

Strategic Performance Measurement and Compensation Systems in the Czech Republic (Empirical Study)[#]

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Preface

The importance of strategic planning and management for long-term survival and development has become the integral axiom of company's management research during the past 30 years. The evolution of management goes hand in hand with the evolution of concepts and tools of management information support, including performance measurement area. Corresponding to progress in performance management and measurement systems mission and functions, the border between management and its information support is rather help for authors specifying their home ground than real delimitation of two corresponding but at the same time autonomous fields.

Also the role of those who are engaged in management information support changed – they come closer to management consultants rather than just solving methods and procedures of data processing and reporting. They employ their experiences not just from the field of

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information support, but they need the knowledge of management areas that have not been relevant for them before.

According to our opinion just the systematic integration of both performance management and measurement tools enables companies to gain an advantage and survive in a severe competitive market environment. Therefore, the research goes beyond the field of management accounting and controlling, although the research pays extra attention to these two fields.

The incentive to conduct the research is twofold. Firstly, the level of knowledge and understanding to the state and development of performance measurement systems in companies in the Czech Republic is not of a high quality and degree. The companies do not have a long tradition in being managed within the market environment. At the same time, they operate in the environment extremely opened to developed foreign countries and their economies. It is not only the flow of foreign capital investments that is typical for the Czech economy; the management culture, habits and attitude is imported together with such investments, too.

Second incentive is the research initiative performed by Central and Eastern Europe Performance Panel (CEEPP). The mission of the initiative is to coordinate the research in countries which joined the European Union in May 2004 via the net of business schools or universities; one from each country. The aim and the research methodology of the research project was designed in cooperation with the members of CEEPP. However, the methodology was elaborated more by our side in order to analyze the results thoroughly and in full details.

This paper follows up the paper “Management accounting for strategic control in the Czech republic: tradition or challenge”, conducted by members of Department of management accounting at University of Economics in Prague and presented at the 30th Annual Congress of the European Accounting Association in Lisbon, Portugal, in 2007 (see Král et al. 2007).

Literature review

From the general point of view, the performance represents the ability to achieve the aim stated by a subject. In the business area, the

performance reflects the ability of a company, business unit, a manager or the staff to achieve a goal (or goals) given by the principal (the owner, the governing body or the supervisor). The performance measurement can be defined as the process of quantifying the efficiency and effectiveness of an action, and consequently the performance measurement system can be defined as the set of metrics used to quantify both the efficiency and effectiveness of actions (Neely, 1995).

There are many reasons for measuring performance in organizations. In respect to Marr (2006), they can be summarized into three main categories – reporting and compliance, controlling people's behaviour, strategic decision-making and organizational learning. Atkinson et al. (1997), which show principal strategies developed by companies to use performance measurement systems for managing. They imply following roles of PMS – the coordinating role that directs and focuses decision maker's attention on the company's primary and secondary objectives, the monitoring role that measures and reports performance in meeting stakeholders requirements, and the diagnostic role that supports an understanding of how process performance affects organizational learning and performance.

Epstein and Manzoni (1997) review three key points emphasized in recent PMS literature:

- a) Companies should establish performance measurement systems that support their strategies.
- b) Performance measurement systems should contain many non-financial indicators to complement financial ones, particularly with respect to customer perceptions and performance of internal processes.
- c) The company's overall performance measurement system should be broken down into sets of local measurements for lower-level units to translate (cascade) the firm's objectives into more manageable subsets.

Following these principles, PMS can be examined at three different levels – individual performance measures, the set of performance measures (PMS as an entity), the relationship between the PMS and the environment within which it operates (Neely 1995). A fundamental question to ask when designing a performance measure is: In what way is this measure going to help us improve the performance? Or alternatively,

what is the purpose of this measure? (Neely et al., 2003). The focus of company's PMS is the performance of the processes relating to achieving the secondary objectives (e.g. employee satisfaction), which members (employees) must manage to achieve the primary objectives (e.g. increased profitability) (Atkinson et al., 1997).

