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# Differences in Competitiveness of the Construction Enterprises in Czech Republic and Austria

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## Abstract

The paper is aimed at analysis in the areas of strategic management, competitive position and decision-making in small and medium-sized construction enterprises according to their managers. It presents the results of the survey conducted in Czech Republic and Austria. The results are mutually compared and the differences between the enterprises and their managers are identified. For the questionnaire survey two approaches were used, namely resource-based view and the market-based view, for the identification of the competitive position of the enterprises. There are also questions focused on propositions for manager's decision-making. All the acquired results are statistically evaluated with appropriate commentaries. Relationships between those areas in each enterprise provides better understanding of mutual dependence of strategic management, decision-making and competitive analysis. It also provides evidence of different approach of the Czech and Austrian enterprises in analysed areas. Results can be used by managers to understand links and different approaches to those areas in Czech and Austrian small and medium-sized construction enterprises.

**Keywords:** Enterprise competitiveness, Strategic management, Decision-making, Small and medium-sized enterprises (SME), Market-based view (MBV), Resource-based view (RBV), Management

**JEL classification:** M10, M21, L74

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## Introduction

Every human being makes decisions. Our decisions are based on lots of factors, many of them we are actually not aware of at the moment of making decisions. We are influenced by the environment, internal environment of our own mind settings (subjectively based decisions) and also the environment of our surroundings (objectively based decisions). Decision made is thus our choice according to factors in the form of the information available at the time and place of decision has been made (Muth 1961; Lucas, Sargent 1981).

The issue of individual decision-making is examined as part of decision implementation within the framework of economic theory. This activity can be classified as the rational process of selecting one of several possibilities based on the values and preferences of the decision maker. As mentioned before, if we assume

that we are dealing with an intelligent human being then we can infer that his decisions are made in the form of expectations (Kahneman, Tversky 2000).

In this context, there can be assumption formulated for relationship between the economic factors, which influence the decision-making process made by managers of enterprises. Such relationship can be expected between the evaluation of the actual economic situation and the evaluation of the past development of the selected financial indexes (development evaluation of the turnover and the profit). The logic of the assumed relationship is based on the conviction that the human beings make consistent decisions and evaluations as the part of the decision-making process. Thus the evaluation of the past financial indexes should correspond to the evaluation of the present economic situation, with the most important financial part.

Moreover, as the economic theory describes, there are financial factors, such as the turnover and profit, which are very important in evaluation of the enterprise, especially in the evaluation of the performance of the enterprise. But there are other non-financial factors which are very important as well. Financial factors thus can be seen as the part of the resource-based view to the evaluation of the enterprise. Resource-based view stresses the importance of the internal factors of the enterprise, which should be specific and important for the enterprise (Wernerfeld 1984; Grant 1991; Kraaijenbrink, Spender, Groen 2010). Influence of the factors from the external environment of the enterprise is represented by the market-based view (Porter 1994; Nalebuff, Brandenburger 1996). Both concepts are basics for evaluation of the enterprise and could lead to identification of the enterprise specific sources usable for the gaining of competitive advantage, and thus overall to the competitiveness of the enterprise. (Barney 1991)

According to abovementioned assumption of the human beings decision-making process and the influences to this process in the form of evaluation of selected aspects in mutual relationships, there were questionnaire survey conducted among the small and medium-sized construction enterprises in the Czech Republic and the Austria. The survey was part of the international research project as cooperation of Masaryk University, Fachhochschule Wien and the Chamber of Commerce of the South Moravia (Marinic, Zathurecky2014; Zathurecky, Marinic2013).

The aim of the article is to identify and compare the differences of evaluation of chosen aspects of the reality made by managers of construction enterprises and its mutual relationship. To be able to do this methodology of questionnaire survey is provided as well as the results of the comparison of financial indexes and non-financial indexes in categorization to internal and external factors. Identified differences are discussed and the important suggestions for explanation are provided for the decision-making process.

## Methodology

The data for the analysis was obtained through the questionnaire survey conducted among the more than 1500 small and medium-sized construction enterprises in the both mentioned countries, Czech Republic and Austria (Marinič 2012). The obtained data from both sides allows describing relationship between the evaluation of the actual economic situation and the evaluation of the selected financial indexes development (turnover and profit) and non-financial internal and external factors according to RBV and MBV – 60 selected factors. The managers were asked to evaluate the all factors using the 3 point scale (positive, neutral and negative evaluation).

The relationship was analysed by the statistical tools such as descriptive statistics and analysis of the mean difference. The aim of the analysis is to identify the

differences in the factors evaluation of the two groups of enterprises, Czech and Austrian enterprises. This approach allows making the conclusions about approach to the selected factors and their relationships according to the country where the enterprises provide their business.

## Results

First step of the analysis is the relationship between the evaluation of the selected financial aspects, resp. evaluation of the enterprises' situation and the development evaluation of the profit and the turnover. According to the results (table 1), there are the differences in evaluations of the all selected aspects. In general it is able to say that Austrian managers evaluate the economic situation, and development of the both financial indexes more positive than the Czech managers.

