understand their repertoire and how they can become more versatile leaders. It employs an innovative rating scale on which ideal score of 0 is in the middle of it (the right amount), flanked by underdoing to the left (too little) and overdoing to the right (too much). The idea is to avoid the “more is better” design trap by providing a way for raters to indicate when managers go to counterproductive extremes. The LVI works with two-sided view of leadership based on two major pairs of opposites: Forceful and Enabling leadership and Strategic and Operational leadership. Interventions based on the LVI results help to overcome traditional behaviorism as they combine the outer work (behavioral change) with the inner work (personal change) of development. Application of the LVI on a sample of the managers from Škoda Auto a.s. and verification of its practical value represent the core of the ŠAVŠ IGA project MM/07/02. The paper finishes with a presentation of the first findings from this project. It is possible to say already now that LVI can help Czech organizations and their management in many respects – i.e. it overcomes traditional primitive Darwinism in careers management; it has been well accepted by the managers, it stimulates their motivation for development and learning.

Key Words

versatility, leadership, leadership versatility index, 360-degree feedback, curvilinear scale, personal development

JEL Classification:

M10, M12

2.1 Introduction

Today's managers work in a complex world. Every decision can be a trade-off in an economy fraught with paradoxical demands: Companies we compete with in one arena may be our partners in another. Maximizing profits today often conflicts with investing in tomorrow. The need to produce can clash with concern for people and human limits. To be up to the task, managers must be equally complex in their leadership.

What does it mean to be a complex leader? It boils down to the ability to play multiple roles, even contradictory ones, without emphasizing some at the expense of others. Versatility, flexibility, agility – call it what you will, but effective leaders must wear many hats.

The Leadership Versatility Index® (LVI) is a 360-degree feedback tool designed to help managers understand their repertoire and how they can become more versatile leaders. The LVI is a next-generation assessment instrument. First, it employs an innovative rating scale. Second, the instrument is built on a conception of leadership that reflects the tensions and trade-offs in the world of management. By revealing how well-rounded managers are and where they are out of balance, this new approach lights up the development path. Based on more than 20 years of consulting to senior managers and over a decade of statistical research, the LVI is a step forward in assessment technology. In respect to these facts it was chosen as a promising potential complement and alternative to the assessment tools which have been used in Škoda Auto a.s. so far. Application of the LVI on a sample of the managers from Škoda Auto a.s. and verification of its practical value represent the core of the ŠAVŠ IGA project MM/07/02.

1. Versatility and LVI

When managers lack versatility, we often think of them as having a shortcoming – i.e. not very good at thinking strategically or holding people accountable or empowering their staff. They have a weakness. But versatility isn't just possessing the needed skills; it is also about using it to the right degree at the right time.

Many managers limit their versatility by going overboard in areas that come naturally to them. For example, some hard chargers push for results – to the point of burning people out. Many relational leaders are supportive – to the point of being too nice to be taken seriously. Some visionary leaders push the envelope, but their grand plans often defy successful implementation. That is how strength becomes weakness [1].

Versatility can be a more powerful concept when you pair skills and behaviors that look contradictory, yet in fact are complementary. Talking and listening are a good example; great communicators are good at both. Likewise, versatile managers can use opposing leadership behaviors with equal ease, for instance, stepping up to take charge and empowering others to lead, getting the work done and managing relationships, seeing the big picture and zooming in to grasp details.

Instead of being versatile many managers are lopsided. They lean one way by doing too much of one behavior and too little of the other. Thus we define versatility as having a full range of motion, able to freely use opposing leadership approaches, unrestricted by bias for one and a prejudice against the other [2].

This is a view of versatility as a mastery of opposites. It is rooted in the tension and trade-offs that make leadership a balancing act. Like the Taoist notion of yin and yang, the idea is that it takes two complementary elements to form the whole. Neither is complete without the other. The power of this view of versatility is that it conforms to

the realities of the management job, with its conflicting priorities and competing demands. Such a view of versatility was transformed into a new 360-degrees feedback tool LVI.

Most of the existing 360s use 5-point rating scales. Their problem is that they do not indicate when managers do something too much. Instead, they seem to assume that „more is better“ and imply that a high score is the best score. Furthermore they do not tease apart overdoing it and underdoing it as distinct sources of ineffectiveness.

To remedy this problem a new rating scale (curvilinear scale) was developed. The ideal score of 0 is in the middle of it (the right amount), flanked by underdoing to the left (too little) and overdoing to the right (too much). Degrees of doing too little are represented by minus scores from -1 to -4; degrees of doing too much are represented by plus scores from +1 to +4 (see Picture 1). The idea is to avoid the „more is better“ design trap by providing a way for raters to indicate when managers go to counterproductive extremes [2].

← Too little ←				The right amount	→ Too much →			
0 -4	0 -3	0 -2	0 -1	0 0	0 +1	0 +2	0 +3	0 +4

Picture 1 New rating scale

The standard way to conceptualize leadership these days is with competency models: lists of skills, knowledge, behaviors, and abilities needed to perform a given role. Competency models are linear in that the dimensions are presented one at a time and in isolation. They do not reflect the dynamic relationships among the various dimensions. The versatile model of leadership is two-sided and is based on two major pairs of opposites: Forceful and Enabling leadership and Strategic and Operational leadership (see Table 1). These two pairs are complementary themselves in that Forceful and Enabling represent the interpersonal “How” of leadership while Strategic and Operational represent the organizational “What” of leadership [3].

At the center of the Forceful and Enabling distinction is “how” leaders exert social influence: top-down, where the leaders uses power and authority, compared to a more collaborative process of relating and drawing out the contributions others can make. Within the two general dimensions are three more specific pairs of sub-dimensions: (1) Takes charge VS Empowers; (2) Declares VS Listens; (3) Pushes VS Supports..

The Strategic and Operational distinction considers “what” organizational needs leaders focus on. There are also three pairs of more specific sub-dimensions: (1) Direction VS Execution; (2) Growth VS Efficiency; (3) Innovation VS Order [2].

Table 1 LVI Leadership Model

Forceful Leadership Exercising power and authority to push for performance • Takes charge; assuming authority by showing initiative and setting expectations • Declares/decides; being decisive, taking a position and defending it • Pushes; setting high expectations and holding people accountable for reaching them	Enabling Leadership Creating conditions for other people to be influential and contribute • Empowers; letting go and trusting people to decide how to do their work • Listens/includes; being participative, seeking input and being open to influence • Supports; tending to people's needs, showing empathy and encouragement
Strategic Leadership Positioning the organization to be competitive in the future • Direction; planning ahead with a high-level view and broad perspective • Growth; being aggressive to grow the business and expand capability • Innovation; embracing change and encouraging creativity and new ideas	Operational Leadership Focusing the organization to get results in the near term • Execution; managing the details of implementation to produce results now • Efficiency; conserving resources by cutting costs and selection of the goals • Order; establishing stability through discipline, consistency and monitoring

Regardless to what is in vogue, effective leadership depends all four of the Forceful, Enabling, Strategic and Operational roles. At a minimum every manager needs to appreciate the value of each one. In the best case, managers become well rounded leaders by developing the wisdom to recognize when each is called for and the skill to perform it effectively.

Research inspired by Robert Quinn's "Competing Values Framework" which identifies four distinct orientations that are similar to LVI four dimensions, shows that the most effective leaders draw on each of these approaches without emphasizing some at the expense of others [4]. Research with the LVI has confirmed the link between versatility and effectiveness. Across nine independent samples covering over 1 100 managers, the Versatility Score predicted 50% of the differences in terms of overall effectiveness. That is, versatility as measured by the LVI accounts for half of what separates the most well-regarded leaders from the least well regarded leaders. It has been also found, that versatile leaders have employees with higher job satisfaction, commitment and group cohesion. Teams led by versatile managers are also more productive [5].

Table 2 Distribution of Versatility Scores

Overall Versatility	Percentage of Managers
90% - 100%	6,1%
80% - 90%	54,4%
70% - 80%	31%
60% - 70%	7,5%
below 60%	1%

Research with the LVI also shows that truly well-rounded and versatile managers are in the minority. Versatility scores are percentages that can be interpreted like letter grades in school, where higher percentages indicate mastery: 90% A, 80% B, 70% C etc. The average versatile score in Kaplan DeVries Inc. normative database (with ratings for 1 123 senior managers) is 81%, a low B [5]. In fact, just over half of managers get B's and about 40% get lower than a B, while only 6% get an A (see Table 2).

There exist two possible general reasons explaining why do so many managers lack versatility. It may be that leadership is like any other skilled performance; it takes talent, years of practice, hard work and concentrated study to master. It also may be that a new paradigm of leadership is emerging to deal with increased complexity and a faster pace of change and this requires multifaceted managers like never before. Either way, the next question is how can managers expand their repertoire and become more versatile leaders? A key to the solution is an assessment tool that identifies how versatile the leader is now, including clear strengths, strengths overused, as well as shortcomings. This is precisely what LVI was designed to do.

2. A Practical Psychology of Development

Much of modern management development is based on behaviorism. These approaches start and end with behavior: behavior-based assessment, behavior modeling, behavior based performance coaching, and so forth. Of course, behavior is the bottom line when it comes to performance. Performance, however, isn't a matter of behavior alone; it is also the product of mindset and emotion [6].

Purely behavioral approach is often insufficient for realizing sustained performance improvements. When work on the behavioral level is supplemented with personal development of an inner nature, lasting change is more likely. The LVI is ideally suited for setting up both the outer work and the inner work of development.

The outer work of development involves directly changing behavior. In the case of something a manager does too little, the needed change is to do more. This may involve an element of coercion because manager must make himself do something he has neglected or avoided. In the case of "overkill", the needed change is to do less. This requires manager to ease up and be more selective. A requirement for the outer work is that the individual understands which behaviors need to change and how they need to change. The LVI makes clear prescriptions for these adjustments.

Direct attempts to change behavior may only go so far. For instance, managers receiving corrective feedback will sometimes say, "This isn't new. I have heard this before." The next question is, then why does the troublesome behavior persist? The reasons given may be things "out there" in the work environment, but more leverage may be "inside" the manager. Growing as a leader often hinges on growing as a person [2].

Personal development means that the path to improving one's leadership may require a thoughtful examination of basic beliefs and emotional investments. It can start with a few simple, ever so practical questions: Why do you do too much here – what compels you? Why do you do too little there – what holds you back? Experience shows, that behind a lopsided leadership there often is:

- **Crooked thinking.** Some managers have an incomplete and/or incorrect understanding of their job. They are aware of only one side of the "whole story" – they may believe in the need to achieve the results while overlooking the people side, for example.

- **Faulty gauges.** Some managers have a trouble judging how much is too much. Just as a broken thermostat can overheat or chill a room, a faulty gauge can cause a leader to go overboard, or come up short.
- **Polarized values.** Lopsided leadership often rests on polarized values, where one side is idealized and the other is devalued. On one hand, some managers can't imagine such a thing as too much of something they believe in. Consequently, they are liable to overdo it. On the other hand, they will often disparage the complementary approach.
- **Fears.** There can be a fear on the part of overly forceful individuals of not being powerful enough that produces the excess. And there can be a fear on the part of overly enabling managers, of becoming an exaggerated version of forcefulness, as if moving in that direction means being arrogant, rude or abrasive.
- **Unrecognized strenghts.** Some people may fail to appreciate their own strenghts, either in terms of particular skill or one's capability in general. Underrating oneself can compel a manager to try too hard to compensate; underestimate, overdo. It can also prompt an individual to avoid certain tasks for fear of not performing well; underestimate, underdo.

Given the rarity of versatile managers and the intense personal (inner) work involved in becoming more versatile, it is natural to wonder if "the bar isn't set too high for the leaders". However, there are good organizational and personal reasons to think that versatility may indeed be a worthy goal. First, the Forceful, Enabling, Strategic and Operational roles are not elective; they are organizational requirements. Second, versatility is associated with career success – the job histories of successful executives are characterized by a broad range of challenging assignments that lead to a broader perspective and wider repertoire. In contrast, a career based on exploiting a particular strenght by repeatedly taking on similar assignments robs the individual of the opportunity to branch out and develop.

It is not sure, if every manager can become a totally versatile leader. It may be the case that versatility is a prized attribute of only the most accomplished leaders and is not attainable for some. At the same time, it is likely that most managers can increase their versatility to some degree. And the research linking versatility to important outcomes suggests that doing so will improve one's effectiveness to some degree. Thus while total versatility may not be possible for all managers to achieve, it remains a worthy goal on which to set their sights.

3. LVI Project in Škoda Auto a.s.

In respect to an innovative nature of the versatile model of leadership as well as taking into account a need to offer managers an assement tool which could give them new insights into the area of their personal development, LVI has been chosen as a technique with a promising potential. The project started in October 2007 and has been designed for two years [7]. Since October 2007 till May 2009 the following tasks were completed:

- Negotiations with Kaplan DeVries Inc., represented by R.B. Kaiser, about the use of the LVI in the project. An agreement has been signed defining the conditions for the LVI's application in the project – the technique can be used exclusively in Škoda Auto case, Kaplan DeVries will provide the project team with consultations and assistance, all the steps will be discussed in advance with R.B. Kaiser etc. (October 2007 – December 2007).
- Translation and accommodation of the LVI for the purposes of the project. Here again many consultations with R.B. Kaiser were very necessary (January 2008 – April 2008).
- Selection of the sample. Based on consultations with the officials from the Human Resource Development department a group of 14 managers (1 female, 13 males) has been chosen for the project. All of them are participating in the programme Managers 4 Future and represent individuals with a potential to get promoted to more senior positions (February – March 2008).
- First round of the data collection (electronic version of the LVI was used), analysis of these data and preparation of the reports for the managers selected for the project (May 2008 – October 2008).
- Feedback sessions. Two meetings with the respondents were organized during November 2008. All of them were given individual feedback in a form of coaching interview. The participants were assigned a task to elaborate and complete Personal Development Plans focused on reaching versatility in a chosen area.
- Second round of the meetings with respondents. In February 2009 all of the participants were individually contacted and coached again. The focus was on a control and overview of the Personal Development Plans completion as well as on a discussion of the further directions of their efforts to change and improve. On a basis of these interviews respondents elaborated second versions of the Personal Development Plans.
- In May 2009 a "retest" has been initiated. The sample as well as their raters remain the same. It is planned to finish this phase till the end of June, then send the data to Kaplan DeVries and to organize the final coaching interviews with the respondents in October 2009. Results from the both measurements will be used as a reference point for the discussion of the LVI's actual practical value.

4. First Findings and Experience

The first round of the data collection and analysis has led to some interesting observations. These can be divided into two groups: (1) statistics comparing the obtained results with the LVI norms as well as illustrating the most frequent problems; (2) managers's perception of the LVI.

Let's start with the statistics. First, it is possible to compare the data collected on the Škoda Auto sample with the LVI norms (see Tables 3 and 4).

Table 3 Leadership Effectiveness

	Škoda Auto Sample		LVI norms	
	M	SD	M	SD
Overall Effectiveness (10 pt rating)	7,82	0,71	7,80	1,00
Team Productivity	3,85	0,35	3,76	0,41
Team Vitality	3,88	0,45	3,69	0,43

Source: [own]

Table 4 Overall Versatility

	Škoda Auto Sample		LVI norms	
	M	SD	M	SD
Overall Versatility	79%	6%	80%	8%
Forceful-Enabling Versatility	80%	6%	79%	9%
Strategic-Operational Versatility	79%	8%	81%	8%

Source: [own]

These data illustrate, that on the levels of leadership effectiveness and overall versatility assessment there have been identified no significant differences between the data collected on Škoda Auto managers and the LVI norms. However, these findings do not mean, that the Czech managers do not “posses” some specific limitations and weaknesses. More information on this topic reveals Table 5.

Table 5 Data for LVI Dimensions

	Škoda Auto Sample				
	M	SD	Too little	Right amount	Too much
Forceful	+0,06	0,20	14%	50%	36%
Enabling	+0,05	0,38	21%	50%	29%
Strategic	+0,14	0,31	21%	43%	36%
Operational	+0,02	0,36	29%	36%	35%

Source: [own]

Although the results of all respondents were very different, it was possible to identify a certain trend towards lopsidedness on a level of Forceful – Enabling dimension of leadership. Most of the managers from Škoda Auto inclined to overuse their Forceful role. Two general excesses have occurred on a sub-dimension “Takes charge”, in particular on items 2f (“Takes the initiative”, 71% of the ratings were „too much”) and 4f (“Steps in”, 64% of the ratings were „too much”), one of them has been identified on a sub-dimension “Declares”, in particular item 8f (“Doesn’t back down easily”, 57% of the ratings were „too much”). This trend corresponds to a general finding that most of the U.S. managers assessed by the LVI tend to exaggerate their „forcefulness” as well as to our previous research in Škoda Auto (Vroom - Yetton’s contingency approach applied in 2006) according to which Czech managers tend to use so called “time saving mode of leadership” which prefers autocracy to participation.

Another general tendency to exceed some behaviors has been identified on the two items representing „Operational” side of leadership; in particular items 1o (“Results oriented”, 57% of the ratings were „too much”) and 8o (“Seek efficiencies”, 57% of the ratings were „too much”). There are two hypothetical reasons which can explain this finding. First, all of the managers occupy middle positions in Škoda which generally require stronger focus on operational tasks. Second, Škoda Auto as such is strongly oriented on efficiency and results.

Among the identified deficits only one is worthy of our attention – item 8e representing Enabling role (“Makes it easy to bush back“, 71% of the ratings were „too little“). This indicates a certain communication problem with listening and acceptance of the subordinates’ views and can be linked to a previous preference of Forceful leadership to Enabling one, as well as to an orientation on immediate results and efficiency.

During the coaching sessions it was possible to notice some “typical“ perceptions of the LVI. First, most of the managers expressed a view that in comparison to other 360s they have been subjected to before, the LVI is really a new and fruitful tool. It not only deepens their self-understanding, but also gives them a clear and dynamic picture of the relations between their strengths and weaknesses, between excesses and deficits. Such a picture enables to set up developmental goals which do not only lead to an adoption of the new skills and behaviors but also change their attitudes and understanding of the management and leadership. The respondents have accepted the idea of the excesses as a very important and useful one. During the second round of the coaching many of them told us, that a completion of the Personal Development Plans based on LVI results had very positive influence also on an improvement of their relationships with subordinates, peers and supervisors. Even now they feel that they are improving and becoming more effective and versatile.

Conclusion

Not only managers who took the part in the project have appreciated the LVI as a useful and interesting assessment tool. Also the members of the project team (Eva Jarošová, Barbora Horčíčková and Karel Pavlica) already now came to a conclusion that LVI definitely deserves a close attention and can help a lot Czech organizations and their management. In particular, it is possible to highlight the following assets of this method: (1) it offers a dynamic two-sided model of leadership; (2) as such it not only identifies deficits but points to the excesses as well and helps the organizations and their leaders to overcome primitive Darwinism in careers management;; (3) it has been well accepted by the managers, it stimulates their motivation for development and learning; (4) LVI is based on a long and complex research [8].

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Modelling of Sponsor Relationship Management System for Lithuanian Men's National Basketball Team

Abstract

The substantiality of sport sector is growing in economically developed countries. The worldwide growing interest in professional sport, promotes organizations to consider sport sponsorship as a part of their marketing strategy.

The intense competition is becoming the main problem for any business organization. Organizations' offerings are getting similar in terms of price and benefits provided. While trying to attract more customers, organizations have to adopt some particular tactics of customer relationship management. However, in case of sport, the customer relationship management can be transformed to sponsor relationship management. Considering the relationships between the organization and its sponsors, some conjunctive elements are necessary. One of the elements is sport sponsorship. The interest in sport sponsorship as a marketing tool is growing worldwide, and it is becoming a natural component of sport. In order to manage relationship with sponsors, some particular mechanism or system is necessary. Nowadays, it is becoming the matter of high complexity for sport organizations to find and attract necessary sponsors. Accordingly, the scientific problem solved in the article is: how sport organization can attract and retain loyal sponsors.

The object of the research is sponsor relationship management system. The aim of the research is to model the sponsor relationship management system for LMNBT. The methods of the research. The systematic analysis of scientific literature, its theoretical, comparative analysis, synthesis and interpretation are made for the development of the model of Sponsor Relationship Management. Three in-depth interviews were provided to support the theoretical findings: one interview was provided with specialist of Lithuanian basketball management to support the possibilities of application of theoretic model in LMNBT; and two interviews were provided with LMNBT's sponsors to clarify their sponsorship objectives.

Key Words

Lithuanian basketball, sponsor loyalty, sport sponsorship management

JEL Classification

M31, L83

Introduction

Relevance of the research. The substantiality of sport sector is growing in economically developed countries. This sector is rapidly growing part of leisure industry, although, it cannot be considered as largest. The worldwide growing interest in professional sport, promotes organizations to consider sport sponsorship as a part of their marketing strategy.

The intense competition is becoming the main problem for any business organization. Organizations' offerings are getting similar in terms of price and benefits provided. The high customer service quality is becoming one of the most significant competitive tools. While trying to attract more customers, organizations have to adopt some particular tactics of customer relationship management (CRM). However, in case of sport, the customer relationship management can be transformed to sponsor relationship management (SRM). The two areas are very similar and different, as well, in the nature of their management. Both CRM and SRM are management of relationship with existing and potential customers. However, CRM is concentrated on the relationship with consumers and their groups, whereas SRM is supposed to concern relationships with organization's sponsors.

Considering the relationships between the organization and its sponsors, some conjunctive elements are necessary. One of the elements is sport sponsorship. The interest in sport sponsorship as a marketing tool is growing worldwide, and it is becoming a natural component of sport. In order to manage relationship with sponsors, some particular mechanism or system is necessary. Nowadays, it is becoming the matter of high complexity for sport organizations to find and attract necessary sponsors. Accordingly, the scientific **problem** solved in the article is: how sport organization can attract and retain loyal sponsors.

The **object** of the research is sponsor relationship management system.

The **aim** of the research is to model the sponsor relationship management system for Lithuanian Men's National Basketball Team.

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1. The process of sport sponsorship

Sport sponsorship is being described very miscellaneously by different authors. The simplest commonly acceptable definition is that sport sponsorship is the funding of any sporting activity by a commercial organization. However, many other definitions could be found in scientific literature.

The foundation of sponsorship conception lays in exchange theory [1]. Two main principles exist in the theory: 1) two or more parties are exchanging their resources; 2) the resources provided by one party should be equally valuable by the other parties. The principle idea of the exchange is "value getting for value giving". Considering sport sponsorship, the sponsor (commercial organization) is giving some value for sport organization. The given value can take many forms, e.g. financial support, products,

services, etc. But what about the ‘getting’ part of the idea? The more comprehensive analysis of the concept is necessary to answer the question.

Sponsorship is now recognized as being a partnership arrangement: there is a two-way exchange of value and communication between a sponsoring firm and a sponsored entity (sport organization) [2]. Such arrangements are usually no longer agreements of goodwill, but economic agreements, backed by legal contracts, definitions of property rights and a focus on returns on investment [3].

Sport sponsorship could be defined as the area of brand communication – brand awareness and association creation [4]. The primary reason of sport sponsorship is the elicitation of consumer response [5]. Sponsorship is a critical communication tool and an essential component of an organization’s promotional mix [2]. Sport sponsorship should be considered as separate element in the marketing system of both, sponsor and sport organization [6].

According to the scientific analysis performed, the process of sport sponsorship, its feedback and potential benefits for sponsor can be provided (see Chart 1).

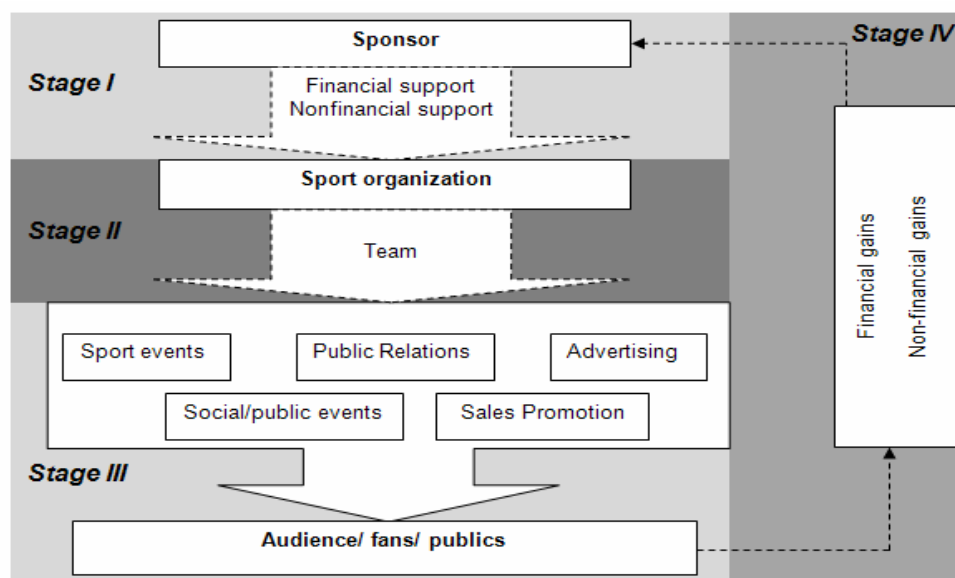


Chart 1. The process of sport sponsorship

Source: self elaboration

Sport sponsorship provides competitive advantages and idiosyncrasy for the commercial organization. The employment of this promotional element helps competing for better market share, attain new and retain existing customers, and increase sales volume and revenue.

The starting point of the process of sport sponsorship is commercial organization – the sponsor. The process of sport sponsorship as a tool of marketing communication helps sponsors in their brand development, reaching its target audience, maintaining brand associations and image [1]. Sponsoring organization reflects itself as a socially responsible entity: sport sponsorship helps in generosity demonstration. Sponsors make

an investment in “cash or kind” [2]. The “cash” can be characterized as the financial support, whereas “kind” stands for non-financial support for the sport organization.

Financial support helps sport organization to attract and retain well-known, high class athletes, professional coaches, medical and administration staff to the team. It results in team salaries, bonuses, and awards. Better team infrastructure (training base, sports inventor, medicine, insurance, transport, etc.) can be developed. Besides, higher level pre-season training sessions can be organized. Pre-seasons training sessions result in training camps’, control games’, etc. organization. Also, financial support can be allocated to fund show program during the game. The show program involves team dancers, acrobatic shows, lotteries and contests for game viewers.

Non-financial support is provided in goods or services, which are part of sponsor’s business portfolio [2]. For example, clothing company can provide sportswear for the team members, auto dealers can supply team with cars, and hotels provide accommodation for guest-teams. Media companies, such as magazines, newspapers, radio stations can help sport organizations with advertising. Printing-houses, also, should be taken under consideration as a potential sponsors. Latter mentioned organizations provide prospects, brochures, booklets, and other informative publications.

The drivers of the process of sport sponsorship are objectives of sponsor organization. The main goal for every commercial organization is profit. Accordingly, sport sponsorship can be called as a method for profit generalization. Sport sponsorship indirectly stimulates sponsor’s product sales through brand image building and brand awareness formation. Overall, enhancing organization’s image and increasing brand awareness have traditionally been the most important sponsorship objectives [7]. Sponsorship is the provision of resources by an organization (the sponsor) to the sponsee (sport organization) to enable their latter to pursue some activity in return for benefits contemplated in terms of the sponsor’s promotion strategy, and which can be expressed in terms of corporate, marketing or media objectives [8]. The tools of promotion mix can be employed to fortify sponsorship’s effect on potential and existing consumers.

As scientific analysis showed, commercial organizations are seeking for profit. Sport sponsorship affects sponsor’s profit either in direct, or in indirect ways. Direct way results in financial gains attained by product or service sales during sport event or under affection of sport-related promotion. The non-financial gains (indirect effect on sponsor’s profit) result in organization’s image building, brand awareness formation, etc.

The complexity of the process of sport sponsorship is obvious: the modelling of the activities of two separate organizations’ overlap. Sport sponsorship process can be successful only with the help of effective sponsor relationship management.

2. Sponsor relationship management in LMNBT

Few studies have considered sport sponsorship from a relationship perspective. This is despite evidence that sponsors and sport entities engage in long-term, mutually beneficial, relationships where the role of trust and commitment is likely to be pivotal [9].

According to the general secretary of Lithuanian Basketball Federation (LBF) Dr. Mindaugas Balčiūnas, the activity of sponsor relationship management is being performed in LMNBT. The accountable for the activity are the Commerce Manager and the Commerce Department of Lithuanian Basketball Federation (LBF). The main objectives of sponsor relationship management are implementation of contracts' (with sponsors) conditions and fulfilment of sponsors' support-related objectives. The fundamental LBF's sponsors' objective is the possibility to get the status of LBF's sponsor. The tight collaboration with the sponsors is mutually beneficial, whereas, LBF receives financial and non-financial support, and the sponsors gain popularity and brand awareness, as a feedback. However, the concrete model for sponsor relationship management persists.

Seeking to clarify the process of sponsor relationship management in LMNBT, interviews with LBF General Secretary Dr. Mindaugas Balčiūnas and the representatives of two selected sponsors (Toyota and ArxBaltica) were provided. From the list of sponsors were selected Toyota representatives in Lithuanian Closed Joint-Stock Company "AUTOTOJA", as a dealer of the global level brand. The choice of this particular dealer (CJSC "AUTOTOJA") was made, because it had the greatest work experience in Lithuania in the Toyota missions. Interview was provided with the Communication with Clients and Staff Department's Director Ms. Reda Aleksandravičiene. CJSC "ArxBaltica" was chosen, because it was a well known organization in Lithuania, having a great experience in printing. Interview was provided with the owner of the company, General Director Rolandas Dovidaitis.

As for the Lithuanian men's basketball team sponsors, Dr. M. Balčiūnas confirmed that selected respondents were on total LKF sponsors list. The support obtained from these sponsors' is being used not only for LMNBT, but also the other LBF objectives. The vast majority of LBF sponsors' provide support for the Lithuanian National Men's Basketball Team, but they are declared as LBF's sponsors. LBF divides its sponsors into three groups: the 'major sponsors', 'sponsors and partners', and 'media sponsors'. Major sponsor receives the principal part of support package, because their support in quantity is significantly higher than the other sponsors' or partners'. LBF holds the condition that the number of major sponsors' should not exceed nine. According to Dr. M. Balčiūnas, it would be impossible to properly fulfill contract obligations, if the number of major sponsors was higher. LBF is committed to sponsors to fulfill the logo visibility requirements. The visibility of sponsor's logo should not be outweighed by other companies' trademarks, trying to keep maximized logo's visibility. In case of other smaller sponsors or partners, there is no quantity limitation, as they are presented together in a list of sponsors and are not distinguished from the total volume in any way.

According to Dr. M. Balčiūnas, in LBF the Commerce Department is responsible for the search of new sponsors. Department's function is to establish contacts with potential

sponsors and arrange meetings with business organizations in the summit. The biggest role in finding potential sponsors plays LMNBT's performances and the achievements of championships or Olympics. The majority of sponsors are attracted in this way. Some potential sponsors are being developed for several years. This continuous communication and contact with commercial organizations ultimately result in signed sponsorship contracts. The principle objective of LBF's Commerce Department is to recruit more potential sponsors for the improvement of organization's budget. As for the maintenance of existing sponsors and their loyalty to the LBF, the focus is given to contract terms. The fulfillment of the terms of sponsorship agreements and the satisfying of sponsors' interests, are the best ways to enhance their loyalty and continuous support the Federation. In this way, a continuous collaboration and interpretation of sponsor's wishes is being provided, on purpose to better satisfy them. However, it sometimes depends on the LMNBT's composition. Sponsors sometimes even increase the support amount only to dash with their logo on the famous basketball player's clothing, when famous basketball players are invited to participate and to represent their country. This is a great opportunity, which allows attracting more generous sponsors. Similarly, the television ratings, and the viewers-crowded arenas help to attract new sponsors, and keep existing ones as loyal LBF's supporters; also, to prolong support giving for the sport organization period.

The well-known car manufacturer Toyota supports the sport organizations worldwide. CJSC "AUTOTOJA" is one of the TOYOTA dealers in Lithuania in implementing the philosophy of Toyota Corporation: its mission and vision, also wanted to support the sport in Lithuania. Since basketball is more than sport in Lithuania (it is quite bold as being the second religion), TOYOTA dealers decided to support the Lithuanian Basketball Federation. According to Ms. R. Aleksandravičienė, the Director of the Communication with Clients and Staff Department, the expectations of the company, before starting to provide support, were to contribute to the development of basketball at the highest level, and promoting the Toyota brand in Lithuania, seeking to promote the TOYOTA sales. The expectations have proven, during the successful advertising campaigns. E.g., the Lithuanian basketball star Šarūnas Jasikevičius and the head coach Ramūnas Butautas were given the new cars for temporary use, while the team had been preparing for the Beijing Olympic Games. According to Ms. R. Aleksandravičienė, TOYOTA is a loyal LBF's sponsor, because the Federation justifies organization's expectations. CJSC TOYOTA receives the required amount of effective advertising and the Federation smoothly carries out its obligations.

The owner and Gen. Director of CJSC "ArxBaltica" R. Dovidaitis, unambiguously confirmed that the love for basketball prompted the organization to support the LBF. Mr.'s R. Dovidaitis expectations before beginning to provide support were to enhance the promotional activities through the publishing of prestigious publications about LBF to perfect themselves, and to show competitors, how strong is CJSC's "ArxBaltica" printing-house. Expectations verified in one hundred percent. The printing-house performs all the work in highest quality, publishes LBF's prestigious magazine "Mūsų krepšinis" and other LBF's orders for publications. Mr. R. Dovidaitis states that CJSC "ArxBaltica" is a loyal LBF's sponsor. The loyalty has formed through such factors as: the high regard showed by LBF's top management, their useful and productive work. Mr. R. Dovidaitis welcomes the visits of LBF's top management, appreciates their special attention during the significant dates for printing-house, calendar feasts, invitations to

go to the championships or the Olympic Games with the national team. The very important loyalty driver is the stride of LMNBT in the championships and the Olympic Games. According to Mr. R. Dovidaitis, it is obvious that an organization with the leading position in the market chooses to support the sport organization, which will also be leading.

3. The model of sponsor relationship management

The analysis of scientific literature and the interview data revealed the necessity for the model of sponsor relationship management. The model (Chart 2) was designed in accordance to the research results.

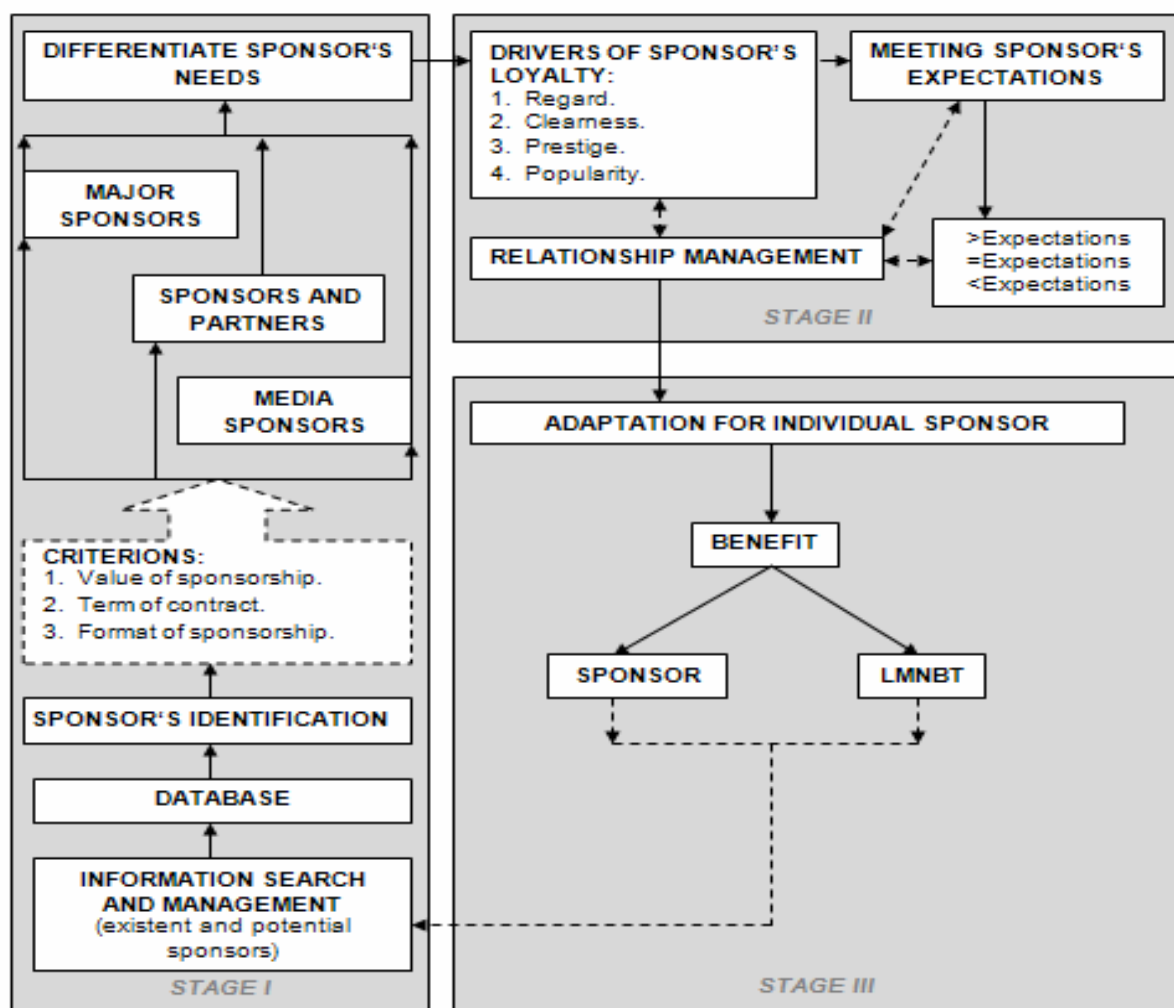


Chart 2. The model of sponsor relationship management

Source: self elaboration

All the comprehensive information about the potential or existing sponsor should be gathered in the Stage 1. The information gathered has to be consigned to the database. According to the criterions established, sponsors are divided into three groups: 'major sponsors', 'sponsors and partners', and 'media sponsors'. The continuous communication with sponsors helps to determine sponsor's needs.

In the Stage 2, sponsor's loyalty drivers have to be identified. The conformity of sport organization's performance with sponsor's expectations has to be evaluated and managed.

In the Stage 3, in accordance to the information obtained, the support package is created and proposed to the sponsor. Support's benefits for the sponsor and for sponsee are determined. The tools of promotion mix can be employed to meet sponsee's expectations:

- Sponsors are publicized during sport events. Such publicity can be divided into two main categories: designed for the audience in the place of sport event (e.g., sport stadium, sport arena, racing track, etc.), and for TV audience.
- Sport team's achievements at sport events attain audiences' and fans' appreciation, reinforcing sponsor's image, as well.
- Sport organizations often organize social events, such as orphanage, schools, hospitals, etc. visiting, friendly games with local communities, drugs-alcohol-deceases prevention events, and etc. Sponsors get positive publicity during such events, in the way of being related to the charitable activity.
- Athletes can be employed in media advertising of sponsor's production or organization. It is a great opportunity for the sponsoring organization to link itself to society's sport-related values.
- Tools of sales promotion used by sponsor can be related to a supported sport's team. E.g., the notion about support for a team can be placed on the labels of sponsor's production. Sponsor's logo can be placed on team's sportswear or inventory.

Promotional activities described above, help sponsor organization to attain its objectives. The process's feedback results in the additional information which has to be added to the database. The information should be continually renewed and refreshed; all the changes and novelties should appear in database, and the process restarts.

The model of sponsor relationship management is necessary for LMNBT, because it involves and integrates various functions of organization, consequently facilitating the sponsor relationship management performed.

Conclusions

According to the analysis of scientific literature, sport sponsorship provides competitive advantages and idiosyncrasy for the commercial organization. The employment of this promotional element helps competing for better market share, attain new and retain existing customers, and increase sales volume and revenue.

The complexity of the process of sport sponsorship is obvious: the modelling of the activities of two separate organizations' overlap. Sport sponsorship process can be successful only with the help of effective sponsor relationship management.

The activity of sponsor relationship management is being performed in LMNBT. The main objectives of sponsor relationship management are implementation of contracts' (with sponsors) conditions and fulfilment of sponsors' support-related objectives. The fundamental LBF's sponsors' objective is the possibility to get the status of LBF's sponsor. The tight collaboration with the sponsors is mutually beneficial, whereas, LBF receives financial and non-financial support, and the sponsors gain popularity and brand awareness, as a feedback. However, the concrete model for sponsor relationship management persists.

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Does Regional Integration Promote Trade? Case Study of Selected Regional Trade Agreements

Abstract

This article analyses the position of selected regional integration groups (mostly consisting of developing countries) in the international market. We will try to find commonalities between their extra regional trade and answer the question if the existence of regional integration can increase value of trade.

We have analysed the overall exports for the period of twelve years and can say that all RTAs witness the continuous growth of total exports; however, there are huge differentiations between particular trade agreements.

The results show enormous differences between chosen regional groups which can be caused by the level of development of the member states in the regional trade agreements. Even if the value of traded products increased over the monitored period of time we can conclude that the structure of foreign trade of analysed regional trade agreements exactly shows the position of developing countries on the international market. They are competitive in agricultural products and fuels but not in processed products or products with higher value added. The problem is even the structure of agricultural products, when some of the RTAs (ECOWAS, CARICOM, COMESA) focus on “cash crops” where the price is fluctuating.

The main aim was to find any evidence of whether the regional trade agreements promote trade. On the basis of our analyses we cannot prove that there is any direct impact of the RTA on increasing value of trade, or even the changing structure of trade.

