"Assessing the existence of synergistic effect in the consolidated accounting entities in the Czech Republic"

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ASSESSING THE EXISTENCE OF SYNERGISTIC EFFECT IN THE CONSOLIDATED ACCOUNTING ENTITIES IN THE CZECH REPUBLIC

Abstract

The objective of the research was to identify possible positive synergistic effect of concerns. Because of the advantages of the existence of consolidated financial statements, the focus is on the Czech consolidated groups.

Consolidated financial statements of 719 groups of accounting entities – concerns in the Czech Republic were studied, i.e., the statistical population consisted of 719 reporting units, which can be considered as the total population of all published consolidated financial statements. Following economic indicators were analyzed to discover the existence of positive synergistic effect: cash position ratio, return on equity, return on sales.

Based on the research, it the authors concluded that return on equity revealed dependency between change in the value of the indicator of the parent company and consolidated unit. Values of this indicator are interesting from the investment point of view. They confirm success of capital acquisitions.

Cash ratio monitoring revealed an inconsistent environment, unambiguous data correlation between the group data and the individual financial statements of the parent companies.

Return on sales indicator showed that consolidated groups had reached higher values of the indicator, i.e., lower total cost ratio than parent companies. Data correlation was found at the low level, i.e., the parent companies did not influence consolidated data.

Acquisition companies in the Czech Republic in the period 2008–2013 generated positive financial synergy. For financial indicator of return on equity, dependence between consolidated groups and parent companies was confirmed. Positive financial synergy was found out for all monitored financial indicators.

Keywords	acquisition, consolidated reporting entities, synergistic effect
JEL Classification	G34

INTRODUCTION

Economic transformation of the Czech Republic has not been completed yet, though passing through its final stage. Therefore, acquisitions and mergers are still a highly topical issue. This opinion is underpinned by conclusions reached by the consulting services company "Ernst & Young", periodically publishing information dealing with this issue, e.g., the M&A Barometr H1 2017 Czech Republic. As indicated in the report, in the long run, the Czech Republic ranks among the countries with the greatest number of mergers and acquisitions in the Central and Southeastern Europe. For this reason, we consider mergers and acquisitions in the conditions of the Czech Republic as up-to-date.

"Mergers and acquisitions" mean acquisition or merger of two companies; one company merges with another, or two companies create a new company. Acquisition can be classified as acquisition of assets and acquisition of equity. Rights to the property are transferred in case of acquisition of assets; acquisition of equity means purchase of shares in the registered capital of the target company. Given the difference between the terms "mergers" and "acquisitions", in particular as to their impact on the company structure, our investigation has been limited to the acquisition of equity in the territory of the Czech Republic.

Mergers and acquisitions have become an important tool for companies looking to gain and maintain a long-term competitive advantage. Specifically, M&A are used as a protection against global competition and excess capacity; likewise, as the method of entry into new markets and cost reduction (Welge, 1967). In addition, a decision to buy another company to gain access to its innovations and innovation opportunities may also be the underlying motive for an acquisition (Kislingerová, 2008).

Nowáková (2002) listed possible rationales for mergers and acquisitions: cost savings, income gains, complimentary resource pooling, tax shield strategy, allocation of surplus funds, benefits of state aid, prevention of merger with a competing company, risk diversification. In his survey, West (2002) defined the most crucial factors relevant to the acquisition process in the following sequence: time, access to capital, market position, growth opportunity, stable clients, price, credit, key employees and management, risk, systems, economies of scale.

A synergistic effect is often highlighted as the dominant leitmotif for acquisitions. The question is how to interpret synergistic effects. The following definitions are available for the given issue.

Table 1. Sources of change in value and method of performance processes to differentiate the term "synergy"

Source: Author's elaboration.

Process management method / Sources of change in value	Income increase and/or expenditure reduction	Only expenditure reduction
Similar and/or different performances, i.e., performance centralization and/or performance expansion	Synergy A Ansoff, Jemison, Porter, Coenenberg/Sautter, Lubatkin	Synergy B Jensen/Ruback, Roll
Solely different performances, i.e., only performance expansion	Synergy C Haspeslagh/Jemison, Welge	Synergy D Buhner/Weinberger, Ropella

In connection with synergistic effects, many authors use the terms "incomes and expenditures" instead of "revenues and costs".

The result is the centralization of similar performances before acquisition, e.g., at one place, under the prerequisite of better utilization of capital, sharing experience between people, and increased size of the company based on the acquisition (market power towards customers and suppliers). The mentioned fact may result in the unit cost reduction or revenue increase, for instance, through the increased value for the customer. To expand performance, additional tasks are assigned to the target subject; however, these additional tasks occur from different performances. The aim is to decrease overhead costs or increase revenues.

Since the term "C" is too restrictive and considers solely the performance expansion, we reject it.

The terms "D" and "B" refer only to the cost reduction as the synergy and do not take into account effects of revenue increase. Nonetheless, this interpretation is too restrictive; besides, sources of the change in value are not reflected.