Table 1

Relationship between evaluations of the selected aspect according to country

	Country	Descriptive Statistics				Analysis of Mean Difference								
		N	Mean	Std. Deviation	Std. Error Mean	Levene's Test for Equality of Variances				t-test for Equality of Means				
						F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
													Lower	Upper
Evaluation of Situation	AT	111	1,81	,514	,049	7,049	,008	-2,473	273	,014	-,153	,062	-,274	-,031
	CZ	164	1,96	,494	,039									
Development Evaluation of the Profit	AT	109	1,53	,602	,058	,298	,586	-5,092	276	,000	-,421	,083	-,583	-,258
	CZ	169	1,95	,714	,055									
Development Evaluation of the Turnover	AT	109	1,92	,709	,068	,315	,575	-2,889	274	,004	-,250	,087	-,421	-,080
	CZ	167	2,17	,700	,054									

Note: CZ = Czech Republic; AT = Austria

Source: data analysis of the questionnaire survey, own processing

The more significant difference can be seen in evaluation of development of the profit (difference -0,421) than in evaluation of turnover (difference -0,250). According to the analysis there can be seen difference in the evaluation of the economic situation of the enterprise as well (difference -0,153). Thus we can conclude there is strengthened influence of development evaluation of profit on the evaluation of economic situation of the enterprise.

Table 2

Relationship between evaluations of the selected aspect according to country

	Descriptive Statistics				Analysis of Mean Differences		
	AT		CZ		Mean Difference	t	Sig. (2-tailed)
	N	Mean	N	Mean			
x35_1_1	107	2,30	156	2,39	-0,092	-1,009	0,314
x35_1_2	103	2,50	155	2,62	-0,124	-1,475	0,141
x35_1_3	108	2,42	146	2,34	0,081	0,886	0,376
x35_1_4	106	2,55	166	2,90	-0,356	-5,948	0,000
x35_2_1	109	2,77	166	2,63	0,138	1,834	0,068
x35_2_2	107	2,46	152	2,43	0,030	0,313	0,755
x35_2_3	108	2,08	142	1,34	0,745	8,062	0,000
x35_2_4	105	1,89	140	1,36	0,529	5,498	0,000
x35_3_1	105	2,42	131	1,97	0,450	4,887	0,000
x35_3_2	105	2,12	133	1,81	0,312	3,441	0,001
x35_3_3	106	2,70	139	2,35	0,346	3,946	0,000
x35_3_4	106	2,46	148	2,59	-0,126	-1,429	0,154
x35_4_1	106	2,33	137	1,66	0,666	7,010	0,000
x35_4_2	106	2,24	149	2,17	0,068	0,682	0,496
x35_4_3	107	2,03	144	2,00	0,028	0,286	0,775
x35_4_4	106	2,07	144	2,11	-0,045	-0,427	0,670
x35_4_5	107	2,52	141	2,04	0,488	5,053	0,000
x35_4_6	99	2,08	132	1,82	0,263	2,612	0,010
x36_1_1	105	1,57	158	1,80	-0,226	-2,883	0,004
x36_1_2	104	1,46	148	1,78	-0,315	-4,319	0,000
x36_1_3	105	1,27	153	1,46	-0,191	-2,685	0,008
x36_1_4	106	1,21	154	1,30	-0,091	-1,477	0,141
x36_1_5	102	1,78	147	1,68	0,104	1,099	0,273
x36_1_6	106	1,69	161	1,71	-0,019	-0,227	0,821
x36_1_7	106	1,23	160	1,28	-0,049	-0,811	0,418
x36_1_8	101	1,33	145	1,42	-0,094	-1,303	0,194
x36_2_1	105	1,19	160	1,25	-0,060	-1,008	0,315
x36_2_2	105	1,22	156	1,36	-0,140	-2,268	0,024
x36_2_3	105	1,41	156	1,63	-0,219	-2,942	0,004
x36_2_4	105	1,24	153	1,63	-0,389	-5,216	0,000
x36_2_5	104	1,38	147	1,59	-0,210	-2,667	0,008
x36_2_6	104	1,51	146	1,72	-0,210	-2,504	0,013
x36_2_7	100	1,37	149	1,79	-0,422	-4,986	0,000
x36_3_1	102	1,81	146	1,69	0,122	1,350	0,178
x36_3_2	104	1,53	134	1,66	-0,135	-1,518	0,130
x36_3_3	104	1,44	150	1,51	-0,071	-0,862	0,390
x36_3_4	95	1,95	127	2,03	-0,084	-0,988	0,324
x36_3_5	95	1,61	154	1,56	0,046	0,571	0,568
x36_3_6	92	1,74	146	1,62	0,123	1,387	0,167
x36_4_1	102	1,44	161	1,38	0,062	0,895	0,372
x36_4_2	99	1,46	149	1,72	-0,260	-3,206	0,002
x36_4_3	98	1,60	145	1,67	-0,067	-0,796	0,427
x36_4_4	87	2,01	147	2,04	-0,029	-0,320	0,750
x36_4_5	97	2,04	150	1,89	0,148	1,678	0,095
x36_4_6	95	1,64	136	1,82	-0,174	-2,029	0,044
x36_5_1	105	1,43	154	1,42	0,006	0,092	0,926
x36_5_2	105	1,67	149	1,59	0,076	0,890	0,374
x36_5_3	102	1,62	152	1,87	-0,251	-2,946	0,004
x36_5_4	104	1,60	153	1,48	0,112	1,629	0,104
x36_5_5	100	1,66	143	1,60	0,059	0,725	0,469
x36_6_1	104	1,50	147	1,55	-0,051	-0,647	0,518
x36_6_2	104	1,79	150	1,81	-0,025	-0,278	0,781
x36_6_3	102	1,64	148	1,62	0,016	0,195	0,846
x36_6_4	103	1,54	142	1,79	-0,245	-2,993	0,003
x36_6_5	104	1,46	141	1,70	-0,241	-3,003	0,003
x36_7_1	104	1,42	147	1,69	-0,264	-3,059	0,002
x36_7_2	101	1,50	146	1,74	-0,235	-2,644	0,009
x36_7_3	103	1,42	141	1,77	-0,348	-4,095	0,000
x36_7_4	76	2,14	139	2,28	-0,136	-1,293	0,197
x36_7_5	97	1,57	139	1,91	-0,347	-3,879	0,000