Pieces of knowledge introduced in this paper resulted from solution of an institutional research intention MSM 6046070906 „Economics of resources of Czech agriculture and their efficient use in frame of multifunctional agri-food systems“.

Key Words

regional trade agreement, RCA index, regional integration, competitiveness, structure of trade

JEL Classification:

F40, O18

Introduction

It is argued that international trade connected with overall liberalization can lead to economic growth. This view comes from neoclassical trade theory which is known for its support of the open economy. In the world economy there has been a massive shift from previously home protected markets to the support of an international trade. We are witnesses of overall liberalization of world trade that started in 1947 with the foundation of General Agreement on Tariffs and Trade (GATT), and the outcome of the Uruguay Round of the negotiation (1986 – 1994) was the creation of the World Trade Organization (WTO) in 1995. The practical impact resulting from this shift was not so

big issue. Pomfret [16] argues that there was no practical impact just the change of nameplate. On the other hand Fernández and Portes [10] mentioned that the change of name brought deepening and widening of the international trading system.

Throughout history, trade agreements were often used to overcome trade barriers and obstacles and to promote trade between nations. Trade agreements were also cornerstones in the processes of economic integration. In the 50's and 60's most of the first attempts of regional trade agreements (RTA) failed. This period can be referred to as the first wave of regionalism. Nowadays, nearly every state is a member of at least one RTA. Probably the most successful example of a regional trade agreement is the European Union.

Two phenomena can be connected with the recent development. One of them is the growing interest in GATT/WTO. It would be difficult to imagine that from approximately 80 member states in the 90's there would be more than 150 fifteen years later. The other one is related to the fall of the eastern bloc when the former member states sought new opportunities. This can be also associated with the unilateral liberalization and decline of non-tariff barriers.

The increasing number of regional trade agreements (RTA) emerges from the liberalization of world trade. Several studies [11] and [12] mentioned the new trend that has been reported as "new regionalism". Many questions have been asked about three main examples of regionalism appearing on different continents which are the European Union (EU), North American Free Trade Area (NAFTA) and Asia-Pacific Economic cooperation (APEC). By the end of 2008 more than 420 RTAs have been notified to the GATT/WTO.

The European model of integration is not fully applicable to the situation of most developing countries. The presumption that all countries can benefit from better access to the expanded internal markets is widely spread between economists. However, this presumption depends on the possible creation or diversion of trade between member states.

1. Theoretical background

While talking about regional integration first of all we have to mention that several types of integration schemes exist. We can divide them into three most important categories (bilateral, regional and multilateral). A special kind of trade liberalization agreement is the preferential agreement.

We will discuss the process of integration at the regional level. The recent proliferation of regional integration schemes increased the interest in regional economics and the economics of regionalization. Originally some authors [13], [14] and [6] have focused on the gains from trade if states create a custom union. The authors of international trade theory have been analysing the impact of integration connected with liberalization of the

international trade to commodity trade. Under global free trade, countries and multinational firms try to reallocate their resources to use the comparative advantage.

Lately some studies [3], [2] and [9] have appeared concerning on the effect of free trade agreements on the welfare gains of member and non-member states.

Viner [19] proved that the move to free trade and introducing external tariffs would leave both countries in a worse position. Bhagwati and Panagariya [4] have the same outcome when they argue that RTA's have mostly a trade diverting effect. Compare this to the findings of Krugman [15] who argues that most RTA's likely entail relatively low welfare losses resulting from trade diversion because the countries involved are usually geographically connected. Bond et al. [5] concluded his study that the formation of a free trade area improves the terms of trade and welfare of non-member countries, because it creates an incentive for members to reduce their external tariffs. On the other hand Crawford and Laird [7] state that RTAs are by their nature discriminatory and hence a derogation of the most favourite nations (MFN) principle. They found out that between the years 1990 and 1999 trade within six analysed RTA (inc. APEC, MERCOSUR, NAFTA, EU, ASEAN and Andean Community) increased by 7 % annually. Imports from non-member states increased by 6% per year.

All these analyses are connected with the "old regionalism" where the main interest has been trade creation, trade diversion and terms of trade.

2. Aim and methodology

The objective of this paper is to examine the role of intraregional and extra-regional trade within chosen regional groups (mostly consisting of developing countries) and also to compare it with the rest of the world. We also try to find common characteristics for intraregional trade and answer the question of whether the existence of regional integration can increase the value of trade. We analyse the structure of trade and especially agrarian trade together with the pattern of export and import.

We analyse the structure of export commodity aggregation and thereby try to find whether comparative advantage exists between chosen selected regional groups. The selection (especially for Africa) was rather difficult because of overlapping membership.

The problem of intraregional trade has been analysed by basic and chain indices. We also use revealed comparative advantage indices and trade intensity indices for our analyses.

The original RCA index, formulated by Balassa [1], can be written as:

$$B = (x_{ij} / x_{it}) / (x_{nj} / x_{nt})$$

where x represents exports, i is a country, j is a commodity, t is a set of commodities and n is a set of countries. RCA I measures a country's exports of a commodity (or industry) relative to its total exports, and to the corresponding exports of a set of countries, e.g.

the world. A comparative advantage is “revealed”, if $RCA I > 1$. If RCA is less than unity, the country is said to have a comparative disadvantage in the commodity/industry. It is argued that the RCA I index is biased due to the omission of imports especially when country-size is significant.

The analyses will be performed for the period 1995 – 2007. The earliest year cannot be taken into consideration because of the lack of data. Data from the COMTRADE Standard International Trade Classification Revision 3 commodity nomenclature will be used for the analyses. We divide the nomenclature into three parts: First include the agrarian commodities (groups 0+1+4 of SITC), second fuels and crude materials (group 2+3 of SITC) and the last one processed products (group 5+6+7+8+9 of SITC).

Pieces of knowledge introduced in this paper resulted from solution of an institutional research intention MSM 6046070906 „Economics of resources of Czech agriculture and their efficient use in frame of multifunctional agri-food systems“.

3. Basic characteristics of the selected groups

We have chosen six regional trade agreements for our analyses: Association of South-East Asian Nations Free Trade Area (AFTA), Common market for Eastern and Southern Africa (COMESA), Economic Community of West African States (ECOWAS), Caribbean Community (CARICOM), Southern Common Market (MERCOSUR) and Commonwealth of Independent States (CIS). The aim was to analyze an integration agreement on each continent except Europe. Of course, the CIS is partially located in Europe and partly in Asia. AFTA, MERCOSUR and ECOWAS are among the most important regional RTAs in each continent. Each of them was intended to eliminate trade barriers between member states and to create regional markets. The aim was to select RTAs which belong to one geographical area. Nearly all of the selected groups (except CIS) were founded before the WTO came into force (Tab. 2).

Tab. 2 Basic characteristics (2007)

RTA	Area (sq km)	Number of inhabitants (mil.)	GDP in PPP per capita (current int. \$)	Date of implementation	Number of countries
AFTA	3 053 899	480,9	5 534	1992	6
CARICOM	462 190	16,3	4 787	1973	17
CIS	20 936 990	217,7	11 634	2003	8
COMESA	861 701	469.36	1 893	1994	21
ECOWAS	5 112 510	280,9	1 598	1975	15
MERCOSUR	11 878 250	240,5	10 062	1991	4

Source: World Bank, WTO

Three of them (AFTA, COMESA, MERCOSUR) are preferential agreements, CIS and AFTA created a free trade area and CARICOM represents a custom union. From these examples it can be seen that “Regional trade agreement” is a general term that refers to a very wide range of levels of economic integration. As is evident from table 1 there are huge discrepancies between chosen RTAs. The difference is not just that CIS and MERCOSUR

belong to the group of better off countries, whereas ECOWAS and COMESA member states are mostly the least developed countries or very poor ones.

4. Empirical evidence and discussion

Trade volume and terms of trade determine the welfare effect of any regional trade agreements which have been a well-known development in recent decades. Another well-known fact is that intra-regional trade has an increasing pattern in the most important block. The question is if the same situation appears in our selected groups.

We have analysed the overall exports for the period of twelve years and can say that all RTAs witness the continuous growth of total exports; however, there are huge differentiations between particular trade agreements. The most successful one is CIS which has the highest increase. This increase was caused by the enormous increase of the price of fuel and crude material (group 2+3 of SITC) which share 70 % of total exports. This was given by the high price of these raw materials in recent years. We would expect a huge drop of the total export in 2008 due to the current economic situation. Unfortunately data are not available yet. Generally speaking fuels and crude material have achieved the highest growth in all analysed RTA. Although the value of agrarian products increase (especially between the years 2006 – 2007), this increase is not as important as the rise of processed products. This was particularly significant for CARICOM, COMESA and ECOWAS. This could be the very first signal of the changing pattern of the economy structure of the developing countries. We can conclude that the structure of export shows typical situation of developing countries.

Whilst we accept the fact that the value of agricultural exports is increasing though the share is declining, the question is what the structure of the agrarian export is and if there are any patterns. The item “Live animals” (S3-00) is declining slightly for AFTA and CARICOM. In contrast “Animal oils and fats (S3-41) have considerably increased - over 100 % for CARICOM and COMESA. Compared to other item it is CARICOM’s and COMESA’s highest increase. “Meat and meat preparations (S3-01) became a very important item for ECOWAS. MERCOSUR has well-balanced growth of all products. There is no unexpected overall increase of any item.

After the results of total trade we would expect that intraregional trade would have an increasing tendency as well. In general this is true. Intra-regional exports mostly copy the pattern of total exports. The only difference is the structure of exports. While on the international level the crude materials and fuels play the most important role, the situation on the intra-regional market is slightly different. AFTA, CARICOM and MERCOSUR focus on this group of products and the increase in the export of these products is significant. CIS and COMESA trade mostly processed products and ECOWAS agrarian products. Data shows that MERCOSUR is changing the structure of its intra-regional trade and there is a gradual transition from the agrarian products to the products with higher added value. This might be considered as evidence of a gradual change of exports to the world market towards higher value-added products.

A similar situation to the world export can be found on the intra-regional export market. The only difference is for MERCOSUR which, due to the shift to more value added product (manufactures), has a higher amount of declining items (mainly agrarian products, for example: dairy products, sugar, beverages and tobacco). The indices also show the year to year differences in the value of the agricultural production and due to that vulnerability of these RTAs, and subsequently member states.

The position of selected regional groups on the international markets also depends on the revealed comparative advantage that each RTA has. First of all the RCA for agrarian products were calculated (Chart 1). The most competitive group in agrarian products is COMESA together with MERCOSUR. Their position is, however, different. COMESA tend to show decline over the period from 1999 to 2006 and MERCOSUR position has improving tendency. While we compare the declining absolute value of agrarian products in the total export this might look like not using the comparative advantage. Then the question is should they use their comparative advantage and specialize in agricultural products, or should they shift toward higher value-added products. Chart 1 also shows the position of CARICOM which RCA has a declining tendency. However, all the above mentioned RTAs still have a comparative advantage for agrarian products. The same cannot be said about AFTA and CIS. The later should not specialize in any agricultural products because its comparative advantage is lower than 1 for all agrarian products. AFTA is competitive in the following items “Fish, Crustaceans, Mollusc” (S3-03), “Coffee, tea, cocoa, spices” (S3-07), “Fixed vegetable fats and oils (S3-42) and “Animal, vegetable fats, oils” (S3-43). ECOWAS position depends very much on the price of cash crops (especially coffee, tea, cocoa and spices) on the international markets. In the years 1995, 2004 and 2007 when the prices of the above mentioned products reached their maxima, ECOWAS’s RCA for these products has varied between 50 and 65. This abnormally high value of one part of the overall index caused the huge variation between the monitored years. If we exclude the problematic item the trend nearly copies the situation of CARICOM.

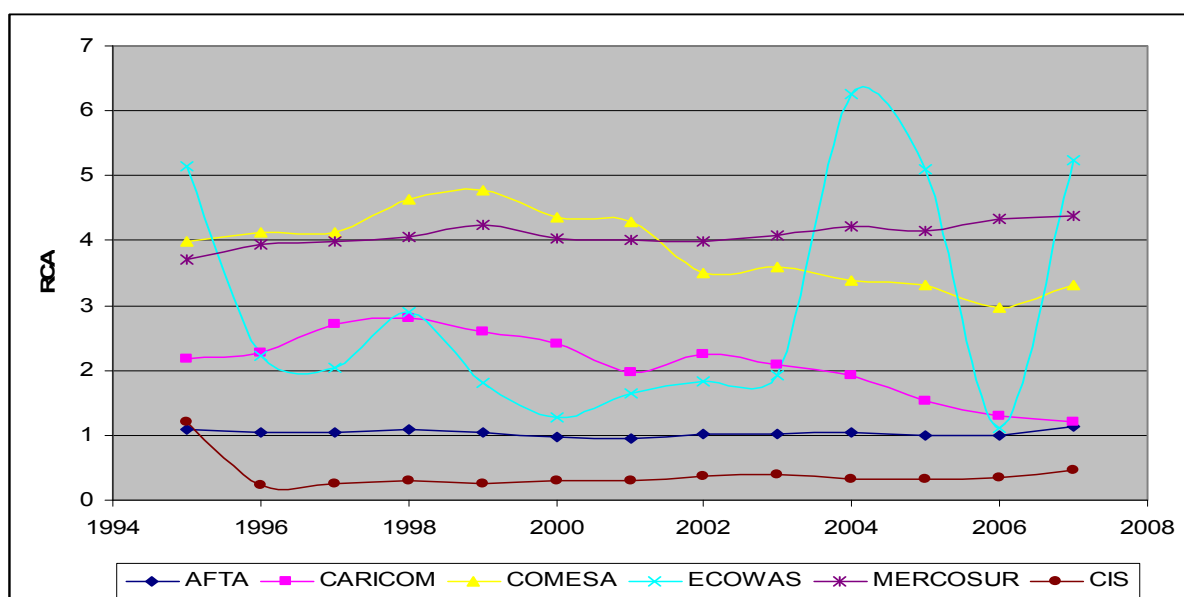


Chart 1 RCA indices for agrarian products at world level

Source: Authors calculation based on Comtrade data

The curve of ECOWAS shows exactly the dependency of developing countries on cash crops and due to that, the vulnerability of these countries at the international market. The position of AFTA countries is given by their specialization. These countries are more industrial than for example ECOWAS or CARICOM countries. The evolution of AFTA RCA index is rather stable without any distinct variation. The value of RCA is, however, on the burden of competitiveness. The Commonwealth of Independent states also has a stable evolution of agricultural RCA but we can speak about comparative disadvantage instead of advantage.

MERCOSUR is on the other site. It is obvious that this regional trade agreement consists of agricultural exporting countries which originally belong to the Cairns group. The graphical illustration shows the stable and even growing importance of agriculture for MERCOSUR countries. Compared to the other RTAs, this is the most competitive one for the monitored period of time. If we put MERCOSUR and COMESA side by side (which are also quite competitive) – one big difference appears. While the competitiveness of MERCOSUR is stable or even increasing, COMESA has been losing its competitiveness over the last decade. This is given by the specialization of the countries. “Coffee, tea, cocoa, spices” (S3-07) play an important role in the agrarian export (however, not as important as in the case of ECOWAS). These countries also specialize in sugar (S3-06) and beverages (S3-11). MERCOSUR partial RCA for distributed index for “single commodities” give us evidence of the competitiveness and importance of “Meat and meat preparations (S3-01), and another very competitive group of products “Fish, Crustaceans, and Mollusc ”(S3-03 CARICOM nearly replicated the trend of COMESA although the level of RCA is approximately about two points lower for the latter. For the period 1995 – 2006 we could talk about comparative advantage, but in the last monitored year the value of RCA dropped and it is now close to unity, and if the trend continues we will be talking about comparative disadvantage.

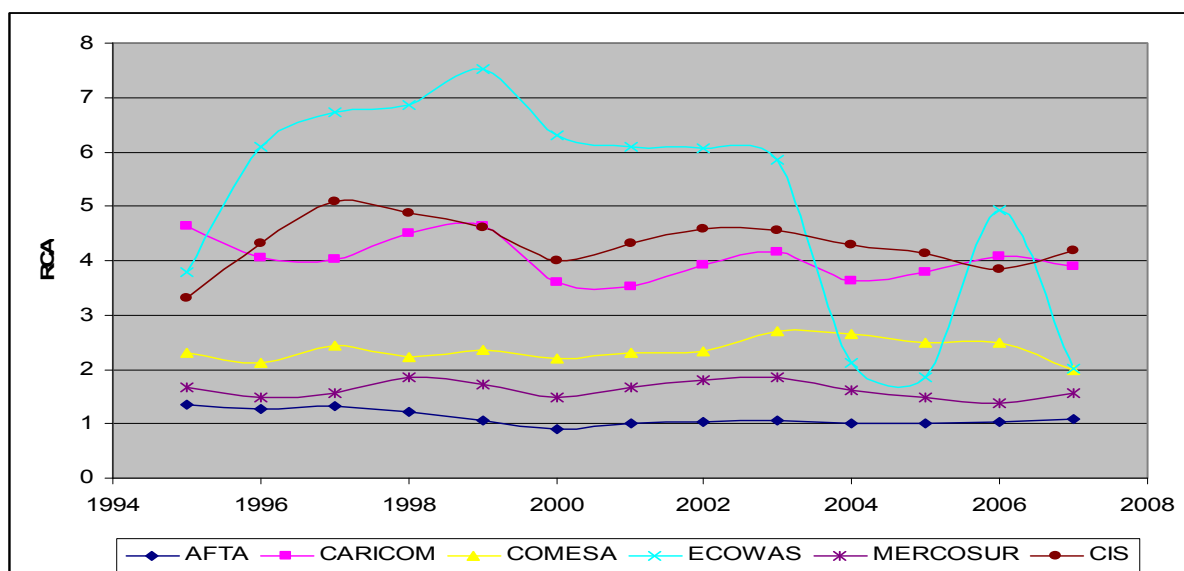


Chart 2 RCA indices for fuel and crude materials at world level

Source: Authors calculation based on Comtrade data

Chart 2 illustrates the value of RCA for fuels and crude material. In contrast to the previous situation there are no groups with obvious comparative disadvantage, although AFTA is just on the edge. Other monitored RTAs are competitive for fuels and

crude materials. The most competitive one is the Commonwealth of Independent States which, together with OPEC, is one of the biggest producers of fuel on the world level. It would be interesting to know what would be the evolution of the level of RCA because of the current economic crisis. CARICOM is also very competitive. What is rather interesting is the evolution of RCA for ECOWAS. If we put it side by side with the previous chart we can see an inverse evolvement. The years when we have witnessed a decline in agriculture are extremely successful for fuels and crude materials, and vice versa.

It is proved that in the years when prices of fuels are in their maxima, prices of agricultural products are very low. This corresponds to the fact that in 1999 the prices of fuels were extremely high. This evolution of ECOWAS's basic RCA exactly mentions negatives of RCA which are based on just the price element, and do not take in account the quantity of exports achieved. Even if the value of export is high, the price is extremely low, and this negatively affects the RCA index. COMESA and MERCOSUR position is quite stable even if we can see a slight decline between the years 2003 and 2007 for COMESA. This is given by the position of Angola, Congo Democratic Republic, Eritrea, Rwanda and Sudan which have a negative impact on other members of the RTA.

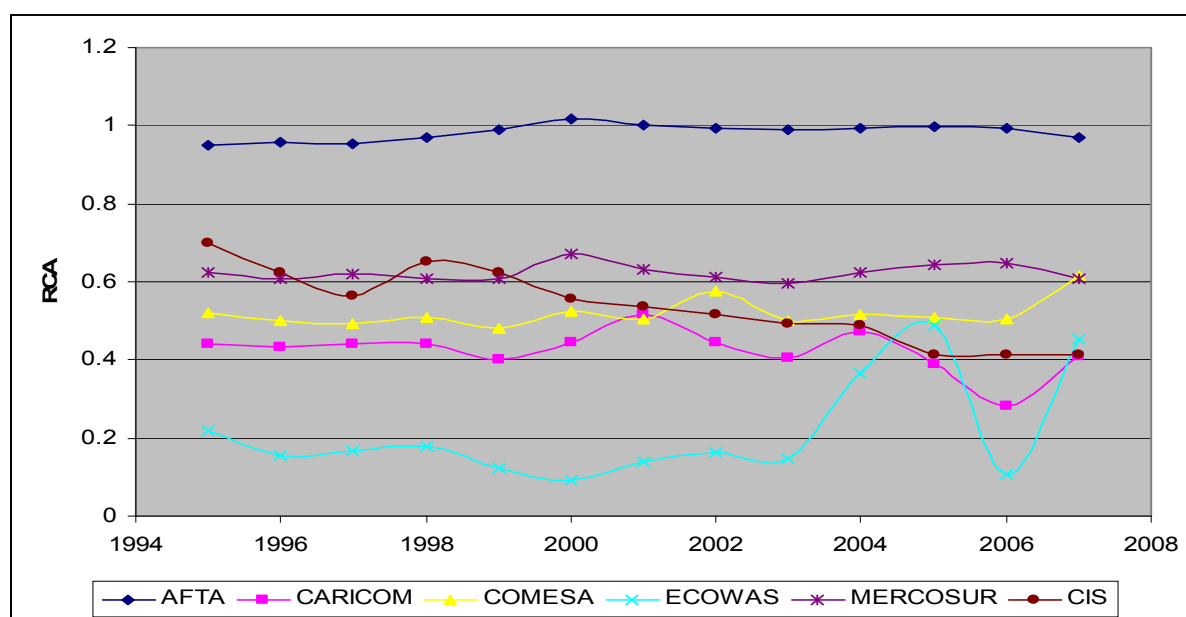


Chart 3 RCA indices for processed products at world level

Source: Authors calculation based on Comtrade data

Chart 3 perfectly exemplifies the position of developing countries on the international market with processed products. Only AFTA which consists of more developed countries such as Brunei, Malaysia, Philippines, Indonesia, Singapore and Thailand has a better position on the international market in comparison with others. But even this RTA has not had a competitive advantage in processed products export (measured as one aggregated group). The declining value of the revealed comparative advantage of CIS is quite surprising. This was rather unexpected; however, it is caused by the member states because only Russia has a better position, whilst other member states are in worse position. Slightly improving trend can be seen at COMESA, CARICOM and ECOWAS. However, we cannot say that this trend would have ongoing tendency. The

question is if massive investment can help these countries to change their production structure.

The difference between the monitored groups is just the value of RCA. The dissimilarity between the best and the others shows that most of the countries cannot compete with products with higher added value. This is also influenced by the tariff escalation phenomena. Another issue is very low intraregional trade between developing countries because of their mutual trade barrier. These barriers have been set up due to the similar structure of production between individual member states. According to Thirlwall [17] and Todaro and Smith [18] this is one of the biggest problems of developing countries. Dollar and Kray [8] proved that a 10 % increase in the ratio of trade to the GDP would raise the GDP per capita by 2.5 % over the decade. When we put side by side the above findings [8] together with our findings the results show that due to the absence of competitive products with higher added value there is little chance for those countries to catch up with the developed countries.

Conclusion

Even if the value of traded products increased over the monitored period of time we can conclude that the structure of foreign trade of analysed regional trade agreements exactly shows the position of developing countries on the international market. They are competitive in agricultural products and fuels but not in processed products or products with higher value added. The problem is even the structure of agricultural products, when some of the RTAs (ECOWAS, CARICOM, COMESA) focus on “cash crops” where the price is fluctuating and the member states of the above mentioned groups cannot calculate a stable income.

The main aim was to find any evidence of whether the regional trade agreements promote trade. On the basis of our analyses we cannot prove that there is any direct impact of the RTA on increasing value of trade, or even the changing structure of trade. This might be caused by the absence of any developed countries in the examined regional trade agreement.

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Specifics of Municipal Development Control

Abstract

High quality control of cities and municipalities development contributes significantly to assurance of municipalities socioeconomic level positive development similarly as in the case of company management and reaching company's business goals. The issue of development control at the level of municipal governments in The Czech Republic is an important subject of both desk study and practical application. This area is the object of regional policy concern especially by means of research projects. Undermentioned specifics of municipality development control are based on research of management function implementation which was realized step by step on the sample of 130 municipalities all over The Czech Republic. The research identified among others also in it's first solvable part a range of moments specific for this area. In three subsequently realized mutually independent examination the investigators of research project observed and judged indicators, factors and concrete situations according to which it has been possible to evaluate and compare the extent, quality and effectivity of realized management functions in individual municipalities selected from a representative sample. Consequent analysis of field research input specifies methods and intensity of management functions application in control of municipalities in The Czech Republic. The analysis mentioned takes over theoretical base of company management digestedly and considers both basic types of management functions i.e. sequential function (planning, organizing, personal policy, people management and control) and continuous function insisting on decision (decision making and communication).

Key Word

municipal development control, management functions, quality of municipality development control, specifics of municipal development control

JEL Classification:

R58, R11

Introduction

Level of management development which is mainly caused by personal insufficiency is one of the main reason of the creation and continuation of the socio-economic disparities in the Czech regional development, predominantly in small and medium-sized municipalities. Human resources issue on the basis of both management and implementation of the municipal development is manifested particularly by lack of qualified and motivated staff as well as particular representatives of the self-governments. This status is largely due to the administrative division of the Czech Republic which is characterized by a very high number of municipalities and their fragmentation. Personal inadequacy for the management of the municipalities or their development is entirely logical from this perspective. As the fragmentation of self-governing units negatively affects other fields of the municipal development (finance, provision of public goods and services, budget tax determination, etc.), the question is

whether it would not be systematically appropriate to support a system of the municipality integration based on motivation and even on profitability for individual municipalities. However, the implementation of these ideas is not realistic at the present or even in mid-term prospect. It is necessary to explore new approaches on how to deal with lack of the effective management of the municipal development, and to contribute to the positive solutions of regional disparities in the Czech Republic.

The current status of municipalities shows that this question is highly topical. Professional management procedure on the basis of the well-elaborated development strategies and programmes is only implemented within a minimum number of municipalities and micro-regions. The main objective of the management is the activation of its own internal development potential, in addition emphasis on the development of human resources (which is a most significant wealth of municipality and region), and to move toward fulfilling a short, medium and long-term objectives set out. The current and for many years applied experience in both municipal and micro-region management consists mainly in direction of development activities purely to the areas where it is possible to draw the grants. Thus, regional development is not being led by pursuit of the systematicness, conceptualness and logical structure of the implemented activities. Individual unlinked partial projects demonstrate a lower multiplier effect, eventually generate the less positive externalities, and cannot in that way fulfill the complex development objectives of the municipalities.

1. Management development of the municipalities

The municipalities as corporate bodies represent the territorial self-government. Thus, the municipality creates the territorial-functional defined unit with the right to decide separately on their affairs. The mission of the municipality is (according to law No 128/2000, Coll., on Municipalities) to take care of both the comprehensive development of its area and the need for its citizens. Based on the above mentioned mission that in practice mostly consist in securing and delivering public goods and public services, the municipality must have the created conditions, particularly in the form of own property (including financial), and of the right to act on their behalf and on their own responsibility in legal relations. All the main attributes of legal identity of the municipalities i.e. decision independence, possibility to own property, acting both on their behalf and responsibility, are completely identical with the elements of the legal identity of other economic entities in the CR or more precisely companies. Based on the management theory it results that legal persons control their own activities better and more effective than the public sector which belongs to the municipality. There is a question whether it is not possible to control the municipality as company.

The fundamental management skills of private sector are also generally valid for public sector. It is sequential function i.e. planning, organizing, management, supervision, and continuous functions i.e. analyzing, decision making and communication [1]. Main difference between the private and public sector from the management's point of view can be seen mainly within the monitored objectives, in addition, defined activity, the extent of liability accompanying by level of motivation.

The aim of the firm's life is all the time to maximize the economic effect. Thus, the objective is clearly defined and its fulfillment can be easily measured, evaluated and monitored by means of relevant financial indicators. In contrast, the municipality aims to maximize the socio-economic effects, including social objectives (effects), which are mostly immeasurable and cannot be evaluated. At this point the main problem occurs (especially decision-making issue) within the municipality management compared to the management of the firm. The social effects of individual municipal projects, which in most cases ensure a provision of public goods and services, are not possible to measure, juxtapose and evaluate. Decision made are logically political-based and may not be contributive in all cases the most effective.

Differences between firm and municipality are also in the activities carried out by these economic entities. The firms mostly focus on goods and services of private pattern i.e. the production with clearly set user, namely product payer. The aim of the municipalities is among others to ensure the production and delivering of the public products. The public product has the specific features compared to public product. It is the same and indivisible benefit of the good for everybody (principle of non-rivalry – consumption of the good by one individual does not reduce availability of the good for consumption by others); benefit or utility cannot be adopted by one individual at the expense of others (non-excludable principle - that no one can be effectively excluded from using the good) [2]. Thus, the consumer/payer is not known, and therefore, the production of these goods and services is financed by public budgets.

Beside the own pattern in delivering public products, the significant difference is that public sector, namely municipalities are facing a high number of various needs and expectation of their citizens (often contradictory) which cause significant problem in the area of decision making.

The last most evident difference in the management of the municipality and firm is the level of participants' motivation of the management process. Generally, the public sector does not apply the staff performance evaluation, and other types of motivation show rather a low efficiency. This status is one of the main above mentioned reason of staff insufficiency in the management of municipality development. Despite the above mentioned differences, it is possible to apply the tools of the business management in modified form for the municipalities.

2. Research – The level of municipality development management in the Czech Republic

In 2008, the first stage of analyzing of the *research on the level of municipality development management* has been conducted within the project “the Processes of the management of the municipality regional development in the Czech Republic”. The key research activities (field survey) were carried out on the selection basis in the whole territory of the CR. Based on the pre-defined and thorough evaluated multi-criteria analysis; both municipal and micro-region groups were defined as representatives of typical municipality groups that are forced to deal with similar decision issue. As far as representative sample a total of 130 municipalities have been chosen (i.e. about 2% of

the total number of units in the sample). Based on the representative sample the research (field survey) which comprises two fundamental stages has been conducted.

In the first stage, the independent survey in the selected territory of the sample has been carried out for the purpose of creation a special preview (uninfluenced by internal opinions of their representatives). The next step of the field survey was a confrontation with reality represented by the representatives of municipalities who took parts the controlled interview. Based on the structured questionnaire, the controlled interview was carried out by the trained interviewers (in cooperation with the Czech Statistical Office) within the second level of the field survey. The outputs of the survey have represented (unlike above stated surveying) the views of the addressed members of the municipalities.

In the first phase of survey the website research of individual respondents has been carried out. Experience gained shows an absolute diversity of information basis, design and user level of individual municipal websites. It is partly given by the potential of particular respondent depending upon the municipality size; direct proportion between quality and size of municipality does not apply. Based on the information sufficiency, the obligatory information (the official board), and information dealing with culture, sport and social dominate. Further, the information in the area of tourism and other local bulletin are also very common. Based on the first assessment, we have to state considerable lack of concept or development information with the exception of the territorial planning documentation.

The “recording sheet” was created in order to carry out web pages research of selected respondents. Individual questions of the recording sheet were created for particular view of the web pages of the municipalities. Within the part of survey the following were examined:

- Whether municipalities have/do not have web pages; and their keeping up-to-date
- What is the content of the web pages? (what documents and their currency)
- Arrangement (placing) of documents on the web pages
- User interface
- Whether municipality has their periodical (incl. content)
- How much space is given to information about municipality development, etc.

The results of the research have proved that municipalities use the internet for their needs (the web pages were not found by only 4% municipalities). In terms of municipal development the main issue of the web pages can be considered to be an essential lack of information on development plans or forthcoming or implementing development activities. The finding is very negative as far as management system of municipalities.

The second step of the field survey, in principle most time-consuming and skill-intensive, was the observation. The activity has been carried out by team members and partners of the research within all involved municipalities. The objective of the survey was on the basis of observed results to appraise the visual development level of particular municipality, its facilities, availability of services, infrastructure, housing pattern, attractively of municipality in terms of private and public property

maintenance, etc, and further, to categorize the entire impression from individual municipality in terms of the implementation of the management functions. Based on the assessment, individual addressed municipality was placed to particular phase of the development cycle of the municipality. The outputs of the survey are processed to two forms – basic description of observed matters (incl. comments), and structured record list with the possibility of peer reviews of respondents. A description of the observed facts focuses on specification of the municipal functions (housing quality, economic activity, tourism, amenities, cultural, sport, social and leisure facilities, catchment area, localization based on higher-order centre linkage).

The controlled interviews were carried out in the last phase of the field survey. Thanks to well-prepared representative sample, this activity took place smoothly in all addressed municipalities with the representative of respondents. Based on the wishes of individual mayors/deputy mayors, the interviews have been conducted either in person or by phone. About 15% of respondents were needed to repeat contact after the checking of the processed questionnaires (mainly due to the clarification of some answers) – repeated telephone call was successful.

The controlled interviews were carried out based on a questionnaire which consists of several important parts. Each part of the questionnaire included questions that are essential for both further work and evaluation of the research. Based on generally applicable management functions the questionnaire was set up in the following structure:

1. **The municipality development** (questions: what are the priorities of municipal development? Is it composed a team for municipal management, etc.?)
2. **Municipality management** (questions: what are the main issues dealing with the municipal management? how a municipality motivates their workers dealing with municipality development, etc.?)
3. **Decision making** (what do you follow by decision making? How much is a share of your decision that you carry out under pressure and without further relevant data (details), etc.?)
4. **Organizing** (questions: how is the implementation of the municipality development ensured at the level of municipal authority? Is it the municipality management managed purely by mayor, etc.?)
5. **Planning** (questions: Does a municipality have an approved conceptual document for the municipality development? what is the form (structure) of the conceptual document? Does a municipality have an elaborated financial view, etc.?)
6. **Information and communication** (questions: Does a municipality offer sufficient information about municipality development to their citizens? Who is charge of information of citizens? How do you promote your town or municipality, etc.?)
7. **Planning** (questions: Do you carry out a control of the fulfillment of the objectives? How often do you conduct the control?)
8. **Decision making** (questions: what part of control concerned decision making is paid the biggest attention, etc.?)

The aim of the survey was to obtain a statement of the municipality management on the issue of development management in the given territory, and based on the system of controlled issues to asses the consistence of the answers. In addition, another aim was to bring the overall result face to face with the results of two previous stages of the field survey. All three types of the field survey were conducted separately and by different team member in order to avoid interaction or result adjustments.

3. Research Outputs

Preliminary outputs that have emerged from the current processed backgrounds of the field survey point to expected imbalance of the results of the research stages (survey, websites) and subjective evaluation of the representatives of particular municipalities. The outputs are grouped according to individual management activities.

The following tendencies may be seen in the **field of management**. A team for managing the development of municipality is not created in half municipalities. Half respondents also consider the management of municipality to be systematic and concept with higher added value of the office than elected representatives. Almost 80% of municipalities consider the implemented model of the management to be the right one. The most significant elements which limit the development of municipality are also considered as lack of financial resources and lack of time, i.e. elements that mainly affect the quality of management. The municipalities use the non-financial incentives (predominant verbal praise) for the purpose of motivation. The significant negative effect is that more than 1/3 of municipalities implement with entrepreneurs the joined project. From the public participation's point of view, the non-profit field takes an active part in 80% of municipalities and the interest of the citizens in municipal events shows gradual increase.

In decision making category, 2/3 of municipalities considers their acting to be conceptual respectively rather conceptual with share of *ad hoc decision making category* to 25%. However, more than 80% of respondents emphasize on the current budget means during the decision making process. Less than half municipalities prefer long-term effects of their decisions with emphasis on positive economic impacts, next social and environment impacts. Almost 70% of respondents suppose that lack of financial resources is the largest obstacle (barrier) in decision making on development issue. The state bureaucracy and legislation are also a significant limiting factor (40% answers). As far as external cooperation within development activities the cooperation with neighboring municipalities has greater weight than cooperation with particular regions.

In the area of organization, more than 60% of mayors suppose that the development of municipality lies only purely on them. It refers to the fact that neither employee nor subject is charged with the issue of the municipal development in 1/3 of the municipalities. The active development of the municipality is being only ensured (provided) by mayors and deputy mayors in 75% of cases. Almost 1/5 of mayors implement fully separately the municipality development, 53% of mayors distribute the work to the members of elected bodies in terms of request for cooperation. The tasks are being usually distributed on and off within the management development of municipality; most once a month. The priorities are always being set in 2/3 of municipalities and 26% of municipalities set their development priorities if it is time. More than 50% of mayors have at their disposal their permanent team of co-workers.

Planning as management function is understood very differently in municipalities. 65% of respondents state that concept development documents are available in municipalities and ¼ are not. Based on other surveys, the territorial plan is in most cases considered to be the conceptual document for municipalities. And the territorial

plan is also considered to be the fundamental and sufficient document (60% of respondents) by the representatives of the municipalities. 14% of respondents argue that there is no need for a concept document. The municipalities are prepared to draw the means from various grants – only 3% of respondents do not struggle it. Lack of information (33% of respondents) and lack of financial means for well-preparation of project and their co-financing is most fundamental issue of drawing grants. 10% of municipalities have not conducted the financial perspective, notwithstanding, it is mandatory.

A large incongruity of interview and survey results may be seen **in the information and communication field**. The mayors state almost 100% of foreknowledge of regional development issues, nevertheless, the findings are opposite through the websites. The municipalities state sizable promotional activities (it is not possible to prove through the survey). However, the structure of the promotional functions is very interesting with a pure emphasis on housing (leader by a huge margin) and followed up by tourism. Economical function is at the bottom of their interest (support of business development – 2% of respondents).

Conclusion

Over all above mentioned specifics, the current outputs of the research show among others the possibility to apply the functions and tools of the business management in public sector. That fact is already evident based on the first above mentioned evaluation results dealing with the implementation of the management functions within the municipality development. Regarding the results, we may state that the main issues of municipality management development in the Czech Republic are the following:

1. Insufficient personal capacity, lack of skills and insufficient qualification – it is the main issue relating to work organization, information and communication.
2. Problematic level of management skills of the representatives of the municipalities (leading, decision making)
3. Absence of conceptual work and systems approach.

It can be expected that the correct setting for the management processes within the municipalities mainly contributes to the quality and efficiency of all management activities with positive impact on the entire quality of the municipal development.

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Attractivity of Domicile of Czech Municipalities

Abstract

Faculty of Economics (Technical University of Liberec) has acquired the research and development project WD-30-07-1 „Innovation Approach to Analysis of Disparities on Regional Level - InoReDis“, realized under the state subsidy of the Czech Republic within the Ministry for Regional Development within the years 2007 - 2011. The Department of Business Administration (Faculty of Economics, Technical University of Liberec) realized within the project InoReDis the full-area questionnaire survey (within the range: 6 249 municipalities, i. e. all municipalities in the Czech Republic). The following paper will be devoted to outputs of results of this questionnaire survey. It was focused on the wide spectrum of questions; in this paper we are concretely aimed at the attractivity of domicile of Czech municipalities. Three hypotheses were determined and by means of this article they will be answered, verified, or refuted: Hypothesis No. 1: „Municipalities' mayors/mayoress join the attractivity of domicile above all with the civic amenities“. Hypothesis No. 2: „Fluctuation of Czech citizens is rather low“. Hypothesis No. 3: „Improvement of conditions for entrepreneurship and business activity development may increase the attractivity of domicile“. On the basis of questionnaire survey outputs and results we may claim that two from the above mentioned hypotheses we may verify (i. e. hypothesis No. 2 and No. 3.). The hypothesis No 1. we may verify just in part, not unabridged, as it was determined.

Key Words

Disparity, questionnaire survey, attractivity of domicile, municipality

JEL Classification:

R11, A13

Introduction

The following article is devoted to outputs of results of questionnaire survey which was realized within all Czech municipalities and it was focused on the wide spectrum of questions. In this paper we are concretely aimed at the attractivity of domicile of Czech municipalities. The hypotheses were determined and by means of this article they will be answered, verified, or refuted.

1. Questionnaire survey

Faculty of Economics (Technical University of Liberec) has acquired the research and development project WD-30-07-1 „Innovation Approach to Analysis of Disparities on Regional Level - InoReDis“, realized under the state subsidy of the Czech Republic within the Ministry for Regional Development.

The main goal of this project is to formulate some arrangements leading to the decreasing of interregional disparities in the field of economic development of the Czech Republic. The benefit of this project is an elaboration of the new methodology for identification of the regions, requiring focused state subsidy. The second benefit is a detection of the significant factors, which are the cause of differences of regional economic levels; measuring of their importance and proposals of arrangements supporting the decrease of the interregional disparities. [1] The Department of Business Administration (Faculty of Economics, Technical University of Liberec - TUL) realized within the project InoReDis the full-area questionnaire survey (within the range of all Czech municipalities, i. e. 6 249 informants).

Outputs of these primary data will serve in this paper for verification, or refutation some hypotheses, which were by the research team in the project defined. In this part then this paper will focus just on the following hypotheses: Hypothesis No. 1 „Municipalities' mayors/mayorress join the attractiveness of domicile above all with the civic amenities“. Hypothesis No. 2 „Fluctuation of Czech citizens is rather low“. Hypothesis No. 3 „Improvement of conditions for entrepreneurship and business activities development may increase the attractiveness of domicile“.

The above mentioned hypotheses will be verified by sample of municipalities, which answered the questions within the full-area questionnaire survey. This survey was realized in June 2008 with the range of all Czech municipalities. Each municipality obtained a letter – written questionnaire with the request for fulfilment and sending back to the research team. The questionnaire contained eight thematic groups of questions, one description part and one additional part. The scientific parts of the questionnaire were aimed at the following areas (for better transparency they are marked with capital letters):

- Description part – part of basic information about the informants.
- Thematic groups:
 - A) Unemployment and job opportunities.
 - B) Attractiveness of domicile.
 - C) Residential density of municipality.
 - D) Age structure of municipality population.
 - E) Civic amenities.
 - F) Structure of the municipality economy (rate of agriculture, industry and services).
 - G) Sustainable development (environment).
 - H) Business inactivity.
- Additional part – marked by letter (I) in the questionnaire.