The term "A" is recognized as the optimum. Joining and expansion of performances are noticed as synergistic processes and effects are expressed as costs and revenues.

The synergy concept of Ansoff: Ansoff's concept is based on the understanding of the term "synergy", where joint use of manufacturing resources is greater than individual; in other words, the synergy is an effect, which might generate greater combined profitability of the company's resources rather than pure sum of their individual parts. Synergy is the only one decision criterion, applied by Ansoff. Ansoff distinguishes four possible synergistic effects through their effects: turnover increase, cost reduction, liability reduction, and management synergies. His concept of synergy indicates that synergies must always be positive. Ansoff rather believed the contrary; nevertheless, he did not follow negative synergies, their causes, and reasons. Thus, Ansoff's model does not reliably identify change in the value of the company through the net synergy.

The synergy concept of Porter: Porter seeks to reach positive synergy through the value chain and interaction between the individual forces: manufacturing, markets, procurement, technology, and infrastructure.

For our survey, taking into consideration availability of data and informational value of the results, we will perceive synergistic effect as introduced in the Ansoff's concept. Assuming the existence of both positive and negative synergistic effect, we will hereinafter use the term "positive synergistic effect". The positive synergistic effect expects cost savings, revenue increase, improved production capacity utilization, market share increase, exploitation of skills and experience, more effective innovation process, etc.

However, synergistic effect may arise only if and when the value of the combined company is higher than the sum of the acquiring and target company, trading separately. Mostly, synergy is created by better utilization of resources, economies of scale, stronger market power as a result of less intense competition, effective work of new management or higher debt capacity, and lower costs of debt.

Synergistic effect is recognized as the change in value of the company as a whole, changes in revenues and costs at the same time or, alternatively, as pure cost reduction. The effect is demonstrated by a higher value of the new company compared to the sum of values generated by combining companies (Synek, 2006). Acquisition is successful only if the created value exceeds costs incurred by the acquisition itself.

The positive synergy may also be understood as the change in the individual sub-indicators – focusing on the financial indicators, it would be a positive synergy in the finances, i.e., so-called financial synergy.

In 2009, the author Svobodová from the Vysoká škola ekonomická (University of Economics) completed the survey carried out in the Czech Republic; her research compared success of mergers and acquisitions in the context of comparison with the industrial Czech averages; reached conclusions confirmed higher values of the absolute indicators in case of merging and acquiring companies compared to the mentioned averages. Nonetheless, conclusions of Svobodová (2009) did not make it absolutely clear as to whether expected synergistic effect of acquisitions occurred.

Smrčka (2013) described disputability of acquisitions based on the conclusions from the research of Dan Lovall and Daniel Kahneman (2003, in Smrčka, 2013). For instance, Lovall and Kahneman assumed that 3/4 of mergers and acquisitions did never worth it and ca. 80% of merging and acquiring companies never met parameters communicated by managers of the combined companies to their shareholders, investors or creditors as to the cost savings, stronger market position, etc. Pfeffer and Sutton (2006, in Smrčka, 2013) concluded the same, i.e., 70% of mergers and acquisitions were not successful in terms of the positive synergistic effect.

1. OBJECTIVES

The subject matter of the proposed research is to evaluate importance of the business concerns for the Czech economy. The importance of the business concerns will be evaluated and deduced from the identified positive synergistic effect reached by such business groupings. To define such objective, we have considered the macroeconomic significance of these subjects, as well as ambiguity of conclusions of research tasks evaluating results of the implemented acquisitions.

Thus, our objective is not to evaluate the level of success of acquisitions, as we do not have necessary data to do so, but to study whether target companies show positive financial synergies on the basis of conclusions from the analysis of accounting data based on the consolidated financial statements of consolidated units and individual financial statements of the so-called parent companies.

Taking into account the focus on investigation of fulfillment of the positive financial synergistic effect of acquisitions, the submitted proposal for the research task is unique in the Czech Republic.

2. METHODOLOGY OF RESEARCH AND DATA

The following progress steps should help to meet the main objective:

1) finding values of the financial characteristics reached by the business concerns in the Czech Republic in the period from 2008 until 2013;

2) formulation of new knowledge gained from the investigated area, which should clearly answer the question whether the business concerns in the Czech Republic reach so-called positive financial synergistic effect.

Consolidated financial statements of 719 groups of accounting entities – business concerns in the Czech Republic have been studied in the research. I.e., the statistical population consisted of 719 consolidated reporting units, which can be considered as the total population of all published consoli-

dated financial statements. This statement is supported by the fact that Obchodní rejstřík (Trade Register) has provided us with the data upon the prior consent of the Ministry of Justice.

In harmony with the Act No. 90/2012 Coll., we understand the term "consolidated unit" as a business grouping, consisting of the controlling and controlled entity and/or units under decisive influence.

We have narrowed group of combined companies to the consolidated reporting entities based on the complex economic view on the group, offering the processing of accounting data by the consolidated financial statement.

