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## Selected Components affecting Quality of Performance Management Systems

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### Abstract

The paper addresses two basic components of successful performance measurement and management, namely the identification of an appropriate set of performance measures and factors that created quality of the performance management system. Based on the literature review, the results of previous research studies and case study analysis, the importance of financial and non-financial measures for decision-making is identified. Furthermore, the current trends in financial performance measurement and the specific areas of performance measurement using non-financial indicators are examined. The essence of successful performance management is seen in identification of key factors that affecting the quality of the performance management system. Therefore, the attention is paid to this issue.

*Keywords:* Performance measurement, Performance management system, Factors, Financial measures, Non-financial measures

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### 1. Introduction

The development of the economic environment and the related development of diverse approaches to corporate performance management are further reflected in the development of all components of performance measurement systems, primarily in defining performance measures and in determining methods of their measurement (Wagner, 2011). This development is mainly affected by: the technical-economic type of economy, globalization trends, development of modern technologies, the influence of intellectual assets, the degree of knowledge of economic systems, etc. (Dluhosova, 2007)

In the last decade, the pressure on the use of both financial and non-financial measures for corporate performance monitoring has increased continuously. The primary reason is that traditional financial measures are no longer sufficient for understanding performance in a dynamic business environment because they promote short-termism

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leading to a lack of strategic focus and failure to provide data on quality (Kagioglou et al., 2001, Robinson et al., 2005, Wagner, 2011).

In response to this fact a wide variety of performance measurement systems have been developed and implemented – e.g. Performance Measurement Matrix (PMM) (Keegan et al., 1989), the results and determinants framework (Fitzgerald et al., 1991), Balanced Scorecard (Kaplan and Norton, 1992), the SMART pyramid (Lynch and Cross, 1995, Tangen, 2007), Brown's (1996) macro process model of the organisation, Performance Prism (Neely et al., 1995, 2001), Kanji Business Excellence Performance Management Systems (Kanji, 2002). All of the mentioned PMSs are designed to help an organisation – in their specific way - to identify a set of performance measures which appropriately reflect its strategic objectives. The knowledge of Czech enterprises about PMSs is growing. The enterprises are realizing the important role of performance measurement and management. (Horcicka, Jelinkova, 2014)

Performance measurement systems become effective instruments of corporate performance management only if they are integrated suitably within a company's environment, if they facilitate the implementation of the company's strategy, are flexible – i.e. capable of responding to changes in the dynamic, quickly transforming business environment – and thus provide precise and up-to-date information. The management of the performance measurement systems aimed at keeping the dynamics and relevance of those systems is possible when these two key questions are understood and addressed (Kenerley and Neely, 2003):

1. What factors affect (facilitate and hinder) the ability of the performance measurement systems to transform in the course of time?
2. How can companies manage their performance measurement systems in order to continue to fulfill their purpose?

It was in this same context that the main goal of this submission was defined; i.e. to identify the key factors affecting the quality of the management of the performance and relevance of individual performance measures for decision-making and management. First, attention was paid to financial measures, namely to the use of the modern indicators of financial analysis in selected companies. With non-financial measures areas and methods of their measurement were observed, because as stated by Stivers et al. (1998), among others, despite a large number of academic studies regarding non-financial measures, only little is still known about the actual current practice.

## **2. Performance management system: performance measures and factors affecting the quality**

The success of performance measurement and management depends, above all, on the choice of correct performance measures and of an instrument to measure the degree of their fulfillment and on possible use in corporate management. (Dluhosova, 2007) Corporate performance can be assessed by means of several various indicators. However, the question remains which of these indicators are optimal for measuring long-term corporate performance? Most executives agree that there is no magic formula or one right measure for evaluating business performance. (Stivers et al., 1998)

In the recent years so-called traditional indicators of financial performance measurement have been abandoned. The current trend in financial management results from orientation on the management of corporate values and on transition from accounting, through economic to market measures. Of major importance is transition to value-based management (EVA, MVA), to the increasing information efficiency of capital markets and to the preference of corporate market value. The new concept is based modified financial indicators that enable better identification of processes that can improve the value for shareholders and overall corporate value over the long-term. This concept known as Shareholder Value is viewed as a measure of performance and simultaneously the highest corporate goal. (Dluhosova, 2007)

Resulting from the criticism of performance management only in terms of financial indicators, companies began to employ non-financial measures as well. The reason for the use of non-financial measures is that these measures are better indicators of future financial performance than traditional financial measures and that they are valuable in evaluating and motivating managerial performance (Kaplan, Norton, 1992, Hemmer, 1996). This statement is confirmed also by other scholars, e.g. Ittner et al. (1997, 1998) found that customer satisfaction measures are indicators of accounting metrics and measures such as market share data are frequently used to evaluate managerial performance. Banker et al. (2000) investigated that customer attitudes are good predictors of future financial performance.