The questionnaires were distributed within June 2008 by means of the TUL post central office. The total return of questionnaires was 1 357 pieces on 30 June 2008 [2], i. e. cca 21,7 %. Persons who fulfilled the questionnaires were mayors/mayorress from 72 %; the second group (i. e. 28 %) was created by other representatives of municipalities. All delivered paper questionnaires were transferred into the electronic form – Microsoft Office Excel. For processing of these data we used program Statgraphics.

2. Attractivity of domicile

The questionnaire contained all the above mentioned eight thematic groups, the following part will be devoted to the group B) intent on the attractivity of domicile. First the questions will be presented, then the answers evaluation will follow. The verification or refutation of the above mentioned hypotheses will be the result.

Question No. 1: Do you perceive your municipality as an attractive place for living?

- ☐ Yes.
- ☐ No.

77 % informants think that the municipality is an attractive place for living, the remaining 23 % informants do not think so.

Question No. 2: How do you value the changes of number of residents? (please choose just one possibility and cross it)

- ☐ low,
- ☐ average,
- ☐ unchangeable,
- ☐ high, but they were always here,
- ☐ high, with positive tendency (gradually diminishing),
- ☐ high, with negative tendency (steady increasing).

In most municipalities, i. e. 52 %, the number of residents changes on average, in 23 % municipalities the number changes very low, in 13 % municipalities there are almost no changes. On the other side – in the remaining 12 % municipalities the number of residents changes very often. The results you can see on Figure 1.

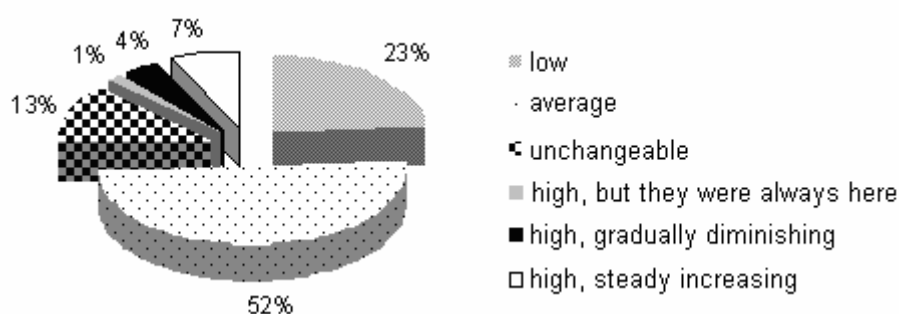


Figure 1 Changes valuation of number of residents

Source: own calculation

Question No. 3: Why is your municipality unattractive for residents? (ring the value on scale from 1 do 5, where 1 = irrelevant cause, 5 = strongest cause)

1	2	3	4	5	Absence of vacancy jobs in the municipality.
1	2	3	4	5	Absence of jobs within 1 hour commuting.
1	2	3	4	5	Absence of teritary sector.
1	2	3	4	5	Absence of civic amenities.
1	2	3	4	5	Polluted environment.
1	2	3	4	5	Insufficient traffic connections.
1	2	3	4	5	Increased occurrence of social-pathological phenomenon.
1	2	3	4	5	Others (describe it)

From the following summary it is clear that the biggest problems, which caused the unattractivity of domicile are: lack of vacancy jobs, absence of teritary sector and absence of civic amenities. The unattractivity of domicile (on scale from 1 to 5, where 1 = irrelevant cause, 5 = strongest cause) was valuated on average as follows (see Table 1):

Table 1 Reasons of unattractivity of domicile

Cause/Reason	Average value
Absence of vacancy jobs	3,4
Absence of jobs within 1 hour commuting	2,6
Absence of teritary sector	3,1
Absence of civic amenities	2,8
Polluted environment	1,4
Insufficient traffic connections	2,7
Increased occurrence of social-pathological phenomenon	1,8
Others (absence of building licences, few homesite, etc.)	-

Source: own calculation

Question No. 4: How could be the attractivity of your domicile increased? (Ring the value on scale from 1 do 5, where 1 = irrelevant preference, 5 = strongest preference)

1	2	3	4	5	Support of trading and productive activities.
1	2	3	4	5	Support of teritary sector.
1	2	3	4	5	Support of infrastructure.
1	2	3	4	5	Support of travel movement and connected activities.
1	2	3	4	5	Support of civic amenities.
1	2	3	4	5	Support and development of culture and sport.
1	2	3	4	5	Others (describe it)

For increasing of attractivity of domicile it would be necessary above all to support trading and productive activities, teritary sector, travel movement and civic amenities (see more in Table 2):

Table 2 How could be the attractiveness of domicile increased?

Preference	Average value
Support of trading and productive activities	3,5
Support of teritary sector	3,4
Support of infrastructure	3,1
Support of travel movement and connected activities	3,3
Support of civic amenities	3,3
Support and development of culture and sport	3,2
Others (new buildings-up, enlargement of homesites, etc.)	-

Source: own calculation

The last question No. 5, part B) of the full-area questionnaire survey was aimed at the necessity of financial means for realization the above mentioned arrangements.

Question No. 5: How many financial means does your municipality need for solving of the problem of increasing of attractiveness of domicile? (please choose just one possibility and cross it)

- ☐ to 1 mil. CZK,
- ☐ 1 - 5 mil. CZK,
- ☐ 6 - 10 mil. CZK,
- ☐ 1 - 30 mil. CZK,
- ☐ 0 (nothing) CZK,
- ☐ other amount.....

33 % municipalities for solving of the problem of increasing of attractiveness of domicile would need 11 - 30 mil. CZK, 21 % municipalities from 1 to 5 mil. CZK and 20 % municipalities from 6 to 10 mil. CZK. Other municipalities would need the amount lower than 1 mil. CZK or vice-versa the amount higher than 30 mil. CZK (more details you can see in Figure 2):

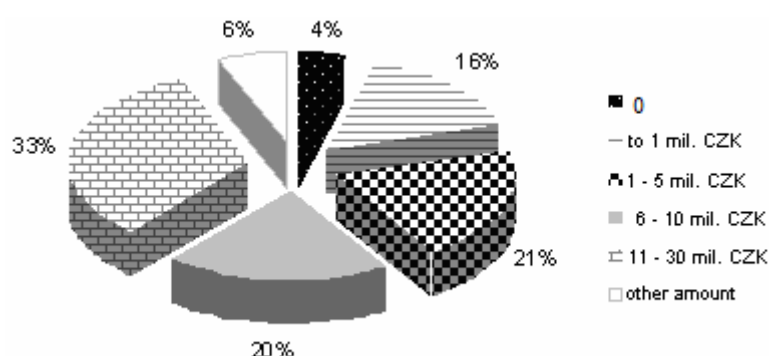


Figure 2 Financial requirements for increasing of attractiveness of domicile

Source: own calculation

3. Hypotheses verification

In this part the above mentioned hypotheses will be verified, or refuted. The hypothesis No. 1: „Municipalities' mayors join the attractiveness of domicile above all with the civic amenities“. The response to this hypothesis we may find in question No. 3: Why is your

municipality unattractive for residents? If we focus on the sequence of featured factors, then the civic amenities is placed on the 3rd position from those seven offered possibilities. Indeed the differences between the first and the third position are not so significant: on scale from 1 do 5 the values get around the central value 3 – i. e. within the range from 3.5 to 2.8; nevertheless the difference among other values is much more essential. On the basis of that it is possible to declare that the attractiveness of domicile is connected with the civic amenities. It is not the most important factor for municipalities but compared with other factors it is the most substantial factor. Therefore we may verify the hypothesis No. 1 just in part in the following version: „Municipalities' mayors/mayoress consider the civic amenities as a substantial factor having the influence on the attractiveness of domicile.“

The hypothesis No. 2: „Fluctuation of Czech citizens is rather low“. With the attractiveness of domicile it is necessary to watch also the willingness of people to move from their domicile, no matter what is the reason – job, attractiveness for living, environment, etc. The questionnaire did not deal with these reasons for fluctuation, therefore we may not answer this interesting question. But verification/refutation of this hypothesis is possible on the basis of questions No. 1 and No. 2. 77 % informants think that the municipality is attractive place for living, the remaining 23 % informants do not think so. Changes of number of residents are average in 52 % municipalities, very low in 23 % municipalities. So from mayor/mayoress view, people are rather more satisfied with the attractiveness for living and the fluctuation of Czech citizens is rather low. This statement is confirmed on the basis of the full-area questionnaire survey where the informants were municipalities' mayor/mayoress, not Czech citizens directly. Then we may accept for example some outputs and results of Czech Statistical Office, where the Czech Republic is placed on the last positions within the EU rank of indicator „Internal rate of fluctuation“. [3] Czech population fluctuate less from the domicile view, therefore we may claim that the increasing of attractiveness for living is more beneficiary above all for the current residents living in the municipality.

The last third hypothesis aimed at the tools leading to the increasing of attractiveness for living, concretely at the business activities. The hypothesis No. 3: „Improvement of conditions for entrepreneurship and business activity development may increase the attractiveness of domicile“. The response to this hypothesis we may find in question No. 4, part B) of the full-area questionnaire survey. From the hypothesis results that the most important factors influencing the attractiveness of domicile are sufficiency of job offers and support of business activities. Concretely the first positions are placed with these indicators: 1. support of trading and productive activities; 2. support of territory sector; 3. support of travel movement and connected activities. You can see in Table 2 that the differences among the meaning of individual indicators are rather insignificant - the values get around the central value 3. Though we may argue that the support of business activities and conditions for entrepreneurship (in the field of production, services and also travel movement) are for municipalities' mayor/mayoress very important. On the basis of these results then we may verify the hypothesis No. 3.

Conclusion

The term „attractivity“ in its sense means above all the attraction, daintiness, catchiness, interest. Is it possible to join this term with the second word „living/domicile“? Yes, why not? The municipality may have an attractive environment, tempting job offers, interesting historical origin, etc. So it is possible to join the word „attractivity“ with the word „domicile“ – nowadays it is often used phrase. The above mentioned text was just devoted to the attractivity of domicile of Czech municipalities. Within the project „InoReDis“, relating to the questions of disparities on the regional level, the full-area questionnaire survey was realized. One part of the survey was focused just on the attractivity of domicile – informants (mayor/mayoress of municipalities) answered the questions regarding the reasons why their municipality is/is not attractive for living, how many financial means do they need for better situation, etc.? Then three hypotheses were determined - hypothesis No. 1: „Municipalities' mayors/mayoress join the attractivity of domicile above all with the civic amenities“; hypothesis No. 2: „Fluctuation of Czech citizens is rather low“; and hypothesis No. 3: „Improvement of conditions for entrepreneurship and business activity development may increase the attractivity of domicile“. On the basis of questionnaire survey outputs and results we may claim that two from the above mentioned hypotheses we may verify (i. e. hypothesis No. 2 and No. 3.). The hypothesis No. 1. we may verify just in part, not unabridged, as it was determined.

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Tourism Service Quality: Implementing the Standards for Achieving the Competitive Advantage

Abstract

Tourism belongs to the industries that are characterised by the permanent growth in the recent years. It is essential for the businesses to focus on the quality of provided services in order to retain the competitive advantage in this dynamic industry. The nature of tourism product seems to be rather complex. The main reasons are the significant number of services provided and the large number of small businesses that comprise this product. The importance of developing quality tourism products has been recognised both by the public and private tourism sectors. To this end, some initiatives aimed at quality improvement in tourism have been undertaken at different levels. Therefore, the aim of this paper is the analysis of current work in this area. A secondary research directed at the regulation and standardisation in tourism service quality has been undertaken to attain this goal. It includes the activities and recommendations of World Tourism Organisation from the international point of view. The level of the European Union is primarily represented by the European Commission with its directives and published research reports. The Ministry of Regional Development and the Czech tourist authority CzechTourism stand in the position at the Czech national level - they should act in cooperation with other authorities representing the tourism industry in regions. In this paper the Swiss quality programme in tourism which has been already accepted by other European countries, is presented as a practical example of an efficient quality system. In the national area of quality assurance and improvement there is still a need for things to be done such as the launch of an integrated quality certification programme that would be applicable for various companies in tourism. A quality label obtained through the certification can serve as an important marketing instrument for differentiation.

Key Words

tourism, quality, quality label, Switzerland, certification

JEL Classification:

L15, L83, M31, M38

Introduction

Tourism is one of the fastest growing economic sectors in the world. According to analyses by the United Nation's World Tourism Organisation (WTO) from 1950 to 2007, international tourism arrivals expanded at an annual rate of 6.5 %, growing from 25 million to 903 million travellers. International tourism arrivals are projected to rise to 1,6 milliard by 2020. The income of international tourism reached 625 milliard € in 2007. Tourism creates approximately 200 million jobs worldwide and represents about 10-11 % of gross national product. In these terms tourism has become one of the largest global export industries and represents at the same time one of the main income sources for many developing countries. [11]

Modern tourism is closely linked to development and encompasses a growing number of tourist products. The market is characterized by a strong competition. Companies and destinations can no longer compete on the basis of the cost alone. In order to defend and strengthen the competitive position it is essential for the business to provide the services of high quality. The nature of quality within tourism products is rather complex. The reasons result from their particularities. Furthermore, in many cases the tourism products are sold before they are actually rendered. Therefore it is necessary to provide the customer with the guarantee of a certain level of quality. This can be achieved by implementing a quality tool. [5]

The following demonstrates that the service quality in tourism is a complex construct with its particularities due to which some quality standards have been introduced at different levels. The aim of this paper is to provide the analysis of current work in this area. To attain this goal a secondary research directed at the regulation and standardisation in tourism service quality has been undertaken.

1. Service quality in tourism

The service quality has become a critical factor in enabling firms to achieve an advantage over their competitors and it thus makes a significant contribution to profitability and productivity. The distinctive attributes of services make the study of the service quality difficult. In particular, their intangible nature makes quality more difficult to control than in case of tangible products. Pérez identified five main research streams into service quality [10]:

- The first stream has focused on the concept and nature of the service quality. However, there is no general consensus about the nature or content of the dimensions of the service quality. There is a general recognition that service quality is a multidimensional construct.
- The second research stream has focused on the strategic consequences of quality. It has been claimed that an improvement in quality has a measurable effect on customer retention, market share and profitability.
- The third research stream has focused on the measurement of the service quality. In this research stream a number of models have been developed. Model SERVQUAL has been the most used and as well most discussed method in the literature [9].
- The fourth research stream has analysed how an organisation can improve the service quality.
- The fifth research stream has focused on the effects of the service quality on consumer behaviour. In effect, this research stream has concentrated on the link between the service quality and an improvement in the profitability of the company.

This paper can be classified as the latter research stream.

Quality in tourism is an important factor and ultimately dictates the success of the tourism business. The World Tourism Organisation has defined quality in tourism as „...

the result of a process which implies the satisfaction of all the legitimate product and service needs, requirements and expectations of the consumer, at an acceptable price, in conformity with the underlying quality determinants such as safety and security, hygiene, accessibility, transparency, authenticity and harmony of the tourism activity concerned with its human and natural environment.” [12]

In this context, there are many factors that describe and influence the tourism product. Klefsjö has stressed the following factors [7]:

1. Tourism is dominated by services; this means that consumption occurs in interaction with the suppliers of those services.
2. Demand for tourism is significantly influenced by seasonal variations, including climatic seasons and the timing of vacations; a consequence of this is that many staff members are hired for short periods only.
3. The tourism industry consists of a mixture of private-sector businesses and public-sector organisations; as a result, the industry operates within two systems that have different requirements, rules, and forms of control.
4. The tourism industry is fragmented. It consists of many small companies working in various business areas – including lodging, travel, food, and leisure.
5. Tourism consists of a number of ingredients experienced over time, and it is seldom the case that one actor has control over all components.

The aforementioned factors along with the intangibility, inseparability, heterogeneity, perishability of service indicate that the tourism quality is a complex concept [7]. The last mentioned factor is sometimes referred to as the tourism value chain (Figure 1). Visitors experience a tourism product as a sequence of influences spaced out over space and time, from initial planning, through the visit itself to departure and post visit reflections. [3, 15]

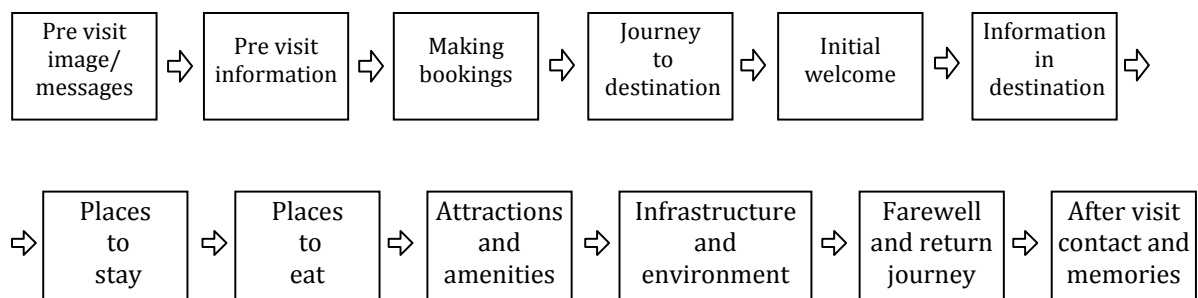


Figure 1: Tourism value chain

Source: according to [3,15]

2. Regulation of quality

The importance of development quality tourism products has been recognised both by the public and private tourism sectors. To this end, a number of quality systems have been introduced and some initiatives aimed at quality improvement in tourism have been undertaken at different levels.

2.1 International level

Among many international tourism organisations, the work of the United Nation's World Tourism Organisation (WTO), is of utmost importance in creating quality awareness among public and private tourism organisations. In fact, this organisation has been concerned with quality issues since its creation in 1923. The WTO emphasised that the future of the tourism industry depends on the ability to instil a culture of quality in tourism services. In order to support this idea, the WTO has adopted the *Tourism Bill of Rights and Tourism Code*, undertaken a study on state measures to ensure quality of tourism services, published a manual on *Quality Control of Tourism Products and Services*, adopted *Recommended Measures for Tourism Safety* and published policy guidelines on health-oriented information. The recognition of quality in tourism ultimately led to the creation of a quality support committee in 1995. The committee was assigned the task of developing a basic framework necessary for providing quality tourism services and the issue of safety and security received the greatest concern in the committee's recommendations. [2, 12]

It is apparent that the major purpose of all these steps undertaken by the WTO is to build quality awareness in the tourism sector, protect the customer and encourage states to set measures aimed at prevention, assistance and international co-operation in order to improve quality in tourism.

Concerning the international standards, International Organization for Standardization (ISO) is the world's largest developer and publisher. There are two ISO international standards referring specifically to tourism services: *Hotels and other types of tourism accommodation (ISO 18513)* and *Tourism services. Travel agencies and tour operators. Terminology (ISO 13809)*. Furthermore, ISO introduced standards that provide requirements or give guidance on good management practice. In the field of quality, ISO 9001:2000 has achieved truly global status and is now thoroughly integrated into the world economy. It gives the requirements for quality management systems and it is now implemented for providing assurance about the ability to satisfy quality requirements and to enhance the customer satisfaction in the supplier-customer relationships. [6]

All the mentioned quality tools have the character of recommendation and its implementation is completely optional for the business.

2.2 European level

At the European level, a number of legislative instruments have been used to increase the level of consumer protection. They include the directive on *Package Travel, Package Holiday and Package Tours* as well as other European Union (EU) legislation related to unfair terms in consumer contracts, general product safety, the quality of bathing water and fraudulent publicity. Although this legislation does not cover the complex issue of quality improvement, it is perceived as a tool for setting uniform standards from which tourists can benefit. [2,3,4]

The tourism policy of the European Commission (EC) focuses on the service quality. Many researches and studies in this field have been carried out. Apart from other studies and recommendations, in 2003 the EC published a manual for evaluating the quality performance of tourist destinations and services, called *Qualitest*. [4]

Currently, quality classifications or standards in tourism are being implemented throughout the EU, but there are three that merit special mention. Firstly, a star classification that has been implemented only in a few countries. These classifications are sometimes seen as obsolete and not very reliable. Some countries have classifications developed by entrepreneurial associations, but in these cases there are some difficulties in their application. However, they are not regarded as true quality systems, but as tools for better information of the clients about the range of products, services and facilities available rather than about the quality of its products, services and facilities. These classifications pre-date the true quality systems. Secondly, the quality standards ISO 9000 series that have not been implemented so much. It is not considered to be the most suitable system for tourism in any case. The number of tourist companies with ISO certifications accounts for a small percentage of the total number of ISO certifications in each country. Thirdly, the methodology of the European Foundation for Quality Management (EFQM): EFQM is an organisation whose mission is to stimulate the development of Total Quality Management in organisations throughout Europe to gain efficiency and competitive advantage. EFQM methodology is rarely used, although implementation is increasing, and there is some useful experience of application of this methodology in destinations. The number of EFQM prizes is irrelevant, though there is an increasing tendency to implement it. Apart from the official classifications or standards mentioned above, some countries have entrepreneurial associations that are really carrying out the true quality systems. In those countries where specific quality systems have been developed an increasing number of tourist establishments are obtaining certification. [4]

2.3 The case of Switzerland: the service quality in tourism

The Swiss quality programme is presented as an example of a successful quality system in tourism. The "*Quality Seal of Approval for Swiss Tourism*" programme aims at increasing quality awareness in companies, promoting co-operation among the various providers and maintaining the service quality in the travel and holiday destination Switzerland at a high level. Practical tools were developed to help destination and tourism managers to tackle quality management. This programme is divided into several levels and can even be expanded into a Total Quality Management (TQM) system [14]:

1. **Level I** is based on the promotion of quality awareness through "quality viruses". The aim is the ongoing development of systematic quality of service. Four instruments for promoting in-house quality of service (which were specially designed for this programme) must be systematically implemented to obtain the Quality Seal of Approval. These are service chains, quality profile, complaints and action plan.

2. Built upon level I, the attention of **level II** is above all focused on the management of the company because the development and safeguarding of service quality is not possible without the consistent support of management. Four instruments are available to allow a comprehensive definition of position to be carried out: basis and management profiles, employees' poll, guests' poll and mystery person.
3. When a company has passed levels I and II of this programme, it should be in a position to introduce a Total Quality Management System (TQM). There are various ways of doing this (ISO, EFQM, etc.). After implementing TQM, a company can apply for a quality label **level III**.

The labels are awarded with the validity of three years and since the programme introduction in 1998 the total number of awarded labels has risen, growing from 249 in 1998 to 560 labels in 2007 (see Chart 1). The majority of labels have been awarded in level I (about 78 %). [13]

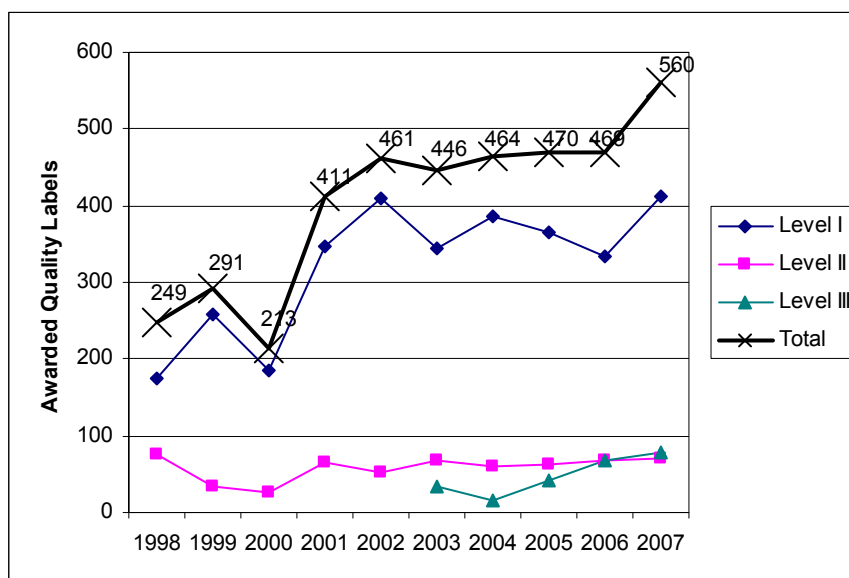


Chart 1 Awarded Quality Label in Switzerland 1998 - 2007.

Source: according to [13]

The Swiss programme has been designed for those companies which are convinced that only constant improvement in their own performance can assure success for the future. They want to offer their guests high quality services on a permanent basis. The nature and size of the company is not decisive for participation in the programme. Small, medium or large-sized companies from whichever branch can profit from it. However, as shown in table 1, the majority of certified companies were hotels and other accommodation facilities (more than 54 %), tourism organisations (about 10 %) or gastronomy facilities (more than 8 %). [13]

**Tab. 1 Awarded Quality Label in Switzerland: distribution
by branches (31. 12. 2007)**

Branch	Share (%)	Branch	Share (%)
Hotels	40,59	Travel agencies	1,67
Non-hotel accommodation	14,68	Viniculture	1,05
Tourism organisations	10,30	Agencies in non-hotel accommodation	0,99
Gastronomy	8,20	Marketing organisations	0,80
Winter sport schools	5,31	Taxis	0,68
Transport facilities in tourism	3,33	Commerce/Trade	0,62
Car businesses	2,96	Sailing companies	0,49
Free time/culture	2,96	Others	0,37
Public transport	2,84	Public authorities	0,19
Education/Consulting	1,97		

Source: according to [13]

The expansion of the Swiss quality programme demonstrates its efficiency and success. Other three European countries have introduced quality system in tourism that is based on the Swiss one. These states are Austria (Tyrol), Latvia, Greece and Luxembourg. [14]

3. National level: situation in the Czech Republic

Compared to the foreign destination, tourism industry in the Czech Republic is still weak in insufficient infrastructure. The quality and structure of accommodation and gastronomy facilities remains still problem in some attractive places. Quality of provided services is unstable, there is a lack of certification and standardization.

At present there is a standard certification system but it is applicable just for accommodation facilities. The Czech Association of hotels and restaurants with support from the Ministry for Regional Development, CzechTourism, the Czech Consumers Association and the Consumer Protection Association created „*Official standard classification of accommodation facilities in the Czech Republic - hotel, garni hotel, pension and motel categories*“. Within this system, there have been 516 certified facilities (13 as *, 50 as **, 260 as ***, 176 as **** and 17 as *****). Similar certification system has been created by the Ministry for Regional Development and the authority CzechTourism for the campsites, chalet colonies, walkers dormitories and accommodation in private facilities. The standards listed are minimum requirements meaning that services or facilities of a higher standard than shown are required in the given class of accommodation. Classification does not constitute a general compulsory legal standard and it is up to the individual accommodation provider whether he or she undergoes the certification process or not. On the other hand CzechTourism will give preference to those accommodation facilities that have undergone the certification process in its promotional activities. [1]

Regarding the quality standards ISO, the implementation of ISO 9000 (quality management), ISO 14000 (environmental management) and ISO 22000 (management of food safety) is the essential milestone. Because of the increasing requirements for service quality from the visitors' side and growing competition in the domestic and foreign travel market, it is essential to initiate a system that leads to the guarantee of given service quality. At the national level the aim is the activation and implementation

of standard categorisation and voluntary certification of service quality in selected facilities of tourism industry. The responsible bodies are the Ministry for Regional Development, the Ministry for Industry and Trade and regional authorities. [8]

Conclusion

The service quality in tourism is due to its particularities a complex construct. Much has been undertaken at the international level of quality regulation - the recommendations and standards presented by the World Tourism Organisation or the standards for quality management introduced by the International Organisation for Standardisation. At the European level the directives set by the European Commission are of a high importance. However, the majority of the above mentioned standards and systems are voluntary. In the Czech Republic there is no system of quality certification that would be applicable for companies of different sizes and natures in tourism industry. Some companies have already implemented the system of quality management in compliance with the ISO 9000. Nevertheless this system is regarded as costly intensive. Therefore there is a need to develop a quality system that will be acceptable and affordable among businesses and that will become distinguishable and popular among customers at the same time. The reasons are evident: standards can help preserve uniqueness, substantiate competitiveness and strengthen comparative advantages. They can serve as excellent tools for forming a fair, market-driven business environment in the future.

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Balanced Scorecard as a Corporate Strategy Execution Tool

Abstract

The description of the characteristics, basic parameters and the formulation of the company's mission and vision is based on the analysis of the company's profile and activities. Turning the vision into the strategy under the consideration of the external environment conditions is an approach to increase the company's performance and competitive edge. The next step is the execution of the strategy by meeting concrete objectives embodied into the company's strategic plan. One of the possible tools to create the company's strategic map is the SWOT analysis. In order to maximize the value of the company the strategic objectives and measures are defined by means of the Balanced Scorecard. Cascading of the objectives and measures supports the alignment within the organisation.

Strategy execution, i.e. meeting the company's strategic objectives and goals in practice, is the key success factor in achieving the maximum value of the company. The importance of execution of strategic objectives remains the leading concern world-wide, as it represents the interests of all parties involved, i.e. stock-holders, customers and employees.

The paper presents practical results of the strategy execution and draws Hartmann – Rico, a. s. as an example. The above theoretic approaches were implemented in Hartmann – Rico, a. s. where the preparations of a strategic map were started in June 2002. Cascading the corporate Scorecard down to the level of personal Scorecards was finished by the end of 2002. Since 2003, the Balanced Scorecard serves as the management tool to control and execute strategic objectives both within the company and externally.

Key Words

balanced scorecard (BSC), corporate value, strategic objectives, strategy, strategy execution

JEL Classification:

L20, D20

Preface

Strategy and its excellent execution remains the leading concern of executives in increasing the value of the organization. Managers increasingly ask themselves whether the sources available are focused the right way, how profitable the sources are and how to measure their performance. Monthly or quarterly reports used by now don't suffice any more. They are time consuming, only more or less structured and don't produce standardized and transparent overview over the performance of the organization to all parties involved; i.e. stock-holders, customers and employees.

The Balanced Scorecard (BSC) is the management tool that replies to the question how to maximize the output value of the organization by means of integrated management of its single business units, which is usually not possible when controlling the single units separately. Unlike the methods of financial analysis, dealing with effects and facts within the organization, the BSC not only transfers mission and vision of the organization into its strategic objectives and initiatives but it also provides the feedback on the degree of its execution and helps to manage the results.

Kaplan's and Norton's theory of integrated approach [2], stating that the integrated and coordinated management of the system provides better results compared to the differentiated control of its single business units, bases on transforming the strategic objectives into the separate perspectives of the Balanced Scorecard. The method of BSC puts emphasis on the key factors and input parameters that influence the final value of the organization across the four perspectives; namely financial, customer, internal processes and learning & growth. Coordinated approach of system management by means of central and usually holding organizations provides even additional synergic effects of mutual co-operation and alignment [4].

The Conference Board [3] in October 2008 surveyed among the 190 executives worldwide in order to find out their leading concerns. The excellence in execution of the business strategy remained the top priority among the executives. Top five concerns were ranked by the executives this way :

1. Excellence in execution of the business strategy
2. Consistent execution of strategy by top management
3. Speed, flexibility, adaptability to change
4. Global economic performance
5. Financial risk, including liquidity, volatility, and credit risk

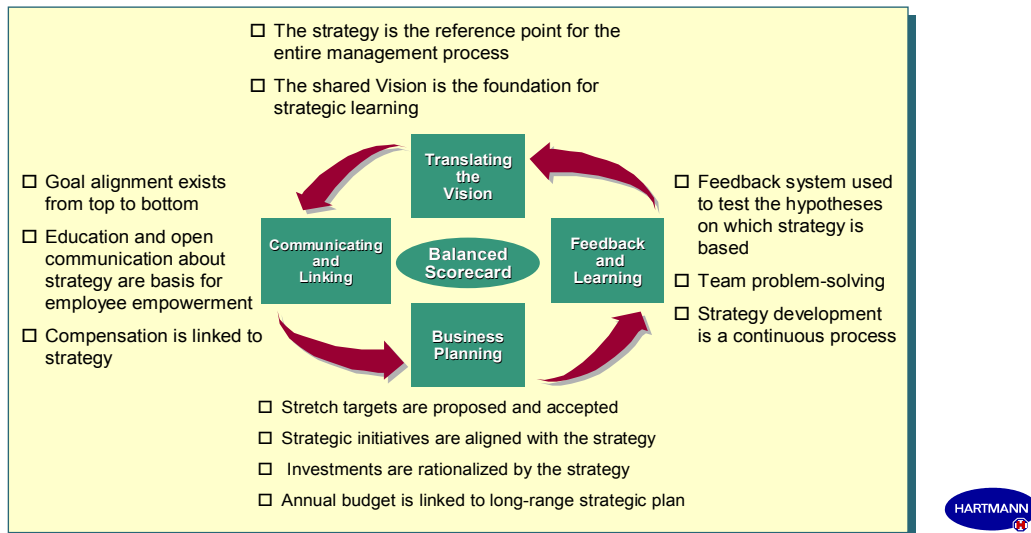
Kaplan [1] states that 9 of 10 companies fail to execute strategy. He puts reasons for this that way:

- Only 5 % of the work force understands the strategy,
- Only 25 % of managers have incentives linked to strategy,
- 60 % of organizations don't link budgets to strategy,
- 85 % of executive teams spend less than one hour per month discussing strategy

That is why strategy and excellence in execution are again perceived as the leading priority in the turbulent world [3].

1. Balanced Scorecard as the management tool for strategy execution; case study at the Hartmann – Rico.

Formulation of Balanced Scorecard can be divided into four stages; i.e. strategy formulation, strategy communication and alignment, strategy planning, feedback and learning. Implementing the Deming's PDCA loop, the process is illustrated in Tab. 1.



Tab.1 Balanced Scorecard as the Centerpiece of the Management System

When formulating the Balanced Scorecard, the first step for an organization is to analyze itself. Typically, the organisation has to consider several key aspects such as,

- its history; i.e. strategic objectives and goals in the past,
- current preferences of the owner's and managers, their private visions and interests,
- internal and external influence ; i.e opportunities and threads,
- sources of the company,
- its competencies,

and transforms them into the mission, visions and strategic objectives. The mission of the company describes the fundamental purpose of the entity, especially:

- focus on the customer and his needs (why and how do we want to serve him; what his goals and needs are ?),
- company core values and formulation of its own strategy,
- expected economic benefits.

The vision is a concise statement that defines the 3 to 5 year goals of the organization. The first works on formulation the mission started at Hartmann-Rico in 2002. In the course of time a series of updates took place. The current mission of Hartmann-Rico, based on the value & competence matrix, is given in Tab. 2:

*„The meaning of our work is to provide our customers with products and services which **help healing**, to allow medical prevention and to promote care for our customers' health. We strive for **customers' satisfaction**.
Our products and services are based on the deep understanding of our customers' needs and **on our medical competence** in the area of nursing and medical procedures. Solutions provided by our company are highly **efficient and cost-effective** both in professional health care and private use.
We create motivated work teams, characterized by personal satisfaction and development of potential of all our co-workers.*

This all is done in pursuit of ongoing growth in profit and values of our company. Long-term prosperity allows us to fulfill our vision and mission and to create the sound basis for growth, employment and new investment. In our everyday work we strive for creation of a strong and stable company which helps healing.

Partners, professionals, ... with passion "

	Partners	Professionals	...with passion
Medical competence	Jsmo vyhledávaným partnerem.Naše dlouhodobé zkušenosti v oblasti umožňují nejvyšší lékařskou kompetenci (při ošetřování ran, při zvládání inkontinence a při prevenci rizik na operačním sále).	Pomáháme aktivně. Naše medicínská řešení pomáhají lidem a těm, kdo profesionálně pomáhají – s orientací na výsledek. Transparentně, efektivně a účinně.	Dosahujeme lékařského pokroku. Kvalitou našich služeb a správnými nabídkami v oblasti medicíny přesvědčujeme naše zákazníky a vzbuzujeme v nich nadšení.
Social competence	Zaměřujeme se na prospěch lidí. Přebíráme zodpovědnost a jsme důvěryhodným a spolehlivým partnerem.	Všímáme si důležitých potřeb. Známe a chápeme problémy pacientů, našich zákazníků a našich partnerů.	Máme nápady pro lidi. Angažujeme se pro společný úspěch a společně s našimi zákazníky vytváříme inovativní řešení odpovídající potřebám.
Consulting competence	Jsmo empatičtí. Jsme na přední pozici prostřednictvím partnerství s přidanou hodnotou, poskytujeme rady orientované na problémy řešení, vždy udržujeme vztahy s našimi zákazníky a partnery na základě vzájemné důvěry a úcty.	Jsmo fundovaní poradci.Naše služby a řešení jsou praktické, jednoduše se používají, poskytují asistenci a usnadňují každodenní život.	Pomáháme našim zákazníkům posunout se kupředu. Jsme ambiciózní a máme know-how pro profesionální poradenství a systémová řešení, abychom lépe zvládali výzvy budoucnosti.



Tab 2. Value & Competence Matrix of Hartmann-Rico

When formulating its vision, Hartmann – Rico , understands itself as a human nature. The organization is then perceived with all its fundamental needs; i.e. the need to live, to learn, to love and to leave the legacy [5]. The vision of the organization must also reflect both to its internal and external factors. The SWOT analysis serves this purpose the best. The synergy of the system description dealing with the Strengths and Weaknesses as well as with Opportunities and Threads is typically at the corporate level put into the SWOT matrix.

Hartmann-Rico formulates his vision this way:

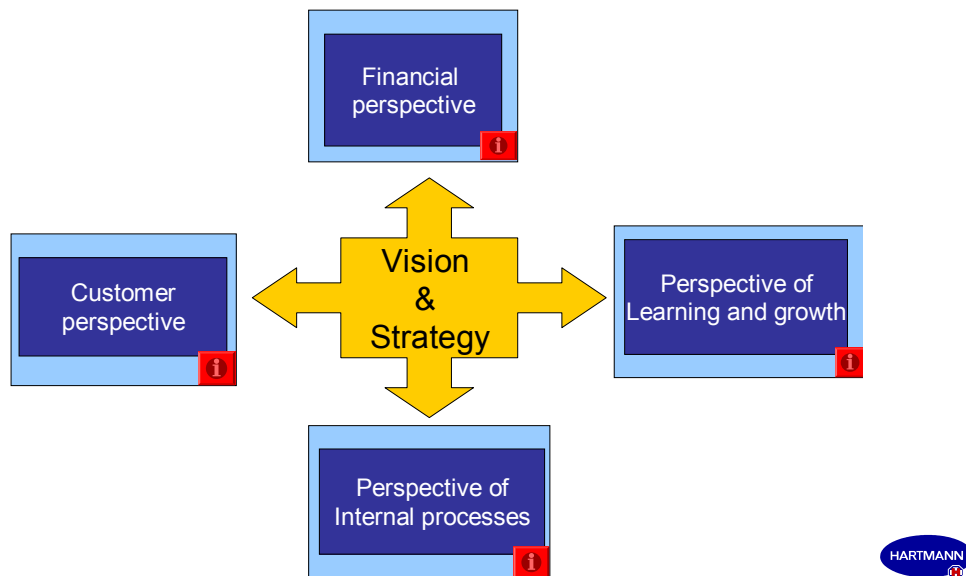
„In 2015, Hartmann-Rico is a successful and respected corporation. Medically competent, it is able to be a partner to professionals in provision of healthcare to all who need it. HARTMANN helps healing“.

Having found and internally anchored its “ME(aning)”, the organization may process to another important stage and transform its mission and visions into the strategic perspectives of the Balanced Scorecard, as illustrated in Table 3.

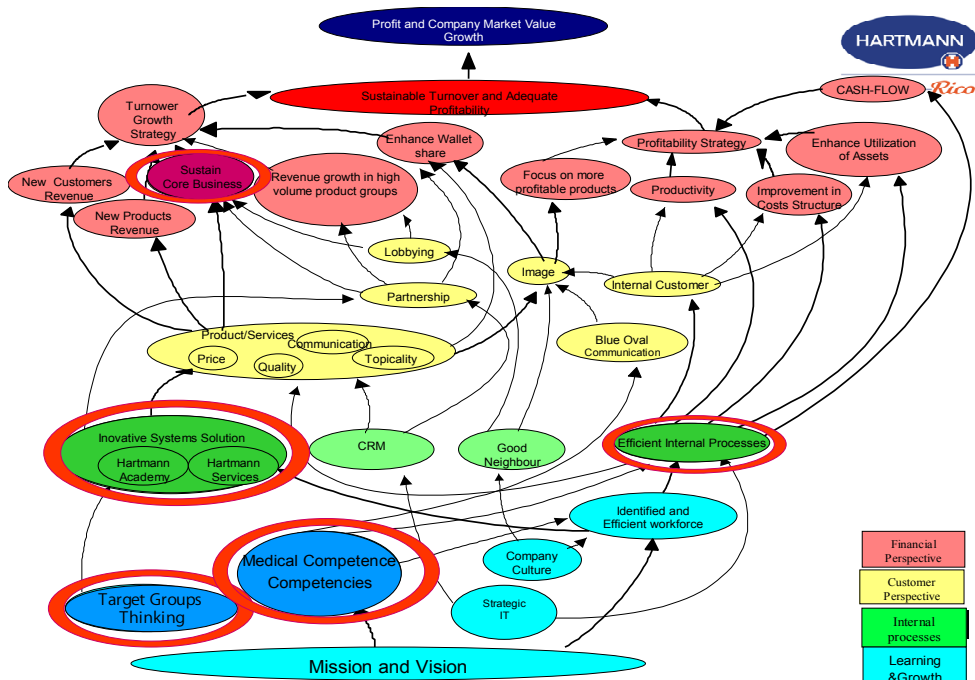
The framework of the four perspectives of Balanced Scorecard demonstrates how effective the organization is in the value creation process regarding its stock-holders, and based on the relations with the customers, and performing excellent in internal processes [6]. These processes are being continuously improved by people, systems and culture.

