

ACCOUNTING INFORMATION AS THE FRAMEWORK FOR MANAGEMENT

Karel Šteker, Milana Otrusínová

Klíčová slova:

účetní informace, finanční řízení, ekonomický proces, výkonnost, mezinárodní standardy účetního výkaznictví (IFRS), mezinárodní účetní standardy pro veřejný sektor (IPSAS)

Key words:

accounting information, financial management, economic process, performance, international financial reporting standards (IFRS), international public sector accounting standards (IPSAS)

Abstrakt

Těžištěm příspěvku je analýza významu účetních informací pro finanční řízení podniků v České republice a prezentace výsledků výzkumů z let 2007 a 2009. Cílem článku je také poukázat na důležitost srovnatelnosti účetních informací pro podniky z hlediska dopadů na jejich výkonnost a konkurenceschopnost. Základem úspěšného finančního řízení je využití postupů finanční analýzy, plánování, controllingu a reportingu. Všechny manažerské metody jsou založeny na kvalitních vstupních informacích z finančního a manažerského účetnictví. Účetnictví podléhá neustálým změnám a vývoji nejen v Evropě, ale i ve světě. Z toho důvodu význam Mezinárodních standardů účetního výkaznictví (IFRS) bude v českém účetním prostředí dále vzrůstat.

Abstract

The focus of this article is to present an analysis of the importance of accounting information for the financial management of enterprises in the Czech Republic. This article presents the results of research in 2007 and 2009. The aim of this paper is to discuss the importance of the comparability of accounting information for companies and their performance and competitiveness. The basis of successful financial management is the use of financial analysis, planning, controlling and reporting. All management methods are based on quality input data from financial and management accounting. Accounting is subject to constant changes and development not only in Europe but worldwide as well. Hence the importance of International Financial Reporting Standards (IFRS) will be further increasing in the Czech accounting environment.

Introduction

Financial accounting is a process used for reporting on the activities of organizations. The function of accounting is to provide information about the changes in the financial position of an enterprise that is useful to users. Users are also interested in the information contained in the financial statements. Internal users of financial results are all the managers in both financial and non-financial area of organization, who nevertheless need to understand and interpret financial information. Managers need to be able to do the activities that will increase shareholder value. The company's management team is putting together a long-term corporate strategy. It is based on inputs from several sources, including consumer research data, production figures market intelligence on the competition, and the latest financial information. Explanation of basic principles of Accounting, its functions and rules, allows the

managers a smarter use of the accounting figures, and results in a higher level of a corporate management and decision-making (Šteker, Otrusínová, 2010).

In the Czech Republic only listed entities are required to prepare consolidated financial statements according to IFRS (Act on Accounting). For statutory filings the preparation of financial statements according to IFRS is not permitted and companies who prepare financial statements according to IFRS prepare them voluntarily and in addition to the financial statements under Czech Accounting Legislation (CAL). Two research projects that focus on voluntary adoption of IFRS in Czech companies were performed at the Faculty of Management and Economy, Tomas Bata University in Zlín, Czech Republic. The first research with the sample of 177 Czech companies was held in 2007. The second research with the sample of 89 Czech companies was held in 2009 as a part of an ongoing GA CR project. Usage of IFRS was stated by 2 % of the companies in 2007 and 3 % of companies in 2009 (Paseková, Struhařová, Šteker, 2009).

The usage of IFRS has slightly increased in the Czech Republic, mainly due to the fact, that Czech companies are becoming important parts of foreign groups and their owners require them to report its financial statements according to group accounting rules based on IFRS. IFRS financial statements are also more frequently required during mergers and acquisitions. On the other hand most of the Czech companies do not see the opportunities that IFRS could bring them and if the opportunities are seen, the fact that financial statements prepared according to IFRS have to be prepared in addition to Czech financial statements discourages the companies to use IFRS (Struhařová, Šteker, Otrusínová, 2010).

1. Financial and international accounting in the Czech Republic

Is the history of accounting in the Czech Republic a good baseline for understanding the necessity of comprehending the scope of the changes being experienced in Czech accounting? Before 1990, there was one system of Czech accounting (Figure 1). Beginning in 1990, the Czech Republic began to embrace double entry accounting. After 2003, accounting began to be widely used as a chronological and systematic system with an accompanying complete recording of company activities (usually recorded in monetary units).

Today, reporting financial information in the Czech Republic is organized into two forms: recording of events and activities for tax purposes (formerly single-entry bookkeeping) and double-entry bookkeeping. Recording for tax purposes records ordered incomes and expenses and quantifies the difference. The economic result from double entry bookkeeping is checked simultaneously in a Profit and Loss Statement and on a Balance Sheet.