Note: CZ = Czech Republic; AT = Austria; 35\_X\_X = internal factors (RBV); 36\_X\_X = external factors (MBV); bold = significant factors

Source: data analysis of the questionnaire survey, own processing

According to analysis of the mean differences in the evaluation of the internal and external factors, it is obvious that there can be seen the different approach to these factors from Czech managers point of view and the Austrian managers point of view. Differences were identified in almost the half of the factors, thus it is possible to conclude that the differences in the evaluation of the actual economic situation

is also caused by the differences in the evaluation in the internal and external factors.

Generally it is possible to see the worsen evaluation in the internal factors by the Austrian managers, in comparison with the evaluation of the external factors (more positive mean differences in the case of internal factors in comparison with the external factors).

## Discussion

The analysed data provide us with the insight to the decision-making process, in the form of evaluation of the chosen aspect of the reality, and their relationship to the evaluation of the actual situation of the enterprise. It is possible to identify the differences between the Czech and Austrian managers; and these differences can be characterised as caused by the influence of different environment of these countries.

According to the differences in evaluation of the economic situation it is obvious that Austrian managers evaluate it more positive, and this evaluation corresponds with the evaluation of the chosen financial indexes. Thus we can conclude, that profit situation of the Austrian enterprises is better and also better evaluated by the managers of the enterprises. We can also conclude that this evaluation is based on the better situation in whole construction sector. According to the internal and external factors it is bit surprise that the evaluation of the internal factors made by Austrian managers are more negative than evaluation made by Czech managers. Evaluations of external factors made by Austrian managers in compare to the evaluations by Czech managers are almost in all cases more positive. Thus it is obvious that there is different approach to the internal and external factors by Czech and Austrian managers of construction enterprises.

## Conclusion

From the results presented above, it can be stated that there is greater optimism among Austrian construction companies than among Czech ones. This assertion follows on from the demonstrated differences between mean values for the individual variables of chosen financial indexes, where in all cases lower mean values were identified for Austrian companies in comparison with Czech ones. More optimism can be explained through the possibility of different influence of the economic crisis after the year 2008, when construction industry has suffered the high volume of decreases in all activities.

The different approach to the internal and external factors can be identified as well. Quite surprise, the internal factors evaluation made by Austrian managers in comparison to Czech managers is worsening. The interpretation of the better evaluation of economic situation connected with the worsen evaluation of the internal factors suggest, that the Austrian managers take internal factors as the bigger problems of the enterprise. External factors are evaluated in compliance with the evaluation of the economic situation, and thus it is possible to conclude the same direction of influence of the external factors according to the distribution of the enterprises.

Moreover the results and their interpretation encourage us to spend more time and effort with the next phases of analysis of the differences. There is the space for other analysis of the relationships among the results of the questionnaire survey to analyse for getting the more information about the differences of managerial work and decision-making process (especially in the form of evaluation of selected



aspects of reality) in the future. We can fearlessly state that the environment can represent the basic ground for differences, with all its impacts. There are obvious differences in the environment characteristics, but it is very interesting to discover which of them have bigger influence, or is more important for decision-making in the form of evaluation.

Also the evaluation as the subjective process can be evaluated in the contextual form. It means it is possible to analyse the subjectivity of that process and compare the data obtained through the questionnaire survey with the objectivised form of the data to conclude other part of the analysis of the decision-making process. But this is the insight to the other topic for other analysis and research.

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