- The Financial perspectives replies to the question: “What are the expectations of the stock-holders, as far as financial strength is concerned? “
- The Customers perspective replies to the question: “How do we create satisfying experience to our customers, and reach our financial goals in this way? “

- The Perspective of Internal processes deals with the question: “Which processes do we have to master world-class to satisfy our customers and stock-holders needs ? “
- The Perspective of Learning & Growth answers the question: “How to reach the system alignment of the intangible assets – people, systems, corporate culture - to improve continuously our key processes? “



Tab. 3 The Framework of the four Perspectives of the Balanced Scorecard



Tab 4. A strategy Map provides the foundation for a new strategy execution system - Strategic Map of Hartmann-Rico.

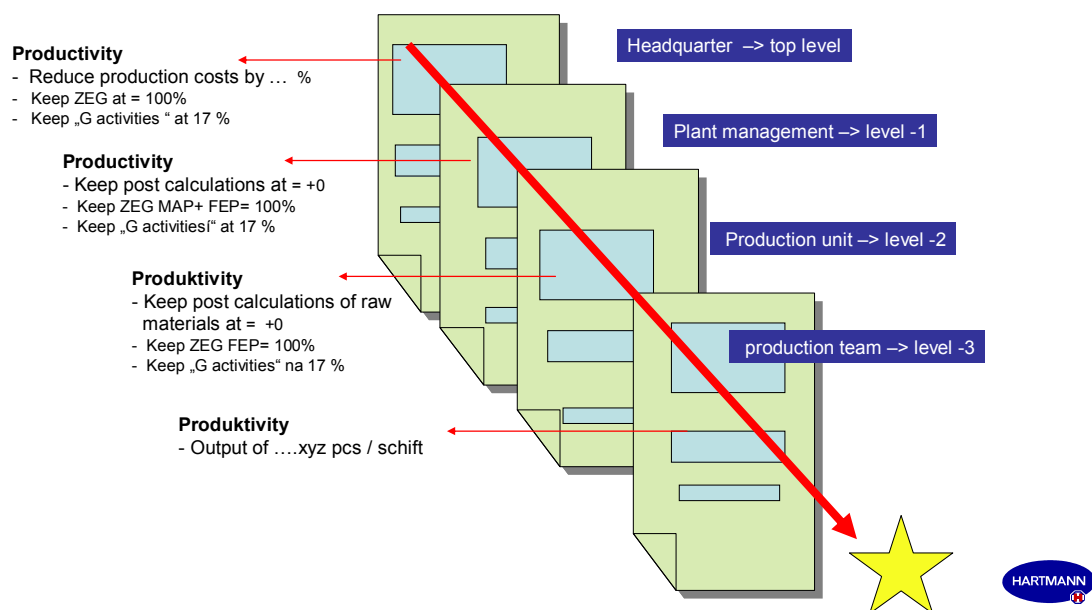
The strategy map presents the mission and visions of the organization transformed into the structured and related strategic themes, as illustrated in Table 4.

The particular perspectives of the strategic map already clearly suggest the formulation of the strategic objectives. Typically, the strategic objective presents the key element of the strategy and describe desired behavior of the organization, and it is perspective specific. At least one outcome measure must be assigned for each strategic objective within Balanced Scorecard. The importance of assignment of the measures to the strategic objectives underline Kaplan and Norton (and many others): „ If you can't measure it, you can't manage it. If you can't manage it, you can't improve it”.

The next and second consecutive step in the development of the organizational BSC is its communication top down. It is of vital importance that the top management clearly demonstrates its support to BSC as to the strategy tool for strategy execution.

Strategic objectives in the higher level must be supported by the objectives from the levels beneath.

At the end, the consequent and transparent cascading of the strategic objectives brings the synergic effects in the Balanced Scorecard. Linking the strategic objectives of the organization to the incentive system provides desired support to BSC, as well.



Tab 5. Cascading of the perspective of Internal processes, case study Hartmann-Rico.

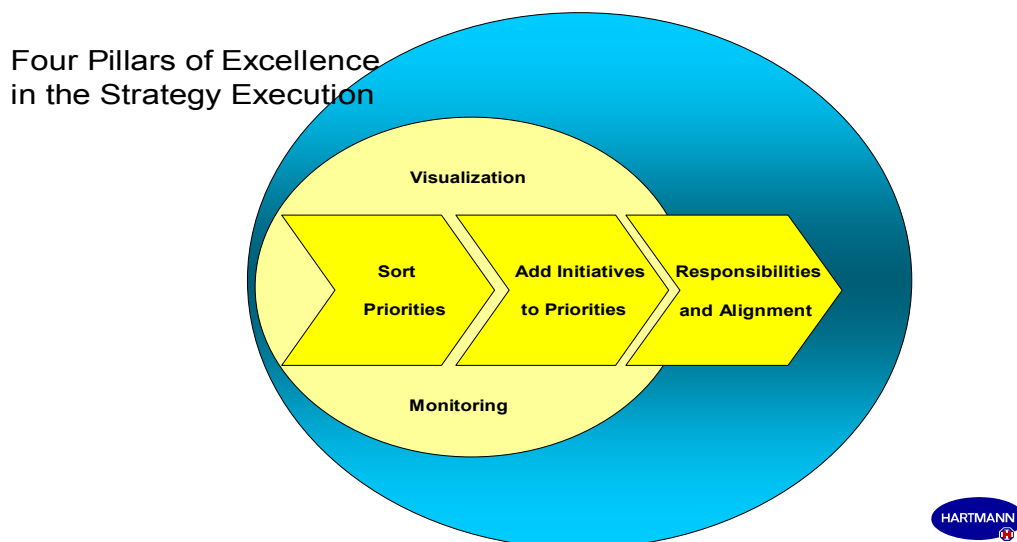
The case study of Hartmann-Rico draws the example of the production plant of Veverská Bítýška. The support of the top level as well as cascading its strategic goals downstream, from the plant management level to the production units and production teams, is demonstrated. The perspective of Internal processes, which is the key one for any production plant, is illustrated in Tab. 5.

2. Key success factors in execution of vision and strategy into the perspectives of Balanced Scorecard

Less than half of the organizations starting with BSC also successfully finish it and adopt it. The key question is, how to get the implementation of BSC through and assure its sustainability. What are the critical success factors of sustainability like?

The successful implementation of vision and strategies into the BSC requires discipline. Both internal and external factors may influence the management system of the organization, though. It may lead to the failure of the strategy, and the objectives are no more achievable. This is what we generally call the execution gap [5].

The successful execution of the strategic objectives of the BSC rests on the four pillars of the sustainability.



Tab 6. Four Pillars of Sustainability

1. Sort / Compass the Priorities ! – only the wildly important objectives of the organization are chosen and followed. The organization focuses on the goals that are important and not urgent. Kaplan [1] recommends to work at the most with 15 to 25 measures within the BSC. The purpose is not to work harder and faster, but more efficiently.
2. Anchor the Initiatives ! – 1 to 3 initiatives, that specify the particular strategic goal, have to be assigned to the objective. Typically organizations fall into the trap accepting the goals like that: “increase productivity by 5% within the next 12 months”. This serves the purpose only the half way. Subsequently, 1 to 3 supporting initiatives and their measures must be defined. This relates both to the organizational and the top down cascaded Scorecards.
3. Monitor regularly the objectives ! - strategy reviews and hang outs of measures of objectives and activities keeps the team informed. A well-arranged scoreboard tells you within 3 seconds whether you “lose or win”.

4. Align the systems ! - system alignment and the team commitment has to be regularly supported and developed. Regular /weekly, monthly, quarterly/ team discussions on the goals increase the focus. The only thing worse, than the bad news is the bad news late ! – You can never over-communicate.

Conclusions

The continuous effort to increase the value of a company remains the leading concern of the management. The theoretical approach of transforming mission and visions into a set of strategic objectives and measures has been verified within the case study of Hartmann-Rico, where the BSC is being applied since 2003. Regular update of strategic objectives serves as the basis for the annual planning of Hartmann-Rico, and the multinational concern Paul Hartmann AG, as well. The concept of sustainability in execution is being illustrated by means of four pillars of sustainability.

Nowadays, the Hartmann Rico company keeps developing the BSC both in the practical and theoretical fields. In 2009 the measurement of the Execution Quotient „xQ“, expressing the probability of successful execution of the both current and future objectives, has been carried out. The co-operation on development of the dynamic models of the BSC [7] may serve as another the example in the theoretical field of work.

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Financial Analysis Assessment of Agricultural Holdings in the LFA Regions

Abstract

Regional disparities related to the typology of areas defined as less favoured (LFA) - forming 50% of the total Czech land fund - significantly influence possibilities of farming in these regions. The paper analyzes the economic results for the sample of agricultural holdings that are part of our own database of about 150 farms per year. Considering the share of agricultural land in the LFA, farms were divided into the following groups: group I – less than 25%; group II – from 25 (including) to 75% and group III – more than 75%. The average values of each group of the farms calculated as a weighted average were used to determine the resulting values from the data base. Using methods of financial ratio analysis, the following groups of indicators: profitability, including the profit/loss assessment, activity, the debt ratio, and liquidity were calculated for years 2003-2007. The assessment of the profit/loss revealed the necessity of the subsidy policy of the agrarian sector as the share of subsidies in the yields of farms is approximately 20%. Fluctuations of the profit/loss not exceeding 7-8 million CZK was mainly due to the specific types of farming in plant and animal production and climatic conditions in recent years and problems with sales, in competition with the import of cheap agricultural commodities. Total returns reflected the tendency of the profit/loss and ranged between 5-6%, with the turnover of assets ratio of approximately 0.8. The debt ratio (40%) and liquidity (with values ranged between 3 and 4) can be regarded as satisfactory. The absence of agricultural policy would lead to long-term non-profitability (loss) of all farms. The analysis revealed that there are no significant differences in the efficiency according to the division based on the share of the LFA. The paper contributes to the NAZV QG 60042 research project.

Key Words

agriculture, financial analysis, agricultural firms, less favoured areas (LFA)

JEL Classification:

Q14, G31, G32

Introduction

The support of agriculture in less favoured areas through financial aid was implemented in the EU in 1975 in order to support the continuation of farming in areas with structural and natural handicaps thereby maintaining a minimum population level or conserving the countryside (Council Directive 75/268 on mountain and hill farming and farming in certain less favoured areas).

The aim of the LFA support in the European Union as stated in NR 1275/1999 is to:

- to guarantee the continuation of use of agricultural land in order to keep living rural community;
- to maintain the countryside;
- to maintain and consolidate sustainable systems of economy with special regard to the protection of environment (Štolbová, 2006).

There are many indicators used to designate the area as less favoured (including altitude, slope, system of estimated pedologic-ecological units (BPEJ), density of population, share of workers in agriculture). A municipality, i.e. NUTS-5 according to statistical nomenclature, is set as the basic territorial unit that could belong to the LFA. There are three categories of the LFA set according to the above mentioned parameters: mountain, intermediate, specific.

The Czech Republic, with approximately 50% of the agricultural area in the LFA, is slightly under the European average (Štolbová, 2006).

The financial analysis consists of a number of methods of indicator decomposition. The parallel system of indicators including ratios covers all parts of enterprise's efficiency. Blocks of indicators are created measuring certain aspects of the financial situation and all features are perceived as equivalent to assess the financial health. An enterprise must not only be profitable but of reasonable debt and liquidity to be able to exist for a long time (Kislingerová, E. et al, 2004).

1. Material and methodology

In order to assess the financial analysis indicators, we used a database of approximately 150 agricultural holdings created within the NAZV QG 60042 research project. The analysis was performed in 2003 – 2007. Agricultural holdings were divided according to the share of agricultural area in the LFA to the following groups: group I – less than 25%; group II – from 25 (including) to 75% and group III – more than 75%. The database consisted of enterprise's financial statements (simplified balance sheet; simplified profit and loss statement) and a questionnaire. The average values of each group of agricultural holdings calculated as a weighted average were used to determine the resulting values from the database. In the paper, the following financial analysis ratios were used: return on assets (ROA), return on equity (ROE), return on sales (ROS), including the profit/loss analysis, total assets turnover, inventories turnover, average collection period, financial costs coverage, total debt ratio, creditors payment period, current ratio and the acid test.

2. Results

2.1 Analysis of the profit/loss and profitability

The profit/loss and its structure are presented in table 1. This table revealed that all groups of farms were profitable since 2004. It is important to say that the profitability of farms especially the plant production followed by the animal production is under the significant influence of climatic conditions. These conditions were very favourable both in 2004 and in 2007. Year 2003 was unfavourable to agriculture due to abnormal droughts that resulted into a loss of profit for a number of farmers. It is also clear that the deduction of subsidies would cause that all groups of farms would report a loss in the period under investigation that would increase by 20% until 2006.

The main earning power of a farm (operating activities) is created mainly by income from operations after the deduction of costs. This is the main part of total profit/loss. The long-term under-financing of this sector is reflected in the loss from financial operation caused by high costs. The tendency of a slight decrease of this loss can be assessed as a positive feature. The extraordinary activities according to Czech legislation on accounting consist of random and unusual operations – such as operations connected with deficits and damages resulted from floods or extreme droughts.

Table 1: Structure of the profit/loss (P/L) in 2003 – 2007 (in thousand CZK)

Farm (% LFA)	Indicator	2003	2004	2005	2006	2007
Group I	Operating P/L	-116	5975	4272	2525	7910
	Financial P/L	-1232	-1129	-1265	-862	-1010
	Extraordinary P/L	84	156	687	169	252
	Total P/L	-1265	5002	3693	1832	7151
	P/L after tax	-1061	4464	3099	1462	6699
	P/L without subsidy	-6959	-5064	-7891	-11558	-7818
Group II	Operating P/L	297	5685	3482	3702	9150
	Financial P/L	-592	-970	-898	-962	-1186
	Extraordinary P/L	234	548	181	119	157
	Total P/L	-61	5263	2766	2860	8122
	P/L after tax	-342	4778	2688	2559	7727
	P/L without subsidy	-6731	-6380	-9664	-11159	-5873
Group III	Operating P/L	-824	4309	3257	2839	6965
	Financial P/L	-798	-667	-557	-616	-551
	Extraordinary P/L	153	202	342	510	342
	Total P/L	-1470	3844	3043	2733	6756
	P/L after tax	-1302	3670	2847	2294	6592
	P/L without subsidy	-6334	-6200	-8607	-9713	-7092

Source: Own investigation

The Czech Republic entered the European Union in 2004. The availability of European funds supporting farmers significantly influenced the profit/loss and profitability of agricultural holdings. Subsidies are a significant source of income of agricultural holdings with the 15% – 20% share in total revenues. In 2003, i.e. before the EU accession, the average subsidy amounted to 5.5 CZK. The EU accession brought new

sources of aid (structural funds of the EU) followed by an increase of subsidies. Subsidies has increased more than two times in average reaching to 14 million CZK currently.

Absolute indicators such as the profit/loss are not suitable for spatial comparison so that ratio indicators (profitability indicators) are preferred.

Table 2 outlines the development of profitability indicators that revealed positive values since 2004 related to positive profit/loss.

Table 2: Profitability analysis in 2003 - 2007

Farm (% LFA)	2003	2004	2005	2006	2007
ROA (%)					
Group I	-0.89	3.52	2.10	1.07	5.26
Group II	-0.31	4.39	2.58	2.41	5.68
Group III	-1.49	4.07	2.90	2.36	5.73
ROE (%)					
Group I	-1.48	5.69	3.38	1.64	8.51
Group II	-0.54	7.75	4.60	4.34	9.67
Group III	-2.49	6.64	4.66	4.00	8.97
ROS (%)					
Group I	-1.25	4.82	2.98	1.53	7.33
Group II	-0.45	5.57	3.56	3.39	7.90
Group III	-1.95	5.92	4.37	3.60	8.07

Source: Own investigation

The most successful return on assets appeared in 2007 with more than 5% in all parts. Group III was surprisingly the most profitable although it faces to the worst natural conditions with limited structure of agricultural production. "Improved" values of ROA indicators within this group may be a result of the development of the absolute value of the indicator of total assets. The value of assets within this group of agricultural holdings decreased inter-annually in 2007 while it increased as a result of supports from investment subsidy programmes in 2005 and 2006 primarily. Assets in group I and group II increased inter-annually. The return on assets is the most favourable within group III as relatively equal profit/loss was reached with lower volume of assets in comparison to group II. This improved the value of the ROA indicator. The return on assets is considered to be the key measure of profitability.

The return on equity should be greater than the alternative return of an investment with the same risk or than rate of return of a risk-free capital allocation on the financial market; such as an average annual return of five-year state obligations to maturity in the Czech Republic (Grunvald, R., Holečková, J., 2007) which ranged 4 to 5.5% in the period under investigation (www.mfcr.cz). It is obvious that agricultural holdings were able to reach the above mentioned values, with the exception of 2003 and 2006. The highest value of 8 – 9% in 2007 can be interpreted as relatively satisfactory result considering the fact that the alternative deposition of capital (such as through financial institutions) did not even approximately reach the same percentage of interest (due to the influence of the risk factor, etc.). This value was therefore satisfactory with regard to the state of agriculture. The inter-annual dynamics of this indicator is similar to the return on assets with decreased values due to the financial leverage that is gradually losing influence. This is caused by faster settlement of shares as a result of transformation in agriculture.

Generally speaking, the indicator did not reach such value that would bring a significant yield for the owner in any year. However, the group II seemed to be the most profitable on a long term basis.

The return on sales (ROS) was calculated as a ratio of net profit and revenues. The revenues were used as they better describe the principle of agricultural holdings' activity (they include the above mentioned subsidies). The value of this indicator is the most variable (such as the other indicators) within group I – there was a decreasing tendency until 2006 with the exception of 2003 (negative value of the indicator). In 2007, the ROS increased several times within all groups with the greatest increase in group I (a 4.8 times increase, i.e. by 380%).

2.2 The activity analysis

The total assets turnover ratio is one of the factors that influence the profit/loss (together with the profitability). Compared to the profitability with its variable values, the total assets turnover ratio was relatively stable with an increase of values from 0.70 to 0.79 (see table 3).

Table 3: Activity analysis in 2003 - 2007

Farm (% LFA)	2003	2004	2005	2006	2007
Total assets turnover ratio (x-times)					
Group I	0.71	0.73	0.70	0.70	0.73
Group II	0.70	0.79	0.73	0.71	0.79
Group III					
Inventories turnover (in days)					
Group I	122.43	118.65	112.37	114.41	107.90
Group II	115.72	105.73	112.44	105.29	97.90
Group III	106.73	120.13	123.12	119.29	116.00
Average collection period (in days)					
Group I	55.57	63.69	60.77	58.67	56.89
Group II	54.70	58.43	58.59	67.84	64.56
Group III	34.99	54.97	52.22	48.09	57.89

Source: Own investigation

The inventories turnover of agricultural holdings is generally higher due to specific features of the agricultural sector. It is positive that the value of the indicator was decreasing by approximately the same rate within all three groups in the period under investigation.

The average collection period is calculated as the time from invoicing to payment. Table 3 revealed that this period is quite long with no significant differences among groups. It is useful to investigate this indicator in connection to the creditors' payment period. These two indicators should be agreeable. As table 4 revealed, there were no great differences between the creditors' payment period and the average collection period with a decrease of values in all groups.

2.3 Debt ratio analysis

The assessment of the indebtedness and related liquidity must be based on the debt ratio.

Table 4: Debt analysis in 2003 - 2007

Farm (% LFA)	2003	2004	2005	2006	2007
Debt ratio (%)					
Group I	39.27	37.93	37.52	34.85	37.77
Group II	42.07	43.30	43.97	44.42	40.96
Group III	39.81	38.63	37.65	40.98	35.86
Coverage of financial costs					
Group I	0.46	3.53	2.69	1.95	4.66
Group II	0.97	4.15	2.80	2.39	5.54
Group III	0.11	4.43	4.04	3.32	4.40
Creditors' payment period (in days)					
Group I	61.39	61.77	58.94	54.11	50.57
Group II	80.20	79.03	70.33	71.31	56.94
Group III	48.69	56.02	48.39	42.69	45.55

Source: Own investigation

Table 4 revealed the debt ratio as satisfactory with the value close to 40% without any significant differences among groups. Such state is reported as the optimal debt ratio of companies. It is appropriate to add that the optimal structure of capital is connected with the lowest possible average cost of capital.

As we used the simplified profit and loss statement it was impossible to investigate individual items of interest expense. They were included in total financial cost; however the detailed analysis of a part of our sample revealed that the biggest share of these costs consists of interests. This indicator is relatively suitable for investigating differences among groups, Again, group III reached long-term satisfactory values. In case of the value higher than 1, farms are able to pay interest expenses with the possibility of further investment. Positive values are caused both by the profit/loss as noted previously and by a slow decrease of interest expenses. On the other hand, the evaluation of the indicator is negative after the deduction of subsidies in all groups and in all years.

The creditors' payment period is the number of days with unpaid current liabilities; a company uses a free-of-charge commercial credit. The number of days when purchasers are in debt is higher than the number of days when a commercial credit is used in the whole period under investigation. While the creditors' payment period decreases, the tendency of the average collection period is inversed. It is interested that both periods are longest in case of group II.

2.4 Liquidity analysis

The liquidity is a part of efficiency assessment that cannot be separated from the analysis. The firm must be profitable; at the same time it must have enough cash available to be able to meet its liabilities on a given time and within the given range.

Table 5: Liquidity analysis in 2003 - 2007

Farm (% LFA)	2003	2004	2005	2006	2007
Current ratio					
Group I	3.20	3.23	3.47	3.76	3.91
Group II	2.42	2.34	2.87	2.81	3.38
Group III	3.24	3.48	4.20	4.68	4.55
Acid test					
Group I	1.15	1.27	1.52	1.60	1.74
Group II	0.95	0.98	1.25	1.28	1.62
Group III	1.00	1.30	1.63	1.87	1.96

Source: Own investigation

In order to ensure permanent financial solvency, it is important to pay operating debts to contractors, employees and state. Such liabilities have a short term of expiration (maturity up to one year). Short-term liquidity is analysed by the current ratio (current assets/current liabilities) and by the quick ratio (current assets without inventories/current liabilities) often referred to as the acid test ratio (Grunwald, R., Holečková, J., 2007).

The current ratio indicates a relative share of current liabilities in funds of current assets. The higher the ratio, the more favourable the possibility of maintaining the financial solvency is and the greater part of current assets is covered by long-term sources that decrease the risk of insolvency. The ratio below one is unfavourable, indicating lowered liquidity. The agriculture usually has the current ratio around 2.5. The current ratios of farms within our sample were favourable in all years with the highest values in group III. An increasing tendency of the ratio is favourable as well.

The quick ratio should be approximately 1.0. The ratio of 1 would indicate that short-term receivables and short-term financial assets are sufficient to pay current liabilities exactly. Agricultural holdings in all groups had the quick ratio greater than 1 with the greatest values within group III where the current assets liquid enough are approximately two times higher than short-term liabilities in 2007.

Conclusion

The aim of the paper was to assess a sample of agricultural holdings by methods of financial analysis. Farms were classified according to the share of agricultural land in the LFA and the hypothesis was based on possible influence of regional disparities on economic results within each group. The analysis of profitability revealed its relation to the profit/loss. Fluctuations of the profit/loss, which did not exceed the threshold of 7-8 million CZK, was mainly due to the specific types of farming in plant and animal production and climatic conditions and problems with sales, in competition with the

import of cheap agricultural commodities in recent years. Previous analysis showed the relation of the profit/loss and the subsidy policy of the agrarian sector as there is a 20% share of subsidies in returns of agricultural holdings. The absence of agricultural policy would lead to long-term non-profitability (loss) of all farms. Total returns reflected the tendency of the profit/loss and ranged between 5-6%, with the turnover of assets ratio of approximately 0.8. The debt ratio (40%) and liquidity (with values ranged between 3 and 4) can be regarded as satisfactory. The analysis revealed that there are no significant differences in the efficiency of groups according to the division based on the share of the LFA, i.e. subsidies balanced worse conditions for farming of agricultural holdings with the higher share of area in the LFA.

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FDI as an Economic Growth Strategy in the Czech Republic – Lessons from Ireland

Abstract

This paper reviews Foreign Direct Investment (FDI) as a strategy for economic growth in transition economies. It focuses on the economic growth strategy of the Czech Republic over the past decade and the balance that it has sought to achieve between FDI and the development of indigenous industry. This type of investment is generally associated with facilitation the transfer of newer, faster and productive technology to host countries. FDI and multinational companies brings along a more competitive environment that motivates local enterprises to perform to international standards set by the foreign firms as a survival strategy or motivate to create appropriate linkage with the multinational company and set integration in the branch. The paper also explores the case of Ireland and highlights the lessons that transition economies such as the Czech Republic can learn from its experiences regarding the promotion of FDI. These lessons include that a package of incentives is superior to a single incentive, host countries should adopt an enterprise-centred approach, sectoral direction requires project selectivity, and there are limitations to the local linkage potential in global production chains. A final warning is that FDI is not loyal to a host country and when it makes more economic sense to transfer operations to a lower cost / higher profit economy, then the FDI investor will move quickly and leave behind job losses and related difficulties. This paper and research was supported by the Grant of Moravian-Silesian Authority for mobility of young researchers Nr. VaV 19/2008 and the Grant of the Czech Grant Agency GAČR 402/07/0234.

Key Words

foreign direct investment, transition economies, Czech Republic, Ireland

JEL Classification:

M10, F23, L26, L53, R38

Introduction

Foreign Direct Investment (FDI) has frequently been viewed by governments as a panacea for economic ills. Policy-makers and politicians frequently believe that attracting FDI is an effective strategy for engineering economic growth and that it will quickly result in the creation of a significant number of jobs and the transfer of innovative technologies. Such results have obvious political benefits in the short-term but may cause other difficulties in the medium and long-term. As countries from Central and Eastern Europe transitioned from central-planned to market economies, their governments sought to introduce their own vision of capitalism. Many noted the substantial economic success of Ireland during its 'Celtic Tiger' years and sought to

emulate its model of growth. Policy makers particularly noted Ireland's use of FDI to stimulate its economy and leverage its position as an international player in the high-tech industrial environment. However, while the benefits of this strategy were immediately apparent, the dangers of pursuing this policy were recurrently considered less carefully. This paper examines the FDI policy of the Czech Republic and assesses it within the context of the Irish experience, particularly given Ireland's recent dramatic slump in economic fortunes. Having profiled the economic growth and policy development of the Czech Republic since the turn of the millennium, the paper questions what lessons can be learned from the Irish experience that should be heeded by policy makers in Prague.

1. FDI as an Economic Growth Strategy for Transition Economies

The debate about the value of Foreign Direct Investment (FDI) should begin with an understanding of what the term actually means. For example, one definition of FDI is contained in the IMF Balance of Payments Manual (International Monetary Fund, 1993 [32]) which stated that FDI is "an investment made to acquire lasting interest in enterprises operating outside of the economy of the investor and the investor's purpose is to gain an effective voice in the management of the enterprise". Furthermore, the IMF manual suggested that a threshold of 10 per cent of equity ownership is necessary to qualify an investor as a foreign direct investor. Similarly, according to the OECD's Detailed Benchmark Definition of Foreign Direct Investment (Organization for Economic Co-operation and Development, 1996 [32]) "a direct investment enterprise is an incorporated or unincorporated enterprise in which a single foreign investor either owns 10 per cent or more of the ordinary shares or voting power of an enterprise". Indeed a broader review of the literature reveals that there is little disagreement with the above understandings of the term and that FDI is generally defined by four central points:

- Mobile material investment into manufacturing sector and strategic services;
- Investor is interested in long term development of the company;
- Investment share must be 10% or more of basic capital;
- Investment must not cover financial transactions, development funds or grants.

Nowadays more than 196 countries around the world profit from FDI flows, with the total FDI flow in year 2007 amounting to 1,833,324 million US dollars (World Investment Report, UNCTAD, 2008 [32]). However, this investment flow is not divided equally across the world economy since approximately 35% of the total investment was received by EU27 countries (which meant that Europe is the most popular FDI destination). However, with the global economic crisis of 2008 changing FDI investors' criteria for country selection, Asian countries such as India, China and Malaysia have become increasingly popular destinations (A.T. Kearney's Global Services Location Index, 2009). Interestingly, Kearney also noted that some Eastern European destinations such as the Czech Republic (16th place in 2008), and Poland, Slovakia and Hungary (each

placed between 32nd and 40th place out of the most popular 50 countries for off-shore investment) have become more active targets for FDI investment [16].

The benefits of FDI flow into the host country are still be debated within the economic literature. The primary benefits identified from the literature include: (1) technology transfer and support of export activities of the host country, especially in the manufacturing industry (Hirschman, 1958; Findlay, 1978 [18]; Barro, 1990; Romer, 1993; Makhija-Spiro, 2000 [20]; Damijan-Majcen, 2001 [7]; Campos-Kinoshita, 2002 [4]), (2) linkages to the global division of labour (Wiśniewski, 2005[33]; Kaminski, 2001[17]), (3) development of human capital in the host country and linkages with local labour market (Hunya, 2005 [14]; Hanousek, 2005 [13]; Sabirianova-Peter, 2004 [30], Lízal-Švejnar, 2002 [19]; Borensztain, 1998), and (4) the transfer of knowledge and knowledge spill-overs boosts the host region by increasing competition and pushing other companies to invest in technologies or high-tech production (de Mello, 1997[5]). Generally, the positive spill-over of FDI can engender the transfer of the new technology into the host region and thus improve its competitiveness and develop linkages with local firms. It may additionally cause a regeneration process in regions suffering from traditional industry roots and in need of a transformation of its business structures. In political terms, FDI is seen as a way of creating jobs quickly, an outcome that is most clearly understood by an appreciative local electorate.

Many transition countries in Central and Eastern Europe have introduced FDI as a way of restructuring their economy, since FDI generally influences economic growth and employment, primarily with a growth in production and services. The amount of the positive effect that FDI will achieve is frequently dependent upon the amount of profit re-invested by the multinational company (MNC) back into operations within the host country. Additionally, if domestic enterprises start to cooperate with the MNC, then the transfer of new technologies may occur, which in turn could lead to product and labour quality growth and an increase in the strategic growth and competitiveness of indigeneous enterprises (Petráková, 2005 [26]). Furthermore, it is hoped by the host country that FDI will help to increase trade in the regions and solve regional disparities. However, while FDI investment combines capital flows, managerial skills, the transfer of know-how and an opening pathway to the global market, FDI success needs a stable socioeconomic environment, but this is not common in transition economies that frequently suffer from being laboured with a traditional oriented industry base. FDI contribution should therefore be accompanied by diversified FDI flows into the host country to split the risk and diversify spillovers or types of knowledge transfer, (Mickiewicz & Radošević, 2000 [22]). Economy openness to export also plays an important role to create linkages on the global market, but host countries should not substitute innovations as a long-term perspective. Indeed, for a host country to achieve real benefit from FDI, it is worth combining significant variables such as GDP growth, patent licensing growth, labour elasticity, capital elasticity, environmental variables, and real exchange rate (Yao & Wei, 2007 [34]).

The current analysis of the effects of FDI on a host economy is full of conflicting opinion. One group believe in free moving capital flows between integrated countries to exploit the contribution of knowledge transfer supported by capital flow. An opposite perspective comes from people such as local politicians or economists who want to protect domestic non-innovative firms and domestic markets against foreign

competition. Academics, especially those who employ national FDI statistics, might tend to treat FDI as homogenous, while policy makers most surely do not. More than 160 governments have established investment promotion agencies (IPAs) to attract foreign direct investment, and more than 70% of these agencies report that they focus their resources on a small number of “target” industries that they deem to be of particular benefit (Alfaro-Chairlton, 2007 [1]).

Countries in transition process or developing countries identify four types of FDI investments into their countries.

1. Spontaneous investments – the main idea is to enter the foreign market. In this type of investment investors simply want to buy a local company in order to have the potential to place their output on the new market and do not avail of host country support.
2. Recruitment investments – this is the active positioning of host country government or local government in pushing investments into regions with economic disparities, with investment support and investments leading to development of the manufacturing sector of the region.
3. Integration of investment – this type incorporates the support of services, outsourcing local suppliers, cooperation structure development and building integrated logistic centres.
4. Interaction of investment – this is the saturation point of the investment; some investors move into another country, while others reinvest profits and develop production with higher value added.

It is generally viewed as beneficial to integrate FDI into the regions as it can bring about positive long-term effects for the host region in terms of GDP share and research and development. Strong local conditions, well-qualified people and cooperation between multinational companies and local suppliers can bring about the supplementary effects of clustering and the forming of additional strategic services in each industry. Since regional disparities can cause different outputs and spillovers from FDI, a policy of cross-regional investments to support the long-term benefits from FDI investments, or the linking of companies into some supply chain or knowledge based cluster cooperation, would ensure a balanced geographic approach to FDI activity within a country.

2. FDI in the Czech Republic

The Czech Republic is one of the most stable and prosperous of the post-Communist states of Central and Eastern Europe. Between 1993 and 2006 the Czech economy underwent some significant structural changes with a decrease in the proportion of agriculture and industry in the country's GDP but an increase in the service sector. This phenomenon occurred, with varying degrees of intensity, in all regions of the country. Growth in GDP per capita between 2000 and 2007 was supported by exports to the EU, primarily to Germany, and a strong injection of foreign and domestic investment. Indeed, domestic demand is continuing to play an important role in underpinning growth in the Czech Republic as the availability of credit cards and mortgages increases. The economic policy of the Czech government has focused on promoting growth,

reducing unemployment and increasing the economy's competitive edge. The important priority of the Czech Republic in the macroeconomic area is the consolidation of public finances. Monetary policy, based on targeting inflation, helped to sustain a low-inflationary environment. For the period starting from January 2006, the inflation target was defined as 3% year-on-year CPI growth with a maximum deviation of one percentage point in either direction. While, arguably the FDI inflow signified the health of the host economy, it was also caused by a stable economical environment, EU membership, a well-qualified labour force and existing investment incentives. Another reason why foreign investors prefer the Czech Republic as a location for investment is because the current economic situation looks set to continue for the foreseeable future (low rate of inflation, low foreign debt ratio, well-qualified human resources, low labour costs).

In comparison with countries like Poland and Hungary which enjoyed strong FDI activity in the 1990s, the biggest FDI flow in the Czech Republic came after 1999 (1 755 million US \$ per 1 million residents). Between the years 1998-2001 FDI came mostly from the Netherlands as a mediated country. In 2001, the Czech Republic's share of total FDI activity was estimated to be 29%, and it was especially strong in the telecommunication sector. However, while FDI between the years 1998-2007 came primarily from high-tech products like airplane production, pharmacy, IT technologies, electronic media production (high added value based on research and development), these FDI activities were oriented on a cheap labour force and a rapid investment return. A comparison of BERD costs in the Czech economy with FDI flow highlights the gap between domestic and foreign investments into research and development. A particularly high level of FDI in the year 2002 was caused by TPCA (automotive company) investment in Kolin, and in 2005 with the investment of Hyundai.^[27]

Table 1 - BERD and FDI in CZ 2000-2007 (thousands of CZK)

	2000	2001	2002	2003	2004	2005	2006	2007
Domestic companies total-BERD	12 807 501	14 370 875	15 159 854	15 927 885	17 785 179	21 982 504	27 627 463	28 475 422
Foreign companies total-BERD	573 710	320 666	423 111	1 073 444	859 119	1 217 884	863 751	1 430 409
FDI inflow	192 421 150	214 585 300	277 689 500	59 316 050	127 844 000	279 181 490	134 677 140	185 274 400

Source. Czech statistical office [27]

Since 1993 more than 50 billion USD came as FDI flow into the Czech Republic and in the 2006 European Attractiveness Survey by Ernest & Young, the CZ was ranked in 7th place (CZECHINVEST, 2007 [5]). Indeed, foreign direct investments have now reached over 149,000 companies and it is estimated that approximately two-thirds of the Czech companies have some form of foreign capital control. The massive FDI inflow has caused "dual economics" (Jeřábková, 2008 [15]) in the Czech economy by multinational companies, which have higher productivity of labour, better financial ratios, and it has created a "gap" between domestic and foreign owned companies and their development. Domestic companies have lost their market position, because of problems in the financial market and loan supply, or due to the supply of grants and loans for R&D. FDI are mainly allocated in manufacturing industry, particularly in areas with low value added activity. Investments in the automotive industry have caused export growth of 17.9% on total export balance. For example, the biggest FDI investments are Hyundai and TPCA in Kolin, so that in the automotive industry 77.6% of owners are foreign companies and all sector in 2007 gave work 121,440 persons. While the creation of seems to be positive, the risk of these companies is, that they do not plan R&D

investments in the Czech Republic. Other negative effect brings deformities on the local labour market by productivity of labour or wage rates, which had to be negotiated because of offered minimum wage rate in the Czech Republic. The automotive industry is connected with chemical and rubber industry and price fluctuation in these markets influences the demand on automotive products. It is important is to create conditions to adopt and develop transferred technologies to support research and development and patents in Czech hands – it could be the positive effect of FDI. However, the question is now being asked in the Czech Republic - why is it that FDI companies do not innovate and use only cheap labour force and investment incentives?

3. FDI in Ireland

While there is a long tradition of trade and commerce in Ireland, the vast majority of trade since Norman times (12th century) has been with England and her colonies. Up until 1922 Ireland was part of the British Empire and therefore much of Ireland's produce was exported to England to help support the English economy. For almost 800 years the economic structure of Ireland was dominated by landlords and businessmen who had their roots in England. While some of these landlords and businessmen settled in Ireland, they still considered themselves to be part of the British Empire and their profit and trade was geared towards 'the mainland' of England. Thus, in general terms, the Irish did not have a sense of trade or commerce in terms of business ownership, and those who did were very much limited to one market – Britain and its Empire. Although the British Empire was good to businessmen working and living in Ireland, as it was vast and it was much easier to work through the Empire's extensive trading network than it was to find new markets for oneself, Ireland was very much dependant upon its biggest trading partner (O'Gorman and Cooney, 2007[25]).

Following upon its independence from Britain in 1922, a bitter civil war ensued for approximately one year. Thereafter, during the first ten years of independence, Ireland operated a free trade policy under its new government. But during this time the main opposition party was proposing self-sufficiency and the imposition of high tariffs on imports. When the opposition came to power in 1932 they introduced Protectionism, which virtually remained in place until the introduction of the Anglo-Irish Free Trade Agreement in 1965 (Ferriter, 2004 [9]). Whereas protectionism and self-sufficiency might have been an ideal to pursue for nationalistic reasons (and the country did well from this policy during World War II), it had a devastating effect on the Irish economy. For example, the government had distorted the economy by the wholesale subsidisation of economic activities, rather than letting entrepreneurial activity find the correct product for the correct market (Garvin, 2004 [12]). But this policy was more devastating for economic growth after WWII, as not alone did it limit competitiveness through importation, but it also limited businesses to trading internally within the state, and thus the development of export markets was restrained. A key aspect of this stifling of export markets and support of the protectionist stance was the Control of Manufacturers Acts (1932) which provided for majority Irish capital holding in Irish companies and were aimed at eliminating British control of Irish Industry (Garvin, 2004 [12]). The Acts were put in place because of the view held by some political parties in the early years of the new State that foreign direct investment (FDI) meant UK owned companies, the presence of which were seen by some to represent a failure of Ireland to establish itself

as a viable economy entity (Ruane and Gorg, 1996 [28]). It was not until 1958 that the Control of Manufacturers Acts were repealed. There were also other Acts that had negative effect on small businesses trading 'unfairly' against larger and more unionised concerns (Garvin, 2004, [12]). It was only after 1965 that FDI became significant due to the positive promotion of it as a key industrial policy by the Taoiseach (Prime Minister) at the time. The significant level of FDI achieved during that time resulted in a large increase in the numbers of people employed in manufacturing industries in Ireland. It also resulted in the growth of the Irish economy for arguably the first time in its history (initially this was short-lived) and formed the foundations for the more recent economic growth.

In the mid-1980s, the country was suffering from severe economic depression, with unemployment in excess of 15%, a national debt approximately 140% of GNP, and high emigration. A National Economic and Social Council (1986) report proposed the need to develop economic and social policy based on agreement between the government and its social partners (e.g., trade unions, employer organisations, farmers' organisations, etc) if Ireland was to achieve economic recovery. In 1987, the 'Programme for National Recovery: 1987-1990' was published and it has been followed by six more such Social Partnership Agreements. Indeed these agreements have ensured that Ireland has now experienced two decades of negotiated economic and social governance. Over the intervening years, the number of social partners included in discussions has broadened to incorporate community and voluntary organisations. The most recent agreement 'Towards 2016' incorporates macro-economy, infrastructure, environment and social policy, as well as detailing arrangements on pay, the workplace, and employment rights and compliance. The Taoiseach's (Prime Minister) Department is effectively the guardian of the partnership programme, with a quarterly monitoring of its performance embedded into the partnership process.

During the 1990's, Ireland's economy witnessed unprecedented growth, with increased inward investment and exceptional employment opportunities contributing to the so-called 'Celtic Tiger' phenomenon. The development of a strong and highly skilled entrepreneurial class was central to this process, reflected in the policy measures taken by Ireland in recent years. The government's enterprise strategy (Forfás, 2000 [10]) focused on the need to create more high skilled/high knowledge-based jobs, and placed a great deal of emphasis on the small firms sector, recommending that support be provided through the encouragement of high-tech start-ups, early stage investment, and the development of a partnership approach between the development agencies, the financial institutions, and SMEs. Traditionally, start-ups were viewed with suspicion and the support infrastructure was minimal in Ireland. Prior to the early 1990s, government policy was primarily focused on attracting Foreign Direct Investment (FDI) as a means of encouraging new business development. The recessionary economic environment which now faces Ireland has meant a return to a greater emphasis on FDI while many Irish people argue that it is critical that the country secures an indigenous entrepreneurial base if the Ireland is to enjoy economic growth in the near future.