Research design

The aims of this research were to prove the level of PMS and their relationship to strategy development in practices of companies operating in the Czech Republic. This aim was transformed into following questions:

1. What are organizational reasons for using performance management and measurement systems?

In this part, the role of PMS for strategy decision and planning, operational planning, communication within organization and controlling is explored. Corresponding to progress in functions of performance management and measurement systems, we assume that only systematic integration of these performance management and measurement tools bears the company the power needed to survive in competitive market environment.

2. Is there an evident linkage among strategic goals and used tools of PMS?

There is plentiful evidence of the gap between organizational strategic goals and tools of PMS in the literature (e.g. Kaplan – Norton, 2004). This interruption can be a cause of formal and inefficient functioning of PMS in organization. We assume that organizational strategic goals are implied – in final consequence – by pursuit of stakeholders' satisfaction.

3. What perspectives are measured in PMS?

There is a huge range of measures for measuring organizational performance in component perspectives developed by particular companies, consultancy firms and academics. We focus on measures used in following perspectives – financial, customer, processes, employees and innovation.

4. Is the employees' compensation based on achieved performance?

The increasing importance of human capital causes the need for more intensive motivation of managers and employees supporting their initiative, enterprise and loyalty within the organization. The intensity of performance-based compensation for managerial as well as non-managerial positions can demonstrate this aspiration.

Methodology

Methods

The research outcomes from empirical survey cover large companies seated in the Czech Republic. Standardized questionnaire was selected as the framework for data collection. The structure of the questionnaire and formulation of individual questions was coordinated in conjunction with all members of CEEPP.

The questionnaire involved the four sections:

1. Basic data about the company
2. Market environment
3. Dimensions of performance
4. Elements of performance management system.

The purpose of questions in the first section was to identify the company and to structure the sample in terms of industry the company operates in, its ownership structure, business structure etc.

The second section focused on current business condition within the business environment (2005) and its development compared to the situation 3 years ago (2002) in terms of competition and market position of the company.

The third section examined the dimensions of performance, especially the goals of a company and its market position; both compared as today and 3 years ago.

The fourth, most extensive and comprehensive part, examined elements of the performance measurement system;

- tools and methods used to measure the performance of a company and their IS/IT support,
- the way (the conception) the performance management system is designed,
- centralization or decentralization of the performance management system,
- specialization (the width of scope) of the performance management system and employees engaged in its operation,
- the level of integration of the performance management system and
- the range in which top management uses performance indicators.

The questionnaire combined closed, semi-closed and scale questions – subjective judgments of a respondent about frequency, intensity, etc.

Sample definition

Top 150 non-financial companies according to turnover operating in the Czech Republic were addressed as the potential participants of the research project. Total turnover in fiscal year which ended in 2005 was used as the criterion to include the company in the group of targeted respondents.

Data collection

The survey was conducted in two consecutive phases. Firstly, all the selected participants were contacted via phone. They were offered his/her company to participate in the research project. If he/she agreed, the questionnaire was sent to the company via e-mail.

Secondly, the questionnaire had to be filled out by CFO or director of controlling department individually. If needed, second call was made with the person responsible for answering the questionnaire properly. 95 (from 150 contacted subjects, i.e. 65 percent) promised to cooperate in the research project. 44 companies really did and sent the completed questionnaire. Thus, the response rate is 29 percent of companies selected or 46 percent of companies contacted successfully. We think that such a high response rate is due to the fact we pre-negotiated the involvement of the company in the research project and communicated with the respondent continuously.

Collected data were transferred to MS Excel file, which was used as the primary data source for next data processing in SPSS application.

The data collection was undertaken in May, June and July 2006. Both telephone and electronic communication were combined.

