

APPLICATION OF CORPORATE CONTROLLING IN THE CZECH REPUBLIC

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Abstract: *In order to secure corporate control continuity, the management utilises instruments of controlling that begin to be applied even in the environment of small and medium firms. The goal of the report is to find the reasons and the scope of controlling application in companies operating in the Czech Republic. In order to fulfil the objectives of the article, an analysis of expert literature and studies dealing with the issues in question has been performed. The data obtained during the electronic questionnaire investigation in the firms of the Czech Republic was used as primary data. The application of controlling in firms has been examined based on the number of employees in the company and their economic focus. For the presumption in question, hypotheses had been expressed where the statistical importance and correlation relationship have been examined. The results ascertain the growth of controlling in the enterprises and the lowering discrepancy between the application of controlling activities from the standpoint of the number of employees and economic focus. The article is concluded with a discussion of the ascertained results of the actual investigation complemented with the expert knowledge of other researchers.*

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JEL Classification: *M21.*

Introduction

The firm is exposed to constant changes, therefore it is necessary to permanently adjust its production programme to the market's requirements. In order to succeed in the enterprise field in question, it is no longer sufficient to consider the relationships with the competition, the effect of the consumers and the suppliers, the creation of substitute products, etc., but it is necessary to work on the development of new procedures and applications of new manners of solution seeking. In this sense, controlling enters corporate activity as an innovation tool that participates in the problem solution process and the need for introducing and developing new instruments that should help company managers when solving corporate problems (Horvath, 2003, 2008; Eschenbach, 2004, 2011). Controlling in the European concept is perceived as a tool of "management control" and "relationship control" in accordance with the new development and concept of management (Terry & Franklin, 1994; Anthony & Govindarajan, 2007).

1 Statement of problem

The growing pressure on market development leads managers to the improvement of the analysis, planning, and controlling, the innovation of the organisational structure and information systems (Kilger, Pampel, and Vikas, 2012). Controlling is becoming essential for improving the performances of enterprise and maintaining a competitive advantage because it supports top management in strategic and operative decision-making.

The managerial controlling system of the company in question should be flexible and dynamic, adaptive and developing according to the needs of innovation, but it should be sufficiently stable at the same time (Davila, 2005). Authors Cardinal, et al. (2004) and Wijewardena et al., (2004) confirm that controlling has crucial importance for fulfilling the organisation's objectives.

According to author Singl (2009), there are five basic policies for fulfilling an effective controlling system; these are the performance standard set-up, actual performance measurement, current performance to standard comparison, deviation analyses, and deviation removal proposal. Authors Simons (2000), Janakiran & Rao (2010), Govindarajan & Natarajan (2012), and Chaturverdi (2013) add that performance evaluation is important with controlling. If necessary, apply corrective measures so that the fulfilment takes place according to the company's plans. Defining the standards for measuring a certain performance is immensely important for controlling. The standards are then related to all business functions including production, sales, finances, and research (Bragg, 2004). The corporate tools are then especially focused on quantitative business modifications of corporate activities, continuous analyses of corporate results at the operating and financial level, the use of scatter analysis as the main approach to assess business results, etc. (Gaonkar, 2007).

2 Methods

Controlling should be a tool for the companies that helps prepare an adequate environment for their decision mainly through obtaining quality information with high predictive capability. Application of controlling is then a certain consequence of the need for orientation during information control from their accounting information system that helps provide better coordination of corporate goals and plans and for the overall future orientation of the company.

The goal of the article has been to find out the reasons and the actual scope of controlling application in the firms acting in the Czech Republic. In order to fulfil the goal in question, information from secondary and primary sources has been utilised. The secondary information has been mainly drawn from expert literature and from foreign studies by many researchers. In order to determine the rate of application of controlling in the companies in the Czech Republic, primary data collection via electronic querying has been used.

From April to June 2016, financial managers of 188 companies acting in all regions of the Czech Republic were addressed. During data evaluation, the firms were classified according to size [number of employees] and the economic sector structure.