With the increasing use of non-financial measures it is important to recognize that they are not free of limitations. Fisher (1992) presents an example: If a company monitors the percentage of shipments delivered on time, there may

be an incentive to sacrifice one late but important shipment to ensure the on-time delivery of many smaller shipments. Moreover, according to Chow and Van der Stede (2006) at least some non-financial performance measures may be difficult to measure accurately, efficiently, or in a timely fashion. They also stated that in a study of business executives by Wm. Schiemann & Associates, the executives widely acknowledged the limitation of traditional financial measures. Nevertheless, they still favoured them over non-financial measures because they saw them as being generally less ambiguous.

The survey of Stivers et al. (1998) conducted in U.S. Fortune 500 companies and in Canadian Post 300 companies examined the degree to which executives identify particular non-financial performance measures as important and whether the companies are measuring them. They revealed three drawbacks which can still be seen as a challenge for performance measurement. First, the measures of innovation and employee involvement were not perceived to be as important as customer service and market standing. Second, although the top managers believe that certain non-financial factors are highly important, a large number of companies are not capturing data on these measures. Third, a large number of companies are collecting data that are not being used by managers in the planning process.

The Gap between what are wanted to be measured and what can be measured is the main reason for performance measurement being still so challenging (Meyer, 2002). However, the identification of an appropriate set of measures against which to evaluate and manage performance is only one dimension of the performance management system. This is an important aspect of the PMS, but in essence the system should be seen as an alignment, improvement and learning tool. (Atkinson, 2012). Therefore it is necessary to focus on key factors that created quality of the performance management system.

These factors that facilitate yet may simultaneously hinder the development of corporate performance measurement systems are addressed in a study conducted by Kenerley and Neely (2003). The study involved seven case studies from companies with at least one year's experience with using performance measurement systems. Interviews led with executives resulted in the identification of main factors that are essential for the development of performance measurement systems in time:

- Process – the existence of a process, its settings, review, and introduction of actions
- People – availability of required knowledge and skills, their use, ability to respond to corporate and employees' requirements, fulfillment of requirements, and introduction of actions
- Systems - availability of flexible systems that will enable collection, analysis and reporting of required data
- Culture – the existence of a culture that will prevent negative perception of performance measurements.

The same four key success factors for the development and implementation of the performance management system (PMS): culture, systems, people and process are also identified by Atkinson (2012). Each group contains suggestions to develop or enhance the performance management system. To summarize, the key points are the top management that proactively promote the deployment of PMF, a culture focused on performance, improvement and learning and PMF that is regularly reviewed and updated in order to remain dynamic, flexible and credible.

Kozena and Jelinkova (2014) identified three the same factors: process, people, systems and complete the factors for manufacturing company: customers, communication, technology and innovation.

### 3. Methodology

To achieve the goal set, the method of case study analysis based on semi-structure interviews was chosen. The notion 'case study' can be expressed as the study of a single or several cases. With this method it is possible to capture complexity, details, relationships and processes taking place in a given micro-environment. Detailed examination of one case is assumed to contribute to the better understanding of other similar studies. This method investigates the characteristics of a case in concern or of a group of cases being compared. Unlike statistical examinations that collect a relatively limited amount of data from many individuals or cases, this method tries to secure a large amount of data from one or a limited number of individuals. Its aim is to capture the complex nature of a case under examination and to describe relationships. Individual case studies can differ, whereas the major differences are perceived in the chosen subject of investigation, in a plan, in selected methods and tools. Case studies may concentrate on the investigation of individual persons, small groups, social groups, organizations, institutions or relationships. (Kabinet of Information and Library Studies, 2014)

Interviews were conducted in twenty middle and large-size companies because such enterprises are expected to apply PMS due to their size. Another criterion of no less relevance was previous experience with performance

measurement and management. Simultaneously, researchers studied relevant in-company materials dealing with performance management issues. The interviews covered the following five areas:

1. Which indicators are more important for your decisions: financial or non-financial ones? Why?
2. In which specific areas and in what way do you measure corporate performance by means of non-financial (qualitative) indicators?
3. Which standard indicators of financial analysis are relevant for you?
4. Do you use any indicators of modern financial analysis?
5. Which are the most important factors affecting the quality of performance management in your company?