However during this period of time there was some foreign direct investment (FDI) into Ireland especially after the Industrial Development Authority was set up in 1949. It was after 1965 that FDI became significant. The significant level of FDI resulted in an increase in the numbers of people employed in manufacturing industries in Ireland.

Table 2 – Employment by Irish and Foreign Companies

	Irish	Foreign	Total
Employment 1973	143,815	69,388	215,203
Employment 1998	121,073	109,222	230,295
Employment 2008	144,734	152,364	

Source: Sweeney, 1999[31]; Forfas, 2009 [11]

Sweeney (1999, [31]) stated that since 1973, ‘the growth of employment in foreign firms is impressive. In the five years to 1998 it had risen by a very high 20,595 or almost a quarter. Therefore even with the Irish recovery and trend reversal, it seems certain that, soon after 2000, the foreign MNC manufacturing sector will be a bigger employer of Irish workers than will Irish manufacturing firms’. When internationally traded and financial services are added to these manufacturing jobs, the numbers in 1998 were 133,230 in Irish firms and 136,515 in foreign firms. Thus in 1998, for the first time, the number of jobs in foreign firms in manufacturing and internationally traded and financial services exceeded the number of jobs in Irish firms. The high level of foreign direct investment (FDI) has helped Ireland shift from a very high dependence on the UK market. Thus in the case of Ireland it can be seen how setting up the Industrial Development Authority (IDA) to focus on attracting FDI has changed the country from being a rural based to an industrial based economy (Sweeney, 1999 [31], Garvin, 2004,[12]).

According to Meyler and Strobl (2000,[21])Ireland’s enterprise policy in the early 1950s was very much focused on regional development in that they (the IDA) distinguished between designated areas and non-designated areas. The regions classified as designated areas were typically the least wealthy, least populated, least industrialised and most peripheral regions of Ireland. This focus on regions seems to vary from decade to decade. For example the Buchanan Report (1969) proposed a focus on nine regional development centres to support the regional growth argument of the 1960s. According to Meyler and Strobl (2000, [21]) the regional policy of the 1970s focused on two primary issues: (i) an attempt to avoid the rural-urban drift whereby workers migrate from rural to urban areas in search of higher paid jobs, and (ii) to avoid an over concentration of foreign owned MNCs in certain areas. The IDA’s “Regional Industrial Plans for 1973 – 1977”, focused more on towns, albeit they targeted (designated) many more than nine centres for growth. In 1982, however, after the publication of the Telesis Report, enterprise policy emphasis changed from being predominantly regionally focused to being predominantly focused on attracting strategic industries into the State. With the passage of time, even though regionality is still expressed in enterprise policy, there does appear to be a greater emphasis on attracting and supporting foreign owned MNCs that have a tendency (or expressed desire) to locate in urban centres of large concentrations of population.

Clearly there is evidence to suggest that the IDA has performed well in identifying, pursuing and securing prestigious FDI since the early 50s, up to and including the present time. However, there are many commentators and researchers that question Ireland’s over-dependence on the level of foreign multinationals in the country (see O’Hearn 1998 for example, [24]). During the late 1980s and early 1990s many politicians including Albert Reynolds, who held the ministries of Industry and Commerce in 1987, and Finance in 1988, expressed concern that the IDA were overly focused on the attraction, and support of, foreign multinationals to the detriment of indigenous industry. Reynolds, himself a businessman, made some key changes to

address these concerns, during his tenure as Taoiseach (Prime Minister) from 1992 to 1994. One of the most notable changes was the passing of the Industrial Development Act 1993. This act was influenced by the Culliton Report of 1992 which boldly suggested to split-up the IDA. The report urged the government to focus on Irish industry; it particularly suggested that a state agency be set up to focus solely on indigenous industry (Sweeney, 1999). The Industrial Development Act 1993 established three industry support state agencies – Forfas, Forbairt (now called Enterprise Ireland), and the industrial development authority (IDA). In summary Forfas is the overall state agency that is responsible for enterprise policy and development in Ireland. The implementer of policy for indigenous enterprise is Enterprise Ireland (formally Forbairt), and the responsibility for attracting “industrial undertakings from outside the State” lies with the IDA. This policy continues to exist in Ireland today.

4. Lessons for CZ from Ireland

One of the more alarming statistics to arise in recent years was a figure offered in a report by the Enterprise Strategy Group (2004, [8]) which highlighted that 89.4% of Irish exports came from foreign owned firms. A more recent Forfas Report (2009,[11]) noted that Irish exports in 2007 was €11.8bn (9.25%), while foreign exports in 2007 was €97.4bn (90.75%). This dependency on multinational firms was alarming as the international FDI market has become very competitive with countries such as India and China offering low cost economies, an ample supply of skilled labour, and mobile investment. Additionally, the Irish cost base has increased substantially (2nd highest minimum wage in EU), Ireland’s low rate of corporation tax being emulated by other countries, and changes in EU state aid limits place new restrictions on state aid for enterprise. If Ireland cannot continue to attract FDI with the same success as in previous times, or if MNCs currently in Ireland begin to leave (as is currently happening), then what effects will this have on Ireland’s export activity? It is arguable that the heavy dependence of Irish economic policy on FDI has been to the detriment of building a strong and sustainable indigenous industry. Ruane and Buckley (2006, [29]) reviewed Ireland’s FDI policy and assessed what lessons transition economies could learn from Ireland’s experiences. They suggested that the following were the principal points for consideration:

- Host countries can never stop being pro-active
- A package of incentives is superior to a single incentive
- Host countries should adopt an enterprise-centered approach
- Sectoral direction requires project selectivity
- Project selectivity in turn requires:
 - A careful cost-benefit analysis
 - Strategic bargaining
 - Strong governance to avoid corruption
- Policy consistency matters to investors – thus policy should evolve systematically and not add to uncertainty
- Performance-based incentives, both fiscal and financial, can combine well
- Projects need to be monitored
- Limitations of local linkage potential in global production chains

These considerations highlight that attracting maximum FDI into a country should not be the goal of an economic policy, but that the type of FDI attracted and how it is embedded into the local economy is also critical to sustained success. Any FDI policy needs to be proactive in terms of ensuring that linkages are made between MNCs and local indigenous firms to ensure that clustering is developed and technology transfer is taking place.

The Irish experience has broadly been extremely positive as it has developed a very effective FDI policy over four decades. However, during that period it has not developed effective enterprise policy for its indigenous industry and so the balance of export activity has increasingly focused on MNCs which has now placed Ireland in a precarious economic position. Effective economic policy must include a balance between attracting strategic FDI and building a strong indigenous industry.

Conclusions

Comparison between these two countries illustrates requirement for driving FDI investments into R&D position to develop host region by innovation activities or diversify the type of FDI investment. It could cause long term benefit and fix the investment into the region. FDI inflow could cause, on the other hand, disparities on the labour market or change the diversity of local companies. Policy makers have to examine not only current stage and type of FDI investment, but its future impact on the hosted region development, not to bring wider gap into regional disparities. Created conditions for FDI are essential and must be based on policies of cross-regional cooperation or investments; reduce inter-regional migration to reduce negatives on incomes and production based on FDI support.

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Application of Queueing Theory in Setting Standards of Auxiliary and Service Work

Abstract

This article deals with possibilities of application of queueing theory for setting standards of auxiliary and service work. The aim of this article is a survey and description of situations where the queueing theory can be used as an effective tool for standardization of overhead work. It includes not only setting of optimal number of workers but also equipping workers with appropriate tools, setting of number of served machines or gadgets and frequency of their reparation. The opening part pays attention to some basic terms about queueing theory from the professional literature. It includes description of open and closed systems, their differences and their application in setting standards of auxiliary and service work. Next chapter brings the advantages and disadvantages of these systems according to examples from the production. The next advantage of this theory is the fact that it can provide not only information about time consumption of the particular operation but also about its labour costs and other expenses. This is also very important source for the following decision of management. Open systems provide information about number of workers in the team of repairers and assemblers or how many workers should be employed in the dispatch office or in the stock. The closed systems can be used by the multimachines service, mainly by setting numbers of setters. According to independent research activity there is an example of application of queueing theory in setting optimal number of drivers of fork-lift trucks for particular working area of a company in the car industry.

Key Words

auxiliary and service work, productivity of labour, queueing theory, standardization of labour

JEL Classification:

L62, M54, C1

Introduction

Labour standards for manual workers have already been calculated and kept in many factories. Piece wage is being determined according to output standards, this is significant motivation for management of the plants to concern with this topic. However laborers that work in auxiliary and service processes are also necessary part of the production system. Auxiliary and service work concerns especially workers in maintenance, setters and handlers. Regrettably setting standards for auxiliary and service work is the topic nobody pays much attention to. In case there are any standards in the factories, they are set according to estimation and experience in the particular working area. Unfortunately the methodology for setting of these standards usually does not exist. What is the cause for this long-term lack of interest for setting standards of

overhead work? The biggest complication of this task is caused mainly by problematic description of the service process. There are many random events that influence overhead work and this brings many complications within calculation of their standards. Results of the calculation brings information not only about time consumption but also informs about economical demand of the particular operation (in connection with costs). This is one of the most important resources for further decisions of the management. Nowadays there is a big emphasis on increase of labour productivity, so that setting standards for auxilliary and service work can be objective resource for possible savings of overhead costs. The aim of this article is to point at the possibility of application of exact methods, particularly of queueing theory, in setting standards of overhead work.

1. Characteristic of the method

Queueing theory is the mathematical study of waiting lines or queues. The theory enables mathematical analysis of several related processes, including arriving at the (back of the) queue, waiting in the queue (essentially a storage process), and being served by the servers at the front of the queue. The theory permits the derivation and calculation of several performance measures including the average waiting time in the queue or the system, the expected number waiting or receiving service and the probability of encountering the system in certain states, such as empty, full, having an available server or having to wait a certain time to be served. Queueing theory is generally considered a branch of operations research because the results are often used when making business decisions about the resources needed to provide service. It is applicable in a wide variety of situations that may be encountered in business, commerce, industry, healthcare, public service and engineering. Applications are frequently encountered in customer service situations as well as transport and telecommunication. Notation for describing the characteristics of a queueing model was first suggested by David G. Kendall in 1953 [1].

According to professional literature are individual parts of queueing system characterized by:

1. size of resource, its limitation or unlimitation,
2. patience of requests,
3. maximally tolerable lenght of the queue,
4. order, in which are individual requests served,
5. arrangement of channels (serial, parallel and mixed). [4]

According to another resource queueing system means everything between arrival of the request to the system and its departure from the system. Service equipment is also called as service channels, service lines and stations of service. There is a synonym for queueing system too, sometimes it can be as called a waiting system. [5]

There are two possible situations that can be described in connection with service work: manipulators are fully occupied and requests for service are cumulating, or there are almost no requests for service and it gets to downtimes. Standard number of service

workers, in the fact the optimal number of service workers, depends on rate of value of time unit describing waiting for the manipulator (cost or revenues) and value of time unit of downtime of the manipulator. In this case it is necessary to pay attention to economical aspect, especially to costs of waiting of the claimant for service in the queue and costs of waiting of manipulators. According to professional literature the main difficulty during setting standards of overhead work is caused mainly by laboriousness of calculation. This problem can be now eliminated by the help of the appropriate software. However the main problem that resists is complicated mathematical formulation of the model. The useful method that can help to set standards of overhead work is queueing theory.[3] However one of the biggest disadvantages of this theory is its system complexity. Setting of output rates is on the other hand simple task, it concerns several elementary mathematical operations. The great advantage of queueing theory is the fact that it helps to display also economical aspect of the dilemma.

There are two basic types of queueing theory models:

1. open systems (with unlimited resource of requests),
2. closed systems (with limited resource of requests).

2. Problems of open systems

Open systems, especially waiting systems, are mainly used just by analysing and optimizing of auxiliary and service work. Number of potential claimants is bigger in proportion to number of manipulators and request for service arise in incidental, usually very long intervals. According to assurance of flowing run of production it is necessary to keep service with any delay if possible. Setting of optimal number of workers in service process is demanding because it is important to regard not only capacity reserves but also avoid needless increase on labour costs.

Open models of queueing theory can be used by setting setting of standards of overhead work in the businesses which can be influenced by random events that effect need for service and its operating period. Detailed description of these operations in concrete examples follows in the next part of this article.

Standard open model of queueing theory expects performance of following obligations [6]:

1. Service node has arranged channels in parallel. Service channels are fully available and homogenous.
2. Channel starts next service immediately after finishing of the last request.
3. Resource of requests is unlimited and rising requests are non-homogenous.
4. Every newly arisen request is sooner or later fulfilled
5. Requests are fulfilled according to their sequence of origin.
6. Duration of interval between start of the request and duration of service are random quantities with exponential probability distribution.
7. System of service is in the stable status and parametres λ and μ are not changeable in time period.

Sometimes it is required to fulfill also some complementary operation from the service channel, mainly in the situations when the channel is in the downtime and there is no other request. Channels of service can be used close to full capacity then and they are still ready to fulfill their main duties. The whole system is more effective. There is one condition to make this system work, the complementary work must be determinable in case it appears another request for service.

Apart from setting number of workers can be open systems used within decision making about what kind tools should workers have or about number of service machines and frequency of their reparations. Here are some problems from common practice which can be solved by systems of queueing theory. Above all it is setting of optimal number of workers that hand out tools. The ideal capacity is in the situation when cost of downtime of workers are equal to cost of waiting of workers for distribution of the tool. The theory is applicable also in the cases when it is necessary to consider whether it is more profitable to employ more experienced workers for higher wage or less experienced workers for lower wage. Internal factory transportation is another area where can be with a help of cost functions and probability theory optimized both current organization and recoveribility of investment before purchase of new machines or equipment. Queueing theory can be also used within setting economical benefit for development of production in cases that it is necessary to quote a priority and let some of workplaces be served in preference. If there is essential to decide whether to keep in some type of businesses (e.g. in textile manufacturers) numerous group of repariers or to buy some reserve machines, then queueing theory is also a very useful method.

3. Problems of closed systems

The most significant characteristic of closed system is dependancy on intensity of requests on immediate number of subjects in the resource. The next important difference from the open systems is the fact that length of the queue cannot expand predefined limits. If the service system is overloaded and there are many requests in the queue, next flow of requests will be smaller because there is less subjects in the resource.

Closed systems can be used mainly at service of more than one machine. If there is a long run time of the machine, number of machines can be higher than number of service staff. There are two possibilities of multimachines service in the closed systems: random arise of requests for service and random occupation with assignments. Next area where can be closed system applicable are situations in common practise where it is necessary to compare variants of setting machines according to cost efficiency of the particular variant. By means of closed system it is also possible to objectively calculate how many setters should operate with required number of machines, which variant option is for the company more profitable and how to divided machines into selected areas. This method helps also to uncover decrease of productivity when it is necessary to compare service work of more and less experienced worker, as well as decrease of productivity attended machines caused by low labor productivity of the worker.

Closed system of queueing theory are in particular used for setting number of setters assigned to group of machines and number of machines assigned to one setter according

to cost benefit of the alternative. Origin of requests for setting can be in dependance on character of production described as random. Group of setters has always responsibility for group of particular machines producing different types of products and their duty is to be ready in case it appears any breakdown and some reparation is needed.

4. Setting of labor standards for internal factory transportation

The aim of independant research activity was to find out whether it is possible by means of queueing theory set optimal number of fork lift truck drivers for required working area. Selected company produces plastic components for automotive industry. This request arised in terms of optimalization and search for potential savings from the management. The task was to analyse capacity utilization of fork lift trucks and check local capacity of needed vehicles. Frequency of requests was captured by multiple activity chart. Along several eight-hour shifts all activities of the drivers were monitored and written down and in result the avarage number of request was set. According to the methodology in the professional literature [6] it was calculated procedural coefficient which characterized capacity utilization of service channel and cost proportion to loss caused by waiting for the request in the queue and costs for lost time of service channel. Further it approached to check of current capacity utilization of fork lift trucks according to the costs and comparison on basis of total costs on service of 4, 5 or 6 fork lift trucks. Total costs for internal factory transportation were calculated and compared regarding system stability, average time that the subject waits in the queue and probability that all trucks are available. Analysis of the current setting confirmed that according to queueing theory there is optimal number of fork lift trucks in the working area at the moment.

Conclusion

Due to preview analysis it can be done following conclusion. Queueing theory can be in common practise used for setting standards and losing problems connected with this overhead work:

1. setting of number of workers in service and assembly teams, further for setting of number of staff working in the stock or in despatch,
2. choice of type and number of equipment in particular working area,
3. determination of buffer stock quantity in order to assure failure-free production,
4. setting of number of automatic and semi-automatic equipment assigned to one or several workers,
5. planning distribution network of stock and number of workers e.g. in supply points of tools in the plants.

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Image as an Instrument of Marketing Communication of the University

Abstract

The article deals with the terms identity and image in connection with marketing management and university communication. At present when the information pressure on subjects of internal and external environment of a university is increasing and at the same time competitive environment in tertiary education is strengthening, school image in its communication is gaining more significance. Systematic work on the development of good relations with goal and interest groups of a university should become a part of university communication as intentional, planned and continuous activity related to the goals and a strategy of a school. A university image may become one of the decisive factors in the process of a potential students' decision-making, makes other school clients be willing to cooperate with the school and enhances the loyalty of its employees. The article presents the methodology and the results of a school image research done with present and potential students and employees of the Faculty of Economics, Technical University of Liberec. The article also presents methodology and results of research on the recognition of the faculty and the positive/negative attitude towards this faculty among citizens of the Liberec region and potential students of the faculty in Liberec. In the discussion the author speculates what the analysis of image can bring to the university in general as well as to the actual examined faculty. The conclusion of the article is devoted to the significance of university image to different interest groups in the area of tertiary education – potential and current students, graduates, companies cooperating with the university and companies employing the graduates.

Key Words

identity, image, marketing communication, university, image research

JEL Classification:

M31

Introduction

Within the last ten years in the Czech Republic there have been marketing approaches in school management detected in the sphere of tertiary education that require the creation of good relations with different subjects of macro- as well as micro- school environment. It is more common to talk about the formation of an intended image that should result from marketing communication of the university. Marketing communication is one of the basic instruments of marketing management, which tries to affect the attitude of important interest groups in relation to offered products, services and the organization itself. Marketing communication is an important instrument used in service marketing as well as in tertiary education marketing. Marketing communication of the university provides information on educational program offers, persuades target groups to cooperate, draws attention to its offer and existence and last

but not least it forms and strengthens image of the university. Marketing communication in tertiary education should be accepted as a dialogue, and two-way communication with interest groups.

1. Marketing communication and image of the university

Marketing communication of universities is influenced by a specific attribute of educational services – "immateriality". University marketing helps to "materialize" educational service by using communications to present a school trademark, content and quality of education, environment and school facilities, profile of a graduate etc. Communication instruments of the university result from basic tools of marketing communication (personal selling, advertisement, sales promotions and public relations). Different categorizations and arrangements of communication instruments occur in theory as well as in practice, for example Direct Marketing is classified as a new communication instrument, or sometimes sponsoring, exhibitions and trade fairs are ranked among additional independent instruments (other times they are mentioned as part of public relations). **Elements of communication mixture at universities** can differ, however they should always contain public relations **as an instrument that can create an image and influence it in a positive direction**. Světlík [1] defines public relations in education as a form of communication with its major goal to generate favourable images of the school and its educational program in public.

The terms - identity and school image - originate from the theory of corporate identity and image. Horáková, Stejskalová, Škapová [5] also deal with the relation of corporate identity and image. **Corporate Identity** is personification of an organization derived from its philosophy, history, culture, strategy, management style, reputation and behaviour of the company representatives. It shows how the organization accepts itself and how it is presented on the outside. The summary conception of corporate identity is formed by several particular terms. It is **Corporate Design** - coordinated setting of visual elements, **Corporate Culture** - complex of images, approaches and values in the organization and **Corporate Communication** - set of all methods and ways of communication inside as well as outside the company. Interaction of the elements of corporate identity creates corporate image [5]. Corporate identity means, what the company is or what it wants to be, while corporate image is a public portrait of this identity [11].

Corporate image can be, in the above mentioned terms, determined as a conception that is spread about the company on the basis of external perspectives. It is a simplified symbol, based on the summary of images, postures, opinions and experience of a man in relation to a certain company [11]. Consequently, the company image is the way, the organization is perceived by subjects of internal as well as an external environment of the company.

The conception of the school image in the Czech Republic can be mainly found in works of Světlík [1], Jakubíková [2], Štefko [3] and Eger and Egerová [4]. **Identity of the university** is determined by a great number of extrinsic and intrinsic factors and its specific feature is to be a part of the identity of education, region and nation. These identities can also be contradictory. Most of the elements creating school identity are

qualitative variables that affect human consciousness and subconsciousness and develop in them. **The image of the university** mainly depends on the quality of provided educational service. Štefko [3] defines school image as "a complex of all images, knowledge and expectations linked with the existent educational subject, with the present as well as the former teachers, the present students, and the school graduates, and with their expected knowledge and skills." Eger and Egerová [4] refer mainly to the educational programs of the universities, lower level schools are generally noticed in a more complex way. Most of the mentioned authors agree that school image consists of objective and subjective, correct and incorrect images, postures, and skills of individuals and groups connected to a certain school or educational program.

2. Research methods of recognition and favourableness of attitudes and university image research

Research on image follows the research on school recognition and favourableness of attitudes towards it. In 2006 to 2008, researches were organized among the citizens of the Liberec region and the students of high schools in Liberec, for needs of the Faculty of Economics at the Technical University in Liberec (thereinafter EF TUL). The groundwork for creating the questionnaire was taken from an innovated version of a pilot questionnaire for school image survey, prepared for teaching the school management in the Czech Republic [4], edited by Eger [8].

2.1 Research on recognition and favourableness of attitudes towards EF TUL among citizens of the Liberec region

The target group consisted of people above 15 years of age from the Liberec region, minimum size of sample was specified statistically for unknown constitution of respondents ($n \geq 400$), **volume of the selective sample** was defined by **aiming selection, using the technique of appropriate opportunity** and it was formed by **2 018 respondents**. Research on recognition and favourableness attitudes of the public towards EF TUL included more detailed **analysis of causes and connections**. As the analysis deals with categorial variables, contingency tables were created [9] with empirical absolute frequency, corresponding hypothetical (theoretic) frequency was defined and they were mutually compared by using test criterion. Statistical relevancy and intensity of independence in a contingency table was compared with Pearson and Cramer contingency coefficient of independence.

2.2 Research on recognition and favourableness of attitudes towards EF TUL among potential students in Liberec

A method of questionnaire survey was used for this research. Data was provided by using single standard structured questionnaire that contained the same questions about recognition and favourableness of attitudes as the research among citizens of the Liberec region. The target group consisted of students of 4th class or seventh and eighth

class from secondary schools and students of 3rd and 4th class from business high school in Liberec, **volume of the selective sample** was defined by **aiming selection, using the technique of appropriate opportunity** and it was formed by **130 respondents**.

2.3 Image research

Image research, as one of the types of marketing research, traces a picture created by customers about the organization, its services and brings details for strengthening or appropriate change of image. Vysekalová, Komárková [7] point out that the analysis of image serves to psychological understanding of the market and at the same time presents a complex access to efficiency measurement of communication process with the infliction of its motivational aspect. Eger and Egerová [4] together with Štefko [3], Světlík [1] and Vysekalová with Mikeš [11] recommend the following procedures for image measurement as the most suitable:

- Semantic differential – image position measurement of the institution on the basis of major, so-called relevant dimensions.
- Multi-factor method for comparison of the school with competitive schools
- Multi-dimensional analytical map

The last method is complicated and it is the worse applicable in the sphere of tertiary education. First two methods are more suitable in education and they are also mentioned by Kotler [10] in connection with the image analysis. The multi-factor method of comparing the school with competitive schools results from researches and surveys of competitive universities. Since this analysis was not executed at EF TUL, **EF TUL image research was executed by the method of analysis using techniques of simplified semantic differential – polarity profile**. Image indicators result from the fact, which dimension is used by people to describe an observed object, and we can determine these indicators for image measurement on the basis of answers to questions about evaluation of the faculty [8]. EF TUL image research used the innovated version of a pilot questionnaire for the school image survey prepared for teaching the school management in the Czech Republic [4], edited by Eger [8], where a five-degree numerical scale is used with ascending numbering of 15 dimensions (see picture 1). Groups respondents were selected from present students of the 5th class from EF TUL attendance studies, employees of EF TUL and graduates of the EF TUL attendance studies, data was collected by the **method of written questionnaire using a single standard structured questionnaire** with a five-degree verbal scale.

3. Results

Next part sums up the results of the researches on recognition of the faculty, favourableness of the attitudes towards it among the general public and potential students and research on the faculty image among students, employees and school graduates.

3.1 Citizens of the Liberec region

Knowledge and recognition of EF TUL among citizens of the Liberec region only matched the answers "I know it", "I know quite a lot about it", "I know it very well". In this way, more than half of the respondents from the Liberec region "know" the faculty. There are 25% of respondents, who assume that they know quite a lot about EF TUL or know it very well, and about 22% of respondents had never heard of the faculty. Those respondents, who know EF TUL or know it very well, or know a lot about it (total of 1094 respondents), were asked, what was their attitude towards the faculty (how well is the respondent disposed towards the faculty).

- **Very favourable** towards EF TUL - it is the same proportion of people, who are well-disposed towards the faculty, as those with a rather averse approach towards the faculty.
- **Positive** (rather favourable and very favourable) attitudes towards EF TUL were shown by 43% of respondents compared to 14% of those, who reacted **negatively** to the faculty (very unfavourable and rather unfavourable attitude).
- **Neutral** and positive reaction to EF TUL was shown by the same number of respondents.

Recognition of EF TUL and the attitude of the respondent towards the faculty did not statistically significantly depend on the sex of the respondent and attitude towards the faculty did not depend on the age of the respondent. The strongest proven independence was independence between recognition of the faculty and the attitude towards it. Furthermore we have analysed results **relating only to the respondents from Liberec**. The research showed that **recognition of the faculty or the attitude of the respondent in Liberec is independent on the sex, and the attitude of the respondent does not depend on the age. Research in Liberec showed a dependence of the faculty recognition only on the age of the respondent; in this case it was a statistically significant dependence, more intensive than throughout the Liberec region**. It means that recognition of the faculty in other parts of the Liberec region is less dependent on the age, than in Liberec. The attitude of the respondent in Liberec towards the faculty is not statistically significantly dependent on the age of the respondent. **According to the methodology used for the structure of the questionnaire, EF TUL does not have a markedly positive image among citizens of the Liberec region above 15 years of age.**

3.2 Potential students

Once again, knowledge and recognition of EF TUL among high school students in Liberec only corresponded to the answers "I know it", "I know quite a lot about it ", "I know it very well". In this way, **half of the high school students in Liberec "know" the faculty**. Knowledge and recognition of EF TUL is higher among business school students than among secondary school students. 11 % of high school students in Liberec do not know EF TUL.

- The questioned secondary school students do not notice EF TUL neither markedly very unfavourably or markedly **very favourably**
- **Positive** (rather favourable and very favourable) attitudes towards EF TUL are shown almost by a third of high school respondents in Liberec compared to a small proportion of those, who react **negatively** to EF TUL (very unfavourable and rather unfavourable attitude).
- A similar number of respondents showed **neutral** relation to EF TUL as well as positive relation. The business school respondents overall see EF TUL more positively than secondary school students.

According to the methodologies used for the structure of the questionnaire, EF TUL does not have a markedly positive image among high school respondents in Liberec.

3.3 Faculty image among students, employees and school graduates

Students unlike school graduates and employees evaluate positively the facilities of the faculty and negatively communication with students. Graduates compared to students and employees see worse scientific activities of the faculty and cooperation of the faculty with local authorities and companies, however better than other respondents they notice interests in studies at the faculty and achievements of school graduates. **All the examined target groups stated positive evaluation of the atmosphere, achievements of school graduates and interest in studies at the faculty. Presentation of the faculty in public was evaluated negatively** (by graduates and employees), **and also the scientific activities and cooperation with local authorities and companies** (by students and graduates).

Answers within individual table items from particular groups of respondents are averaged and graphically displayed so the resultant vertical line presents a summary view of the image of the institution on the evaluation of particular groups of respondents (see picture 1). If we review small deviations of particular curves of semantic differential, it is evident that **image of EF TUL is specific, undispersed**, with small deviations (small differences in the evaluation of single image factors by different groups of respondents). Image of EF TUL is formed by elements that are similarly noticed by different interest groups.

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are similarly noticed by different interest groups. **The research confirmed that image of EF TUL is consistent, which means that it does not markedly differ among students, school graduates and employees of EF TUL.**

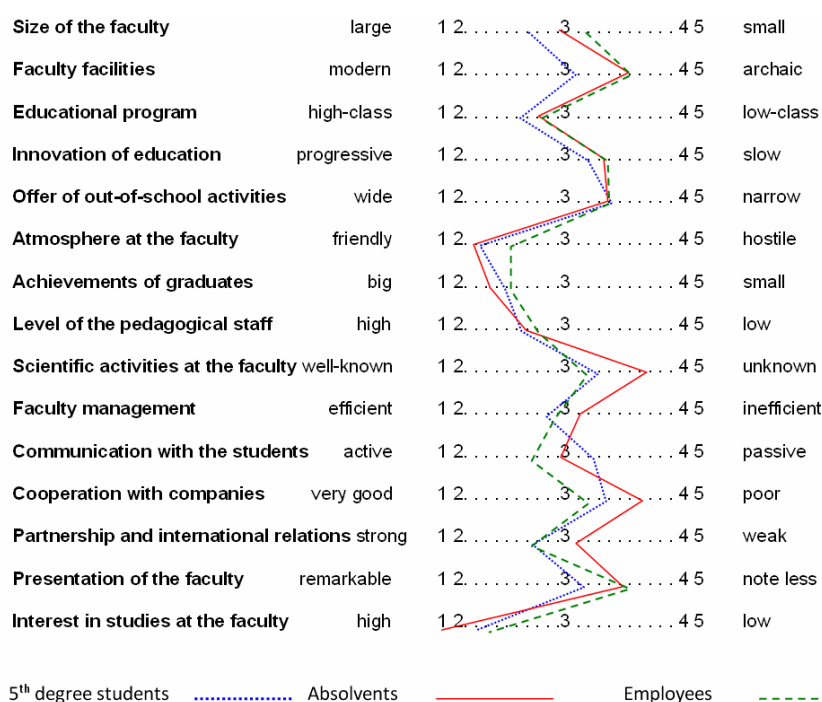


Fig. 1 Image of EF TUL – students, employees, school graduates

Source: Author's own elaboration

4. What are the benefits of the university image analysis

There is no standard method of image analysis, methodical procedures are chosen individually in connection with research targets. Image analysis starts with the determination and definition of variables, which influence the creation of image, and dimensions used to describe the observed object. The technique has its exactly specified progress, starting with construction of bipolar scales, which will help to evaluate characteristics of the examined phenomenon. For the university image measurement we can assess the characteristics upon answers to questions used for evaluation of the school. The method of image analysis with a polarity profile (simplified form of semantic differential), which records subjective feelings of the respondent by using a bipolar rating scale, appears to be suitable even for the university image analysis.

Image analysis is a complicated process. Nevertheless, the image of a specific university can be at least partially diagnosed, developed and systematically moved in the desired direction. Image analysis can then become an instrument of evaluation of marketing communication efficiency of the university with emphasis on motivational aspects of communication. Therefore it is necessary to regularly accomplish prime research aiming at the determination of recognition of the university and favourableness of attitudes towards it and focused on the university image analysis among fundamental interest groups in the school.

Research for the particular university (EF TUL) mentioned above results in recommendation to repeat this research in the Liberec region as well as outside the Liberec region (particularly in the Ústecký and Královehradecký regions) and implement it among another target groups. Furthermore, findings of research showed suitability to organize research of expectations for cooperating companies and other organizations and accomplish analysis of internal communication (which however assumes the established system of feedback from employees, periodical questionnaires, public inquiries, researches of satisfaction etc.). When creating an image of the university, it is very important to know, how the subjects of macro- and micro- school environment look at the school, what conception they have and what expectations they link with its educational program. That is why it is essential to regularly repeat research of satisfaction of students with studies, satisfaction with study conditions and fulfillment of students' expectations from studies (either as independent regular research or within the students' evaluation of quality). It is important for universities that the image analysis can determine the market position of the university during the comparison of images of competitive schools, and consequently in what position the university is placed in the minds of potential students. Subsequently, the management of the university should from results of these researches choose forms and resources leading towards an improvement of image in its negative evaluations. Purposeful work on the development and progress of the desired image should be thoughtful, systematic and continuous activity relating to targets and strategies of the school.

Conclusion

A competitive environment intensifies in the area of tertiary education and the image of the school can play a significant role during decision making of potential applicants for studies at the university. Consequently, it will be important for the university in the future, not only to gain new students, but also retain the current students as the increasing number of competitive educational institutions will enable an easier changeover to the competition. Maintenance of students is connected with the university image, with positive presentation of the school before current students, but also before potential students and school graduates. The increasing concern within tertiary education is in expectations of applicants for studies, what to acquire at the school and how difficult it will be to seek employment with this education and qualification. Future employers will have to choose between school graduates with similar education and similar personality characteristics and experience, and will probably prefer graduates from schools with better image. Graduates of prestigious universities assume the school image and on the other hand they help to create it.

Good image can help the school in obtaining financial resources for its development and can also increase goodwill of companies and other institutions to cooperate with the school. Image of the school also influences loyalty of employees at the university, but on the other hand criticism of the school from the academic workers can badly damage the school's image.

However, the image of the school is usually relatively stable, so it is impossible to change it quickly and in addition people respond to image of the school and at the same time they may not have the correct conception of the real situation at the school. That is why

the image is built up slowly and its creation is a continuous activity. It means to bring the universities to communication with all interest groups and accept feedback from them.

The principle of communication for the universities is the continuous monitoring of the interest groups concerning their activities and creation of long - term relations with these groups. Assessment of the targets is connected with problems of determination of the interest groups and definition of the priorities between them. There is a discussion about the necessity of integrated communication that is based on an integrated strategy, and is implemented via a consistent and optimised composition of all communication instruments mentioned above. Integrated communication represents strategic coordination of all announcements of the organization, synchronized application of all suitable communication instruments, and guided communication with all relevant target and interest groups.

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Sensitivity Modelling of Capital Requirements to Market Risk

Abstract

The recent financial crises resulted into significant increase of volatility of financial assets returns and, more importantly, it also brings many cases of jumps, ie. sudden and huge movements of prices. The crisis spread into particular market segments promptly mainly through the integration of regional markets into one global market place. It is evident especially when we examine the evolution of foreign currency returns, which is probably the segment with the highest liquidity and traded volume of overall financial market. Such a significant growth of realized volatility of market returns should obviously lead to demand of financial institutions on additional capital eligible to cover market risk as it is recognized by supervisor authorities. The aim of this paper is to present an approach based on copula subordinated Lévy model application, which is qualified to give a true picture of increased volatility of market returns, including more than normal kurtosis (i.e. higher peaks and fatter tails) and nonlinear dependency assuming portfolio consisting of six currencies, GBP, HUF, EUR, PLN, SKK, and USD. We also study the sensitivity of capital requirements to input parameters of skewness, kurtosis and dependency as specified by parameters of selected models. More particularly, we apply two examples of subordinated Lévy models, the variance gamma model and the normal inverse Gaussian model, ie. the Brownian motions driven by stochastic time. In order to obtain the portfolio distribution, ie. the random evolution of particular risky factors, two examples of elliptical copula functions are supposed, the Gaussian copula and the Student copula.

Key Words

FX rates, portfolio distribution, copula function, Lévy models, capital requirements

JEL Classification:

G1, G2, C1

Introduction

Financial risk modelling and its subsequent management is a very important and no less challenging task of quantitative units of financial institutions, such as banks, insurance companies, or security firms. An efficient management of financial risks can increase the performance of any given entity. Generally, taking additional risk can, on average, increase the return on equity. However, considering a particular mix of stakeholders, there always exists some risk limit, which should not be exceeded. Otherwise, the business would become more risky than desired.

The recent financial crises resulted into significant increase of volatility of financial asset returns and, more importantly, it also brings many cases of jumps, ie. sudden and huge movements of prices. The crisis spread into particular market segments promptly

mainly through the integration of regional markets into one global market place. Thus, the need for advanced tools to model the risk was further enhanced.

It is evident especially when we examine the evolution of large portfolios sensitive to movements of foreign currencies. This segment is commonly regarded as the one with the highest liquidity and traded volume of the overall financial market. Such a significant growth of realized volatility of market returns, we could observe during the last period, should obviously lead to a demand of financial institutions on additional capital eligible to cover market risk as it is recognized by supervisor authorities. Advanced models of portfolio risk modelling, including measurement of capital requirements, were studied recently e.g. by Rank [17] or Tichý [20].

The aim of this paper is to present an approach to market risk estimation based on a standard copula subordinated Lévy model – i.e. a model, which is qualified to give a true picture of increased volatility of market returns, including more than normal kurtosis i.e. higher peaks and, possibly nonsymmetric, fatter tails, and nonlinear dependency. We assume a portfolio sensitive to the evolution of six distinct currencies: GBP, HUF, EUR, PLN, SKK, and USD (FX rates with respect to CZK). We also study the sensitivity of capital requirements to input parameters of skewness, kurtosis and dependency as specified by parameters of selected models.

More particularly, we proceed as follows. In the following section the theory which lies behind of a copula subordinated model is briefly reviewed – we define two examples of subordinated Lévy models, the variance gamma model and the normal inverse Gaussian model, i.e. the Brownian motions driven by stochastic time, and in order to obtain the portfolio distribution, i.e. the random evolution of particular risky factors, two examples of elliptical copula functions, the Gaussian copula and the Student copula, are introduced. Next, in Section 2 we describe the data used in this study. Finally, in Section 3 we apply particular models in order to estimate several risky measures of portfolio distribution as well as the sensitivity of VaR and cVaR to input parameters of standard deviation, skewness, kurtosis, and degrees of freedom.

1. Standard copula subordinated Lévy model

In order to assess the risk of a portfolio, i.e. unexpected changes in its value, a joint probability distribution of all relevant drivers of random evolution should be estimated, though marginal distributions and a suitable tool to express the dependency among particular factors can be estimated separately.

Actually, such decomposition can be of great value since joint probability distribution generally presumes identical margins, at least at elementary levels. By contrast, choosing e.g. copula functions to rebuild independent marginal distributions into dependent structure gives us a great portion of freedom when estimating the marginal probability distribution.

1.1 Marginal distribution by subordinated Lévy processes

The major task of financial model building is to allow one to fit also extreme evolution of market prices. It is a matter of fact that returns at financial markets are neither symmetrically distributed nor without exceed peaks (or heavy tails) over time, which is in contradiction to Gaussian distribution. A very feasible way to fit both skewness (non-symmetry) and kurtosis (heavy tails) is to apply a subordinated Lévy model, a rather non-standard definition of Lévy models as time changed Brownian motions, which goes back to Mandelbrot and Taylor [14] and Clark [6].

Generally, a Lévy process is a stochastic process, which is zero at origin, its path in time is right-continuous with left limits and its main property is that it is of independent and stationary increments. Another common feature is a so called stochastic continuity. Moreover, the related probability distribution must be infinitely divisible. The crucial theorem is the Lévy-Khintchine formula:

$$\Phi(u) = i\gamma u - \frac{1}{2}\sigma^2 u^2 + \int_{-\infty}^{\infty} (e^{iux} - 1 - iux1_{|x|<1})\nu(dx) \quad (1)$$

For a given infinitely divisible distribution, we can define the triplet of Lévy characteristics,

$$\{\gamma, \sigma^2, \nu(dx)\},$$

The former two define the drift of the process (deterministic part) and its diffusion. The latter is a Lévy measure. If it can be formulated as $\nu(dx) = u(x)dx$, it is a Lévy density. It is similarly to the probability density, with the exception that it need not be integrable and zero at origin. The first focus at Lévy models with jumps goes back to 1930's. The most recent and complete monographs on the theory behind and/or application of Lévy models are Kyprianou et al. [10], Applebaum [1], Cont and Tankov [8], Barndorff-Nielsen et al. [2] and Bertoin [5].

Define a stochastic process $Z(t; \mu, \sigma)$, which is a Wiener process, as long as $\mu = 1$ and $\sigma = \sqrt{t}$, its increment within infinitesimal time length dt can be expressed as:

$$dZ = \varepsilon\sqrt{dt}, \quad \varepsilon \in \mathcal{N}[0,1], \quad (2)$$

where $\mathcal{N}[0,1]$, denotes Gaussian distribution with zero mean and unit variance. Then, a subordinated Lévy model can be defined as a Brownian motion driven by another Lévy process $\ell(t)$ with unit mean and positive variance κ . The only restriction for such a driving process is that it is non-decreasing on a given interval and has bounded variation.

Hence, we replace standard time t in

$$X(t; \mu, \sigma) = \mu t + \sigma Z(t) \quad (3)$$

by its function $\ell(t)$:

$$X(\ell(t); \theta, \mathcal{G}) = \theta \ell(t) + \mathcal{G}Z(\ell(t)) = \theta \ell(t) + \mathcal{G}\varepsilon \sqrt{\ell(t)}. \quad (4)$$

Due to its simplicity (tempred stable subordinators with known density function in the closed form), the most suitable models seem to be either the variance gamma model – the overall process is driven by gamma process from gamma distribution with parameters of shape a and scale b depending solely on variance κ , $G[a, b]$, or normal inverse Gaussian model – the subordinator is defined by inverse Gaussian model based on inverse Gaussian distribution, $IG[a, b]$. For more details on variance gamma model see e.g. Madan and Seneta [11] (for symmetric case) and Madan and Milne [13] and Madan et al. [12] (for asymmetric case). Similarly, normal inverse Gaussian (NIG) model is due to Barndorff-Nielsen [4] and [3]. Note also, that there exist several generalizations and extensions, see any of the monographs referred to above.