The Act No. 563/1991 Coll., on Accounting, lays down procedures for processing of consolidated financial statement. According to the Czech legislation, the method of full consolidation is applied, used for companies exercising decisive influence, i.e., at least 40% proportion of the voting rights in the company. Full method of consolidation means adding up all accounting entries, exclusion of intercompany operations and so-called minority interests in the equity capital. Another method of consolidation is the so-called equivalency method, used in case of the significant influence, i.e., 20-39% proportion of the voting rights in the company. The method is based on determination of share in the economic results depending on the share in the equity capital, which is labelled as the share upon the economic result in equivalency. The last method of consolidation is the proportionate method; this method is applied if two equal proportions of the voting rights in the company exist and both these proportions can be considered as decisive.

Rules for the compilation of consolidated statement are strictly defined in the Act on Accounting. Therefore, consolidated financial statement may be considered as a relevant source of information about economic conditions of the business group.

In the first stage of research solution, methodology of identification of positive synergistic effect of the business concerns must be framed. Given the fact that views on the positive synergistic effect are consistent, we will operate with measur-

able phenomena meeting the financial synergistic effect. To identify these economic indicators, we have come from results of the analyses of expert literature from the sector of the financial management of business concerns. Perridon et al. (2009), Rudolph (1998), Reisch (1998) and others share the understanding in the need to provide:

- liquidity as the basic concept in the business;

- return on equity as the unique indicator of findings of the evaluation of the venture capital; and, of course;

- cost management, which we see in the definition of the return on sales as the indicator of the cost level of the company, economies of scale or, possibly, as the cost reduction.

To calculate liquidity, the following method has been employed: short-term current liquid assets/ short-term payables.

To calculate return on equity (ROE): profit (loss) after taxation/equity capital.

To calculate return on sales (ROS): operating profit (loss)/revenues total.

The expert literature describes synergistic effect coming from the financial savings – we talk about financial stability allowing to draw liabilities in a cheaper manner and in higher volumes. Monitoring of the debt to equity ratio might be recommended. The research (Dluhošová et al., 2013) revealed that decreasing liquidity was accompanied with rising indebtedness. To accept this point of view, positive satisfactory values of the liquidity indicator can be considered as satisfactory indebtedness. In contrast, low liquidity would mean high indebtedness.

In the second stage of the research, a search for the data gathered in the Trade Register has been essential to calculate, process, and analyze defined characteristics of all 719 enterprise groupings from 2008 until 2013.

Collected quantitative data have been used to identify dependence between an accounting entity and parent company; if determined, also its direction, as we assume a positive financial synergistic effect.

The coefficient of skewness as a measure of distribution of random variable shows whether distribution of values around the mean is symmetric or asymmetric; i.e., skewed right or left. The symmetric distribution has a skewness value of 0. The positive skewness (left-side asymmetry) suggests long tail of values of the file on the right side of the mean; i.e., majority of values is grouped on the left from the mean. The negative skewness (right-side asymmetry) means the opposite distribution.

The coefficient of kurtosis is a measure of distribution of random variable, comparing given distribution with normal distribution of probability with the coefficient of kurtosis value of 3. The more sharper distribution (positive values over 3), the more values grouped around the mean; distribution with negative peak contains values very far from the mean, but even more, the probability density curve is more shallow than normal distribution curve. As to the extremely left-side distribution of nearly all data (for most variables, values have been grouped in the first interval) and connected high peakedness, logarithm calculation has been applied. After logarithmization of data, new coefficients of skewness and kurtosis have been calculated, testifying fulfillment of condition of normality of data.

Calculations of correlation coefficients have been applied to the calculated data. Correlation coefficients for the monitored variables for the individual years for the individual financial indicators have been calculated by the statistical program Unistat 5.6. The correlation coefficient indicates dependency between two variables. Values can range from –1 to +1, meaning a perfect linear relationship (negative or positive). For the positive correlation, values of both variables increase simultaneously. For the negative correlation, value of one variable increases and the other drops. In case of non-existence of the linear relationship, $r = 0$.