The analyzed cohort comprised twenty production companies. Six of them are active in the metal working industry and five in the processing industry (three of them specialize in plastics processing and two in the manufacturing of packaging). Three companies are active in the food processing industry. The six remaining companies are active in the technological industry, electrical engineering, the energy industry, the petrochemical industry, the tobacco industry and the textile industry, respectively.

Depending on the number of employee's criterion, companies can be divided into eleven middle-size companies (50 to 250 employees) and nine large ones (more than 250 employees). By analogy, according to their turnovers the companies under investigation can be divided into two groups of five companies with a turnover of CZK 30 to 100 million and into fifteen companies whose turnovers exceed CZK 100 million.

The analyzed cohort of twenty companies comprises fourteen parent companies and six daughters. The daughter companies are members of holdings of which three are based in the Czech Republic; one company is a member of a holding that was created by the merger of a German and an Austrian companies, one company is a member of a Swedish holding and one belongs to a group based in the USA.

Content analysis was used to process the data obtained.

#### **4. Findings and discussion**

Performance measures are fundamental components of all performance measurement systems. Therefore, the investigation focused on them from the very beginning. It is still a common practice in the Czech companies that managers base their decisions only on traditional financial measures. As it was said in the introduction of this article, such traditional measures are no longer sufficient for the understanding of performance in a dynamic economic environment. The researchers therefore investigated whether the managers of the selected companies still prefer financial indicators for decision making and for performance management. Eleven managers - i.e. more than a half – considered financial indicators to be more relevant. They justified this opinion by claiming that financial indicators help them achieve financial stability and that figures are the best means of presenting employees with the impact of their actions. Seven managers did not mention non-financial indicators at all, one manager stated that the 'company lacks the measurability of soft skills' and plans to introduce such indicators.

Seven managers consider financial and non-financial indicators to be of the same significance. These managers stated that financial results are determined by non-financial measures and that financial indicators only reflect figures yet cannot indicate the areas in which a company makes mistakes and what it should improve. It can be argued that these managers understand the meaning of on-financial measures in the modern system of performance management as it is described in the theoretical premises. In two cases managers even considered non-financial indicators more relevant. This was mainly due to focus on quality and also to the fact that the target value of financial measures is set by a holding and cannot be influenced – unlike non-financial measures – by a specific branch. Since these managers supported their opinions with concrete examples of non-financial measures they used for their decision making, it can be assumed that non-financial measures are fully integrated in the performance measurement systems applied in their respective companies.

The application of non-financial measures is closely connected even with the categories in which they are used by companies to monitor performance. One of the most frequently reported categories is quality in the context of customers' perspective (six respondents), specifically the measures that regard customer satisfaction, number of complaints, failure to supply goods to a customer and average times of delay expressed in days or in the number of contracts in progress. Three respondents reported the quality in production categories; e.g. the internal and external amount of spoilage, the influence of technologies used on production volumes or on machine use indicators. The companies with an integrated BSC model responded, in accord, that they monitor departures from evaluation standard. Their responses were not given in greater detail. Only three respondents mentioned the employee's category, namely the indicators of productivity, fluctuation, sickness rate in % and satisfaction. Four respondents did not provide any

response. The results of the Stivers et al. (1998) research indicate that customer service factors are perceived to be the most important measures. On the other hand, factors in the innovation and employee involvement categories were perceived to be less important in goal setting. This study came to the similar conclusions on the basis of the deeper analysis of provided non-financial measures.

These conclusions can be interconnected with the category that concerns the significance of the financial and non-financial measures presented above for decision making. As a result, it can be stated that the respondents who consider financial and non-financial measures to be of the same importance are also able to identify the areas in which they apply the non-financial measures to measure performance. On the other hand, the respondents who see the financial indicators as more relevant for decision making did not provide any answer to this question or gave answers that were very brief. Therefore, the results of both partial analyses correspond with each other.