Within the countrywide research among firms, information has been ascertained concerning the possibilities of controlling application, the reasons for executing controlling activities, and their specific tasks and functions in the corporate environment. The obtained answers of the respondents have been classified based on analytic sorting that allowed for examining the mutual relationships and dependencies among the ascertained information via determining relative frequencies, correlations, and hypothesis tests. For data analysis, two programs have been used – the Microsoft Excel spreadsheet and the statistical data analysis program IBM SPSS STATISTICS 23.

For the ascertaining of controlling application in the corporate environment, it is presumed that the fact in question will be affected by the company's size and its economic focus. Based on this presumption, these hypotheses have been expressed:

H1: It is presumed that the execution of controlling activities does not depend on the number of employees in the firm in question and on the economic classification of companies into sectors.

H2: It is presumed that the reasons for the possible execution of controlling do not differ from the standpoint of the companies' size and their economic classification.

H3: It is presumed that there is a statistically significant difference in the number of performed controlling activities in the companies according to their size and economic focus.

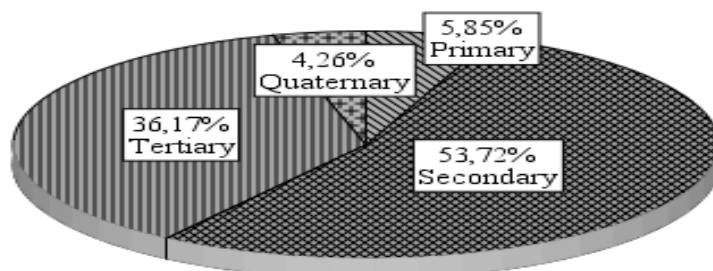
The presumptions in question have been confirmed based on the use of the chi-squared test of independence for the nominal values and the non-parametric Kruskal-Wallis test has been used for the ordinal values. If the p-value (Asymp. Sig.) is higher than the chosen significance level $\alpha = 5\%$, then the hypothesis will be accepted.

Furthermore, the goal was to find out whether there is some relationship between the reasons for applying corporate controlling via the correlation analysis. The correlation coefficients have been calculated in the SPSS Statistics program using the Spearman's coefficient. The rate of correlation will range in the interval from -1 to +1; the closer the value to one or -1, the stronger the relationship between the variables.

3 Problem solving

The sector structure of the addressed firms, shown in Figure 1, basically corresponds to the composition of the companies acting in the Czech Republic (CSU, 2014). The segmentation of the addressed firms according to the number of employees has been based on the methodology of the European Union, according to which 7% of the addressed firms employ fewer than 50 employees, three quarters 51-250, and more nearly 19% (Ordinance of the European Commission, 2008).

Fig. 1: Sector structure of the addressed firms



Source: Author

Nearly three quarters (136) of the addressed firms apply the controlling system: nearly all companies with more than 251 employees, almost a third of medium enterprises, and nearly a half of small enterprises [see Tab. 1]. More than a third of the addressed firms in the primary sector, nearly three quarters in the secondary, more than a half in the tertiary, and 63% of organisations in the quaternary sector use controlling. Using the chi-squared test of independence, it has been ascertained whether the application of controlling in the companies depends on the number of employees and the sector focus of the company. At the significance level of 5%, it has been found that the execution of controlling activities in the firms based on the number of employees ($p = 0.010$) and according to economic sectors ($p = 0.026$) differs statistically.

Tab. 1: Execution of controlling in companies

| | | Number of employees | | | Total |
|---|-----|---------------------|--------|----------|-------|
| | | Up to 50 | 51-250 | Over 250 | |
| Do you execute controlling in your company? | yes | 6 | 99 | 31 | 136 |
| | no | 7 | 41 | 4 | 52 |
| Total | | 13 | 140 | 35 | 188 |

Source: Author

Of the firms in which controlling activities are implemented, 32 have their own department the workload of which is the implementation of the controlling system. In 104 firms, they have created a position of a separate controller. Of that in all small companies, in 84% of medium size companies, and nearly a half of companies with more than 251 employees. On average, three employees work in separate departments, 2.3 employees in medium size organisations, and 4.5 in large organisations. Half of the companies acting mostly in the primary sector, a quarter in the secondary, and a fifth in the tertiary have a controlling department, while organisations in the quaternary sector only utilise a separate position of a controller.