1.2 Dependency modelling by copula approach

A useful tool of dependency modelling are the copula functions, i.e. the projection of the dependency among particular distribution functions into $[0, 1]$,

$$c : [0, 1]^n \rightarrow [0, 1] \text{ on } \mathbb{R}^n, n \in \{2, 3, \dots\}. \quad (5)$$

Actually, any copula function can be regarded as a multidimensional distribution function with marginals in the form of standardized uniform distribution. In this paper, we restricted ourself to ordinary copula functions. Basic reference for the theory of copula functions is Nelsen [15], while Rank [17] and Cherubini et al. [7] target mainly on the application issues in finance. Alternatively, Lévy processes can be coupled on the basis of Lévy measures by Lévy copula functions.

For simplicity assume two potentially dependent random variables with marginal distribution functions F_X, F_Y and joint distribution function $F_{X,Y}$. Then, following the Sklar's theorem:

$$F_{X,Y}(x, y) = c(F_X(x), F_Y(y)) \quad (6)$$

If both F_X, F_Y are continuous a copula function c is unique. Sklar's theorem implies also an inverse relation,

$$c(u, v) = F_{X,Y}(F_X^{-1}(u), F_Y^{-1}(v)). \quad (7)$$

Formulation (6) above should be understood such that the joint distribution function gives us two distinct information: (i) marginal distribution of random variables, (ii) dependency function of distributions. Hence, while the former is given by $F_X(x)$ and

$F_Y(y)$, a copula function specifies the dependency, nothing less, nothing more. That is, only when we put both information together, we have sufficient knowledge about the pair of random variables X, Y .

Thus, assuming that the marginal distribution functions of random variables are already known, the only further think we need to know to model the overall evolution is an appropriate copula function. With some simplification, we can distinguish copulas in the form of elliptical distributions and copulas from the Archimedean family. The main difference between these two forms is given by the ways of construction and estimation. While for the latter the primary assumption is to define the generator function, for the former the knowledge of related joint distribution function is sufficient.

1.3 Parameter estimation

There exist three main approaches to parameter estimation for copula function based dependency modelling: exact maximum likelihood method (EMLM), inference for margins (IFM), and canonical maximum likelihood (CML). While for the former all parameters are estimated within one step, which might be very time consuming, mainly for high dimensional problems or complicated marginal distributions, the latter two methods are based on estimating the parameters for the marginal distribution and parameters for the copula function separately. While assuming IFM, marginal distributions are estimated in the first step and the copula function in the second one, for CML instead of parametric margins empirical distributions are used. On more details see any of the empirically oriented literature such as Cherubini et al. [7]. In this paper we will assume IFM approach.

2. Data set

The data set we consider in our study comprises of daily effective FX rates for EUR, GBP, HUF, PLN, SKK, and USD with respect to CZK as published by the Czech National Bank, i.e. generally the market quotes at 2 p.m. The data observation started on January 1, 2000 and finished on December 31, 2008. It follows that we have at our disposal 2268 observations of log-returns for six distinct FX rates. For each FX rate basic descriptive statistics – mean, variance, standard deviation, skewness and kurtosis – of daily log-returns (per annum, if applicable) were evaluated, see Table 1.

Table 1: Descriptive statistics of daily log-returns (p.a.)

Parameter	EUR	GBP	HUF	PLN	SKK	USD
<i>mean</i>	– 0.032	–0.079	–0.037	–0.032	0.005	–0.068
<i>variance</i>	0.0037	0.0088	0.0074	0.0106	0.0043	0.0135
<i>st.deviation</i>	0.061	0.094	0.086	0.103	0.065	0.116
<i>skewness</i>	–0.131	–0.236	–0.737	–0.410	0.209	0.029
<i>kurtosis</i>	13.010	9.357	9.951	11.511	11.192	6.829

It is apparent, that the mean returns p.a. varies substantially between – 8 % (GBP) and 0.5 % (SKK). The only FX rate with positive drift is SKK. Similarly, also the variance of

returns is various. For two FX rates we get values close to 6 % (SKK, EUR), another two are close to 9 % (GBP, HUF) and the last two go above 10 % (PLN, USD).

A positive drift of SKK implies significantly positive skewness, while the other four FX rates (EUR, GBP, HUF, PLN) are more or less negatively skewed. Next, USD returns seem to be highly symmetric. Concerning the frequency of extreme movements, all FX rates should be regarded as significantly leptokurtic, although its magnitude differs. When testing if the distribution can be regarded to be the Gaussian, several tests of Jarque-Bera type can be used. Here, the hypothesis of normality must be strongly rejected for all FX rates, mainly due to higher than normal probability of extreme movements.

Since a similar study [20] was carried for the same data except the last year (2008), we can stress the main differences: standard deviations increased by approximately 1 % (in absolute values), the excess kurtosis generally increased two to three times (except HUF and PLN), mainly due to large number of extreme market movements, predominantly returns with positive sign (depreciation of CZK), which further implied decreases in the magnitude of negative skew.

In this study we focus first of all at the ability of elliptical copula functions to estimate the risk of FX rate portfolio properly. Hence, the risk/return tradeoff is not so much important as the presence of skewness and kurtosis and their mix in a notional portfolio. We therefore normalize all data to get zero mean and unit variance of log-returns either for the whole length of the data or for particular subintervals, depending on the task.

Portfolio modelling issues require some information about mutual dependencies among particular components. Although the linear correlation measure is far from perfect, which is highlighted when the underlying data are not elliptically distributed, it is still of high information value. We therefore report the correlation matrix below:

$$\mathbf{R} = \begin{pmatrix} 1. & 0.58 & 0.39 & 0.25 & 0.71 & 0.47 \\ 0.58 & 1. & 0.26 & 0.35 & 0.45 & 0.65 \\ 0.39 & 0.26 & 1. & 0.48 & 0.45 & 0.14 \\ 0.25 & 0.35 & 0.46 & 1. & 0.34 & 0.31 \\ 0.71 & 0.37 & 0.45 & 0.34 & 1. & 0.31 \\ 0.47 & 0.65 & 0.14 & 0.31 & 0.31 & 1. \end{pmatrix}.$$

We can observe that the correlation coefficient is always positive, for most cases between 0.31 and 0.47, with three exceptions outside these bounds (to both sides). As one might guess, the highest correlation is for (EUR, SKK) and (GBP, USD) – i.e. the pair of economies with tight linkage (lowest, respectively) to the czech one.

3. Results

Let us assume a unit of financial institution (henceforth *Unit*) that is responsible for trading with foreign currencies and hedging of open positions. Assume next that the residual portfolio (i.e. open positions) consists of six distinct currencies as in Table 1, for simplicity each with equal weight $w = 1/6$. Domestic currency is CZK, the overall amount is 1 000 000 CZK.

First, we calculate particular risk measures for such a portfolio effective for 1.1.2008. The results obtained by Monte Carlo simulation (number of independent scenarios, $n = 500\,000$) are depicted in Table 2. Particular columns depict the results estimated for (geometric) Brownian motion, variance gamma model and normal inverse Gaussian model together with Gaussian copula function (GBM-G, VG-G, and NIG-G, respectively) and Student copula function (GBM-St, VG-St, and NIG-St, respectively). For comparison purposes, also the empirically obtained measures over 2000-2008 are provided.

**Table 2: Risk measures of equally weighted portfolio
estimated over 2000-2008 (df = 7)**

Parameter	2000-2008	GBM-G	VG-G	NIG-G	GBM-St	VG-St	NIG-St
<i>Mean</i>	-0,00017	-0,00017	-0,00016	-0,00017	-0,00016	-0,00018	-0,00017
<i>Variance</i>	0,00001	0,00001	0,00001	0,00001	0,00001	0,00001	0,00001
<i>St.Dev.</i>	0,00355	0,00355	0,00349	0,00351	0,00355	0,00353	0,00354
<i>Skewness</i>	-0,467	-0,001	-0,221	-0,213	0,004	-0,275	-0,301
<i>Kurtosis</i>	6,582	2,993	4,777	4,608	3,443	6,627	6,578
<i>VaR (0.95)</i>	0,006	0,006	0,006	0,006	0,006	0,006	0,006
<i>VaR (0.99)</i>	0,010	0,008	0,010	0,010	0,009	0,010	0,010
<i>VaR (0.999)</i>	0,020	0,011	0,015	0,015	0,012	0,017	0,017
<i>VaR (0.9997)</i>	0,023	0,012	0,018	0,018	0,014	0,022	0,022
<i>cVaR (0.95)</i>	0,009	0,007	0,008	0,008	0,008	0,009	0,009
<i>cVaR (0.99)</i>	0,014	0,010	0,012	0,012	0,010	0,013	0,013
<i>cVaR (0.999)</i>	0,022	0,012	0,017	0,017	0,014	0,021	0,021
<i>cVaR (0.9997)</i>	0,023	0,013	0,020	0,021	0,015	0,025	0,026

Apparently, each model we considered works very well for the first two moments of the portfolio distribution (mean and variance/standard deviation). However, the level of kurtosis is modelled well only by VG-St and NIG-St approaches, ie subordinated Lévy models connected by a copula function with stressed dependency in tails. Since the copula function we have assumed is symmetric, the calculated level of skewness is not perfectly matched to the empirically obtained result.

However, from the risk modelling perspective, the VaR (Value at Risk) and cVaR (conditional VaR, ie expected shortfall) measures are more important. Actually, what is the loss which might be exceed with a given significance α ; what is the conditional mean of such a loss, and, finally, what is the amount of capital the Unit should set aside?

The results for $\alpha = 0.05, 0.01, 0.001$, and 0.0003 are evident from the second part of Table 2. While $\alpha = 0.01$ is related to Basel II capital requirement to market risk, $\alpha = 0.0003$ is implied by target rating of AA category. We can see that for Basel II purposes either VG-G (NIG-G) or VG-St (NIG-St) models can be used, while in order to manage the risk for internal purposes only Student copula function provides us sufficient results. The same is evident when the expected shortfall, ie what can happen under worst case scenarios in average, is followed.

An important part of risk management is to examine the sensitivity of the risk – and simultaneously, the amount of capital required to cover it – to input factors. From the point of view of FX rate sensitive portfolio, the most significance inputs are standard deviation, skewness, and kurtosis of particular risk drivers (FX rates) and the dependency among them. We change all parameters by k 10 %, $k = -0.5$,

-0.4, ..., 0.4, 0.5. Thus, for overall portfolio we obtain standard deviations from 0.17% to 0.53%, levels of skewness from -0.12 to -0.45, and levels of kurtosis from 4 to 8. Concerning the dependency, we modify the degrees of freedom, ie the measure of linearity of dependency. The results are depicted in Figure 1 (we assume only GBM-St, VG-St and NIG-St models – VaR for $\alpha = 0.01\%$ (disk) and $\alpha = 0.0003$ (diamond), cVaR for 0.01% (square) and $\alpha = 0.0003$ (triangle)).

As it might be expected, the GBM models, even if coupled by Student copula function, is insensitive to the modification of skewness and kurtosis, almost insensitive to df . We will therefore make comments mainly on VG-St and NIG-St models.

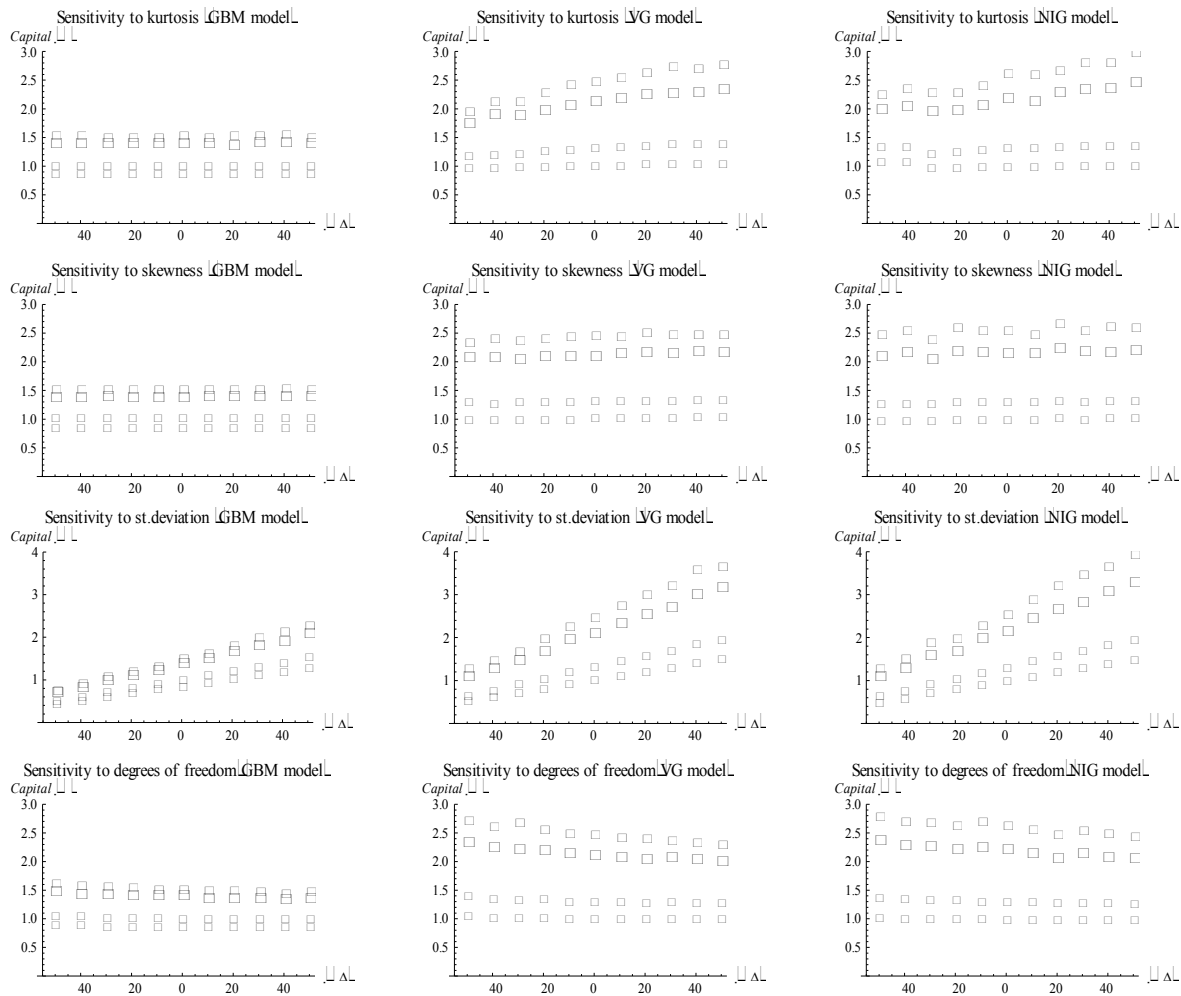


Figure 1: Sensitivity of capital requirements to selected input parameters

As one might guess, the effect of kurtosis modification is evident mainly for $\alpha = 0.0003$ (results for NIG model are not very smooth). Hence, even if the probability of extreme events increases (the tails are heavier), as we could observe during the last year, the capital requirement due to Basel II approach is rather insignificant. However, for internal management purposes and subsequent capital allocation among particular units the level of kurtosis is important (up to 20% of additional capital). The sensitivity of chosen risk measures to skewness modification is rather low, mainly due to the data (negative skewness) and portfolio composition. By contrast, the modification of standard deviation implies very sharp changes in the amount of required capital.

Conclusions

An efficient management of financial risks can increase the performance of any given entity. Moreover, the risk measurement and subsequent capital allocation can be used to increase competitiveness among particular units of a given institutions. In this paper we have shown a powerful tool to estimate the (market) risk of a portfolio – the standard copula subordinated Lévy model. We have also calculated the sensitivity of selected risk measures to the modification of input factors. This analysis is important in order to asses a vulnerability of financial institutions (or their units) to the change of external factors.

Acknowledgement

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Regional Disparities in Visegrád Group Countries

Abstract

Territorial disparity indicates the degree to which the intensity of a certain economic phenomenon differs between regions within a same country. In recent years, regional development issues have returned to the policy agenda of many EU countries. In this paper we concentrate on regional differences in some economic indicators like GDP per capita or unemployment. The explored sample of countries are the Visegrad group countries which have similar experience with central planned economy. Regional disparities have occurred during transition period in these countries especially between the metropolitan regions and the rest of regions. The paper also attempts to identify the factors responsible for the persistence of regional unemployment disparities in these countries because the persistence of significant regional disparities challenges countries' capacity to promote economic growth while ensuring social cohesion. There are several measures of regional disparities. It must be emphasized however, that measures of concentration are not the same as measures of inequality, such as the Gini coefficient which measures inequality in the income distribution of a country. Examples of measures of regional disparities or concentration like the Concentration ratio, the Herfindahl index, the Ellison and Glaeser index, the Geographic concentration index and the Adjusted geographic concentration index which are tested on data which are obtained from accessible statistics databases. In this paper we also compare these approaches to measurement of regional disparities. The findings are consistent with the view that regional unemployment disparities are explained primarily by regional disparities in economic competitiveness.

Key Words

regional disparities, Visegrad group, concentration

JEL Classification:

R10, R12

Introduction

The main aspect, which had fundamental influence on economic development during the last twenty years, was the transition of economy from the central planned one to market one. It was expected that change of V-4 countries' geopolitical situation, their democratization, change of property rights and inflow of foreign investment would be the main factors of regional economic structure in these countries (see Illner 2001).

New governments faced many challenges, especially poor economic performance with the undersized tertiary sector. On the other hand regional differences were relatively low compared with the countries of Western Europe.

Thus, the aim of this paper is to estimate various alternative measures of regional disparities in four Visegrad group countries. Based on the results obtained, we will assess and compare the level of achieved regional imbalances. We used the OECD Regional database which is a comprehensive and consistent macroeconomic database of the OECD countries at sub-national territorial level, covering demography, economic accounts, labour market, social and innovation indicators.

The paper is structured as follows. First, we discuss theoretical concept of measurement of regional disparities. Next, we provide the estimation results. Finally, the main findings of the analysis are summarized.

1. Theoretical concept and literature review

Generally, economic inequality comprises all disparities in the distribution of economic assets and income. The term typically refers to inequality among individuals and groups within a society, but can also refer to inequality among regions or countries. Territorial disparity indicates the degree to which the intensity of a certain economic phenomenon differs between regions within a same country or group of countries. This definition is quite broad and we can find out definition of academic nature in Kutscherauer (2008:7): *„regional disparity is dissimilarity of character, phenomena or processes which have unambiguous territorial location (is possible to allocate in determined territorial structure) and which occur at least in two entities of this territorial structure.“*

In this paper we concentrate on regional differences in GDP per capita and unemployment. There are several measures of concentration. It must be emphasized however, that measures of concentration are not the same as measures of inequality, such as the Gini coefficient which measures inequality in the income distribution of a country. Examples of measures of concentration like the concentration ratio, the Herfindahl index, the Ellison and Glaeser index, the geographic concentration index and the adjusted geographic concentration index are found in Spiezia (2003).

The Herfindahl index (H) is defined as:

- for production $H = \sum_{i=1}^N y_i^2$
- for unemployment $H = \sum_{i=1}^N u_i^2$

where u_i is the unemployment and y_i is the production share of region i and N stands for the number of regions. The index lies between $1/N$ (it means that all regions have the same unemployment/production share, so there is no concentration) and 1, which means that all unemployment/production is concentrated in one region, in other words it means the maximum concentration. The theoretical example is just below. Suppose imaginary country A with the 100 000 unemployed persons and four regions. In the table we can see four possible values of H .

Tab. 1: Herfindahl index and its possible values

Total unemployed	100 000	100 000	100 000	100 000
in which				
Region 1	25 000	10 000	1 000	100 000
Region 2	25 000	5 000	2 000	0
Region 3	25 000	50 000	80 000	0
Region 4	25 000	35 000	17 000	0
Value of H	0,25=1/N	0,385	0,6694	1
Value of H*	0	0,18	0,5592	1
Concentration	none	low	high	max

Source: own calculation

There is also a normalised Herfindahl index. Whereas the Herfindahl index ranges from $1/N$ to one, the normalized Herfindahl index ranges from 0 (no concentration) to 1 (maximum concentration). It is computed as:

$$H^* = \frac{(H - 1/N)}{1 - 1/N}$$

where again, N is the number of regions in the country, and H is the usual Herfindahl Index, as above.

In general, however, regions have in most countries different areas so that a correct measure of geographic concentration has to compare the unemployment or production share of each region with its share in the national territory. An index that takes into account regional differences is the one proposed by Ellison and Glaeser (1997):

- for production

$$EG = \sum_{i=1}^N (y_i - a_i)^2$$

- for unemployment

$$EG = \sum_{i=1}^N (u_i - a_i)^2$$

where a_i is the area of region i as a percentage of the country area. If the unemployment share of each region equals its relative area, then there is no concentration and EG equals 0. Therefore, the bigger the value of EG is reached in the country, the higher geographic concentration.

According to OECD study a major drawback of the EG index is that it is not suitable for international comparisons because it is very sensitive to the level of aggregation of regional data. This feature is due to the fact that the differences between the unemployment or production share and relative area of each region are squared.

To correct for this bias due to aggregation, the EG index can be reformulated into the following index of Geographic Concentration (GC) which is taken from Spiezia (2003):

- for production

$$GC = \sum_{i=1}^N |y_i - a_i|$$

- for unemployment

$$GC = \sum_{i=1}^N |u_i - a_i|$$

where $| \cdot |$ indicates the absolute value.

International comparability of the GC index can be increased further by noticing that the index reaches its maximum when all unemployment is concentrated in the region with the smallest area. The maximum value of the GC index is the equal to:

$$GC^{MAX} = \sum_{i \neq \min} a_i + 1 - a_{\min} = 1 + 1 - 2a_{\min} = 2(1 - a_{\min})$$

where $a_{\min}$ is the relative area of the smallest region.

The GC index, therefore, is not internationally comparable if the size of regions differs systematically between countries. A natural correction for this second aggregation bias is provided by the adjusted geographic concentration index (AGC), defined as

$$AGC = GC / GC^{MAX}$$

As the AGC index lies between 0 (no concentration) and 1 (maximum concentration) in all countries, it is suitable for international comparisons of geographic concentration.

- In the case of production

$$y_i - a_i \equiv (y_i - l_i) + (l_i - a_i)$$

where y_i and l_i are, respectively, the production share and the labour force share of region i .

- In the case of unemployment:

$$u_i - a_i \equiv (u_i - l_i) + (l_i - a_i)$$

where u_i and l_i are, respectively, the unemployment share and the labour force share of region i .

The AGC index is then equal to:

- for production

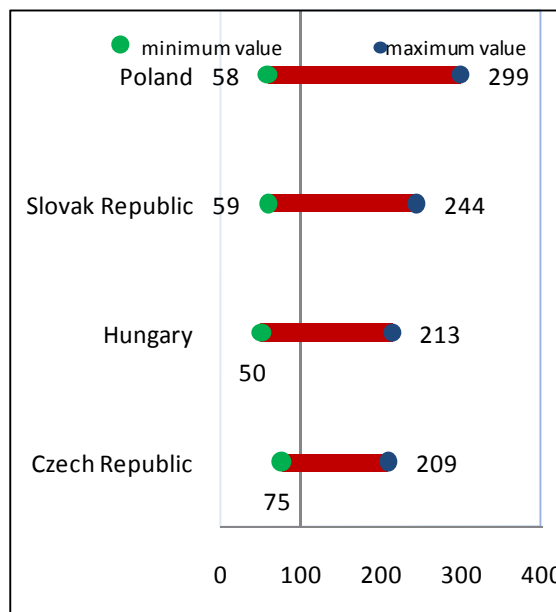
$$AGC = \sum_{i=1}^N \frac{y_i - l_i}{y_i - a_i} |u_i - a_i| + \sum_{i=1}^N \frac{l_i - a_i}{y_i - a_i} |y_i - a_i|$$

- for unemployment

$$AGC = \sum_{i=1}^N \frac{u_i - l_i}{u_i - a_i} |u_i - a_i| + \sum_{i=1}^N \frac{l_i - a_i}{u_i - a_i} |u_i - a_i|$$

2. Empirical results

We obtained data for an analysis from OECD database which is accessible through web pages. According to OECD methodology we used regional data at Territorial level 3 (TL3) which is largely consistent with the Eurostat NUTS classification at level III. There exist 14 TL3 regions in the Czech Republic, 20 TL3 regions in Hungary, 45 TL3 regions in Poland and 8 in the Slovak Republic.



Note: As percentage of national GDP per capita. Part of the of variation is due to commuting

Fig. 1 Range in TL3 regional GDP per capita, 2005

Source: OECD

GDP per capita varies greatly among Visegrad group countries. In 2005 the GDP per capita within these countries ranged between 50 per cent of national level to 299 per cent of national level (see Figure 1). The GDP per capita in regions of the capital city is more than four times higher than the country's average in all V-4 countries. This is due to headquarters which are often located in the capital city and generally because of concentration of tertiary sector in metropolitan areas. In addition a gap has been extending between the metropolitan region and the rest of country.

Next figure shows relation between the regional GDP and regional labour force. As is seen from the figure the highest GDP is created in the regions of capital city. There is exist significant difference between the metropolitan region and rest of the country which is expressed by two or three times bigger GDP. The rest of the countries is characterised by low differences in level of GDP even if the regions have higher number of labour force (see Figure 2).

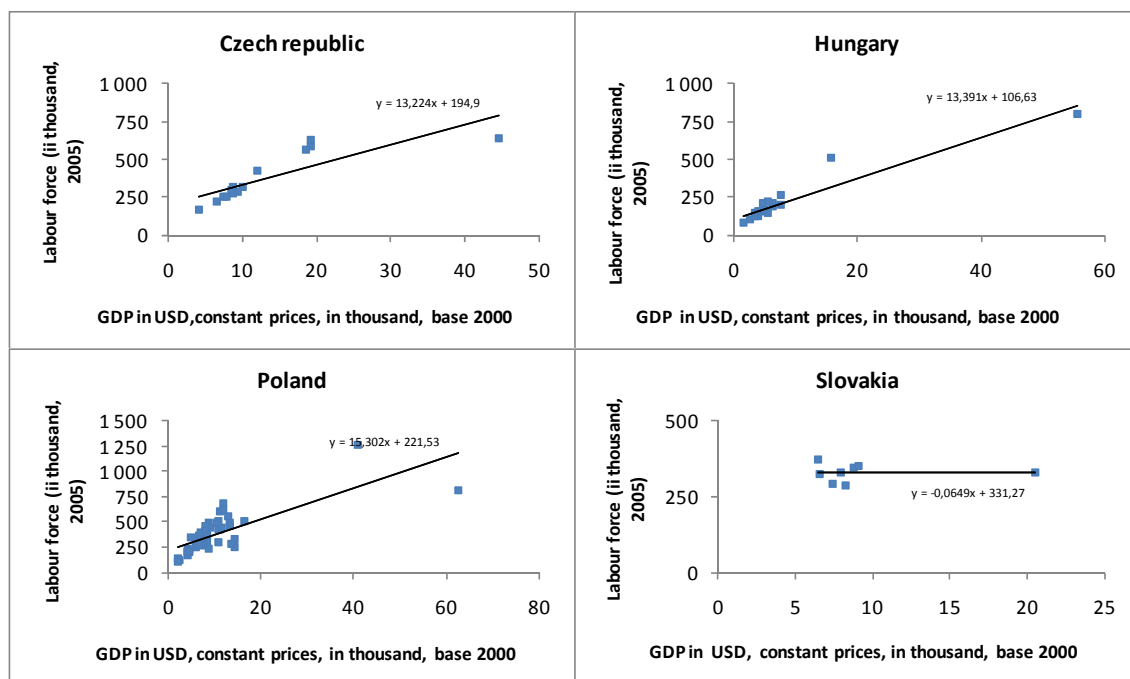


Fig.2: Regional production and regional labour force, 2005

Source:OECD

Figure 3 shows regional inequalities in GDP per capita. It shows that in all Visegrad group countries among regions, measured through the weighted coefficient of variation, increased over the period 1995-2005. The Czech Republic, Hungary and the Slovak Republic have seen their already high inequalities in per capita income increases (the same trend was in most OECD countries).

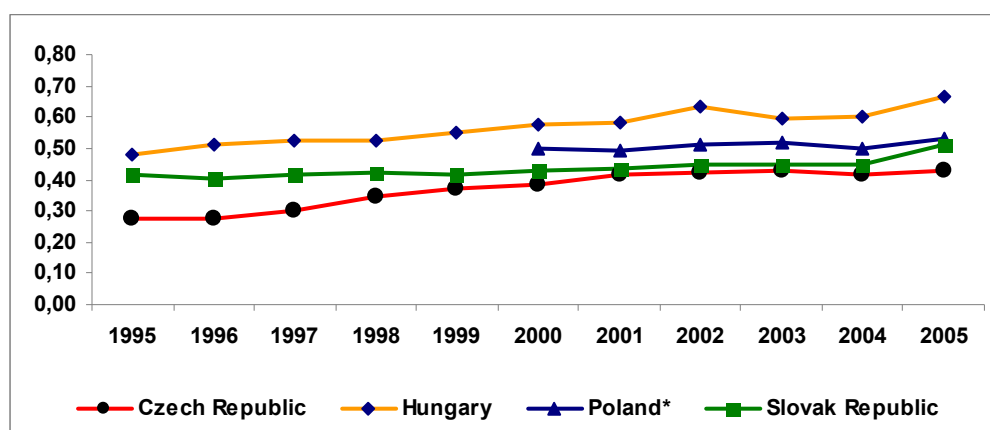


Fig. 3: Weighted coefficient of variation of TL3 regional GDP per capita, 1995-2005

Source: OECD

Figures 4 and 5 present a ranking of four Visegrad group countries based on the indexes defined in methodological part of the paper (Normalised Herfindahl index, Ellison-Glaesner index, Spiezia Index and Adjusted Geographic Concentration index (AGC)). We decomposed regional disparities into two components: production and unemployment and used indexes which are mentioned above. First we use Normalised Herfindahl index which is based on standard Herfindahl index. The highest value was reached in Hungary, nevertheless it means low level of concentration. This is due to polarisation of production between the region of capital city and rest of the country in all Visegrad

group countries. In all other V-4 countries is the value even lower. But this measurement does not take into account area of the regions so it can lead to misleading interpretation, particularly if significant differences in surface of regions exist. Secondly, we used Ellison and Glaeser index which takes into account regional differences, especially area of the region (for procedure of computing see methodological part of the paper). This approach proved previous findings that the highest concentration exists in Hungary, followed by Slovakia and Czech Republic. A drawback of this approach is that the differences between the production/unemployment share and relative area of each region are squared. To correct this bias we used Spiezia index which uses a sum of absolute values (for procedure of computing see methodological part of the paper). From this point of view there are not so remarkable differences between the V-4 countries. The last undertaken measurement was using the Adjusted Geographic Concentration index which takes into account also differences in amount of labour force between the regions and this index is suitable for international comparisons of geographic concentration. As is seen from the figure, the highest value of AGC index was computed for Hungary followed by Poland. Value of the index reaches 0.80 in Hungary, respectively 0.75 in Poland and it indicates high degree of geographic concentration. Regional disparities have risen significantly in all V-4 countries in comparison with data of year 1999 which are taken from OECD study (see OECD 2003).

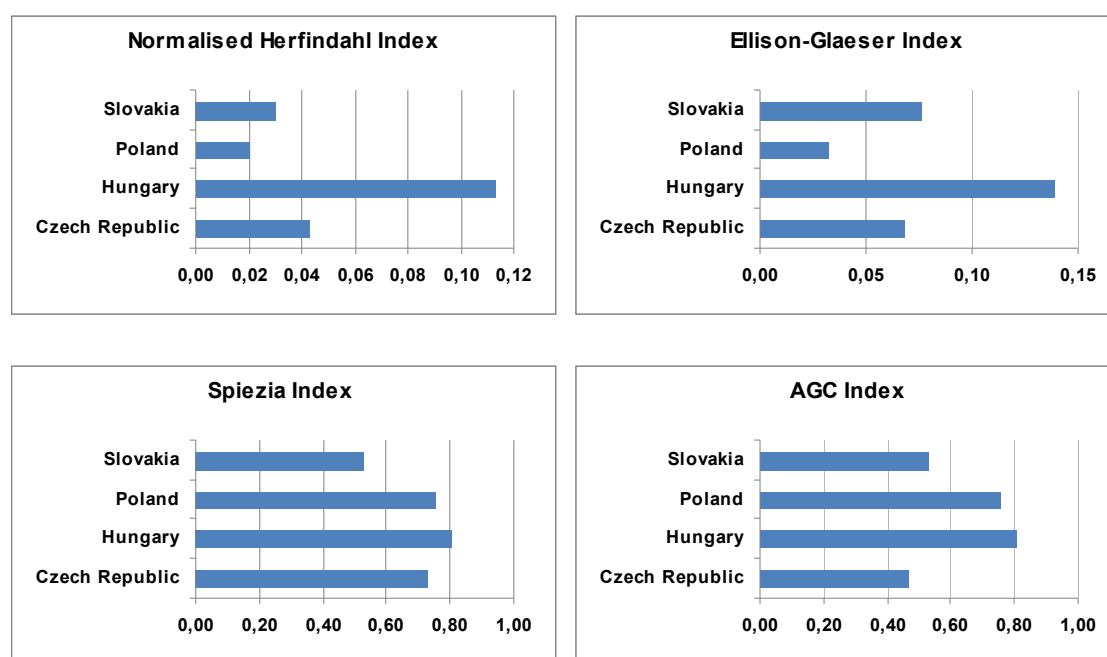


Fig.4: Regional disparities in level of production,2005

Source: OECD; own calculation

We use the same measurement for disparities in amount of unemployed labour force. Results of this analysis of geographic concentration of unemployment are different with previous analysis of production. First, geographic concentration of unemployment does not mirror geographic concentration of production (e.g. in the Czech Republic unemployment appears much more concentrated than production and in Hungary and Slovakia vice versa). If we use Normalised Herfindahl index Slovakia seems to have second highest concentration of unemployment in among V-4 countries but if we take into account area of regions (using Ellison-Glaeser index) it had lowest

one (see Figure 5). The Czech Republic reached has the highest ranking in all used indexes.

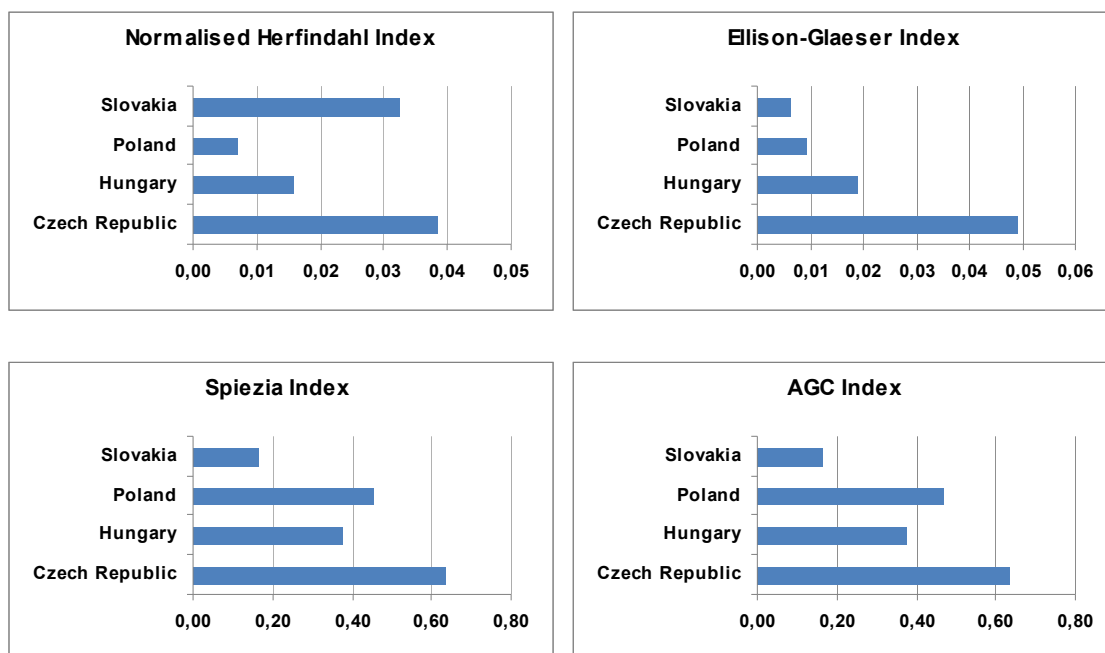


Fig. 5: Regional disparities in unemployment, 2005

Source: OECD; own calculation

Conclusion

In this paper, we analysed regional imbalances in level of production and unemployment in Visegrad group countries. We used four approaches for computing appropriate indexes of geographic concentration. Generally, different levels of production and unemployment exist in all V-4 countries. One of the main problem of these analyses constitutes low comparability of regional data like GDP per capita or unemployed labour force due to different sizes of regions. In order to deal with this problem it is suitable to take into account also a share of regions on overall surface of the country.

With empirical results obtained, we may conclude that the regional disparities varies among V-4 countries and we have to distinction between regional disparities of production nature and unemployment nature. Production in V-4 countries seems to be significantly concentrated (AGC index being equal 0.63 for average V-4 countries). Similar results emerge for the geographic concentration of unemployment (average AGC index reached 0.41). In addition, geographic concentration of unemployment does not mirror geographic concentration of production (the Czech Republic unemployment appears much more concentrated than production and in Hungary and Slovakia vice versa).

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The Risk Management System as a Source of Information and Knowledge about Hazards in Construction Companies – Selected Theoretical Aspects

Abstract

To manage a company in a modern way means also to manage its risk. This refers to many aspects and activity areas thereof. It's the construction and assembly production that requires a particular risk supervision in the construction companies. The risk relevant for building engineering ought to be identified with this very area, being all the threats that may potentially occur while executing any project. However, in practice, one may not get limited to the operating activities of these entities, but the risk management in a company also ought to comprise the investment and financial activities. Only such a formula ensures the comprehensive management of any threats in the activities of construction businesses. In Polish construction companies, no risk management systems have been implemented so far that would comprise all the areas and levels of these companies functioning. Also, there's no independent occupation of a risk manager in the Polish construction industry. Due to such innovations, it would be possible to limit the risk negative impact in a company. In particular, the operated system of the integrated risk management would allow for timely anticipation of some of the types of threats or for determining the most suitable manner of risk response. The risk management system operated within the company ought to be fully IT-supported. Owing to this, the risk managers will be able to acquire the current information on risk on regular basis, store it in the proper bases, process it, which will allow for counter-acting the risk in a more efficient manner in future as opposed to the common practice so far. By principle, each risk manager ought to possess the relevant knowledge about the potential threats in the company, so as to manage the risk effectively.

The purpose of the publication is to discuss the selected issues on risk management in the activities of construction companies. In particular, the issue of implementing the comprehensive risk management system in the construction businesses is of top priority in the discourse. For the complex risk management requires the integrated management thereof.

Key Words

risk management, hazards, contractors

JEL Classification:

D8, D81

Introduction

The risk in the business operation of companies can be defined in many different ways for it refers to almost all the aspects of any business entity functioning. "The entity risk management is about taking decisions and executing the activities carried out in order

to achieve the acceptable risk level by that entity” [10]. This definition may be also directly referred to the construction companies operations, for the risk in the investment and construction process is an integral part thereof. In the construction companies, one may not eliminate the risk entirely and thus one is left with mitigating its impact, i.e. the minimisation of its effects. Various methods and tools are used for that purpose, owing to which it's possible to react accordingly; they may also be identified effectively and then quantified. All these activities, tools, techniques and methods are the components of the entire process called risk management.

The risk in the construction companies can be managed by using various methods. It's important that it's managed in a systematic manner without omitting any significant areas of the enterprise functioning. The comprehensive risk management requires the integrated control. “The integrated risk management in any company may be defined as versatile and cohesive management of credit risk, market risk, operational risk, economic capital and risk transfer for the purpose of maximising the company value” [13]. For by managing risk it's possible to maximise the corporate value. Furthermore, the very functioning of such a system within a business is an effective way of acquiring data of any type of threats and crisis situations in a company.

The objective of the publication is to discuss the selected issues in the scope of risk management treated in the categories of a sub-system under the overall system of managing a construction company. In particular, risk management is treated in the article as the process comprising the phases and stages, the execution of which ensures the ongoing information provision regarding the potential threats that may generally occur in a company. All the questions considered refer to the operations of a large-sized construction company since it's such entities that are able to implement the procedures associated with managing risk.

1. Risk in the activities of construction companies

The risk in the construction industry has its own characteristic profile. In this field, it's most frequently treated in the categories of the likelihood of a damage occurrence during a project execution. This is how it's defined, among others, in insurances that, in practice, are treated as the one of the most effective ways of safeguarding against the risk effects. “When defining risk, one takes into account various notions associated therewith:

- danger – general threat (also in a positive sense),
- uncertainty area and around the relevant event,
- likelihood – possibility of the relevant event occurrence,
- effect – significance of the relevant event effects” [3].

Nowadays, risk is also defined not only in a negative approach. It's treated in the category of certain opportunities, i.e. obtaining a chance for a better result that would not be the case when managing this value would be entirely ignored. Thus, risk is treated in a positive manner which allows for using the predominance resulting from

the opportunities of effective risk management in a company. Figure 1 provides a graphic illustration in this scope.