If we concentrate on the financial indicators in detail, we can see that it is the ratio indicators that are perceived by companies to be the most significant of all traditional financial analysis indicators. This fact was reported by fourteen managers who most often base their analyses on profitability, liquidity and indebtedness indicators. Six managers also mentioned absolute indicator. Three respondents assigned the highest importance to differential indicators, primarily net working capital. The Altman Z-score is used only by one company. Two managers did not provide any answers to this question. The responses given imply, save for one exception, that the respective companies do not use summary performance indicators; i.e. bankruptcy prediction models, including e.g. Tamari model, creditworthiness index, Beermanov discriminatory function, Tafler bankruptcy model or overall corporate performance index. Their main advantage is the fast provision of a survey of the financial health or distress of an enterprise, and how stresses e.g. Kubenka (2013), solves the problem of conflicting evidence which exhibit different ratios indicators in the company. They can be considered as early warning systems.

The value indicators that are most frequently applied in practice are economic value added (EVA), market value added (MVA) and the CFROI indicator (cash flow return on investment). Only free of the investigated companies run financial analysis with the creation of value for the customer, using EVA. Fourteen respondents answered that they do not use any of the above stated indicators. A third of them do not even consider their introduction since the traditional financial indicators are sufficient for their decision making. One respondent reported the use of both dynamic and static models for the evaluation of the efficiency of and return on investments. The remaining two managers answered the same question in broad terms, reporting that Balanced Scorecard and Benchmarking methods are introduced in the companies they work for.

It is interesting to use this standpoint and to study the factors that affect the quality of the performance management in the companies under examination. Thirteen companies see people; i.e. their employees and management, as the most significant factor influencing the performance management system. Some companies specify this factor in greater detail, most often referring to the quality of employees' work which is perceived as a key indicator by four companies. Two companies in each category mentioned the professional competence of employees, their dedication and interest. In their answers the companies further indicated the will of the management, sufficient number of employees and communication between them. In this context the following relevant factor was indicated by the remaining companies: personnel changes and employee turnovers which only add to other corporate issues. The second most frequently stated factor given by six companies is the costs of the performance management system. In particular, companies mentioned the cost of employees and raw materials; i.e. a company's inputs. The days when company management relied on experience and intuition are gone. Today, management cannot work without information. Of crucial importance is a suitable information system that provides information required. Therefore, it is only logical that the third most relevant factor, as reported by seven companies, is the monitoring of processes, their measurement and securing an information flow across the company by means of information technologies. Data relevance and quality represent another factor that affects performance management processes. This factor was mentioned by three companies. The above-referenced factors are closely connected with control, its quality and frequency which were indicated by two companies. This factor affects mainly the outputs of the performance management system. Individual companies also reported the following factors: error correction, quality of processes, quality of systems and tools, and relevant indicators.

Compared to the conclusion presented in the studies by Kenerly and Neely (2003) and by Atkinson (2012), the respondents stated, in accord, that the people, processes and systems factors are considered to be significant and to have a substantial impact on the quality of their performance measurement systems. Unlike the studies referred to in the previous sentence, our respondents do not assign any relevance to the creation and securing of corporate culture that would support the measurement and management of corporate performance. However, the respondents listed

other factors which, in their opinion, influence the quality of their performance measurement systems such as cost, data relevance and quality, securing of error correction and of relevant tools and indicators.

## 5. Conclusion

The results of our investigation refer to the fact that financial measures still carry greater significance for companies, yet the huge differences of the past no longer exist in this area. The results of the Fibirova (2007) research still shows, that non-financial performance measures used only 35% of the surveyed companies. In contrast, absolute financial measures used 89% of companies surveyed and ratios financial measures of 60.2% of surveyed companies. A more recent study (Marr, 2004, Střiteská, 2012) show that non-financial indicators are becoming increasingly integrated into the performance measurement systems. The reason is that at present the sustainable value for shareholders is made up of non-financial factors such as customer loyalty, employee satisfaction, internal processes or innovations (Cumby and Conrod, 2001). However, the conducted analysis suggests that so far only 50% of managers appreciate the significance of non-financial indicator for decision making and performance management. These managers were able to give specific examples of non-financial measures and it can thus be assumed that the same non-financial indicators are fully integrated in the performance measurement systems used in the companies they work for.