3.1 Reasons for Introducing Corporate Controlling

Organisations (regardless to the size and sector in which they mostly operate) that apply controlling do so mostly in order to secure their goals and to satisfy the requirements of owners and investors. Nearly all the largest companies (94%), four fifths of the medium sized companies, and two thirds of the small ones also apply controlling with regard to the market situation and competition. Other organisations consider these factors rather unimportant.

The utilisation of controlling for securing a functional information system is considered significant by all small and the largest companies and 80% of the medium sized companies. The market situation is considered a less important factor of implementing the controlling system except for the companies in the primary sector (80%). Controlling is most connected with the flexibility of the information system by the organisations in the secondary sector (90%), in the tertiary – 85%. The reasons that lead the companies to the utilisation of the controlling system are summarily shown in Table 2.

Tab. 2: Factors affecting the application of the controlling system in %

| Factors | Significance | | |
|--|----------------------|------------------|--------------------|
| | Definitely important | Rather important | Rather unimportant |
| Securing the firm's objectives | 73 | 25 | 2 |
| Market situation | 38 | 47 | 15 |
| Owners' requirements | 59 | 35 | 6 |
| Competition | 33 | 46 | 21 |
| Necessity of a flexible informs system | 45 | 40 | 10 |

Source: Author

Furthermore, the statistical dependency of the reasons of controlling implementation on the number of employees in the company or their economic focus. At the significance level of 5%, a statistically significant dependency has not been found with the factors “company goals” and “owners’ requirements” due to the number of employees in specific firms. Unlike with the reasons of the “market situation, the need for a flexible information

system, and company's competition", where statistical significance has been found, which presumes that the effect of these factors on the application of controlling will differ with the enterprises according to their size [see Tab. 3].

Tab. 3: Statistical significance of the reasons for executing controlling activity due to the number of employees

| | Test Statistics ^{a,b} | | | | |
|-------------|--------------------------------|------------------|----------------------|-----------------------|--|
| | Company goals | Market situation | Owners' requirements | Company's competition | Need for a flexible information system |
| Chi-Square | 0.382 | 6.451 | 1.143 | 12.569 | 6.467 |
| df | 2 | 2 | 2 | 2 | 2 |
| Asymp. Sig. | 0.826 | 0.040 | 0.565 | 0.002 | 0.039 |

a. Kruskal Wallis Test

b. Grouping Variable: Number of employees

Source: Author

When examining the statistical dependency of the reasons for executing controlling from the standpoint of implementation of the economic activity of the enterprises, the presumption that the reasons for every sector do not differ statistically at the significance level of 5% has been confirmed [see Tab. 4]. This means that the economic classification of enterprises into individual sectors will not have an effect on the reason for executing controlling activity.

Tab. 4: Statistical significance of the reasons for executing controlling activity due to the sector classification of companies

| | Test Statistics ^{a,b} | | | | |
|-------------|--------------------------------|------------------|----------------------|-----------------------|--|
| | Company goals | Market situation | Owners' requirements | Company's competition | Need for a flexible information system |
| Chi-Square | 2.286 | 1.212 | 4.798 | 2.262 | 1.702 |
| df | 3 | 3 | 3 | 3 | 3 |
| Asymp. Sig. | .515 | 0.750 | 0.187 | 0.520 | 0.636 |

a. Kruskal Wallis Test

b. Grouping Variable: Economic sector

Source: Author

However, nearly 30% of the addressed companies that do not apply controlling expect its implementation in the future: three fifths within one year, a quarter within two years, others later. The reasons for which the introduction of controlling is needed consist mainly in their management being motivated for its introduction especially in order to secure the corporate goals and by competition pressures.

Furthermore, it has been examined using the correlation coefficient whether there is a statistically significant relationship between the reasons for executing controlling activity. The value of the correlation coefficient is the highest between the reason "securing enterprise goals" for executing controlling and the company owners' requirement and competition. These values are already relatively high and statistically significantly differ from zero at the significance level of 1% [see Tab. 5]. Here the tendency that for the companies that state securing the enterprise goals as the reason for implementing controlling activity, implementation of controlling is important for the reason of competition and investors' or owners' requirements, shows from the factual standpoint. On the contrary, the correlation relationship between the reason "owners' or investors' requirements" and the company's competition and the need for having a flexible information system for reason of controlling implementation in the company is low. This means that for the companies that stated the company's competition as an important reason for controlling implementation, a flexible information system will no longer be such an important reason.