Sample structure

The sample TOP 150 was supported by the possibility of the comparison with other countries (in CEEPP project). These companies are also supposed to have implemented a more developed performance management system. On the other hand, the sample selection requires considering following special features:

- A lot of companies operate in oligopoly market environment or they have dominating position on the market (telecommunications, airport, exhaust industries, energy companies). They have better conditions and possibilities for strategic development than “current” companies due the limited market capacities in the Czech Republic. (See Fig. 1)
- The companies have a long history, they have been operating for many years in central planned economy and they have a different experience of the development during last 16 years (market economy).
- Some of these companies are still owned by government and political interests have an influence on their development; and they are often still looking for PMS concept;
- Some companies belong to multinational corporations that determine their development and implement the PMS applied in the whole holding corporation;
- Companies owned by Czech investors and its major shareholders have long term interests in strategic development and PMS;
- Companies with frequent changes of shareholders and also frequent changes of PMS.
- Shareholders structure of sample is shown in the Fig. 2.
- 95 percent of companies are in the stage of growth (42 percent) or maturity (53 percent), with respect to the sample, start-up companies and companies in stage of formation are not almost filled in. Many companies operate in high profitable branches (IT, telecommunication, and energy).

- 70 percent of companies increased their profit compared to the last year (among others) due to boom in the Czech Republic.

Fig. 1: Sample structure according to market environment

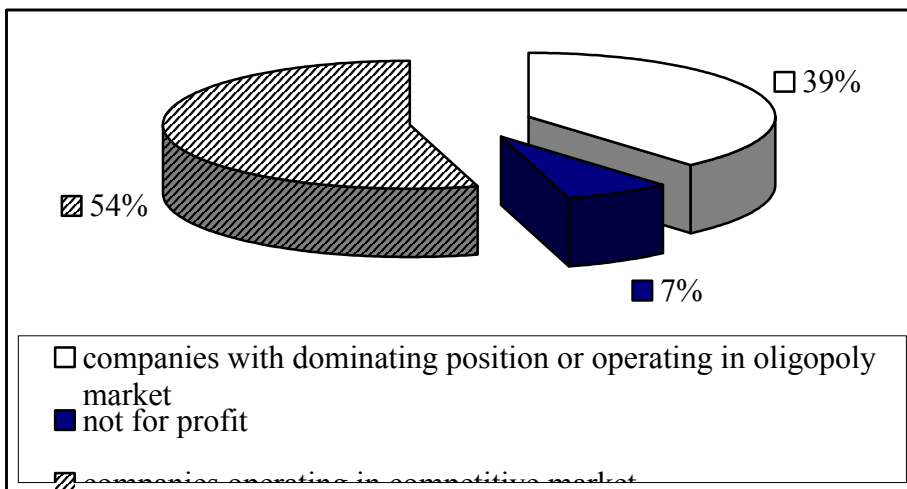
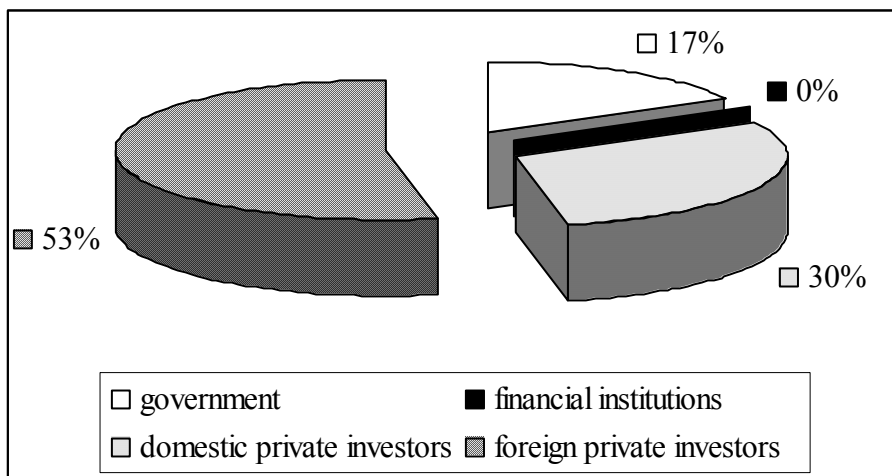


Fig. 2: Sample structure according to shareholders structure



Empirical results

Research question 1: What are organizational reasons for implementation performance management and measurement systems?