Czech Accounting Standards, can be considered “an accounting system” and, to a limited extent, follow the International Financial Reporting Standards. Currently, Czech Accounting Standards are comprised only of minimally required basic account classification and financial statements organization. These standards may expand into accounting procedures which can be adapted to meet CAL.

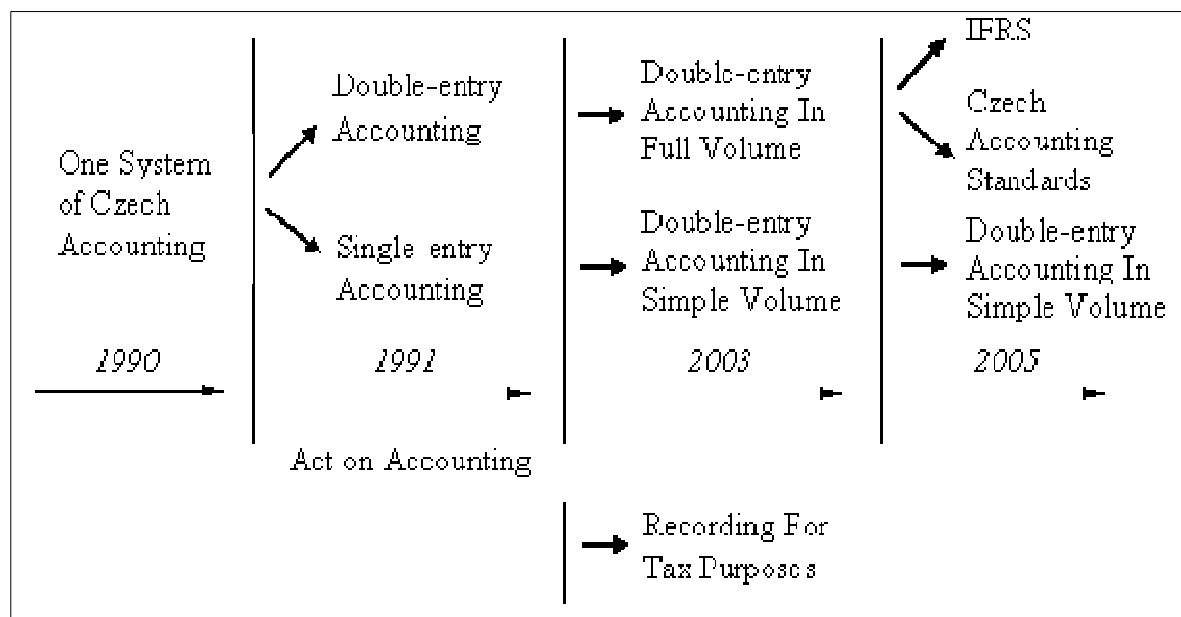


Fig. 1 – The Development of Czech Accounting. Source: Own processing.

IFRS, financial reporting standards published by the International Accounting Standards Board (IASB), are becoming the most important financial reporting standards in the world. The standards do not take the form of legal documents, but instead act as a principle-based accounting system, primarily aimed at publicly traded companies and large enterprises. Application of IFRS requires a high level of professional knowledge by the accounting staff of any entity trying to apply these standards (Mechelli, 2009).

The scope and importance of IFRS is fundamentally expanding. After 2005, all publicly traded companies in the European Union (EU) are required to prepare consolidated financial statements in accordance with IFRS. Therefore, as the Czech Republic is now a member of the EU, this requirement has impacted all Czech companies listed as the subsidiaries of publicly traded European multi-nationals.

Unlike IFRS, CAL is a national, rule-based accounting system, which is not subject to the requirements of the regulations of the EU. As a result, entities in the Czech Republic have been facing obstacles in implementing these regulations into Czech legislation and therefore Czech accounting. The Act on Accounting, which is the cornerstone of CAL, provides the legal rules for all country-wide entities and therefore determines the accounting methods and financial reporting for all the accounting entities located in the country. Such entities, including small, large and multinational companies, regardless of different activities and purposes must use CAL (Act on Accounting; PricewaterhouseCoopers, 2009; Dvořáková, 2008).

Form and content are given not only by requirements of European legislation but also by the Czech legislative rules and requirements for full compliance – in subject and terminology – with other rules of Czech legislation. Due to its validity even for very small entities (sole proprietorships, non-profit entities), in which wide theoretical accounting and related knowledge cannot be assumed, it is necessary for the text of the Act on Accounting to be as clear and unambiguous as possible (Kovanicová, 2005).