Tab. 5: Correlation relationships between the reasons for executing controlling activity

| | | | Securing the enterprise goals | Inevitability resulting from the market situation | Owners' or investors' requirements | Company's competition | Need for a flexible information system |
|--|---|-------------------------|-------------------------------|---|------------------------------------|-----------------------|--|
| Spearman's rho | Securing the enterprise goals | Correlation Coefficient | 1,000 | 0,248** | 0,016 | -,005 | 0,158 |
| | | Sig. (2-tailed) | . | 0,004 | 0,857 | 0,950 | 0,066 |
| | | N | 136 | 136 | 136 | 136 | 136 |
| | Inevitability resulting from the market situation | Correlation Coefficient | 0,248** | 1,000 | 0,054 | 0,439** | 0,193* |
| | | Sig. (2-tailed) | 0,004 | . | 0,536 | 0,000 | 0,024 |
| | | N | 136 | 136 | 136 | 136 | 136 |
| | Owners' or investors' requirements | Correlation Coefficient | 0,016 | 0,054 | 1,000 | 0,182* | 0,233** |
| | | Sig. (2-tailed) | 0,857 | 0,536 | . | 0,034 | 0,006 |
| | | N | 136 | 136 | 136 | 136 | 136 |
| | Company's competition | Correlation Coefficient | -,005 | 0,439** | 0,182* | 1,000 | 0,241** |
| | | Sig. (2-tailed) | 0,950 | 0,000 | 0,034 | . | 0,005 |
| | | N | 136 | 136 | 136 | 136 | 136 |
| Need for a flexible information system | Correlation Coefficient | 0,158 | 0,193* | 0,233** | 0,241** | 1,000 | |
| | Sig. (2-tailed) | 0,066 | 0,024 | 0,006 | 0,005 | . | |
| | N | 136 | 136 | 136 | 136 | 136 | |

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Source: Author

3.2 Controlling Utilisation in Enterprise Activities

A quarter of the organisations applying controlling utilise it especially when processing reports for the management's and owners' needs as a support of planning and determining their goals and for continuous obtaining and processing of information for supporting decision making. A fifth utilise it as a reinforcement of control with an emphasis on the deviation analysis. A mere 5% of companies apply controlling in the selection and preparation of the control employees. A summary overview of the relative frequency of the controlling tasks with regard to the organisation type is stated in Table 6.

Tab. 6: Relative frequency of controlling utilisation in corporate activities in %

| Segment | Relative frequency of corporate activities within controlling | | | | | |
|-------------------|---|---|--|---|--|------------------|
| | Support of enterprise goal determination planning | Continuous obtaining and processing of information for the support of decision making | Control support with an emphasis on deviation analysis | Information processing into the reports for the management and the owners | Participation in the selection and preparation of managing employees | Other activities |
| Up to 50 | 33 | 17 | 11 | 28 | 11 | 0 |
| 51–250 | 24 | 24 | 21 | 26 | 5 | 0 |
| 251 and more | 23 | 26 | 22 | 25 | 2 | 2 |
| Primary sector | 30 | 20 | 10 | 40 | 0 | 0 |
| Secondary sector | 25 | 23 | 21 | 25 | 6 | 0 |
| Tertiary sector | 24 | 26 | 21 | 26 | 3 | 1 |
| Quaternary sector | 30 | 20 | 10 | 40 | 0 | 0 |

Source: Author

When companies already execute controlling, then mostly it involves several corporate activities at once; most frequently, the firms implement three to four controlling tasks. Concerning the number of executed controlling activities at the same time in the firms in

question, statistical significance between the frequency of controlling utilisation from the standpoint of the number of employees ($p = 0.010$) or from the standpoint of economic activities ($p = 0.036$) has not been proved at the 5% level. Based on this fact, we presume that the number of executed controlling activities in the corporate functions (their scope) will not depend on the firm's size and its economic focus [see Tab. 7].