Fig. 1 Risk Taxonomy

Source: [17]

Taking into account the specific nature of building engineering, one may point out here many risk variations that occur in any project execution process; the project execution is the basic activity of these entities. “To establish a common reference framework, we define the risk management process simply as follows:

- initiation: project opportunity assessment – examining the high-level requirements of the project opportunity to define risks versus opportunities in order to make a decision to proceed or not to proceed with the endeavour,
- planning: risk management planning – identifying risks and developing mitigation strategies and contingency plans to minimize their impact,
- executing: project risk audit – auditing the effectiveness of project management processes,
- controlling: continuing risk management – monitoring identified project risks to trigger the implementation of risk mitigation strategies and contingency plans; identifying new risks,
- closure: risk knowledge transfer – capturing lessons learned in the mitigation of project risks for use in future projects” [15].

In practice, during the project execution, many various events take place that can be considered in the category of risk. For example, in practice, delays are often observed in the project execution, which in turn generates cost growth. The potential types of threats that occur in the construction industry are shown in table 1.

In particular, it’s worth noting (Tab. 1) the risk considered in terms of financing the project execution. For it may be considered both from the viewpoint of the investor and the contractor. For the contractor it’s predominantly associated with the lack of the construction process financing possibilities as well as the investor’s insolvency. In Poland, it’s the insolvency on the investor’s part that is the serious barrier for the continuity of the activities connected with the construction process. Fundamentally, this results from the fact that financing the construction works is carried out by instalments, after approving and commissioning a part of the works. Moreover, many projects in Poland are currently held back owing to the investor’s (developer) bankruptcy. The current financial crisis has an impact on the investors’ financial stance. It’s also worth emphasising here that it’s the introduction of the integrated system for risk management in companies that’s a form of counteracting theses threats, which would ensure timely opportunity of anticipating the occurrence of some of the threats and, predominantly, it would support the company total management. According to K. Jajuga, “the integrated enterprise risk management is the process, in which enterprise

evaluates, uses, controls, finances and monitors all types of risk in order to increase short term and long term value of shareholders” [9].

Tab. 1 Risk in construction

Client Team Type of client Constraints on contractor choice Competence Bureaucratic procedures Change in requirements Change in requirements Confirmed brief Delay in decisions/approvals Change in policy/buy-out/ Government Funders' requirements Approval procedures Communications Interpretation of requirements	Design Team Experience of team Continuity of team Authority of team Project management role Duplication of roles Tolerances Level of design information Practicality of concept
	Public and Safety Regulations Fire service requirements Health and safety requirements Client department regulations Planning approvals and public consultations Building regulations
Financial Interest rates Delay in funding approval Restrictions on cash flow Inflation rates Fixed/fluctuating contract Exchange rates	Design Practicality of concept Extent of foundations Service voids Pioneer/experimental design Specification of materials Tolerances Increase in specifications Foreign specifications Foreign specified items Change in regulations
Scope of Project Additional rates Car parking Access roads Basement floors Storey heights Extra buildings Additional facilities Floor span/plan shape Air conditioning and other service requirements Tenants fit-out	
Contractual Form of contract Type of tender action	Programme Postponement of start date Early occupation Acceleration of works Slippage of programme Accuracy of design/construction programming Fixed end dates
Pricing/estimating Market conditions/tender price level Upgrade quality from brief stage Changes in labour/materials rates Tax changes Inflation level Accuracy of information and BQ measurement	Site Parameters cont'd. Demolition Soil type/ground water Party walls and adjoining owners Rights of light Guest considerations
	Construction Bankruptcy of contractor Industrial action Variations and change orders Construction delays Number and performance of sub-contractors Site management and supervision Defective works Fire risks Force majeure Materials and plant availability Extent of refurbishment Hidden foundation problems
Site Parameters Location Access problems Contaminated ground Rights of way Sewage/waste treatment Noise abatement Services/diversions Infrastructure requirements Occupied site/partial possession Legal restrictions	

Source: [1]

“From his description, the following features are worth mentioning:

- enterprise makes use of risk, thus risk is treated here not only as threat but also as opportunities,
- one considers all types of risk (at least the types that can be identified),
- risk management is value oriented, since value is the criterion of decision making and the criterion of evaluation of risk management,
- risk management is the process rather than one-time activity and it's part of business strategy,

risk management is integrated, therefore all types of risk are treated jointly” [9]. According to the research done by the Central Statistical Office (GUS), as for the fundamental barriers in the construction and assembly activities in February 2009, the contractors listed subsequently: competition from other companies (52% of those surveyed), employment costs (50% of those surveyed), atmospheric conditions (44% of those surveyed), the activities financial administration costs (26% of those surveyed), costs of materials (24% of those surveyed), qualified staff scarcity (24% of those surveyed), difficulties in getting credits (15% of those surveyed), other (8% of those surveyed), equipment and/or material or raw material deficiency (for non-financial reasons) – 2% of those surveyed [11]. It ought to be stressed that these aren't all the barriers that the construction companies meet when rendering their services. These results are proper for the small-, medium- and large-sized construction companies functioning in Poland.

2. The risk management as a source of information about hazards in the construction companies

“The risk management is currently recognized as the key activity for all corporations” [8]. “Adopting risk management as part of the management philosophy depends very much on the people responsible for maintaining, performing and developing management guidelines and procedures in a company that's the managers themselves” [18]. In the construction companies, the attention of those involved in the risk management issues ought to be mainly focused on the operating activities, i.e. on the construction and assembly production executed. For the risk relevant for this type of business operation means the risk directly involved with the construction process. Thus, it's the CAR (Construction All Risks) or EAR (Erection All Risks) that are frequently listed in the subject matter literature in the context of risk, i.e. the insurances against all the construction and assembly risks. Ideally, it's when the risk manager takes care over the risk management in any company. (So far, this profession has not been functioning in the Polish construction industry). To generalise, managing risk in a construction company is, in first place, about taking up the activities aiming at identifying the potential risk sources as well as its relevant categories and then about analysing it thoroughly and assessing and, subsequently, about responding thereto. R. Saporita stresses that “risk management contains the elements of identification, analysis and control” [16]. Depending on the specialisation of a construction company activities, risk management may take place in a more or less formalised manner. For the risk in a company may be managed occasionally (temporarily) or systematically. Within the

framework of its structures, the relevant departments of risk management ought to be organised, where specialists in various fields would be employed. In the Polish construction businesses, it's the engineers, economists and lawyers that deal with risk management. "From among the publications and guidelines recognised throughout the world in the scope of risk management, one may predominantly list the following:

- risk management standard „ISO/IEC Guide 73 – Risk Management”, published by the International Organization for Standardization,
- „AS/NZS 4360: Risk Management”, published by the Australian Standards/New Zealand Standards” [5].

According to the Institute of Risk Management (London) “risk management protects and adds value to the organization and its stakeholders through supporting the organization’s objectives by:

- providing a framework for an organization that enables future activity to take place in a consistent and controlled manner,
- improving decision making, planning and prioritization by comprehensive and structured understanding of business activity, volatility and project opportunity/threat,
- contributing to more efficient use/allocation of capital and resources within the organization,
- reducing volatility in the non essential areas of the business,
- protecting and enhancing assets and company image,
- developing and supporting people and the organization’s knowledge base,
- optimizing operational efficiency” [20].

On the other hand, “the concept assumptions of the comprehensive risk management, developed by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), list four types of a company objective categories:

- strategic – concerning the main objectives, supporting the company’s mission,
- operating – concerning the effective and efficient usage of the company resources,
- reporting – concerning the credibility of the reports prepared in the company,
- compliance – concerning the compliance of the activities taken up by the company with the legal and other regulations” [5].

“The role of the information in selecting the company strategy in risky situations may be considered in the following two aspects:

- negative, when the informational “gap” decides in the risky situation occurrence and the allocation and operating effectiveness limitations,
- positive, when having the relevant retrospective and prospective information system allows for choosing the proper approach to the risk and limitation of its results” [19]. “Taking up the relevant risk strategy for the company results in:
- limiting the risk of endangering the company with the financial crisis and the costs associated therewith (bankruptcy costs),

- limiting the impact of the market parameters variability on the income variability (cash flows)
- growth of the company financial credibility towards the owners, creditors and potential investors,
- increase of the company credit rating and the chances for the advantageous capital obtainment,
- limiting the conflict of interest between the company owners and creditors,
- restricting the company securities' price variation (mainly shares) on the market that's decisive on the chances for the capital profit achievement by the owners,
- complete taking the opportunities that are created by the surroundings and limiting the threats associated therewith,
- growth in the company value by: increasing the expected cash flow, fall of the discount rate, increasing the difference between the rate of return on investment and the proposed expected rate of return of the capital providers" [19].

In case of the construction companies, we differentiate between a few fundamental approaches that may be taken by the contractors when faced with risk. In the subject matter literature, these approaches are associated with the risk response strategies. It's especially in that context that contracts play the significant role because in the realm of men of practice it's believed that owing to the properly structured agreement, it's possible to safeguard against the negative impact of risk. Due to the agreements used in the construction industry, risk may be transferred onto other entity, i.e. the insurer or the works sub-contractor as well as on the investor. "The literature on the theory of practice of risk management has long recognized the importance and place of contractual risk transfer (also often called „noninsurance risk transfer") in the overall risk management process" [4]. In the construction industry, the risk effects ought to be predominantly comprehended as the unexpected growth in costs during the project execution, i.e. chiefly the labour, materials or equipment (L, M, E) costs. In fact, either party of the contract has to incur the additional unexpected costs, i.e. risk. In Poland, it's usually the contractors that bear them. In particular, the risk consequences in the construction industry imply: "the maximum probable loss, the most likely cost of the loss, the likely cost of servicing the loss if no insurance has been effected, the cost of insuring against the event occurring, the reliability of the prediction about the event" [6].

Table 2 shows the graphic illustration of grading for severity of consequences of risky events. The risk in a company doesn't appear without any manifestations, i.e. it's usually accompanied by numerous signals that may be treated in the categories of its first symptoms [14]. That sort of signals contain the following information:

- "type of the risk expected and its spectre,
- likelihood of the threat occurrence in the time scale assumed,
- phenomenon intensity level expected,
- estimated losses incurred by its effects,
- anti-risk activities estimated expenditures" [7].

Owing to the efficient risk management system, the contractor is able to detect early enough the potential hazard. In essence, the system ought to be based on a well-functioning IT system processing the information on risk. In this way, the contractor may create bases with information on risk that will make it possible for him in future, having the historical data, to better quantify the risk. In particular, one may apply the risk simulation using the Monte Carlo method, which allows the contractor to take into account numerous risk factors at the same time and, in result, to obtain more precise outcome reflecting the risk value. Thanks to such systems, depending on the need in a company, it's possible to receive the risk data on regular basis and to process it subsequently, i.e. to anticipate its effects more effectively. This will ensure the possibility of better protection against its very occurrence.

Tab. 2 An example of grading for severity of consequences of events

Category of loss	The consequences of a hazard eventuating	Percentage of costs of projects
0	No loss	Nil – 0,09%
1	Nuisance-type small losses	0.1%-0.49%
2	Small losses	0.5%-0.99%
3	Medium Losses which can be borne by the individual concerned	1%-4%
4		5%-9%
5		10%-19%
6	Probable maximum loss in the range of the largest previous losses of similar projects	20%-40%
7	Serious and exceeding any previous events	41%-50%
8	Very serious	51%-70%
9	Most serious	71%-80%
10	Catastrophic - total loss	81%-100%

Source: [2]

To sum it up, the IT risk management system will allow for anticipating the cause of the risk, its very occurrence as well as the scale of the potential causes thereof, i.e. in accordance with the widely known risk mechanism: source - event - effect. "Mutual co-operation between the risk managers and the individuals managing other areas in a company will allow for:

- determining the threats and sensitive areas in the company activities (this is of particular significance in case of introducing e.g. new production technologies, new marketing strategies, changing the employment policy, changes expected in the company environment, etc.),
- evaluating the impact or significance of various possibilities of controlling risk associated with the existence of those dangerous and sensitive areas,
- ranging the dangerous and sensitive areas of the company functioning depending on the following criteria:
 - time needed for restoring the activity or reconstructing the state that existed before the possible accident causing the damage or disturbance of the company normal functioning,
 - financial consequences of that accident (direct consequences: repair costs or costs of resorting the assets components lost, switch-off time, indirect consequences: non-material losses, additional costs, loss of customers, company image loss, profit loss, time needed for data searching or restoring, etc.)" [12].

To sum it up, “an effective programme for the integrated risk management ought to comprise the following elements:

- corporate supervision ought to implement the relevant procedures in the process of measurement and management and the control systems in the process of risk measurement and management in a company,
- operating directors ought to ensure the integration of the risk management with the activity creating income, taking into account the development of the business, products, customer relationships as well as the pricing policy,
- portfolio management ought to generate the volume of the portfolio components taking into consideration the diversification effects, monitoring the risk concentration in comparison to the limits set,
- risk transfer ought to ensure the decrease of the exposure to risk that appears to be too large or more profitable in comparison to the cost of maintaining it in the portfolio,
- risk analysis ought to provide the risk measurement as well as the reporting tools for the purpose of quantifying the exposure to risk as well as the observation of the risk external factors,
- databases and technological resources ought to support the process of analyses and reporting,
- collaboration with the stakeholders ought to entail the communication and reporting information on the company risk profile” [13].

Conclusion

In the construction companies throughout the world, managing risk is practiced to lesser or greater extent. In Poland, it takes place to a limited extent only. In particular, it's important to maintain the continuity in the risk monitoring. In large construction companies, the control over risk ought to be carried out by the risk managers for it is them that are best predestined and prepared thereto in terms of its essence. A modern company should also be characteristic of a well functioning, integrated risk management system that wouldn't only facilitate the work for the risk managers, but predominantly also provide the information on the potential threats that may appear in all the areas of its functioning, particularly on the level of the project currently executed.

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The Slovak Republic – Economic and Legal Aspects of Joining the European Monetary Union

Abstract

Establishment of the European Union and the European Monetary Union is being considered one of the most important stages of the integration in Europe. By joining the European Union member states agree also with joining Economic and Monetary Union. This is legally stated in both the EC-treaties and the EU-treaty. However, it is necessary to fulfil several economic conditions and adopt various legal acts both on the level of the EMU and national level. Even if the biggest attention is being paid to the fulfilment of the nominal convergence criteria, legal aspect of the whole process of the Euro conversion is at least as important as economic aspect. This paper seeks to identify economic and legal aspects of joining the European Monetary Union by the means of the Slovak republic case and to generalize the knowledge and suggestions for their applications also in other countries. The aim of the paper is being fulfilled by using the method of abstraction, historical and logical method, comparative method and method of generalization. Slovakia became member of the EMU on the 1st January 2009. Because the real costs and benefits of Slovakia's membership in the EMU will be evident only in the longer period, even more it is necessary to consider also impact of the world financial and economic crises, it is not possible to quantify exactly all the costs and benefits yet. That is why the paper concerns mostly on theoretical and assumed ones. However, it is already possible to feel some advantages and guarantees so important for citizens, business entities as well as for the further economic growth and development.

Key Words

Slovak Republic, European Monetary Union, Maastricht Criteria, costs and benefits of Joining the EMU, legislation

JEL Classification:

F15

Introduction

Joining the European Monetary Union and introduction of the Euro currency by the „big-bang“ scenario were one of the most important events of the beginning of 2009 for Slovakia. New currency was introduced both in cash and scriptural forms without a transitional period. Conclusion of the Slovakia's effort for the integration into the European Economic and Monetary area is also connected with different changes, some of them are expectable (mostly according to the experience of other countries), some of them are still unknown and they will occur only in the longer period. In this case existence and appearance of the unpredictable changes are strongly influenced and complicated by the worldwide financial crises and its course. Besides financial crises unpredictable changes are influenced also by the specific features of each member state,

such as its economic and political forwardness and social and cultural tradition. Particularly those specifics, as well as inhomogeneity of the European Union and the EMU could lead to particular problems arising from introduction of new currency as well as to their particular (nonstandard) solutions. Recognition of the specifics, respect to them and generalisation could serve as a source of the information and experience for other countries, which are in the process of decision making or accessing to the Eurozone (not only for the ex centrally planned economies such as the Czech Republic, Hungary or Poland, but in a certain sense, also for western economies such as Denmark).

1. Aims, process and methods of the paper

Process of joining the EMU and introduction of the common currency are accompanied with important and serious political decisions, presentation of the allowance and willingness of the citizens (expressed in a democratic way), preparation and adoption of several legal acts and documents, as well as with the fulfilment of the criteria of nominal convergence (so-called Maastricht criteria). All those conditions in four areas (political environment, legal regulation, citizens' will and economic environment), even if bit simplified, could be considered as the basic pillar of the process of the EMU establishment and existence and common currency introduction. It is possible, again in a simplified form, to use magic quadrangle model (usually used in the economic policy theory) to display those four conditions. It is clear that those four areas are closely connected and one area influences another. If any of those conditions is not fully or partly fulfilled in the realisation phase it could lead to the negative effect on others, which means also changes in the shape of the magic quadrangle.

For the purpose of our paper we will concentrate on two of those areas, namely legal aspects and economic aspects. Economic aspect is, in this case, understood as the fulfilment of the convergence criteria – both monetary and fiscal. Research object of our paper is the perception of the legal and economic aspects of joining the EMU on terms of the political will and citizens' will. The research subject is the economy of the Slovak Republic as a part of the European Economic Area and member of the EU. One of the reason to choose namely economic and legal aspects of Slovak joining to the EMU is the fact, that within the academics and the specialists, the biggest attention is being paid to the economic aspects of Slovakia's membership in the EMU, perhaps even to costs and benefits of introducing Euro, and the legal aspect of the whole process is quasi let unnoticed eventually it is considered as inevitable „duty“ to fulfil other conditions. However, reality is different. Unless all the legal conditions are fulfilled and legal acts and documents are adopted, it is not possible to realise and fulfil political and economic criteria for joining the Eurozone. That is why the legal aspect of the process of joining the EMU anticipates, both from the time and the content point of view, economic aspect of this process and creates a fundamental framework for it. According to that, the faster and more precise the preparation of the legal aspects of joining the EMU is the better conditions for fulfilling economic part of the process are reached. There is also another reason to take in account both the economic and legal aspects of Slovakia's joining to the EMU. In the phase of the preparation for the Euro conversion in Slovakia (and it seems that also in other countries) the biggest attention was paid to macroeconomic effects of introducing Euro (such as inflation, monetary policy, unemployment), and effects on the citizens. However, there was nearly any or just a very small attention paid to the

business sector Euro-adoption readiness and the estimation of the costs and benefits for the companies. Even more legal feeling, ability and possibility to remark and perceive all the changes in the legal regulation and their possible effects on the enterprises are not sufficient and in some circumstances they could be a serious risk of the managing all economic processes also after Euro introduction.

In the sense of the shown information and reflections we consider knowledge and consequential generalization of the economic and legal aspects of Slovakia's joining to the EMU important and inspirational also for other countries. The aim of the paper is to identify economic and legal aspects of joining the European Monetary Union by the means of the Slovak Republic case, to generalize the knowledge and suggestions for their applications also in other countries. To reach the aim we have used several methods. Because of the theoretical and methodological character of the paper and its content we have used mostly method of abstraction, historical and logical method, comparative method and method of generalization. Our research is based on the following steps and processes: specification of the economic background of the membership in the EMU, specification of the legal fundament of the EMU as the postulate for the identification of legal aspects of joining the EMU, identification of the basic organizational, procedural, economic and legal aspects of Slovakia's joining to the EMU and the outline of the costs and benefits of the EMU membership. This range of problems and their solutions create a fundament for the generalization and for the proposals for their application in other countries. Some of the theoretical discoveries could be a discussion topic for the academics as well as the topic for educational process and further research. This paper links to the science and research priority No. 2 at the Faculty of Economics, Matej Bel University in Banská Bystrica „The position of the enterprise in the process of transformation, integration and globalization“ and priority No. 6 “The social and economic coherences of the globalization and their impact on the European economy and policy”.

2. Theoretic aspects of the monetary union

The whole 20th century is connected with the attempts to create and establish larger or smaller integrations. They are either a reaction to the growing competition in the world or simply a condition for surviving in the new global mega competition [5]. One of the fundaments as well as requirement for establishing European Union was creation of common single market. It is joined mostly with the real existence of the economic and monetary union.

In general, there are two theoretical approaches to justify establishment and existence of the EMU:

1. the EMU represents logical process of strengthen the economic and monetary relationships within EU, as well as inevitable enlargement of the European internal market which will enforced economic, social and political coherence,
2. the EMU is the result of a political decision without considering economic effects of introducing common currency and without thorough strategy leading to the political unification [10].

Primary aim of the European economic integration was the creation of common single market. Only later on, this aim was extended to the intention to create and establish common currency area and common monetary policy.

European Union starts its existence as a customs union and its primary goal was to eliminate all trade restrictions between its member states. By the means of the Maastricht Treaty (Treaty on EU) strategy of the EU was enlarged by the Treaty of Economic and Monetary Union and Treaty of Political Union [5].

Contemporary, high level of integration between the EU's member states leads to the growing dependence between them, mostly to the growing amount of their mutual trade, single market with the free movement of goods, services, capital and persons as well as to the exercise of common currency and common monetary policy.

Creation of the EMU was based on the idea that benefits of common single market could have been reached only if the member states introduce common currency. It would lead mostly to the reduction of the transaction costs and to the elimination of exchange rate risk [5].

To assure both political and economic integration of relatively equivalent European countries, it was necessary to set a list of criteria which must be fulfilled by every candidate country. To become a member of the EMU it is necessary to fulfil mostly criteria of nominal convergence. In general, convergence is a process of diminishing differences in particular indicators between national economies, or more precisely, between national economy and integration grouping. Progress is an assumption of the successful advancement of the European integration process, all political, economic and social [14]. Criteria of nominal convergence were set in the Maastricht Treaty (so called Maastricht Convergence Criteria). In certain opposition to them there are criteria of real and structural convergence. Real convergence is expressed mostly by the means of GDP at purchasing power parity per capita, labour productivity and comparable price level [14]. Structural convergence is based mostly on the fulfilling the criteria of the Optimal Currency Area theory (OCA).

Founder of the OCA theory is a Canadian economist Robert A. Mundel. According to him it is possible to decrease costs of introducing common currency only if production factors (capital and labour force) are fully movable (relocatable) behind the borders of particular member states. Because we can assume free movement of the capital, the real barrier for the creation of the OCA in the case of European integration is the free movement of labour force [3].

The OCA theory is based on the idea that every monetary system has its costs and benefits and important for the decision making about joining it is how the costs and benefits are perceived. Costs and benefits could be both political and economic, and it is considered that costs are connected mostly with macroeconomic management and benefits are at the microeconomic level [15]. In general, the enlargement of the currency area will lead to the decreasing marginal benefits and increasing marginal costs and that is why particular currency areas should expand only as long as marginal costs are lower than marginal benefits [15].

The OCA theory in case of the EMU is also associated with the economic cycles theory and symmetric and country-specific shocks. One of their founders is Peter Kenen, who has tried to find out the most probable sources of economic shocks. According to him most of the economic shocks are caused by the expenditure changes which could be connected with the changes in consumer preferences or with the introduction of new technologies which lead to the production of more innovative products. Such a shock can lead to the difficulties in monetary union only if it is big and asymmetric. Countries which could be most likely involved with such shocks are those which specialise in the production of small range of goods. That is why economies of monetary union's member states should be diversified and similar regarding their structure [3].

Ronald McKinnon with respect to the OCA and the EMU developed an idea of the openness of economy. According to him small economy that is very open has only small possibility to influence prices of its goods and services in the world market. That is why its membership in monetary union does not lead to big losses. And that is why a monetary union is optimal only if the countries constituting the union are opened to the mutual trade and to each other [3].

Other criteria for creating the OCA are:

1. the transfer criteria – the OCA consists of countries which make an agreement on the mutual compensation of unfavourable economic shocks,
2. the common priorities criteria – member states of monetary union should really agree on the way how to settle up with economic shocks,
3. the coherence criteria – if the common monetary policy leads to conflicts among national states' interests, all member states must participate on the costs which arise from such conflicts [3].

According to the Baldwin and Wyplosz the EMU is not the OCA because mobility of the labour force and transfer criteria are not fulfilled. That is why the membership in the EMU leads to additional costs for member states [3].

According to Frankel and Rose with the adaptation of the structure of national economies to the monetary union, growing integration will probably lead (by the means of the trade and capital flow) to growing correlation of economic cycles and to smaller probability of the asymmetric shocks appearance [14]. Opposite opinion is presented for example by Krugman. According to him introduction of common currency will lead probably to bigger regional specialisation and that is why also to bigger probability of the asymmetric shocks [14].

The Treaty of Rome (establishing the European Economic Community – the EEC) framed up economic conditions for creating common economic area, it means area in which companies and consumers of member states have the same access to all of its initially separated markets [3]. It was necessary to guarantee following steps for its creation:

- free movement and trade with goods (to eliminate all barriers for the cross-border purchase and sale of the goods) – the EEC treaty eliminates all the customs and import quotas, including non-custom barriers and measures which have the same effect as customs and quotas,

- common trade policy vis-à-vis non-member states (unification of custom tariffs),
- protection of the competition (to adopt measures to eliminate unfair competition, mostly ban on the disorganizing of the free trade by the means of subsidies for domestic producers, creation of common rules of the economic competition, adaptation of the legal acts of member states in the area of trade operations, harmonization of tax systems),
- free trade with services,
- integration of the labour force trade and capital trade (free movement of the workers, right to establish a company in any member state, to eliminate barriers for the free movement of financial capital),
- common agricultural policy,
- coordination of the macroeconomic policies (to create stabilization mechanisms for the balance of payments adjustment).

3. Legal aspect of the monetary union

In the international relationships every sovereign state has its international legal personality. Its part is also a monetary sovereignty. Monetary sovereignty means mostly execution of the absolute power over the money and monetary policy [16]. By joining the monetary union each country cedes part of its rights to the EMU, besides which there are also own monetary policy and national currency.

Legal basis for the establishment and existence of the EMU arise from the treaties establishing the European Communities and the European Union.

In 1951 the Treaty establishing the European Coal and Steel Community, in 1957 the Treaty establishing the European Atomic Energy Community and the Treaty establishing the European Economic Community were signed. These treaties were the legal basis for the existence of the European Communities as well as the European Union.

Economic and monetary integration was already legally governed by the Treaty establishing the EEC. Article 2 of the treaty stated that the task of the Community was, by establishing a common market and by implementing the common policies of member states, to promote throughout the Community a harmonious and balanced development of economic activities, sustainable and non-inflationary growth respecting the environment, the raising of the standard of living and quality of life, and economic and social cohesion and solidarity among the Member States. The main activities which should have lead to this aim were elimination of the customs and quotas of the exported and imported goods between member states, as well as other measures which have the same effect as customs and quotas, implementation of the common custom tariff and common trade policy vis-à-vis non-member states, elimination of barriers existing between member states which lead to the restriction of the free movement of people, services and capital, adoption of the common agricultural policy, adoption of the common transport policy, implementation of the system securing the economic competition, application of the common actions to coordinate economic policies of member states and to regulate unbalances in their balances of payments, approximation

of legal acts in the area of common market, establishment of the European Social Fund to support employment and help people to enhance their education and skills, establishment of the European Investment Bank to facilitate economic development by the easier access to the financial sources, affiliation of overseas areas to enforce the trade and to support common economic and social development.

These aims have been gradually specified and changed with the respect to the economic, social and political development in member states of the Communities. By signing the treaty no. 92/C191/01 on the European Union (Maastricht treaty) these aims were fixed and confirmed. The EU was founded on the basis of the European Communities supplemented by the policies and forms of cooperation in the area of common foreign and security policy and in the area of the justice and home affairs.

Treaty on the EU also contains provisions according to which the EEC is changed to the European Community. Article 2 of the original EEC treaty was amended as following:

„The Community shall have as its task, by establishing a common market and an economic and monetary union and by implementing the common policies or activities referred to in Articles 3 and 3a, to promote throughout the Community a harmonious and balanced development of economic activities, sustainable and non-inflationary growth respecting the environment, a high degree of convergence of economic performance, a high level of employment and of social protection, the raising of the standard of living and quality of life, and economic and social cohesion and solidarity among Member States.“

Besides, treaty includes also new provisions in articles 4a and 4b, according to which the European System of Central Banks, the European Central Bank and the European Investment Bank could have been established.

By the treaty on the EU exact terms for the second and third stage of the economic and monetary union creation were stated. Second stage should have started on the 1st January 1994. At the beginning of this stage the European Monetary Institute was established. Its task was to specify normative, organizational and logical framework necessary for the operation of the ESCB in the third stage.

The Maastricht treaty let the original structure of the basket currency of the ECU unchanged, however with the addendum according to which new value of the ECU should be stated at the beginning of the third stage.

Beginning of the third stage was stated in two alternatives – either it should have been strictly stated by the end of 2007 or it should have started on the 1st January 1999 (it really started this day).

The Treaty on the EU constituted also legal basement for the common commercial policy of member states. According to the article no. 113, common commercial policy is based on the uniform principles, particularly in regard to changes in tariff rates, the conclusion of tariff and trade agreements, the achievement of uniformity in measures of liberalization, export policy and measures to protect trade such as those to be taken in the event of dumping or subsidies.

Besides founding treaties (primary law) the existence of the EMU is governed also by the provisions of other legal acts of the European Communities and the European Union (secondary law). The most important acts are following:

1. Regulation (EC) No 1103/97 of 17 June 1997 on certain provisions relating to the introduction of the Euro,
2. Council regulation (EC) No 423/1999 of 22 February 1999 amending Regulation (EC) No 975/98 on denominations and technical specifications of the Euro coins intended for circulation,
3. Regulation (EC) No 2560/2001 of 19 December 2001 on cross-border payments in the Euro,
4. Council Regulation (EC) No 2595/2000 of 27 November 2000 amending Regulation (EC) No 1103/97 on certain provisions relating to the introduction of the Euro,
5. Council Regulation (EC) No 693/2008 amending Regulation (EC) No 974/98 as regards the introduction of the Euro in Slovakia,
6. Council Regulation (EC) No 134/2002 of 22 January 2002 amending Regulation (EC) No 2531/98 concerning the application of minimum reserves by the European Central Bank,
7. Council regulation (EC) No 2533/98 of 23 November 1998 concerning the collection of statistical information by the European Central Bank,
8. and others.

4. Membership of Slovakia in the EMU

Integration of Slovakia to the European integration process started already during the existence of united Czechoslovakia. In 1984 first negotiations on mutual trade with industrial products between ČSSR and Western Europe started. In 1986 Czechoslovak ambassador negotiated possible cooperation between ČSSR and the EEC in Brussels. Negotiations have continued and in 1988 in Luxembourg common declaration on the official relationships between the COMECON and the EEC was signed. In August the same year the EEC agreed to arrange diplomatic contacts with ČSSR, the German Democratic Republic, Hungary and Bulgaria. Starting from the 1st February 1989 Czechoslovak diplomatic mission to the European Communities in Brussels was introduced.

Process of integration to the EMU started for Slovakia at the moment of applying for the membership in the European Union.

By the announcement no 158/1997 Coll. Ministry of the foreign affairs of the Slovak Republic informed that on the 4th October 1993 in Luxembourg Europe agreement establishing an association between the European Communities and their Member States, of the one part, and the Slovak Republic, of the other part was signed.

The National Council of the Slovak Republic affirmed this agreement by the decree no. 352 of 15th December 1993 and the President of the SR ratified it on 19th July 1994. The agreement came into the effect on the 1st February 1995.

At the moment of the validity of the agreement, previous contracts (the Agreement between the EEC and the EURATOM and the Czech and Slovak Federative Republic on the trade and economic cooperation, signed on 7th May 1990 in Brussels and the Protocol on the cooperation between the ECSC and the Czech and Slovak Federative Republic initialled on 28th June 1991 in Brussels) expired.

On the 16th April 2003 Slovakia signed association agreement to the European Union, by which also commit to join the Economic and Monetary Union and to introduce common currency Euro. To perform this obligation it was necessary to fulfil several economic criteria as well as to adopt and implement several legal documents (so far there have been more than 600 legal acts amended or adopted).

On the level of the National Council and the Government following important documents and strategies were adopted:

1. strategy for introducing the Euro and common action of the Government and the National Bank of Slovakia in the process of joining the EMU (the Government agreed on it on 16th July 2003),
2. specification of the strategy for introducing the Euro in SR (the Government agreed on it on 8th September 2004),
3. National plan for introducing the Euro in Slovak republic (the Government agreed on it on 6th July 2005, was amended and reapproved on 21st March 2007),
4. on the 28th November 2005 Slovak currency (Slovak koruna) joined the ERM II system,
5. central parity at the level of the market exchange rate was set to 38.4550 SKK/EUR. Slovakia was in the standard fluctuation bands $\pm 15\%$ from central parity, that is why exchange rate could move between 32.6868 SKK/EUR and 44.2233 SKK/EUR;
6. on the 19th March 2007 on the request of Slovakia and after agreement of ministers of finances of the EMU countries, a president of the ECB, ministers of finances of Cyprus, Denmark, Estonia, Lithuania, Latvia, Malta and Slovakia, central parity of Slovak currency in the ERM II system revalued. New central parity was set to 1 Euro = 35.4424 SKK, with the fluctuation band between 30.1260 SKK/EUR and 40.7588 SKK/EUR;
7. on the 8th August 2007 the Government of the SR approved the Communiqué on the National plan for Euro changeover.

In September 2004 the most important document for the Euro changeover in Slovakia was approved. This document (the National Euro Changeover Plan for the Slovak Republic) was created by the Ministry of finance and the National Bank of Slovakia. It set the most important principles, time schedule and institutional provision for the introduction of the Euro in Slovakia as well as the responsibility of individual entities.

Besides it was necessary to fulfil all the convergence criteria before joining the EMU. Slovakia fulfilled them as following:

1. price stability - average inflation rate for the last 12 months, measured by the Harmonized Index of Consumer prices, may not exceed the average of the three EU countries with the best performance in terms of price stability by more than 1.5 percentage points. Slovakia fulfilled this criterion on the level of 2.2 % (reference value was 3.2 %);
2. budget (public) deficit - the general government deficit for the last year before assessment, based on the ESA 95 methodology, may not exceed 3% of GDP (in 2007 Slovakia reached 2.2 % of GDP);
3. public debt - government debt must not exceed 60% of GDP, or at least level of government debt must be stable (in 2007 government debt in Slovakia reached 29.4 % of GDP);
4. long – term interest rate stability - average of market interest rates on long – term government or similar bonds may not exceed the average of the three EU countries with the best performance in terms of price stability by more than two percentage points. Long-term interest rate in Slovakia reached 4.5 % (reference value was 6.5 %);
5. exchange rate stability - the Slovak koruna must participate in the Exchange Rate Mechanism (the ERM II) for two years prior to assessment. During this period the Slovak koruna may not be unilaterally devalued, the koruna may not deviate from the agreed fluctuation band, the koruna must remain close to central parity and no severe tensions may arise in the development of the exchange rate (Slovakia became part of the ERM II system on the 28th November 2005).

5. Notes to the costs and benefits of the membership in the EMU

Establishment of the Eurozone and the motivation of particular countries to join it is tightly connected with eventual costs and benefits which the EMU brings to economic entities. Because of the short existence of the EMU, costs and benefits are so far estimated or detected by surveys.

Already in 1990 for the purpose of the „One Money, One Market“ expertise a survey between enterprises was held to view their perception of the microeconomic impacts (mostly improving of business environment) of introducing common currency. The survey showed that much more positives are perceived in case a single currency complements the single market than in case of creating only single market. In both cases more than 80 % of respondents considered it as positive, however in case of the single currency more than 40 % of respondents perceived such a process as very positive (to compare it with approximately 18 % in case of simple single market [11]).

Study „One Money, One Market“ revealed following costs and benefits of common currency introduction (at that time common currency did not exist):

1. the efficiency and growth – elimination of exchange rate uncertainty and transaction costs, and further refinements to the single market are sure to yield gains in efficiency. Through improving the risk-adjusted rate of return on capital and the business climate there are good chances that in the not-too-distant future further strengthen in the trend of investment and growth will be reached;
2. the price stability – the Community should be able to build the monetary union on the basis of the reputation for monetary stability of its least inflationary member states,
3. the public finance – new framework of incentives and constraints will condition national budgetary policies, for which the key-words will be autonomy (to respond to country-specific problems), discipline (to avoid excessive deficits) and coordination (to assure an appropriate, overall policy-mix in the Community). The EMU will also bring valuable gains for many countries' national budgets through reductions in interest rates, as inflation and exchange risk premiums are eliminated;
4. adjusting to the economic shocks – the main potential cost of the EMU is represented by the loss of monetary and exchange rate policy as an instrument of economic adjustment at the national level. This loss should not be exaggerated since exchange rate changes by the Community in relation to the rest of the world will remain possible, and the EMU will reduce the incidence of country-specific shocks;
5. the international system – with the Euro as common currency there will be advantages for the Community as banks and enterprises conduct more of their international business in their own currency,
6. the impact through time and space:
 - the transitional costs and benefits – the costs of the transition to the EMU (in disinflation, reducing budget deficits) will be greatly reduced in the future. Most of the costs of moving to the EMU arise in the preparatory stages, whereas some of the important benefits arise only in the definitive regime with a single currency;
 - the impact on the regions – as regards the regional distribution of the impact it is not possible yet to predict gains and losses. However, the policy of the Community and national efforts should lead to the upgrade of the least favoured regional economies;
 - the convergence [11].

In 2002 a Californian professor Andrew K. Rose run a survey with the aim to identify effects of the common currency on the trade. According to him positive effect on the trade is one of the most important benefits of the monetary union. In general, monetary unions lead to macroeconomic costs and microeconomic benefits. Substituting a single currency for several national currencies reduces the transactions costs of trade within that group of countries and that is why it is cheaper to trade between two countries that use the same currency than between countries with their own monies. However, there is still a question how much such trades become cheaper and how much their volume

increase. Rose, according to his survey, predicted almost three times bigger volume of the trade within the EMU area [13].

In 2008 a professor Theo Eicher run another survey focused on the effect of the monetary union on the trade volume. According to the survey, introduction of the common currency Euro will lead only to the 40 % increase of the trade volume [4].

Before enlargement of the EMU there were several discussions whether criteria of the nominal convergence set by the Maastricht Treaty, related with the „rapid introduction of the Euro“, are appropriate for new members of the EMU. There are several opinions about the conflict between the Maastricht criteria and the real convergence requirements [2].

In 1998 an American economist Milton Friedman already marked Economic and Monetary Union in Europe as immature, wrongly conceived and full of risks. For him the only one benefit of common currency was a reduction of transaction [8]. According to E. Stiglitz new currency Euro is not an aim, but only a tool to the higher and more stable economic growth [8].

One of the arguments of the EMU critics is the Optimal Currency Areas theory (OCA). According to it the EMU does not fulfil criteria of the OCA (mostly national economic cycles convergence, transregional and transnational mobility of the labour force, flexible labour market). There is also a problem that the Maastricht convergence criteria are significant mostly for macroeconomics, while the OCA theorists consider microeconomic criteria of the monetary union establishment as the most important [9]. According to Ressoová the aim and the purpose of the convergence criteria are to minimize economic differences between member states. In the monetary union the common monetary policy is applied, and member states are not able to utilize their national monetary policy and exchange rates for the adjustment of asymmetric shocks. That is why mostly minimal economic differences between the EMU member states could protect Euro area from internal economic problems [12].

Impossibility to apply independent monetary policy by the national governments and the central banks, to use the exchange rate as a national monetary policy tool, as well as impossibility to use devaluation of money for increasing competitiveness are considered the most serious costs of the monetary union. There is also a risk of increasing regional differences in the EMU area due to the sources movement from the areas with lower productivity and lower yields to the regions and countries with higher one [5].

On the basis of the study “One Money, One Market” and up to now surveys it is possible to sum up following benefits of the EMU: reduction of the transactional costs, exchange rate risk reduction, increasing of the price transparency, faster economic and financial integration, seignorage for using the Euro as international currency, reduction of the costs for the borrowings at the international financial markets, bigger economic discipline and greater economic and political importance in the international relationships.

6. Conclusion

Memberships of Slovakia as well as other countries in the EMU and the introduction of common currency are the topics of continuous discussions. Within those discussions, essential question is connected with the costs and benefits of the membership in the EMU.

In our paper we attempted to identify basic economic and legal aspects of Slovakia's membership in the EMU. Actual level of the knowledge of both aspects of joining the EMU allows us to assert that both economic and legal framework of the Slovakia's joining process to the EMU were managed sufficiently, were close-knitted and allowed to create adequate basement for the successful Euro conversion. Using the common currency for the 5 month period is, however, very short to evaluate all the costs and benefits. Even more, situation is complicated by the effects of the financial crises on the national economy. In spite of that we can affirm that the stability of the legal and economic framework, good initial conditions achieved by the national economic policy as well as the behaviour and reactions of the citizens and enterprises on the new rules of the system of payments help to create quiet and so far non-dramatic environment. Slovak economy, compared with the non EMU member states' economies, enjoys certain advantages and "guarantees". It is valid even if the unemployment rate and social pressure have increased and foreign demand and the economic growth rate have decreased. Joining the EMU at the moment of the worldwide financial crisis expansion means evident advantage for Slovak economy. However, Slovakia joined the EMU at the moment when real impacts of the crisis were not known. Political and civil will, ability of the economy to fulfil economic and legal criteria and conditions, as well as chosen introduction of the Euro currency by the „big-bang“ scenario have appeared as properly timed with appropriate form and process of joining the EMU. Further actions that should be adopt by the Slovak Government to stabilize economy at the time of the financial crisis should not lower importance and seriousness of eventual costs and risks connected with the real convergence and structural changes in the economy. Holding the position of Slovakia, increasing of economy competitiveness, guarantying stable price level both for business entities and citizens remain in existence as the challenge and mission for the institutions responsible for the social and economic development of the country. In any case, confidence of the individuals and business entities as well as non-conflict and easy acceptance of the new currency as the national currency rest extremely important in the environment full of the turbulent changes, uncertain world economic development and surmounting global downturn.