The average value of the monitored indicator for all companies has constituted another monitored statistics. After the survey of calculated descriptive statistical characteristics, the median value has proved to be more suitable than the arithmetic mean, as highlighted by calculated standard deviations, extreme values, and frequency distribution graph. In the majority of cases, large extreme val-
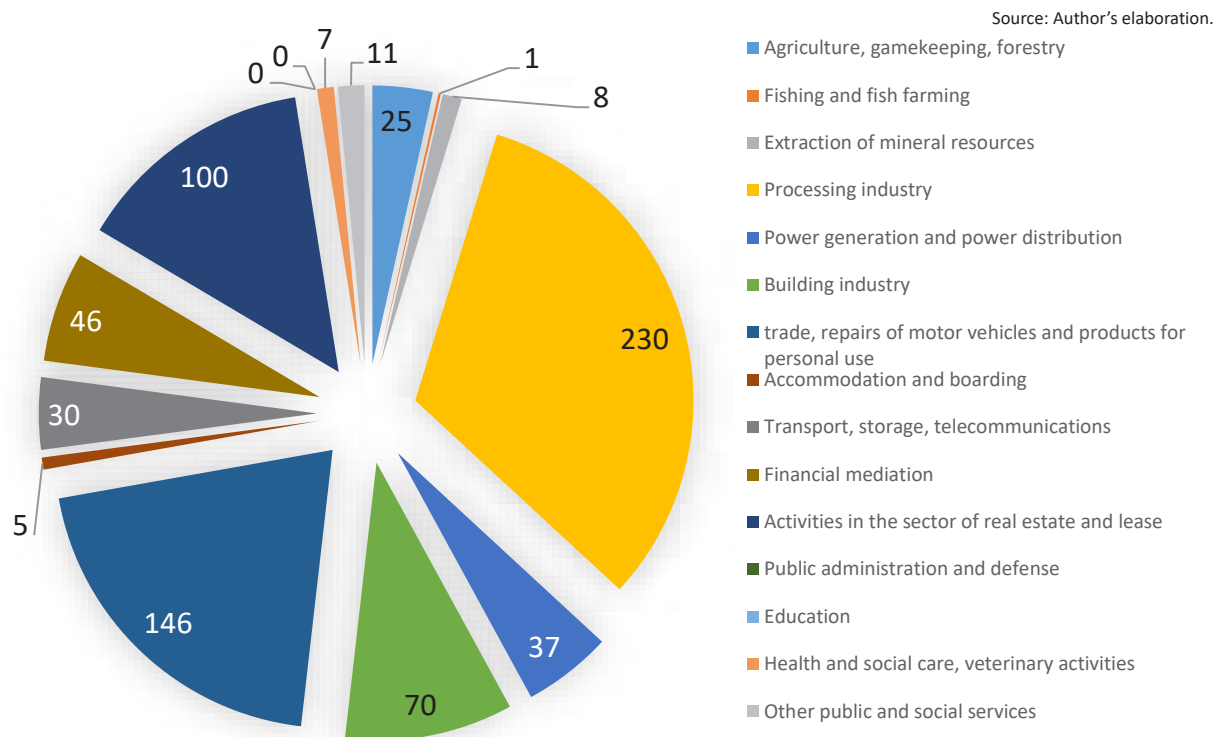
Figure 1. Distribution of consolidated economic entities per industries (2013)

ues have rather significantly influenced the arithmetic mean value upwards. I.e., the median has been used to interpret results as the midpoint of ordered series of values.

The research, which we have carried out, has not been conducted in the Czech Republic before; i.e., we consider its form unique. The research offers a perspective and answers to the question whether or not financial positive synergies exist in the Czech consolidated groups.

3. RESULTS OF THE RESEARCH PROJECT AND DISCUSSION

Effects, expressed as values of the financial indicators, reached by the consolidated groups in the Czech Republic in the period from 2008 until 2013, have constituted the core interest of the research.

The break-down of companies by industrial sectors is essential to gain a complex view on the issue of capital acquisitions in the Czech Republic. As definition of field of business for

the consolidated unit is impossible because of industrially differentiated companies forming the unit, we have classified economic subjects according to the activity pursued by the parent company. The analysis refers to the year 2014. Taking into consideration high degree of differentiation between results of the individual industries, any year-on-year changes cannot be expected resulting in differences in the years when the main survey is conducted to identify financial synergies.

Most frequently, 32%, the capital acquisition of parent companies is in the processing industry, the second position (around 20% from the total number of parent companies) is occupied by the parent companies involved in the trade, repairs of motor vehicles and products for personal consumption and third, with 14%, parent companies doing business in the real estate and lease, followed by 10% from the total amount by companies dealing with the construction engineering. Other areas are either negligible because of its scope or no acquisitions have been completed in the particular industry. More detailed description of results for the individual industries will be studied in depth in our next research plan.

Table 2. Statistical values of ROE

Variables of descriptive statistics and statistical induction	ROE 08	ROE 09	ROE 10	ROE 11	ROE 12	ROE 13
Correlation coefficient	0.5470	0.5960	0.6365	0.6639	0.6042	0.7590
Average p, %	13.62	12.89	15.26	12.77	13.47	9.68
Average k, %	14.23	13.66	15.78	13.67	15.53	9.79
Median p, %	7.68	6.48	7.55	7.10	7.32	6.25
Median k, %	10.99	10.73	11.75	10.27	9.41	6.66
Coefficient of skewness p	−0.93	−0.9	−0.98	−1.16	−1.74	−1.95
Coefficient of skewness k	−1.04	−0.72	−0.99	−0.99	−1.85	−1.23
Coefficient of kurtosis p	4.96	5.11	4.23	5.16	8.77	9.09
Coefficient of kurtosis k	5.56	4.61	5.51	4.25	9.78	4.99

The following financial indicators have been defined: return on equity, total cost ratio, and short-term liquidity.