Due to the different principles and priorities on which both of the systems, CAL and IFRS, are based, there is a range of conceptual and specific differences (Ernst&Young, 2009; PricewaterhouseCoopers, 2009). Factors that influence the current differences are:

- CAL is rule based while IFRS is principle based.
- Czech taxes base remains on CAL. Many decisions and assumptions of management are made after considering the potential tax consequences into the accounting. This procedure is not consistent according to IFRS.
- Czech accounting legislation is based upon the premise that standalone financial statements are primary statements of accounting. The goal of IFRS as a general accounting mechanism directed at listed companies is based on the assumption that consolidated financial statements are the primary source of information about the economic entity/group, while a standalone financial statement of the parent or the subsidiary may be appended if necessary.
- CAL, due to its nature, does not have a thorough conceptual framework to describe the following:
 - The individual elements of the financial statement and their definitions. The fundamental accounting concepts and methods on which the financial statements should be based. Assumptions behind the quality of information that the financial statements should provide.
 - A hierarchy referring to other legislations or accounting literature in cases where relevant CAL rules do not exist.

Currently, there is significant progress in the development of greater sophistication in accounting. Analysis of these developments and the interchange of experiences are in progress in various countries. New methods and accounting applications, as well as the practical application of accounting principles, are being developed and promulgated. The impact of international accounting on Czech companies can only continue to increase. The requirement of the implementation of financial statements according to the IFRS on Czech companies is very important. There are some accounting specialties in reporting and budgeting within the public sector in the Czech Republic.

The public sector has not highlighted the need for public entities and governments to present financial statements under IFRS. They have not highlighted the need for financial statements that are audited and certified by external, independent sources. Transparency and accountability of the public sector is necessary for the citizens of the Czech Republic. During the current legislative process, the Czech Republic pursues maximum compliance with the Fourth and Seventh EU directive, so that the new national standards would accept the international rules of the IFRS, the IPSAS and the European System of Accounts.

Organizations in the public sector have not been required to be in compliance with the IFRS. However, the IFRS are still of great importance. To respond to this need, a strong international reference with standards that encompass public sector has been developed. This occurred in a similar manner to that of the private sector in relation to the IFRS. Since 1996, the IPSAS (International Public Sector Accounting Standards) has built a core set of 21 standards based on the same accrual approach as the IFRS, with the necessary adaptations to public sector specificities being made. There remain some problems regarding the accrual basis of accounting and the cash basis of budgeting in the public sector in the Czech Republic. Adoption of the accrual basis of accounting would enhance the accountability and transparency of the financial statements of governments and government agencies, and would provide better information for planning and management purposes.

Institutions in the public sector have not been required to be in compliance with the IFRS. However, the IFRS are still of great importance. The task for the IASB is to develop rules and principles for the unique concerns of the public sector, such as non-exchange revenues (i.e. taxes, transfers, etc.), relations between financial accounts and budgets, or social policies, obligations, and pensions in order to ensure convergence with the IFRS and the statistical basis used by the IMF, the United Nations and the European Union (Kovanicová, 2005; Dvořáková, 2008; Epstein, 2004). The difference in accounting procedures and the reporting of some items according to the CAL, IPSAS, and the IFRS results is different in accounting reporting. According to one reporting framework, a company can reach a profit, while according to the other, it can show a loss. Another difference can be found in total balance sums, asset values, and the value of other items of property or liability. The IFRS and IPSAS applications influence the way assets and liabilities are reported and priced and also how the trading income is reported (Šteker, Otrusínová, 2011).

The difference in accounting procedures and the reporting of some items according to the CAL, IPSAS, and the IFRS results is different in accounting reporting. According to one reporting framework, a company can reach a profit, while according to the other; it can show a loss. Another difference can be found in total balance sums, asset values, and the value of other items of property or liability. The IFRS and IPSAS applications influence the way assets and liabilities are reported and priced and also how the trading income is reported (Šteker, Otrusínová, 2011).

2. Research methodology and characteristics

The goal of this section of the article is to stress the importance of accounting information for the successful financial management of enterprises. It is widely recognized that efficient management is not possible without accurate financial information. Information is an important tool and represents one of the most important parts of economic life. A useful part of economic information is that which is provided by accurate financial reporting.