According to most of experts' opinion, PMS should support strategic and operational planning and decision making, communication and motivation, reporting and control; and it should be a basis for management and employees compensation.

As shown in Table 1, addressed companies definitely prefer control (93 percent) as main reasons for having a performance measurement system, followed by operational planning and decision (65 percent), strategy planning and decision (64 percent). The least stated primary usages are for compensation (56 percent) and communication (48 percent).

Tab. 1: Reasons for adopting PMS

Reason	Percent of sample
Reporting (internal) and control	93
Operational decision and planning	65
Strategy decision and planning	64
Compensation and rewarding	56
Communication and motivation	48

Priority of reporting and control results from traditional role of PMS in the Czech Republic. According to our opinion, the lower emphasis on communication, motivation and compensation function of PMS could be the cause of the first poor integration of whole PMS among units of companies and with other systems and second formal adoption of PMS as a bureaucratic system. That is why two additional questions search into these aspects. As shown in Table 2, firms do not think of these implications as a problem.

Tab. 2: Implications of PMS role

Question	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
There is little action taken unless the decision fits with the standard operating procedure	0	3	16	7	18
Individuals in the organization frequently refer to it (PMS) as a “bureaucracy”	0	8	18	10	8
note: data shows absolute frequency distribution					

Research question 2: Is there an evident linkage among strategic goals and used tools of PMS?

To use strategic management tools successfully means to translate strategic goals of a company to various indicators defined within the performance management system. Examining whether the strategic goals declared by respondents correspond to the design of performance management system, i.e. performance indicators used by respondents, we conclude that:

- a) There is a correlation between the declared goal of “employees’ satisfaction” and the use of performance indicators focused on this area (see Table 3). On the other hand, there is no correlation proved between the goal of “employees’ satisfaction” and “employee fluctuation” indicators. The first correlation could be expected; the absence of relation between the goal of “employees’ satisfaction” and “employee fluctuation” indicators could indicate the trend quite common in developed economies – not to stay in one company and change the employers and working positions during the employee’s career.

- b) There is a correlation between the declared goal “customer satisfaction” and the use of performance indicators focused on quality of production (failure rate) and customer satisfaction (see Table 4). This correlation, however not strong, could be expected. We conclude that weak correlation indicates that other important factors contribute to the overall level of customer satisfaction simultaneously. Correlation between the goal “customer satisfaction” and indicators to measure innovations and on-time delivery was not proved. It seems that innovations and on-time delivery are the industry standard perceived as natural by customers. Hence, the companies have to create their competition advantage in another way.
- c) Correlation between the strategic goal “shareholder satisfaction” and the use of performance indicators focused on revenue, profit after taxes, return on investment, and economic value added was not proved, which is rather surprising (see Table 5). The reason could be (among others) that managers consider financial measures as the result of non financial indicators (“Satisfied customer means satisfied shareholder”).

Tab. 3: Correlation among goals and indicators in employees’ area

		strategic goal – employees’ satisfaction
the use of indicators focused on employees’ satisfaction	Pearson Correlation	0,222
	Sig. (2-tailed)	0,148
the use of indicators focused on employee fluctuation	Pearson Correlation	0,525**
	Sig. (2-tailed)	0
** Correlation is significant at the 0.01 level (2-tailed).		