We keep under review values of the group of accounting entities identified with the letter "*k*" in the tables and graphs, and values for the parent company identified with the letter "*p*". The objective is to find out dependence, if any, between both variables. We observe whether the condition of the positive synergistic effect is fulfilled; in other words, values of the variable "*k*" should be higher than "*p*".

As for return on equity (ROE) (see Table 2, Figure 2), interpreting the correlation coefficient, we can consider dependence between both monitored values as higher and positive, i.e., the condition of the positive synergy through acquisition is fulfilled in all years under consideration as regards

the return on equity. Return on equity of the consolidated group, measured by its average value, is higher than the monitored average of values of return on equity reported by the parent company during the period considered. The average values reached their lowest levels in 2013; 9.6% for the parent company and 9.79% for the consolidated group. The highest levels were reported in 2010; i.e., the average values for the parent company 15.26% and 15.78% for the consolidated group. Medians of both values display medium values of the indicator. Values of the consolidated group are higher than values of the parent company. Given the widely acknowledged fact that values of the return on equity below 5% are considered to be poor results of this indicator, we can recognize results, which we have received, as satisfactory.

In all years under assessment, ROE average values, as well as medians, are higher for the group of ac-

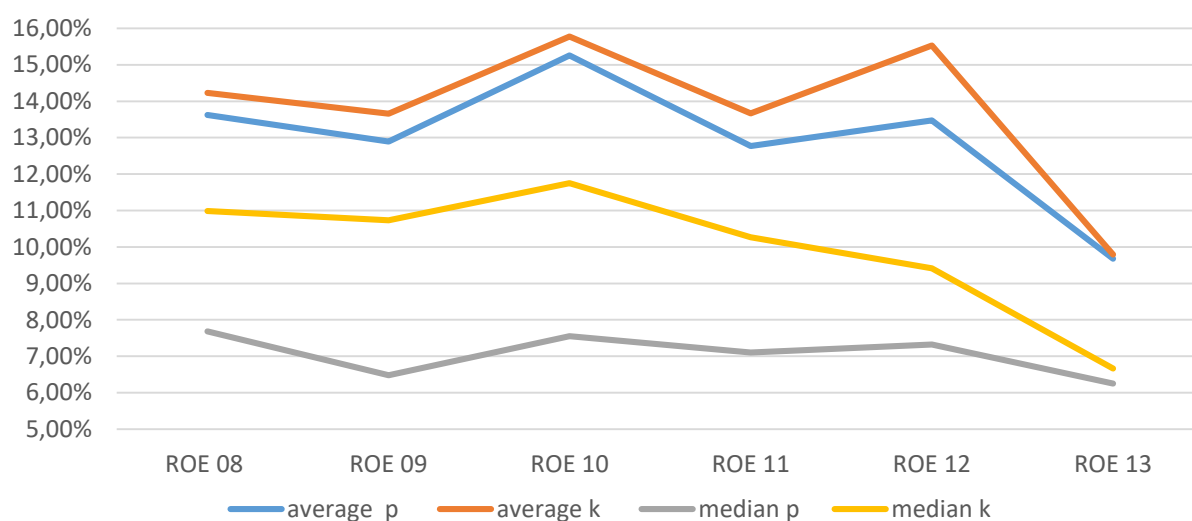**Figure 2.** Statistical values of the ROE indicator over the time

Table 3. Statistical values of cash position ratio indicator (CPRI)

Variables of descriptive statistics and statistical induction	CPRI 08	CPRI 09	CPRI 10	CPRI 11	CPRI 12	CPRI 13
Correlation coefficient	0.6778	0.6335	0.6921	0.6577	0.6084	0.7013
Average p	0.5864	0.5628	0.7874	0.8501	1.0408	0.6294
Average k	0.5734	0.5301	0.6384	0.684	0.6395	0.5077
Median p	0.1738	0.1924	0.2066	0.1912	0.2385	0.1905
Median k	0.3339	0.3462	0.3117	0.2834	0.3016	0.2635
Maximum p	9.1744	10.1567	10.7312	20.8682	19.8676	6.3925
Maximum k	7.8257	5.8005	9.8636	15.6073	10.7715	3.8936
Coefficient of skewness p	−0.35	−0.99	−1.03	−0.94	−0.83	−0.74
Coefficient of skewness k	−0.15	−0.66	−0.19	−0.28	−0.15	−0.64
Coefficient of kurtosis p	3.6	4.98	6.48	5.27	5.46	3.22
Coefficient of kurtosis k	3.53	3.77	3.21	3.28	3.65	3.67

counting entities than those identified for the parent company. Their value is interesting from the investment point of view, confirming owners their capital acquisition success.

According to the coefficient of skewness for ROE indicator, the right-side asymmetry is reported both for individual and consolidated accounting entities; giving evidence on occurence of parent values on the right from the mean. The coefficient of kurtosis shows that data are distributed evenly (values of peakedness osciallate around the coefficient value 3).