Ratio indicators are viewed as the most relevant financial measures within measurement of financial performance. Summary indicators and value indicators remain practically unused in the course of performance management. The question which specific financial indicators are most appropriate for the evaluation of long-term corporate performance was addressed by Siska and Lizalova (2011). Their research tested selected indicators on three-year sets of accounting data published by more than 4 000 local companies that employ more than 20 people each. Using a cluster analysis, Siska and Lizalova identified the most suitable indicators of profitability and growth, specifically return on assets (ROA), asset growth and return on sales (ROS) (adjusted for the risk of year-to-year fluctuation) and sales growth.

The authors see the major problem in the specific areas in which non-financial measures are applied. The examined companies are oriented mainly on quality within the context of customer and production. However, they relate quality only to goods and services, not to the quality of processes and company management which may be the main reason for low-quality products or services. Performance measurement regarding employees or internal processes was rare in the investigated cohort. There was no mention of any measures related to innovations. Performance measures should provide “a balanced picture of the activities of a company and should be multi-dimensional” (Otley, 1999). Nevertheless, if performance measures are not available in certain categories, e.g. in the customers, employees or innovations categories, which was the case with the companies under examination, it cannot be claimed that performance measurement systems provide a comprehensive picture.

The most significant factor that affects the quality of performance management is the people; i.e. employees skills necessary to consistently review and modify PMS as well as senior management commitment. The other factors of relevance reported by the companies included monitoring of processes, their measurement and transmission of information by modern information technologies and costs.

To conclude, the respondents mentioned three factors (people, processes and systems) from four key factors that stated Kennerly and Neely (2003), Atkinson (2012). Unfortunately they absolutely omitted to mention the importance of corporate culture for performance management. Culture conducive to performance measurement, consistent communication, honest use of measures and learning from mistakes, are key assumptions for effective performance management.

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## References

- Atkinson, M. (2012), Developing and using a performance management framework: a case study. *Measuring business excellence*, vol. 16, no. 3, pp. 47-56. Q Emerald Group Publishing Limited, ISSN 1368-3047 j.