Tab. 4: Correlation among goals and indicators in customers' area

		strategic goal – employees' satisfaction
the use of indicators focused on innovations	Pearson Correlation	0,246
	Sig. (2-tailed)	0,108
the use of indicators focused on on-time delivery	Pearson Correlation	0,122
	Sig. (2-tailed)	0,43
the use of indicators focused on product quality (failure rate)	Pearson Correlation	0,328*
	Sig. (2-tailed)	0,03
the use of indicators focused on customer satisfaction	Pearson Correlation	0,373**
	Sig. (2-tailed)	0,013
* Correlation is significant at the 0.05 level (2-tailed).		
** Correlation is significant at the 0.01 level (2-tailed).		

Tab. 5: Correlation among goals and indicators in shareholders' area

		strategic goal – employees' satisfaction
the use of indicators focused on revenue	Pearson Correlation	-0,089
	Sig. (2-tailed)	0,567
the use of indicators focused on profit after taxes	Pearson Correlation	0,171
	Sig. (2-tailed)	0,268
the use of indicators focused on ROI	Pearson Correlation	0,006
	Sig. (2-tailed)	0,969
the use of indicators focused on EVA	Pearson Correlation	0,169
	Sig. (2-tailed)	0,272

Research question 3: What perspectives are measured in PMS?

In this area, the research focused on three consecutive questions – PMS as an entity within organization, perspectives included in PMS, individual performance measures. The first stage determined whether companies use system of key performance indicators and if they embedded it in Balanced Scorecard concept. 70 percent of companies use the system of KPIs and from that, 63 percent applies BSC as framework for it.

The second stage concentrated on how relevant PMS for individual perspectives in organization is. Table 6 shows that financial perspective is more considerable in PMS, followed by customer, process and innovation perspective. We derived a hypothesis that this order does not show the absence of performance measures related to process and innovation perspective, but it indicates low integration of individual perspectives in organizational PMS. Because CFOs make out our questionnaire their answers concentrated on financial measures especially.

Tab. 6: Relevance of perspectives in PMS

Perspective	Relevance*
Financial	4,5
Customers	3,8
Internal processes	3,2
Innovations	2,7
* average values based on 5 range intensity scale (5-most, 1-the least)	

The third stage focused on individual measures used in PMS. Table 7 shows the intensity of usage of inquired criteria.

Results imply following comments:

- The intensity of used performance measures corresponds with the relevance of perspectives according to the relevance for PMS.
- Measures inclusive revenue, cost and profit are used more intensively than measures indicating return on capital invested or economic profit. The reasons could be following: first, some Czech companies operate as subsidiaries of global managed

multinational organizations. That is why, they are not responsible for funding and investment decisions and they target the profit (profit centres), perhaps even cost or revenues (cost/revenue centres). Second, top manager remuneration and evaluation are based on profit; amount on invested capital is from short-term view fixed.

- As far as organizations use measures of effectiveness these measures are based on return on capital rather than on economic profit. Absence of long-term stabilized capital market resulting in difficulties with cost of capital assessment could be reasons for it.

Tab. 7: Intensity of usage of individual performance measures

Measure	Intensity*
Customer satisfaction	4,5
Revenue	4,3
Profit after tax	4,3
Cost efficiency	4,2
On-time delivery	3,9
Failure rate	3,9
Market share	3,6
Return on investment	3,5
Employees satisfaction	3,2
Innovations	3,0
Employees fluctuation	3,0
Economic value added	2,9
* average values based on 5 range intensity scale (5-most, 1-the least)	

Relation performance measures to perspective are described by matrix in Fig. 3.

Fig. 3: Relation of performance measures to perspectives

	Financial	Customers	Processes¹	Innovations
High (4-5)	Revenue Profit after tax Cost efficiency	Customer satisfaction		
Quite high (3-4)	ROI	Market share	On-time delivery Failure rate	
Quite low (2-3)			Employees' satisfaction Employees' fluctuation	Innovations
Low (1-2)	EVA			

Research question 4: Is the employees' compensation based on achieved performance?

The last part of research was oriented on incentive and compensation systems. They concern the relation of performance evaluation to the incentive system in general and further about the performance-based executive compensation, performance-based incentives for non-executives.