Values of cash position ratio, reported in the selected years, are interesting, as they show that the average value of the indicator for the parent company is always higher than for the consolidated

group; on the contrary, the median shows that the mean value of the consolidated group is always higher in the monitored period than the value of the parent company. This condition is mainly due to the extreme values of the cash position ratio indicator, left for the needs of the research, which are displayed in Table 3 as other results; also in the Figure 3 for better illustration. Extreme values of the cash position ratio are caused by the existence of high amounts of cash funds, either on the bank account or cash desk and/or several fold higher value of cash funds and over the value of short-term liabilities. Subsequently, these extreme values influence the average value; therefore, the median has better explanatory value. In all monitored years, the median, as described above, reports values of the consolidated group higher than values of the parent company. As to
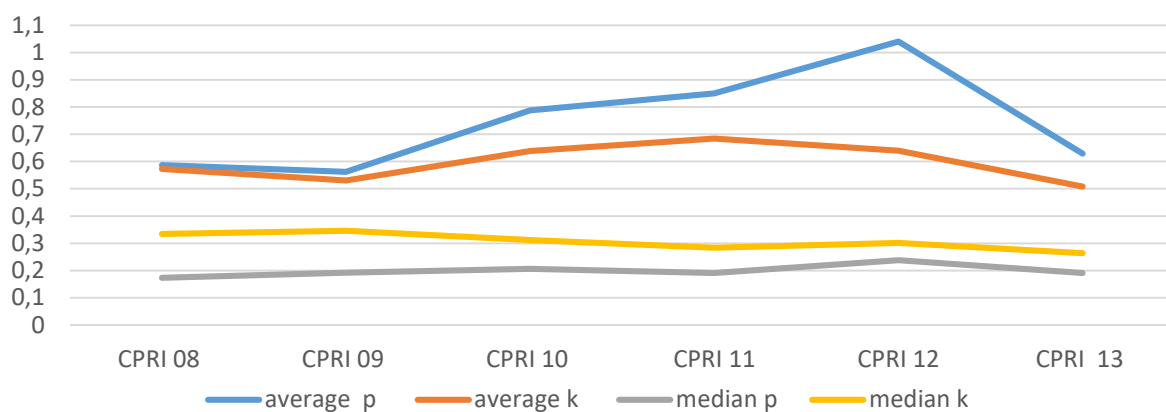
Figure 3. Statistical values of cash position ratio indicator

Table 4. Return on sales (ROS)

Variables of descriptive statistics and statistical induction	ROS 08	ROS 09	ROS 10	ROS 11	ROS 12	ROS 13
Correlation coefficient	0.4745	0.4678	0.5328	0.4440	0.5145	0.4381
Average p, %	8.79	11.83	8.89	7.86	11.19	8.77
Average k, %	15.95	10.15	17.52	14.08	10.57	5.72
Median p, %	3.14	3.59	3.17	2.98	3.74	3.31
Median k, %	5.22	4.49	4.06	4.62	4.62	3.96
Coefficient of skewness p	0.16	0.18	−0.07	−0.44	−0.09	−0.39
Coefficient of skewness k	0.14	−0.10	0.49	−2.68	−0.48	−0.61
Coefficient of kurtosis p	3.71	4.23	3.26	3.55	3.26	3.61
Coefficient of kurtosis k	4.66	3.80	4.10	21.76	5.25	3.23

the cash position ratio, coefficients ca. 0.5 are considered as satisfactory values. The lower the value of the indicator, the worse liquidity, i.e., hazard to the company's solvency. The correlation coefficient shows that the relation between values of the parent company and consolidated group is linear, dependent. Only in 2013, the value equaled to 0.0863, i.e., without detected dependence. In 2011, the figure reached 0.3602; i.e., low dependence. In the remaining years, the value oscillated in the interval 0.558-0.6632. Should some dependence be recognized, we could talk, for example, about the cash pooling effect. According to the logic of Dluhošová et al. (2008) who considers satiss factory liquidity values as indebtedness as satisfactory, low liquidity means high indebtedness, then by us consolidated groups and parent companies show rather higher level of indebtedness. According to the coefficient of skewness, indicator, the right-side asymmetry is reported both for individual and consolidated accounting entities; giving evidence on occurence of parent values on the right from the mean. However, the coefficient of kurtosis shows that data are distributed evenly (values of peakedness osciallate around the coefficient value 3).