Knowledge of the predictive ability of financial statements is a necessity for useful communication among accounting information users. As accounting is undergoing continuous development both in Europe and on a worldwide scale, it must react to the development of national as well as multinational economic environments and to stimuli based on modern tendencies. Financial management cannot function without high-quality input data, which is subsequently presented in financial statements. Information and its respective processing is a valuable tool for each enterprise. Information is obtained based on costs, revenues, earnings, production, the amounts sold, turnover, plans, and movements of property (Drury, 2004; Edmonds, 2006; Eshenbach, 2004).

The key for establishing an appropriate research methodology in the fields to be investigated is an understanding of the meaning and significance of so-called methodological triangulation – i.e. the combination of the qualitative as well as quantitative methodological approaches as a full-valued research alternative (Pavlica, 2000). We used the research methodology based upon our experience as well as observations and expertise defined by the professional authors (Gill, 1991; Pavlica, 2000).

The research investigation itself is realized in the following way:

1. A questionnaire was sent out to suitable organizations (we are in cooperation with some organizations).

2. Qualitative questioning in selected organizations (the structured projective interviews are oriented on this selected kind of industry: organizations with production-to-order or assembly-to-order, procedural manufacturing and wholesale).

The aims of the research are:

1. To prepare an overview of financial management in Czech organizations (i.e. financial analysis, planning, controlling and reporting)
2. To verify general theories about the financial process in these organizations.

The first research we made in the year 2007 and the next in 2009. We collected sources of 177 (2007) and 89 (2009) questionnaires of various organizations from the Czech Republic. The structured interviews were made in 15 (2009) organizations. The respondents were from the practice of the whole spectrum of companies, i.e. manufacturing, business and service enterprises and also from non-profit and public sector. All the data and results are in the doctoral thesis (Otrusínová, 2008; Šteker, 2010).

3. Results of the research

Basic characteristics of the surveyed organizations were included: number of employees, dominant branch of activity, and type of accounting.

According to the specifications of the European Commission, the organizations in the research fall mainly into the small-business category. If we take employee numbers (up to 50 employees), then it is around 60 % (in 2007 and 2009). Medium-sized enterprises (up to 249 employees) rank second, it is around 30 %. And only small part of this sample can be classified as large-scale enterprises.

The respondents can be divided from the perspective of the dominant activity into three groups. The manufacturing enterprises represent around 38 % (in 2007 and 2009), service enterprises around 42 % and business enterprises around 20 %. In the group of services companies was 9 % non-profit organizations, mostly it was the public sector organizations.

The majority of enterprises (about 90 %) have Czech double-entry bookkeeping. The rest of the organizations have recording for tax purposes or IFRS. The results are in the following figure. From 2005 all quoted companies in the European Union are required to prepare consolidated financial statements in accordance with IFRS. The Czech Republic entered the EU, therefore this requirement has impact on all the Czech companies that are quoted or expect to be quoted as well as the subsidiaries of quoted European multinationals. The figure shows that the situation in the Czech Republic is practically same in both years.

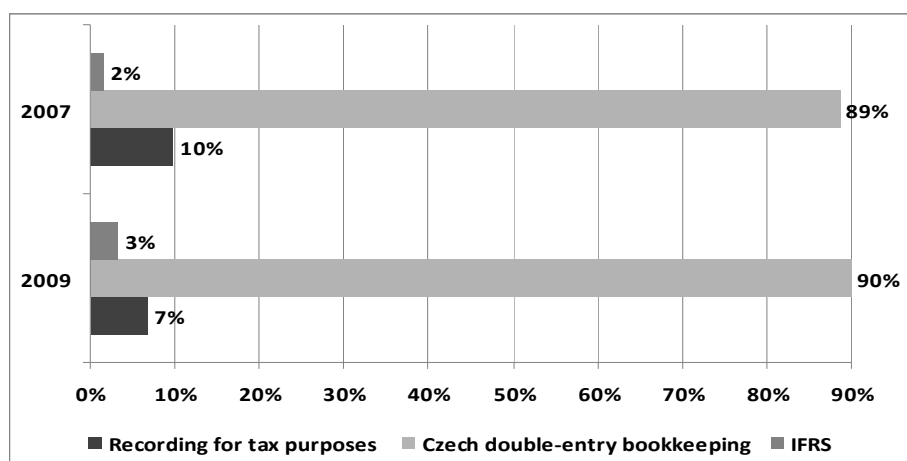


Fig. 2 – Type of accounting in the Czech Republic. Source: Own processing.