¹ Perspective Learning and growth was not a subject of inquiry separately. Measures relating to this perspective are included in perspective Internal processes

Tab. 8: Relation of performance evaluation to incentive and compensation systems

Question	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Incentive system is supported by PMS information.	4	9	23	5	3
Performance management systems provides significantly amount of performance-based executive compensation.	12	17	12	2	1
Performance management systems provides significantly amount of performance-based incentives for non-executives	7	12	12	12	1
note: data shows absolute frequency distribution					

The research confirms the poor integration PMS and incentive system and remuneration system are processed independently on PMS. For employees in managerial positions higher performance-based compensation is evident according to results. However, the usage of performance-based incentives for non-managerial is at surprisingly high level.

Limitation of research

Despite of effort for careful preparing or research, setup of instruction and consistent data collection and processing following limitations of research are detected:

- size and structure of research sample – first the research sample is relatively small for relevant generalization; second all collected data were used in spite of the imbalance of its structure;
- verification of data – due to time and capacity limitations, data were not verified by second interview with other independent respondents within organizations;
- formalized structure of questionnaire based predominantly on closed and scale questions effort no opportunity to detect all soft factors affecting PMS design and role in organization, such as variations in management culture and procedures caused by change in owners' structure, management replacement, etc.

Conclusion

This paper examines the motivation for usage of performance measurement systems and the linkage between formulation of strategic performance goals, design of performance measurement system and employees' compensation system in large Czech companies. TOP 150 non-financial companies operating in the Czech Republic were addressed. Based on formalized questionnaire, data from 44 companies are processed. We specify four main areas of research. First, we focus on reasons for usage performance management and measurement systems in organizations. We find out that companies adopt PMS namely for controlling and internal reporting, followed by operational planning and decision and strategy planning and decision. Especially the relevance for communication within organization is minor. Nevertheless, firms do not consider it as imminent danger of bureaucratic and formalistic character of PMS.

The second question should answer whether there is an evident linkage among strategic goals and used tools of PMS. This hypothesis is proved partially. However, there is not evident linkage among declared aim of shareholder satisfaction and performance measures like ROI, EVA, profit that should be relevant for this aim. Because many companies in the Czech Republic operate as subsidiaries of multinational firms, lower level of their responsibility aimed at cost efficiency or turnover maximization could be the explanation for these findings.

The third section searches for structure and integrity of performance measurement systems. In line with our expectations, performance

measurement systems stress on financial and customer perspective primarily. Measures concerning other perspectives are monitored in other segment of information system that is, however, not fully integrated.

In the last area, we concentrate on linkage between performance evaluation and compensation. Consistent with our expectations, performance-based compensation is more frequented for executives rather than non-executives. However, the usage of performance-based incentives for non-executives is at a surprisingly high level.

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ABSTRACT

Despite of the increasing relevance of strategic performance measurement and management control and many research projects relating to these issues there is yet little evidence about the state-of-the-art in Czech companies. Following initiative of the Central and Eastern European Performance Panel – the association supporting performance research in “new” EU countries – empirical research was developed concerning evolution of company’s performance management systems in context of market environment and internal management culture in large companies in the Czech Republic. One of the main research questions was if there is a linkage between formulation of strategic performance goals, design of performance measurement system and managers and staff compensation system. The survey shows that the inconsistency between in-fashion formulation of performance goals and traditional design of PMS is evident. Particularly on top and middle management levels, the compensation programs are used broadly, however, the role of financial measures as compensation base is confirmed. This paper analyzes differences in the accordance to industry line, the scale of diversification and the ownership structure. The research findings are based on questionnaire survey completed in collaboration with financial managers or chief controllers in 44 from among 150 biggest companies in the Czech Republic.

Key words: Business Strategy; Employees’ Compensation; Performance Measurement Systems.

JEL classification: M41.