Cost reduction in the company and consolidated group is monitored through the return on sales (see Table 4, Figure 4). As to the dependence of the indicator "operating ratio", very low values of the correlation coefficient have been featured, i.e., increased costs of the parent company do not mean increased costs of the consolidated group and vice versa – in the mirror of the logic of this indicator: the lower value of the indicator, the higher costs. This fact is recognized as positive for the monitored indicator, as the consolidated group affects cost management of subsidiary and affiliated companies.
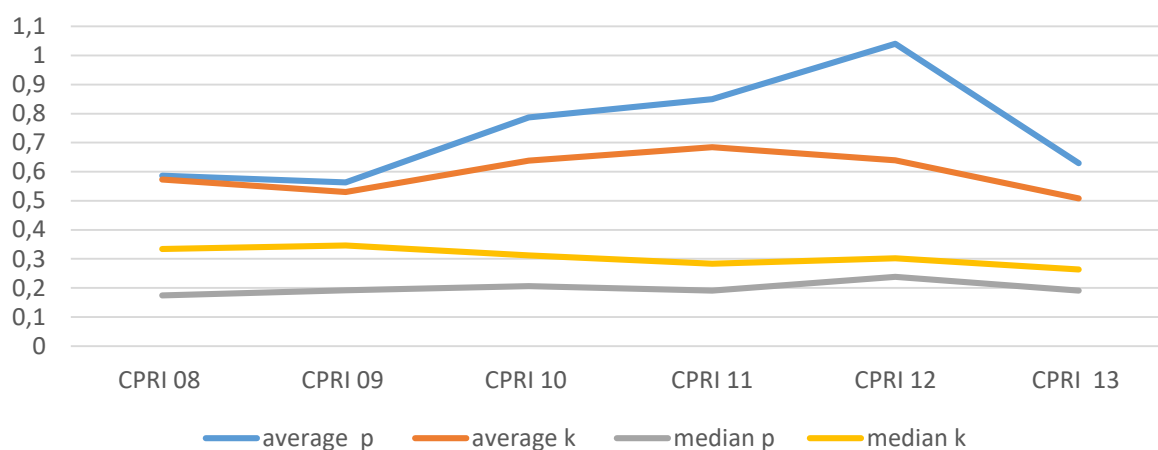
Figure 4. Return on sales (ROS)

Again, statistics of the average is affected by maximum values; therefore, we will consider values of the median as more credible, with higher explanatory power. Median values of the consolidated group are higher than constructed values of the parent company. Recommended values have not been defined for return on sales; their development in the specific company or consolidated group must be monitored. In our research, figures vary around 3% for parent companies and 4-5% for consolidated groups. As consolidated groups reach higher values compared to parent companies, we can identify the existence of the positive financial synergistic effect.

The correlation coefficient (see Tables 2, 3, 4) oscillates in a broad range from 0.0187 for the indicator PVH/sales in the year 2009 to the value 0.6918 for the ROE indicator in the year 2010. This interval of the correlation coefficient also confirms the positive linear dependence between results produced by the parent company and results of the group as a whole. Nevertheless, dependency is not unambiguously very strong. In addition, correlation coefficient values point out that monitored outputs for the group of the accounting entities are not affected by dominance of the parent company only, but are greatly dependent on the outputs of other subjects in the group. We can formulate the issue differently – values reached by the consolidated accounting entities, i.e., accounting units of the groups beyond the parent company, significantly affect the level of the individual quantities, compared between the parent company and group of the accounting entities as a whole. Thus, we can definitely say that difference in values of quantities, monitored for the parent company on the basis of the individual financial statement and the group as a whole in the consolidated financial statement, demonstrates the effect, produced by the capital ties of the individual accounting entities into the group of the accounting entities. The effect can be either positive or negative.

According to the coefficient of skewness indicator, the right-side asymmetry is reported both for individual and consolidated accounting entities; giving evidence on occurence of farther values on the right from the mean. Only values of ROS, both for the individual and consolidated accounting units, show left-side asymmetry for the year 2008, identically to the values for the year 2009 for companies. The coefficient of kurtosis shows that data are distributed evenly (values of skewness oscillate around the coefficient value 3).

As already mentioned in the introduction to this text, numerous research works – strongly supporting the idea that acquisitions are "frequently unsuccessful" – exist. Outcomes of our investigation should answer the following phrased questions: what are the values of financial indicators, reported in the consolidated financial statement, and individual? Is there any dependence between group and company data? Has been financial synergy reached in the surveyed companies? From our perspective, expectations of the owners of acquisition effects, failure to meet them followed by negative evaluation of the acquisition are irrelevant.

The following standpoint may be formulated on the basis of the analysis of results, generated by our research:

Dependence in ROE and cash position ratio has been detected between parent companies and consolidated groups. This dependence is positive.

On the contrary, dependence in the field of the return on sales could not be detected.

The positive synergistic effect, examined according to the median values of parent companies and consolidated groups, has been identified in the case of the impact to the value of the consolidated unit.

CONCLUSION

The objective of the research task is to identify possible synergistic effect of the group of accounting entities, i.e., concerns. We have focused on the consolidated groups in the Czech Republic to exploit advantage of the existence of the consolidated financial statements as the source of data about companies.

Having defined synergistic effect and positive synergistic effect, we have focused on the monitoring of the positive synergistic effect as to the reaching of positive changes in the sub-indicators, in our specific case, financial indicators. We talk about so-called "positive financial synergy".

The following conclusions may be reached on the basis of carried out research.