Tab. 7: Statistical significance of controlling utilisation in corporate activities due to the number of employees and economic classification of the companies

| Test Statistics ^a | | |
|------------------------------|---------------------|-----------------|
| | Number of employees | Economic sector |
| Chi-Square | 9.199 | 8.566 |
| df | 2 | 3 |
| Asymp. Sig. | 0,010 | 0,036 |

a. Kruskal Wallis Test

Source: Author

4 Discussion

The addressed firms in the CR utilise controlling to a significant extent (136 respondents from 188). Based on the statistical examination, hypothesis 1 has been rejected, and so therefore it is presumed that the implementation of controlling activities will be affected by the number of employees in the company and its sector classification. The significance of controlling always grows with the size of the company (Becker, et al., 2011) but the research confirms the significance of the application of controlling instruments even in small and medium enterprises (Davila, et al, 2005; Sandino, 2007; Kral, Duspiva, 2015; Songini, et al., 2015; Berek, 2015).

The companies that utilise controlling see the main benefits in the improvement of their economic situations. According to the study by author Lisi (2015), controlling may positively affect the economic significance. Even the studies by authors Henri & Journeault (2010), Urban & Govender (2012), Crutzen et al. (2013), and Maas & Reniers (2014) show the high degree of controlling application in planning processes that may be dependent on the corresponding sector, organisational factors applied by the firm's management, but also the securing of sustainable development.

Controlling is performed in the firms mostly via a separate controlling department. The second hypothesis was proven only partially. In terms of economic focus the hypothesis was fully proven, differences were not proven. In terms of company size differences were not proven in these factors: Company targets and Owners' requirements, however they were proven in factors of Market things, Company competition and Need of flexible operational system. If the controlling activities are applied, then it is mainly for the purpose of securing the corporate goals and the owners' or investors' requirements. Therefore, it is possible to state that between these two reasons for introducing controlling and the number of employees, there is no statistically significant difference; unlike with further reasons that depend on the size of the individual firms. The sector articulation has no statistical effect on controlling introduction.

A significant correlation dependency of the controlling activity implementation on the market situation and competition can be seen. This means that when the firms state the market situation as a significant factor, then there is a higher probability that they will

consider competition an important factor. The implementation of controlling for reasons of the “need for a flexible information system” is significant in comparison with the aforementioned factors, even though the correlation between them is low.

Firms applying controlling utilise it mainly when processing reports for the needs of the management and the owners, as a support of planning and determining their goals, and for continuous obtaining and processing of information for the support of decision making. Also, the frequency of the performed controlling activities from the standpoint of the effect of the number of employees and classification into economic sectors has been examined. Here, the presumption of the effect of nominal values on the controlling activities has not been confirmed when using a non-parametric test. Thus hypothesis 3 can be rejected.

According to the expert literary research of authors Lue & Radlach (2015), utilisation of the so-called cybernetic control is popular, which especially presumes the utilisation of reports, accounting, and auditing. Nevertheless, the expert research studies warn that the application of only these tools is not enough when applying the control management (Ball, & Milne, 2005).

Conclusion

The demands of the owners towards the managers have been increasing very rapidly, practically in every sector. The implementation of controlling on the part of top management of the company plays a key role in the organisation control (Davila, et al. 2009). The basic function of controlling is to increase the managers’ comfort during decision making. From the foreign literature but also from our research that has taken place in the Czech Republic it is apparent that the companies have already been realising this fact. However, it depends on the type of the company in which controlling is operating from the standpoint of the number of employees and their economic focus. The research shows that controlling activities are beginning to be applied more even in medium and small firms, even though it rather fulfils a supporting function. It participates in the control especially in the passive manner by providing information for managerial decisions. In large companies, where finances play a stronger role, controlling also participates in the control in a more active manner, and it can even be used to make decisions, besides the supporting function.

The managerial information has another structure than the data that can be read from the accounting, and it is adapted specifically for decision making. This is especially the information of non-monetary nature that the accounting does not provide. The controller must know the company strategy in detail and provide such information that shows how well or poorly the company is doing on the path to fulfilling its strategic goals. Other information either distracts the managers or is not utilised at all. The controlling must be the management’s partner, save its time, decrease the surprise element, and increase the comfort of decision making.

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