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Czech Republic Corporate Identity

Abstract

The paper is about the corporate identity development of the Czech Republic and is also focused on the country's image – its brand, value and brand significance. Because it is by means of the brand that countries attract potential investors, tourists, students and other target groups. Corporate identity represents the corporate presentation through its individual components, departs from the complex corporate strategy, covers the corporate history, philosophy and vision, inner and outer corporate surroundings, and represents its ethical values. Corporate identity is created by corporate design, corporate communication, corporate culture, product or service. The unified visual style is demonstrated using the example of the Czech Republic, and above all the paper deals with the effort of the unified national presentation (Czech ministries, the CzechTourism, CzechTrade, and CzechInvest agencies) and the ensuing unified communication with foreign countries. The article also shows visual brands and logos, which represent the Czech Republic, with the crucial attention paid to the a topical concern – the Czech presidency of the European Union, to the campaign and logo. Using secondary data from questionnaires and conferences covering the Czech Republic Image issue in the world and Czech trade image, the paper defines the current absences in the field of the unified presentation of the country. Other possible ways of presentation are also marked. The paper also describes the current image of the Czech Republic, mentions the significant role of the state, enterprises, counties and municipalities in building the unified image. In conclusion the paper makes some suggestions and recommendations about how the Czech Republic should be presented.

Key Words

corporate identity, corporate image, brand, logo, Czech Republic

JEL Classification:

M31, M37

Introduction

Quality and effectively targeted presentation is one of the most important factors influencing the success of organizations in their mutual competition under the current conditions of market economy. A comprehensive presentation of the company is represented by the corporate identity (CI), ie a summary of tools that create its integrity – corporate design, communication, culture and product or service. Once the organization has been replaced by the state, we can define the identity, culture and image of the national - state level. Especially in today's globalized world, brand presents an important marketing tool which can gain the trust of investors, tourists, students or other target groups. If the unified visual style is made and emphasis is placed on a unified presentation, it is necessary first to communicate within the organization - the State, to ascertain the wishes and needs of people and companies, for which will be

communicated. Then it is necessary to define the gaps in communication and remove or add them stepwise.

The aim of the article is to identify the specifics of the corporate identity on a national level and focus on the development of the Czech Republic CI. The example of the Czech Republic will further serve as a description of the image of the state, and the importance of the country's brand. I shall also present a practical example of the logos and marks of the Czech Republic, and introduce the issue of making visual style.

Secondary data sources were used for the work. The techniques of data collection included document analysis and questionnaire survey.

1. Corporate identity and image

Different definitions of corporate identity and corporate image can be found in various publications and internet browsers. Less often are defined and analyzed the relations between the two identities, which in their senses can not be interchangeable. Corporate identity is a presentation of the company, or the state, through the various elements, representing a unique self-expression, its character, just as every person has their own qualities and characteristics. National corporate identity should be based on a comprehensive strategy, include state history, philosophy and vision, both home affairs and foreign policy of the state, representing its ethical values. [1]

Corporate identity can be defined in different ways, but its principle lies in the complexity of the presentment. Corporate identity, see figure 1, is formed by the following tools which create its integrity:

1. Corporate Design
2. Corporate Communication
3. Corporate Culture
4. Corporate Image
5. Product or Service
6. Corporate Philosophy

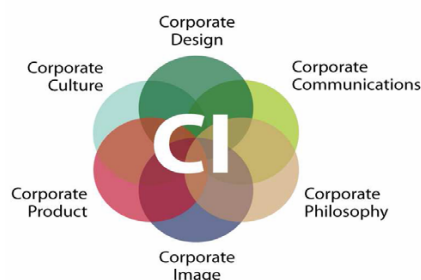


Fig.1: Corporate identity scheme

Source: [3]

Individual instruments interact, creating different links and relationships and act towards and out the unit.

The article focuses primarily on Corporate design, the brand and logo. Corporate design represents a unique philosophy in order to unify company's performance on the market. For this purpose, the company has systematically worked principle of visual communication called graphic design manual or manual visual style. In this manual you can find everything that shapes the company's graphic identity – logotype (logo), company website, business cards, note paper look etc. [2]

2. Corporate design, logo and sign of the state, its importance and value

National corporate design including the state sign has in today's globalized world an important economic dimension and represents an important marketing tool in the competition for the trust of the investors, business partners, tourists and among the media and international institutions. [2]

One of the possibilities, how one state may be presented to the world is through its brand. A value of the brand may be measured in many ways.

An example of the financial valuation of brands is the Anholt National Brand Index. The index measures the strength and the impact of brand image and shows how the public perceive the brand personality and character of a country in terms of foreign and domestic policy, exports, tourism, culture and sport, investment, migration, and people. [6]

Chart 1: Brand value

State	Brand value in milliard USD	% GDP
United States of America	17,893	152%
Japan	6,205	133%
Germany	4,582	167%
Great Britain	3,475	163%
France	2,922	143%
Italy	2,811	167%
Spain	1,758	169%
Canada	1,106	111%
Australia	821	133%
Netherlands	792	137%
30. Czech Republic	55	51%
31. Argentina	55	36%
32. Poland	43	18%

Source: [6]

As we can see, the most appreciated value have the United States of America – 17,893 milliard USD. Almost three times less appreciated brand has the second one – Japan – 6,205 milliard USD. The Czech Republic is on the 30th place with its brand value 55 milliard USD.

The image of a country or a nation affects the evaluation of products, ideas about people and life in different countries. Even in a globalized world, countries must reckon with the national image as an important factor in terms of not only consumer behavior, but also the overall conduct and evaluation of the country. The nation's image is the general nature of the symbol under which the customer can navigate. Even in this case it is subject to a competitive field, which forms a visual image system and other countries' images. Individual countries attract tourists, investors and other target groups on its brand represented by various attributes, which express the country's specificity (art, economics, natural resources, historical heritage, national cuisine, natural beauty, sporting success, etc.). The goal of every country is to be seen, to encourage and

strengthen the existing positive attributes, and to expand them by means of marketing communication wherever possible. [6]

While the image of the state can not be seen and is very difficult to measure, the visual side of the state is represented by its logo. Logo as part of a corporate identity is a constant used to identify the subject, in this case the Czech Republic. Not only is it an important element for all communication activities, representing a symbol which serves as a visual shortcut to the Czech Republic joining the organization, but also has its own informational and emotional functions. When creating a logo, it is necessary to ask one basic question: "What do we want to communicate and present?" [1]

The practical example of creating the unified visual style and its issue will be shown on the Czech Republic.

3. The visual style of the Czech Republic

Taking into account that the corporate design - visual style including the logo and the brand of the subject should be unified (see chapter 1), then the presentation of the Czech Republic in the world is not very positive. In particular, what is missing are a uniform set of goals and unified presentation.

At the national level, one can encounter different presentation activities in the field of tourism, exports, science and culture.

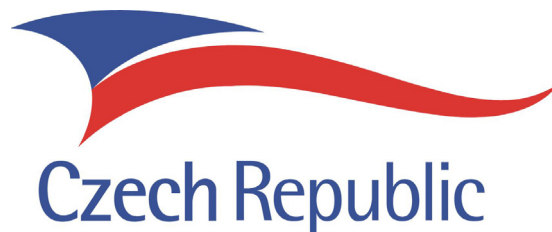


Fig.2: CzechTourismLogo

Source: [1]

These activities represent CzechTourism - Czech Tourist Authority established by the Ministry for Regional Development, see Figure 2, CzechTrade - Czech Agency for trade promotion of the Ministry of Industry and Trade and CzechInvest - Agency for investment and business development under the Ministry of Industry and Trade. [1]

The Czech Center allowance organizations of the Ministry of Foreign Affairs—are also involved in the presentation of the country. Parliamentary initiative for establishing the allowance organization – CzechMark met with no success. The initiative aimed to unify the foreign promotion with a focus on regional and thematic priorities and to link marketing activities private and government but failed to achieve the goal. This concept was envisaged by the merger of foreign CzechTrade, CzechInvest, CzechTourism and the Czech centers. [1]

3.1 The beginnings of a unified presentation, logo Czechia and „Bubbles“

The first signs of a unified visual presentation were started in 1999 by the civic initiative „Citizens for Czechia“, which initiated the proposal competition for logos as the basis of the Czech Republic corporate identity. The main reason was the lack of obvious attributes that label affiliation in the areas of tourism and in the context of all commercial communication.

In the same year there a tender took place and the winning proposal became the logo Czechia, see figure 3. The Logo has been described as original and modern, and also as simple, abstract, lightweight and multi-purpose.

Part of the unified visual style has also become the use of the geographical name of the Czech Republic „Czechia“. This short name is very necessary for the modern marketing because it allows more effective presentation of the country, a short name is also presentable more visibly, clearly and is more memorable.



Fig.3: Logo Czechia

Source: [1]

In 2005 the Ministry of Foreign Affairs announced a competition to create a logo with the following setting: the Czech Republic should be perceived as an advanced democratic country with a rich culture and unique nature and identity, as a quality and credible partner in trade relations, international institutions and security structures, or diplomacy, which is worthy of the attention and interest of people in other countries. The main message which the new logo was to communicate was as follows: "The Czech Republic is a smart choice to stay, invest, study..."



Fig. 4: Logo Bubbles

Source: [1]

The winning proposal, the so-called "Bubbles", see figure 4, emerged from the design studio Side2 and was created by the authors T. Machek, L. Kubik, K. Haloun. Professional jury, which was composed of representatives of governments, designers and graphic artists, labeled the winning design as original, funny, feasible, free-hearted and providing the potential for wide use.

The logo is certainly original, irreplaceable and attractive. But is really simple and memorable? „Bubbles“ should have provided various options of promotional message - for culture, tourism, export. However, they did not meet with positive response neither in the sphere of tourism, nor economic. [1]

So far the last and also very successful attempt to unify the visual style is a "corporate identity set", which within the Czech Presidency of the EU, presented the government headed by the Ministry of Foreign Affairs. The basic structure of the unified visual style of the Presidency consists of the mark in the form of Internet domain, the two codes of official EU member states, colours taken from the state flags and the font from the Czech author. Completed by the symbolic motive of maps and decorative mosaic design. The first two letters bearing the colour of the European Union flag, abbreviation CZ is in the colours of the Czech Republic, the other letters have colours that appear on the individual flags.



Fig. 5: Logo EU2009.CZ

Source: [4]

The creation of applications of the visual style is based on the square modular system. The logo of the Presidency, see Figure 5, which experts describe as smart and intelligent, reflects the motto of the Czech EU Council Presidency "Europe without Barriers" and the European Union motto "Unity in Diversity".

Both central ideas represent the colourfulness (plurality), into which order is brought by means of the logic of selected colours and font defined composition. The symbol is formed by the colour codes of individual states split on the European Union map and then mixed in an equal patchwork. The logo symbolizes diversity, openness, colourfulness and playfulness. [4]

The graphic guide of the Czech Presidency unites design promotional items, web portal, official publications and the total equipment for exteriors and interiors used during the Presidency. The manual also defines the shape, colour, protective zone and the various uses of the brand. The logo will also appear on postage stamps. The production of the Czech manual cost 300 000 CZK. The preparatory phase of the Czech Presidency was accompanied by an extensive government campaign. While the first part of the campaign entitled "Europe shall be sweetened?" was targeted only at the Czech citizens to realize that the Czech Republic is taking chair of the EU Council, the second, along

with the logo, has been targeted at citizens across the EU. The first part of the campaign, "Faces of the Czech Presidency", introduced our country's significant personalities. [4]

The Czech Presidency of the EU should have been a great opportunity for the Czech Republic to present itself towards the world as a country with the unified style, not only the one concerning the visual style but as a country with the complex national corporate strategy, clear philosophy and developed vision. Due to political circumstances this goal wasn't achieved, even if its achievement was in this term of the economic crisis more important than ever.

Other proposals for the Czech logo should emerge from the campaign, which should take place in the years 2009-2010, its organizer will be the CzechTourism agency and the aim is to present the Czech Republic to the European countries as a country of romantic luxury. It is meant to be story-based and thus reach audiences of all European satellite TV channels and, consequently, it should be distributed over the Internet. Reportedly, the Ministry of Foreign Affairs prepare a unified visual style for government land. [1]

4. Status, presentation and image of the Czech Republic in the world

In the years 2000-2005 a number of inquiries was organized, which should define the position of the Czech Republic in the world, its mode of presentation, and also how the Czech Republic is perceived in the world. Many public inquiries were held by different ministries (Ministry for Regional Development, Ministry of Foreign Affairs), Government of Czech centers, or Czech Tourist Authority.

In 2007, the Economic Chamber in cooperation with the magazine Exporter - periodical of the Economical newspapers – organized a public survey with the topic **"The Image of the Czech Republic in the World"**. The survey was attended by 297 businessmen and representatives of domestic companies.

The conclusions of the conference were somewhat surprising. The image of Czechia in the world is not too favorable, but still it helped more than 40% of exporters in their business activities on international markets. 95% of entrepreneurs also agreed that the image of the Czech Republic in the world needs to be significantly improved. The main actor in building the image should be, apart from companies and exportable organizations, the state.

The composition of respondents was as follows: 170 respondents were represented by small businesses or micro companies, 39 responses came from large companies (more than 250 employees), 88 responses from medium-sized enterprises. Two-thirds of the firms representatives, using a range of school grades, marked the image with a 3 and described it as of average rate and gray. The general question whether the image in the world is good, more than a quarter of businessmen, mostly from medium-sized companies, answered with an affirmative.

From the business-perspective, Czechia has the best reputation among the new EU Member States - Bulgaria and Romania (positive image assessed by 47% of respondents), and also in Russia (44%), Ukraine (41%) and Vietnam (33 %). The respondents based their replies on their experience in meeting with business partners or from the prevailing awareness about the Czech Republic.

In contrast, 285 representatives of companies think that the image should be improved in the "old" EU member states, especially in Germany. Representatives of large and medium-sized firms explicitly promote building of the good image in North America and in "old" EU Member States, representatives of small firms also require that the image should be built in the new EU Member States. In the "second category" of interest the respondents ranked Latin America and the Middle East.

Based on the conclusions of the Conference, the Czech Republic is known worldwide thanks to its athletes, beer, private cars and also as a tourist destination.

Other part of the survey was designed to find out to what extent the image reflects the price of the product in the foreign markets. In many world countries the Czech goods are classified as cheap, with about 10-20% lower prices than goods of the developed economies such as Germany. 10% of 223 companies that are active abroad, see the inclusion of Czech goods into the category of "cheap" as a handicap. The image of affordable goods was felt as a handicap by most midsize businesses trading with North America and "old" EU Member States. Most of the respondents, however, point out that in the last year the attitude of foreign partners towards the Czech Republic is gradually changing, the cost of production and price of the Czech products is increasing and competitive advantage is fading away. Exporters must increasingly put emphasis on quality - the added value, speed of supply and service.

Another question focused on the issue of the use of the Made in Czech Republic brand for products or "labels" Made in EU. 58% of the Czech entrepreneurs see more importance in the use of the label Made in Czech Republic. The results suggest that Czech exporters need to rely on a strong national brand, while the change in the designation of the country of origin was not thought over by mainly mechanical and electrical companies. If the size of the firms is taken into account, the smaller the firm, the greater the emphasis put on the origin of the goods – 63% of small firms and 62% of micro companies prefer the view that relating to Czech origin is more useful than the emphasis of the EU. In medium-sized enterprises, this position has 56% of respondents, in large companies – 46%. The result of the investigation, therefore, points to the fact that the activity of large firms includes a wider range of territories (North and Latin Americas, Middle East, Northern Africa) and the desire to penetrate distant markets more so than with the small firms, therefore they sometimes have a better use for the brand Made in EU.

While the first group of questions for national business was aimed at to the standing corporate brands, the second part of the survey was related to new brands. The question of whether the new Czech brands have a chance to assert themselves on foreign markets, 84,5% of businessman responded positively. In large enterprises, it was even 95%. 62% of entrepreneurs think that the effort of building new brands should be coordinated, both by the state and by the companies with the already standing brands

and the business and Economic Chamber. Whereas 65% of respondents from small and medium-sized firms think that the Czech state insufficiently supports the creation of the Czech corporate brands in the world, this position is supported by 56% of representatives of large companies. Respondents also feel a dissatisfaction with the services provided by the state in defending their business interests and do not like the fact that the State hasn't got a strong presentation of itself, more to the brands of the Czech firms. [5]

Another public inquiry showing the position of the Czech Republic's image in the world was organized by the Government of the Czech centers as part of the **Czech* Idea project**. The aim of the project was the identification of strategic direction of external presentation. The Consultation Panel, comprising 60 respondents, evaluated the need for an attractive foreign image of the Czech Republic as high, with an emphasis on the need for strategic building, but also were pessimistic about its ability to implement the strategy. [7]

The evaluation of the Czech image above all negatively assessed the quality, price, safety and frequent return to the past. In contrast, Czech culture was assessed very positively. The world sees the Czech Republic as a historical country with a rich culture and one beautiful city – Prague. Known and famous products in the world are beer, cars and glass.

The question, "**How the does the Czech industry profit from its image?**", was addressed at the conference on "Public Relations and the Image of the Czech Republic", which was organized in Prague, on 30 September, 2008, by the university CEVRO Institute. Other themes were the perception of the Czech Republic before and after the EU Council Presidency and whether the government campaign will help to improve the image of Czechia. The most frequently mentioned problem was the lack of coordination of the state components in the unified country presentation, variables were also identified that affect the Czech image, especially the foreign policy and continual disputes of the Czech statesmen regarding the Treaty of Lisbon. Current problems were summarized in three subgroups: high-quality human factor, finance and long-term planning and effective coordination. [6]

From these conferences emerged the following possible suggestions on how to gradually and effectively change the image of the Czech Republic:

- Lobbying with the European Commission to protect the geographical indication for Czech beer.

Protective marking of the EU bears about 800 delicacies and specialties, from the new member states the Czech Republic brought the largest amount of applications and also has the largest amount of confirmed registrations -17).

- The image of the Czech Republic should be also created by self-government.

The image of the municipality can be seen in different dimensions – the attraction of living in the village, tourism, opportunities for entrepreneurs, the development of care

for cultural and historical heritage, promoting of cultural education and sport. Municipalities should exchange experience not only with their neighbours, but also with the twinning partners, especially the neighbouring European countries. Municipalities are also involved in the EU policy-making, which has subsidiarity among its basic principles. [7]

Conclusion

In conclusion, Czech companies continue to focus on the good tradition of Czech brands in the world and general awareness of them is considered to be greater than the overall image of the Czech Republic. What is very significant is that these bodies could coordinate their interests and activities and that the Czech state has got a sufficiently effective way of showcasing not only the Czech company brands, but also its own. The presentation in the future must be given much greater importance than has been done until now. [7]

The Czech Republic should be seen as a democratic, prosperous, tolerant, safe and stable country. A country which it is advantageous for trade, investment, and study, and which is pleasant to visit. Czechia should be an open economy, which is part of all relevant international organizations and groupings. This should match with the level and rate of its presentation.

When creating the image, it is necessary to count with companies, government organizations and the authorities, both regional and the local. The effort should, however, be coordinated by one single entity – the State.

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Application and Development of the Success-Ability Concept within Investigation of Competitive Advantages of Company

Abstract

The term “competitive advantage” has become generally accepted determination related to the ability of the company to break through in the competition. Nevertheless, in the moment when we would try to describe the substance of competitive advantage in more detail both from theoretical and practical point of view, we would face some problems. Individual authors have different idea on the understanding of the competitive advantage and its definition. Concordance, yet not absolute, shall remain in the idea of “the importance of the advantage against competition”. The question is what the root of such contradiction is. One of the reasons upon theoretical level shall be the fact that the term of competitive advantage has become the premise known to everybody and about which it is not necessary to doubt. In practice level, the cause of the unclearness is in the variety of companies’ behavior, which we always try to include as all-inclusive “competitive advantage”. Unfortunately, this shall prevent us to note how much individual advantages differ. Maybe not as much as with final consequence of “advantage ahead competitor” as with the substance which form it. Admittedly this core of the advantage should be the key element of further development of both theory and practice. The concept of success-ability applies this approach in all levels. The paper submits basic theoretical delimitation together with key opening points, and summarized results of research which were used for the establishment of concept. Individual research were focused on company management always in a complex way so as the evaluation of the approaches to the development of competitive advantages in various contexts could be performed. Conclusions of these researches confirmed that the success-ability represents the approach which can be applied not only in the level of research and development of theory, but also in the practical level.

Key Words

competitive advantage, competitiveness, management, strategy, success-ability

JEL Classification:

L10, L21

Introduction

Success-ability concept represents specific approach to the company strategy. One of its characteristic keystones is in what way the concept perceives the competitive advantage. Certain diversity - in comparison to usual approaches - can be found not only in the mechanism of the birth of competitive advantage, but also in final consequence of established advantage applied in the market. Presented approach was developed and tested not only as purely theoretical structure based on previous theories, but also as a

methodology for the research to competitiveness of companies. The fact that individual research differed by the focus and scope generated the space for the rise of rather complex approach, leaning on documented conclusions. From the point of this particular paper, the key role was to find such typology of competitive advantage, which would sufficiently reflect the reality of behavior of companies in contemporary competitive environment and - at the same time - would have corresponding theoretical basis. First research gradually confirmed difficult applicability of the approach operating with the terms of structural and functional advantages, especially on the grounds of unclear definition of these two terms. Nevertheless, the need to differentiate and define various types of competitive advantages was acknowledged. Such developed approach was then applied in other researches, which confirmed its factual applicability.

1. Theoretical Opening Points of Term of Competitive Advantage

The term of competitive advantage is usually closely associated with competition, competitiveness and success from the point of its definition. From the point of the success-ability concept, just the link with the success is one of essential aspects, which is to be taken into consideration in consistent manner. Besides concepts delimitating the competitiveness of companies, the concepts of competitiveness of countries represent rather elaborated area. In comparison to company approaches, they have very frequently the advantage of relatively profound methodology of the evaluation of individual countries [8]. With the concepts evaluating the companies they are linked in absolute majority with the emphasis on the effectiveness of the whole, influenced by individual partial elements. Classic approach to competitive advantages from the point of companies is based on Porter, who defines that the competitive advantage is the core of the company efficiency in markets with competition. It grows from the value which the company is able to form for buyer, exceeding the costs of company for its establishment. The value is then what a customer is willing to pay for the service – product. The objective of competitive advantage is to build-up profitable and sustainable position against forces, which make decisions on ability of competition [9]. Hitt defines that the company has competitive advantage if implementing the strategy which the competitors are not able to imitate, or which would be too expensive [6]. According to Cockburn, the substance of competitive advantage lies in the ability of good identification and reaction to stimulus of the environment, while keeping orientation to performance and out of it resulting revenues [4]. Collis states very simply – shall a company make any activity far more effectively than competitors, it can potentially achieve competitive advantage [3].

Especially definition, mentioned by Porter, is today generally accepted as standard or premise. However, it does not mean that Porter would unambiguously specify the term of competitive advantage. Klein even states that “... the concept of competitive advantage is surprisingly unclear” [7]. Furthermore, according to Klein, Porter in fact does not practically define the term of competitive advantage, but mentions only examples, respective strategies, how to achieve it. As the time goes by, competitive advantage and sustainable competitive advantage are viewed as self-evident [7]. Moreover, Klein also points out to the trend of defining of competitive advantage as so called “tautology”. It

comes out from traditional cliché “competitive advantage is the heart of the success in the market, upon which the competition exists“. However, if the competitive advantage is usually understood as something guaranteeing financial efficiency and we measure the success also by financial performance, then the sentence just says that “financial efficiency is the heart of financial efficiency“ [7]. Stating that “company must have the source of competitive advantage to be able to reach competitive advantage” is just as not contributing by its tautology approach [7]. Therefore, Klein also probably states that competitive advantage has become the term rather neutral in a certain sense, separated from the content from the period of its birth [7]. In other words, it means the term which is understood in a certain scale rather intuitively, and can mean practically anything. Consequently, as competitive advantage can be identified anything giving the company certain advantage against competitors. For that matter, Porter similarly delimitates the relation of competitiveness and competitive advantage by stating that “... competitiveness is established by competitive advantages... competitive advantage gives the company the advantage against competitors“ [9]. In this consideration an important aspect is the factor of comparison, i.e. relative comparison with competitors. Klein states that that it is not enough to assume that the company has in a particular moment a certain advantage, but decisive is value or level of such advantage in comparison to existing as well as potential competitors [7].

2. Perceiving of Competitive Advantages in Success-Ability Concept

The concept of success-ability put the stress (within the search for the foundation of competitive advantage) upon development of resources, target orientation within evaluation of success of companies and the need to delimitate the post of the company within the environment, in which it operates, also in the sense of its further development. Competitive strategy is understood in this context in the sense of acquiring, utilization and development of competitive advantages forming the competitiveness of the company. Key component is the identification of various types of competitive advantages and its importance. The important fact is that there are significant differences between various advantages both from the point of the mechanism of origination and from the point of benefit or sustainability. The concept of success-ability within the structuralizing of competitive advantages defines three types of competitive advantages: pure competitive advantages, semi-competitive advantages, pseudo-competitive advantages. Decisive for the classification of competitive advantage into a certain group is the fact in what way it is established, acquired, developed and maintained within the framework of competitive area, respectively product or source of competitive triangle. These triangles represent the space delimited by company, competitors and customers, resp. company, competitors and suppliers of sources.

Pure competitive advantages do not deform relations within the framework of the triangle in the sense of restricting or absolutely eliminating the competition by illegal or non-ethical behavior, or the effort to influence other external influences above the framework of business activity of companies. In other words, these advantages strengthen particular company, without unhealthy restricting of the chances of other companies to develop their own competitive advantages and to participate within them

upon the competition for customer. These advantages are primarily based on own ability of the company to establish and maintain them. For their further classification and analysis it is possible to use two approaches. The first one is the concept of structural and functional competitive advantages, coming out from the approach of Coates [1]. Second possibility is the use of modified concept of resources of company, operating with the tangible and intangible resources, human resources, capabilities and with core competences.

In comparison, pseudo-competitive advantages primarily focus on the area of influencing and utilizing of unethical and eventually illegal practices. It means that their formation or method of occurrence is not the question of the development of companies within product or source competitive triangle, but rather a reflection of the willingness of the company not to respect given rules, or its effort to influence them significantly for their benefit in such a way so as the competitors could not have any chance to efficiently defend themselves with their pure competitive advantages. These advantages neither occur nor are maintained in relation to the ability of the company in the sense of the concept based on sources or core competencies. It is possible to operate there with advantages resulting from non-respecting of ethical or legal rules.

Group of semi-competitive advantages is very specific from the point of their occurrence. Fundamental characteristics is the fact that companies often acquire them as the substitution or supplement of their own abilities, or they search for the compensation of own weaknesses. I.e., they are acquired also out of the scope of development of internal factors; nevertheless, they do not have a feature limiting other companies and their possibilities to apply own advantages. However, it is true that they can be often so strong that it is difficult to react to them. Usually they are characterized by small or at least problematic possibility of control and development from the side of the company that uses them. Their most serious weakness is the fact that their use need not to be sustainable from long term point of view and the question is whether the company is able to reflect the benefits, out of them resulting, into further development of competitiveness. Under the pre-requisite that benefits, out of them resulting, shall be used just for the development of own sources and abilities, can help to future development of pure competitive advantages. Acceptable advantages can be classified into this particular group (government help or co-operation with stronger partner) and so-called unidentifiable advantages, including factors which the company is not able to clearly identify in a particular moment.

3. Application of Components of Success-Ability Concept in Research of Competitiveness of Electrical and Mechanical Engineering Companies

In the frame of the research "Possible Trends of the Development of Mechanical Engineering and Electrotechnic Firms with Emphasis on South Moravia Region" [12], was explored, among others, the area of competitiveness, respective competitive advantages. Data collection was made on the basis of questionnaire survey. This was based upon extensive questionnaire, containing several tens of questions. Companies were handed-over the questionnaire personally on the basis of the contact of research

employees and companies and during the research there run frequent consultations between researchers and management of companies. This was reflected in rather high return-rate, from cca 160 addressed companies 118 of them returned the questionnaire. Classification of companies from the view of size was used for data processing. Competitive advantages of companies were evaluated on the base of simple approach of structural and functional advantages defined by Coates.

This evaluation was focused on general aspects of the development of all companies. Basic results summarizing the most developed and the most popular competitive advantages could be summarized to the following points:

- the most popular functional advantages were quality (70%), qualified employees (50%), customer satisfaction (46%), short delivery date (44%) and company name (40%)
- the most popular structural advantages were low price (25%), low costs (14%) and market share (10%)
- the highest importance of functional advantages was identified in middle-sized companies
- the highest importance of mentioned structural advantages was surprisingly identified in small companies. The question is, if this approach is the best way how small companies can build their competitiveness.
- about 7% of companies had no significant advantages

Mentioned research demonstrated that the perceiving of structural and competitive advantages as specified by Coates is hard to applicable mainly on the grounds of low elaboration of his methodology. Nevertheless, it was shown that the idea upon which he built-up his concept, i.e. differentiation of various types of advantages from the point of their origination, is correct. Results clearly distinguished companies with different behavior and approach to the market. Differences were demonstrated between companies varying in size or owner. These differences were presented also in individual elements and functions of management. Advantages of functional nature in increased rate occurred within these companies which – at the same time – had more sophisticated system of management, selected more flexible approaches for organizing and put more emphasis upon strategic management.

4. Applications of Elements of Success-Ability Concept in Research of Innovation Potential of Electrical and Mechanical Engineering Companies

In the year 2002 within the framework of the research “Possible Trends of the Development of Mechanical Engineering and Electrotechnic Firms with Emphasis on South Moravia Region” was made the investigation focusing mainly on the area of innovation potential of selected companies [12]. From addressed 147 companies responded to sent questionnaire 79 of them (rate of return approximately 54%). The objective was to map the area of development of human potential with the emphasis upon the barriers of this development and influence upon competitiveness of the company in the context of development of intellectual capacity of the company. With

respect to the relation with competitiveness of company the supporting was mainly the evaluation of human potential as competitive advantage and mainly from the point of possible change against the results achieved in the years 1999 - 2000. The concept of success-ability was used for this research especially from the point of the contribution of human potential for development of competitive advantage. Human potential and related aspects of its development were in compliance with the elements of the concept based on resources and core competencies, used within the framework of the concept of success-ability perceived as one of potential source of competitive advantage.

Results from the first two years (1999-2000) of research showed that the abilities of management were determined as competitive advantage in average in 30% of companies and qualified employees were considered to be competitive advantage in 50% of companies. In research which was realized only three years later, the stress put to management and non managerial staff was obviously substantially higher. Approximately 80% of companies considered abilities of employees as the most important or very important competitive advantage. No matter how optimistic such data is, evident is clear shift. Understanding of managerial expertness as the complex of abilities and skills, experience, knowledge and certain type of thinking [13] was applied for detailed evaluation of importance of individual parts as the source of competitive advantage. The importance attributed to the expertness of management was really high - 95 to 98% considered it as important or decisive. Interesting is relatively lower importance attached to knowledge, being considered as decisive by 51% of companies, when abilities and experiences were decisive for more than 60% of companies. In the group of workers, the most intense stress is put to abilities and experience when 60-70% of companies considered them as important or decisive. At the same time the stress put on their knowledge was relatively lower. Balanced importance of individual parts of expertness was identified in the group of clerical staff. The importance attributed to individual areas practically copies classical pyramid structure. It means: the higher level, the more intense stress is put to the importance of expertness as competitive advantage. This is clearly seen if we look at the evaluation of the individual parts of expertness just in relation to enlistment of employee. Positive is the confirmation of the growth of the importance of management as the factor influencing competitiveness. In principle, it is possible to state:

- importance, attributed to management as the factor developing the competitiveness, is growing
- there are evident differences in the importance of the individual elements of the expertness in various levels of the company
- these conclusion should be the base for creation of strategies of human potential of the company

The application of ideas of the success-ability concept clearly proved logic link with approaches relying on development of resources, abilities and competencies. These approaches can be understood as fundamental especially with respect to the need of internal analysis of sources of competitive advantage and its further development. On the basis of results of such research for further development of the concept of success-ability it was necessary to define the sources of competitive advantages in rather different way in comparison to classical Resource Based View approaches [e.g. 3]. However, it is not any fundamental discrepancy between both approaches, but more

likely different structuring. Common feature of both approaches is mainly the fact how they understand the substance of the occurrence of competitive advantage from internal view – i.e. as the combination of resources which form them. Important aspect is the fact that the uniqueness can result both from individual resources and the combination as such. Another important finding was perceived growth of the importance of the management as the factor influencing competitiveness. This idea is rather fundamental for the concept of success-ability, and management is considered as the factor principally influencing competitiveness of companies. This must be demonstrated not only for the formulation of strategy, but mainly for its implementation. Shall there exist any discrepancy between these two views, the probability of the failure of the company is rather high.

5. Application of Success-Ability Concept in Research of Internationalization Activities of Small and Medium-Sized Companies

Essential objective of the project solved in the years 2002 to 2004 was to characterize the process of internationalization of small and medium sized companies both in theoretical level – proposal of optimal model of internationalization, and practical level – applicability of established model [11]. The research was focused on mechanical and electrical engineering companies. The greatest part was formed by the limited liability companies. Smaller part was formed by joint-stock companies and other legal forms. Sufficient criterion of the size was the number of employees. From the point of the evaluation of competitiveness was the key objective of the project to analyze and specify factors of competitiveness of SME. Final research involved the sample of 90 companies. In the following part the companies, trying to develop their internationalization activities as target, marked as “INT”, companies not enforcing this approach yet are marked as “NOT-INT”. The concept of success-ability was used mainly on the grounds of the need of the finding of the approach enabling the description of various forms of behavior of companies, different types of competitive advantages, various aspects of entrepreneurial environment in various markets and untraditional approaches to the development of competitiveness. Within the framework of this research the concept of the success-ability was applied to following areas:

- changes in management of companies initiated by internationalization processes
- competitive advantages developed within the framework of internationalized activities
- approach to development of success-ability and competitiveness of companies within the development of their internationalization activities
- perception of changes in competitive environment from the point of companies trying for the development of internationalization activities
- strengths, weaknesses, opportunities and threats for the companies struggling for the development of internationalization activities

From the point of found-out results was the key the confirmation resp. refusing of hypotheses defined on the grounds of pre-research. From the point of competitiveness it

was not possible to evaluate the hypothesis anticipating that companies, which do not change the procedures in management, select rather traditional and conservative approach to the development of competitive advantages. The reason why this hypothesis was not evaluated was mainly the fact that declared level of changes in the management was generally very low.

On the contrary, clearly was confirmed the hypothesis that most of the companies consider in relation with the internationalization effort as important similar advantages as companies not considering this type of the development yet. This can be deemed with respect to the fact that as the most important are evaluated in principle identical or similar advantages as advantages marked as the most important ones in previously mentioned research realized in the years 1999-2000. The research aimed as companies generally, i.e. it did not take into consideration the influence of internationalization as such. Furthermore, statistical important difference between INT and NOT-INT companies was demonstrated in topical research only for three advantages. Nevertheless, for two out of these three are these by NOT-INT companies identified as exceptionally important (quality, ability of management). Remaining advantage (product specific qualities) INT companies evaluates as exceptionally important and NOT-INT companies as slightly under-average important.

Hypothesis assuming that in companies, which are internationalized or at least have started this process, is apparent stronger emphasis upon the development of own abilities and competitiveness than in companies with exclusively local focus was demonstrated in smaller scale than expected. The fact is that the importance of abilities of management and abilities of employees as competitive advantage is in INT companies higher. Only for management is the difference visible also from the point of statistical importance. Identically, the development of own competitiveness is evaluated by INT companies as slightly more important. Nevertheless, also NOT-INT companies evaluate mentioned areas as very important. The thought is suggested that also domestic competitive advantage establishes similar competitive pressure as the international one and that also in this environment is the competitiveness based – among others – on the abilities of employees the necessary base.

Hypothesis that companies focusing only on structural competitive advantage such as low price and low cost have restricted possibilities of the connection into international environment was confirmed in only one area. I.e., the relation of the advantage of low costs and internationalization by means of unexpected inquiries from abroad. Correlation between unexpected inquiry from abroad and low costs confirms that companies, which incline to this competitive advantage, can tend to accept any offer. Level of elaboration and orderliness of their internationalization activities based on such behavior is indeed very low.

The confirmation of the fact that non-ethical practices are considered as more serious problem than the utilization of legislative imperfections is valuable especially with respect to the fact of different approach of INT and NOT-INT companies. It emerged that INT companies operating in larger scale in international environment refuse non-ethical practices and breaching of laws including the utilization of their imperfections more significantly than NOT-INT companies, operating in domestic market only.

With respect to the fact that government policy is from the side of the companies much criticized area as a rule, hypothesis was uttered that government policy and government intervention are not viewed as factor upon which the companies could rely on for their development. This hypothesis was confirmed unambiguously. This relation of companies to government policy and intervention was strongly indicated already in the stage of pre-research. Furthermore, final research demonstrated that INT companies have less trust in this policy than NOT-INT also from the point of statistic importance. On the other hand, the companies would probably welcome, while using certain forms of the internationalization, if the support of state institutions would be more considerable and in all probability more effective. Most probably the companies would expect the help with the acquiring of the information, effective functioning of the laws influencing their effort to expand, more effective role of the state in international relations etc.

The hypothesis was confirmed that companies using various forms of the internationalization prefer different competitive advantages. Many identified statistically important correlations characterize certain aspects of the behavior of companies. It is clear that for certain forms of the internationalization play certain competitive advantages more important task than the others. Certain forms of internationalization also help the companies to solve the problem with insufficient level of own competitive advantages. They try to compensate them for example by the entry into international networks and alliances or by means of appropriate form to develop another advantage.

6. Discussion and Focus of Further Research

The reason why the typology of competitive advantages in the concept of success-ability is so principal is obvious. The key problem of the company is undoubtedly the guaranteeing of reaching and development of competitive advantages forming the competitive base of the company in required level. The difficult of the solution to this problem is in principle the difference in the method of development of various competitive advantages. Each type of advantage demands another foundation and another approach of management from the point of its focus. Strictly speaking, we can say that the development of purely competitive advantages is based rather on internal orientation and internal factors. Primary focus of pseudo-competitive advantages is in external orientation with specific focus on questionable area of law and ethic. Semi-competitive advantages include certain element of internal development; nevertheless, they are based rather on external relations and factors, to which also their development must be adjusted. From the point of internal efficiency of management and its development is certainly the most demanding group just purely-competitive advantages.

The development of managerial competencies shall be needed in all relations. Formulation of strategy demands consistent delimitation of internal development. Semi-competitive advantages demand clear specification of company strategy from the point of links to external factors. Nevertheless, their incorporation into the concept of strategy is in fact trouble-free. The question of pseudo-competitive advantages is from the point of composing into the strategy itself seizable far more difficult. It is understandable that the company intentionally and systematically using non-ethical and illegal acting shall not have any need to formalize such behavior into the form of strategy. On the other

hand, companies operating, most usually from international point of view, on markets with absolutely different characteristics either knowingly operate with various conditions ruling there, or they must at least to adjust to them.

Focus of further research shall be clearly on the area of all aspects of strategic management and evaluation of other possibilities of the use of the concept of the success-ability in all stages of this process. Links between company management and its competitive advantages shall be studied in more detail. Contemporary economic-political situation offer the theme of the influence of links formed by various stakeholders in competitive space upon the possibility of the development of individual types and advantages and their factual importance.

Further, the mechanism of birth and effect of individual competitive advantages with the emphasis to value chain of the company. It shall be necessary to further work out the methodology of the analysis reviewing the sources of competitive advantages of companies. Considerable potential has the concept of success-ability also in the formation of the methodology of competitive comparison of companies, which would serve for the evaluation of the level of competitiveness and by that also the evaluation of the value of given competitive advantages.

Conclusion

While evaluating the approaches interested in the company competitiveness, we can perhaps incline to the idea of unfinished theory linked with competition, competitiveness and also strategic management. Pre-requisite that search for the components of competitiveness should be the primary function of the management is in this context at least logical.

The questions related to competitiveness of companies focus on the search for sources of advantages, sustainability of advantage and factors identifying the benefits related with competitive advantage. Perspective approach in the delimitation of competitiveness is the direction demanding the development of assets and processes guaranteeing the competitive advantage, and differentiation of competitiveness in particular moment and competitiveness aiming at future development of company. From the point of the logic of the relation of terms of competitiveness and competitive advantage is generally accepted affirmation that competitiveness is formed by competitive advantages, at least acceptable. On the other hand, it is essential to differentiate various types of competitive advantages forming the competitiveness in different way.

Furthermore, the nature of competitiveness based on various types and levels of advantages differ. The concept of structural and functional competitive advantages is in this context in spite of considerable imperfection rather contributable and to a certain degree not fully realized. Important is especially diverse substance of individual types of advantages and the emphasis of their different importance in the context of the situation in the market. The approach looking for the way how to develop competitive advantage

on the basis of sources and basic competencies is considered as certain anti-pole to classical approaches.

However, essential contribution can be seen mainly in the approach how the sources of competitive advantages are defined and the method of their origination. The concept of success-ability uses in its attitude to the strategy, competitiveness and competitive advantages of companies specific approach. Its strength is the differentiation of various types of competitiveness types of competitive advantages and projecting of such difference into final competitiveness and strategy of the company both in the level of formulation and implementation.

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