- Banker, R. D., G. Potter, and R. Srivivasan. (2000), An empirical investigation of an incentive plan that includes nonfinancial performance measures. *The Accounting Review* (January), pp. 65–92.
- Brown, M.G. (1996), *Keeping Score: Using the Right Metrics to Drive World-Class Performance*, Produktivity Press, New York, NY.
- Cumby, J., Conrod, J. (2000), Non-financial performance measures in the Canadian biotechnology industry. *Journal of Intellectual Capital*, vol. 2, no. 3, p. 261
- Dluhosova, D. (2007), Nové přístupy a metody k měření finanční výkonnosti podniku. URL [http://www.ekf.vsb.cz/export/sites/ekf/frpfi/cs/rocnik-/prispvky/dokumenty/S154\\_Dluhosova\\_Dana.pdf](http://www.ekf.vsb.cz/export/sites/ekf/frpfi/cs/rocnik-/prispvky/dokumenty/S154_Dluhosova_Dana.pdf)
- Fibirova, J. (2007), Konceptce a využití hodnotových kritérií řízení výkonnosti. Sborník konference Konceptce a praxe řízení výkonnosti. Praha: VŠE, Fakulta financí a účetnictví, Katedra manažerského účetnictví, pp. 21 – 41. ISBN 80-245-1222-8.
- Fisher, J. (1992), Use of Nonfinancial Performance Measures. *Journal of Cost Management*, Spring 1992, pp. 31-38.
- Fitzgerald, et al. (1991), *Performance Measurement in Service Businesses*, The Chartered Institute of Management Accountants, London.
- Hemmer, T. (1996), On the Design and Choice of Modern Management Accounting Measures. *Journal of Managerial Accounting Research*, pp. 87 – 116.
- Horcicka, A. and Jelinkova, L. (2014), Consideration of Cultural Differences in the Performance Management Systems in Czech Enterprises. *Journal Procedia Economics and Finance*, 2014, vol. 12, pp. 221 – 233. DOI: 10.1016/S2212-5671(14)00339-6.
- Hult, G. T. M., et al. (2008), An assesment of the measurement of performance in international business research. *Journal of International Business Studies*. Vol. 39, pp. 1064 – 1080. URL <https://global.broad.msu.edu/hult/publications/jibs08b.pdf>
- Chow, CH.V. and Van der Stede, W.A. (2006), The Use and Usefulness of Nonfinancial Performance Measures. *Management Accounting Quarterly*, vol. 7, no. 3, p. 8.
- Ittner, C. D., D. F. Larcker, and M. V. Rajan. (1997), The choice of performance measures in annual bonus contracts. *The Accounting Review*, vol. 2, pp. 231–255.
- Ittner, C. D., and D. F. Larcker. (1998), Are nonfinancial measures leading indicators of financial performance? An analysis of customer satisfaction. *Journal of Accounting Research*, vol. 36 (Supplement), pp. 1–35.
- Kagioglou, M., Cooper, R., Aouad, G. (2001), Performance management in construction: a conceptual framework. *Construction Management and Economics*, vol. 19, pp. 85–95.
- Kanji, G. K. (2002), “Performance Management Systems” in *Total Quality Management*, vol. 13, no. 5, pp. 715 – 728.
- Kaplan, R., Norton, D. (1992), *The Balanced-Scorecard: Measures that Drive Performance*. Harvard Business Review, pp. 71 – 79.
- Kozena, M., Jelinkova, L. Specifics of Performance Measurement and management manufacturing company. In *International Multidisciplinary Scientific Conferences on Social Sciences and Arts*. Bulgaria, Albena. 2014, vol. 2, 8 p. ISBN: 978-619-7105-26-1. ISSN 2367-5659. DOI: 10.5593/sgemsocial2014B22.
- Kubenka, M. and Kralova, V. (2013), Využití Z-score při hodnocení finančního zdraví odvětví stavebnictví. *E+M Ekonomie a Management*, vol. 16, no. 1, pp. 101-112. ISSN 1212-3609
- Keegan, D.P. et al. (1989), Are your performance measures obsolete? *Management Accounting (US)*, vol. 70, no. 12, pp. 45 – 50.
- Kenerley, M. and Neely, A. (2003), Measuring performance in a changing business environment. *International Journal of Operations and Production Management*. Vol. 23, No. 2, pp. 213-229. DOI 10.1108/0144370310458465.
- Lynch, R.L. and Cross, K.F. (1995), *Measure Up – How to Measure Corporate Performance*, Blaskvell, Oxford.
- Marr, B. (2004), *Business Performance Management: Current State of the Art in Cranfield University*, School of Management. 2014 URL <<https://dspace.lib.cranfield.ac.uk/bitstream/1826/1222/1/BPR.pdf>>.
- Meyer, M. W. (2000), *Rethinking Performance Measurement: Beyond the Balanced Scorecard*, in Cambridge University Press, pp. 81 – 113.
- Neely, A.D., Adams, Ch., Crowe, P. (2001), "The performance prism in practice", *Measuring Business Excellence*, vol. 5, no. 2, pp.6 - 13
- Neely, A.D., Gregory, M.J. and Platts, K. (1995), “Performance measurement system design: a literature review and research agenda”, *International Journal of Operations & Production Management*, vol. 15, no. 4, pp. 80-116.
- Otley, D.T. (1999), Performance management: a framework for management control systems research, *Management Accounting Research*, vol. 10, no. 4, pp. 363-82.
- Případová studie. Kabinet informačních studií a knihovnictví [online]. [cit. 2014-09-05]. URL <http://kisk.phil.muni.cz/search/node/p%C5%99%C3%ADpadov%C3%A1%20studie>
- Robinson, H.S., Carrillo, P.M., Anumba, C.J., Al-Ghassani, A.M. (2005), Review and implementation of performance management models in construction engineering organizations, *Construction Innovation*, vol. 5, pp. 203–217.
- Siska, L. and Lizalova, L. (2011), Výběr ekonomických ukazatelů pro měření dlouhodobé výkonnosti podniku. *Journal of Competitiveness*. Vol. 1. Stivers, B.P. et al. (1998), How nonfinancial performance measures are used. *Management Accounting*, vol. 79, no. 8, ProQuest, p. 44.
- Striteska, M. (2012), Key Features of Strategic Performance Management Systems in Manufacturing Companies. *Procedia - Social and Behavioral Sciences*, vol. 2012, no. 58, pp. 1103-1110. ISSN: 1877-0428.
- Tangen, S. (2004), “Performance Measurement: From Philosophy to Practice”, *International Journal of Productivity and Performance Management*, vol. 53, no. 8, pp. 726 – 737. ISSN 1741-0401.
- Wagner, J. (2011), Měření výkonnosti – vývojové tendence. *Politická ekonomie*, vol. 6, pp. 775 – 792