Indicator of return on equity has revealed dependence between change in the value of the indicator of the parent company and consolidated unit. In all monitored years, ROE average values and their medians are higher in the group of accounting entities compared to those identified in the parent company. The sum of their values is interesting from the investor's point of view, guaranteeing their owners successfulness of their capital acquisitions.

Monitoring of cash position ratio has revealed an inconsistent environment, unambiguous data correlation between the group data and the individual financial statement of the parent company. Median values of the indicator for the groups and parent companies report lower level. Applying the model of Dluhošová et al. (2008), rather higher indebtedness may be concluded. However, a positive influence of the financial lever may be perceived in link to ROE satisfactory values.

Monitoring of return on sales (ROS) indicator has shown that consolidated groups have reached higher values of ROS, i.e., lower total cost ratio than parent companies. Data correlation has been found on the low level, i.e., the parent company does not influence consolidated data. Practically, it means that the parent company reports high costs; companies in the consolidated group report lower total cost ratio. The consolidated group is affected by good cost management of subsidiary and affiliated companies.

The fact has been found out that companies, acquired in the Czech Republic from 2008 until 2013, generated positive financial synergy. Dependence – data correlation – for the financial indicator of return on equity has been confirmed between consolidated groups and parent companies. Positive financial synergy has been found out for all monitored financial indicators.

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REFERENCES

1. Ansoff, H. I. (1965). *Corporate Strategy: An Analytic Approach to Business Policy for Growth and Expansion*. New York: McGraw-Hill.

2. Bühner, R., & Weinberger, H. J. (1991). Cash-Flow und Shareholder Value. *Betriebswirtschaftliche Forschung und Praxis, 43*(3), 187-208.

3. Coenenberg, A. G., & Sautter, M. T. (1988). Strategische und finanzielle Bewertung von Unternehmensakquisitionen. *Die Betriebswirtschaft, 48*(6), 691-710.

4. Damodaran, A. (2005). *The Value of Synergy*. Retrieved from http://people.stern.nyu.edu/adamodar/pdfiles/papers/synergy.pdf

5. Dluhošová, D. (2008). *Finanční řízení a rozhodování podniku: analýza, investování, oceňování, riziko, flexibilita*. Praha: Ekopress.

6. Guserl, R., & Pernsteiner, H. (2011). *Finanzmanagement: Grundlagen – Konzepte – Umsetzung*. Wiesbaden: Gabler.

7. Haspeslagh, P. C., & Jemison, D. B. (1991). *Managing Acquisitions: Creating Value Through Corporate Renewal*. New York: Free Press.

8. Jemison, David B. (1988). Value Creation and Acquisition Integration: The Role of Strategic Capability Transfer. Corporate Reorganization through Mergers, Acquisitions and Leveraged Buyouts. *Advances in the Study of Entrepreneurship, Innovation, and Economic Growth, Supplement, 1,* 191-218.

9. Jensen, M. C., & Ruback, R. S. (1983). The Market for

Corporate Control: The Sci entific Evidence. *Journal of Financial Economics, 11*(1-4), 5-50. https://doi.org/10.1016/0304-405X(83)90004-1

10. Ernst & Young (n.d.). *The M&A Barometr H1 2017 Czech Republic*. Retrieved from http://www.ey.com/Publication/vwLUAssets/EY_MA_Barometr_H1_2017_2/$FILE/MA_Barometer_CR_H1_17.pdf

11. Kislingerová, E. et al. (2004). *Manažerské finance*. Praha: C. H. Beck.

12. Klopfer, K. (2008). *Akquisitionsbedingte Wertänderung von Akquisitionssubjekten: Ein synergie – und übernahmeprämiebasiertes Modell*. Wiesbaden: Gabler Edition Wissenschaft, Springer-Verlag.

13. Lubatkin, M. (1983). Mergers and the Performance of the Acquiring Firm. *Academy of Management Review, 8*(2), 218-225.

14. Porter, M. E. (1987). Diversifikation – Konzerne ohne Konzept. *Harvard Business Manager, 9*(4), 30-49.

15. Roll, R. (1988). Empirical Evidence on Takeover Activity and Shareholder Wealth. *The Impact of the Hostile Takeover,* 241-252.

16. Ropella, W. (1989). *Synergie als strategisches Ziel der Unternehmung*. Dissertation, Universität Bochum.

17. Smrčka, L. (2013). *Ovládnutí a převzetí firem*. Praha: C. H. Beck.

18. Svobodová, I. (2009). *Hodnocení úspěšnosti fúzí a akvizicí v České republice* (Dissertation). VŠE.

19. Welge, M. K. (1967). Synergie. In E. Grochla & W. Wittmann (Eds.). *Handwörterbuch der Betriebswirtschaft* (pp. 3800-3810). Stuttgart: Poeschel.

20. Wicharz, R. (2012). *Strategie – Ausrichtung von Unternehmen auf die Erfolgslogik ihrer Industrie : Unternehmensstrategie - Geschäftsfeldstrategie – Konzernstrategie*. Wiesbaden: Springer Fachmedien Wiesbaden.