The next question regards audits. About 50 % of interviewees are subjects to auditing by law. The conditions of auditing are defined in the Act on Accounting. There are three criteria for Czech companies in the Act on Accounting. After crossing one (for public limited corporation), resp. two (for limited liability company) of these three criteria, companies must verify financial statements by auditor. These criteria include: gross asset value more than 40 million CZK, annual turnover more than 80 million CZK, and average number of employees more than 50. For other companies is audit optional or other statutory duty (e.g. for foundations, political parties, Czech National Bank etc.).

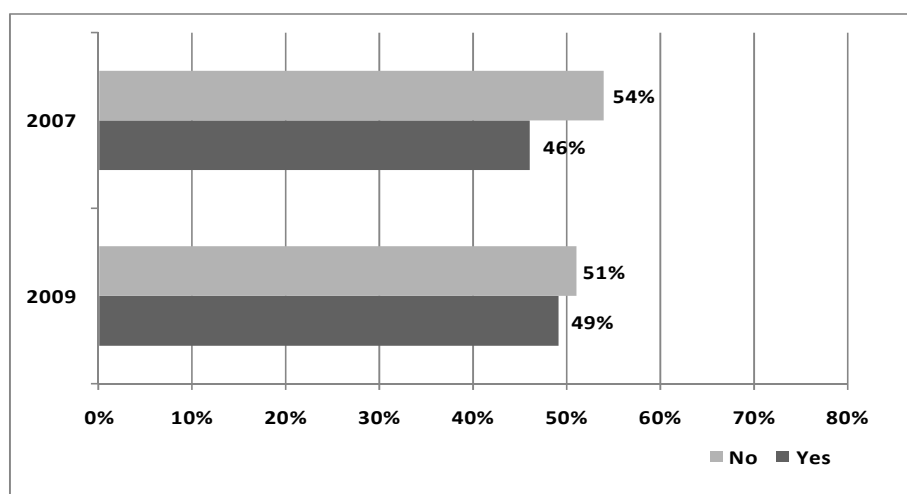


Fig. 3 – Companies are subject to audit. Source: Own processing.

Budgeting is an important part of economic process inside each enterprise. The budgeting means the process of the annual planning of the result expressed in financial terms, especially planning cost and revenues (outputs). About 60 % of Czech companies prepared this budgeting. Business enterprises prepared the budgeting less than the non-profit enterprises. It is mostly caused that the public sector organizations are required to prepare budgets due to legal requirements.

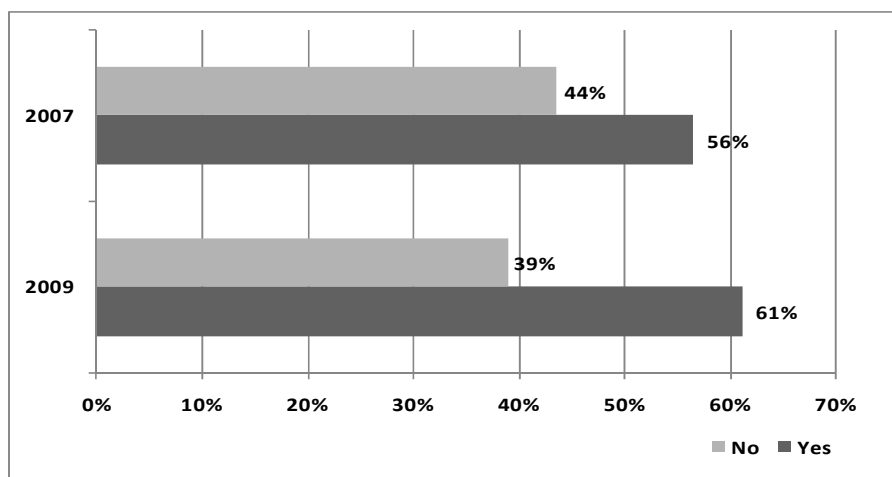


Fig. 4 – Budgets used in companies. Source: Own processing.

Operative planning arises from strategic planning and should demonstrate in budgeted values how the objectives have been apportioned and how they are to be achieved. Annual planning also serves as a basis for the comparison of budgeted and actual figures. Good planning quality is obtained, when the procedure is twofold, top down and bottom up. Approximately half of enterprises prepared operative planning, but only about 30 % made the strategic planning. These results were achieved in both years. Cash flow is a turnover surplus over the liquidity – related expenses incurred by company business activity and it is therefore also an indicator for a company's profit situation as well as its self-financing strength. The research illustrates the enterprises increasingly follow up the cash flow.

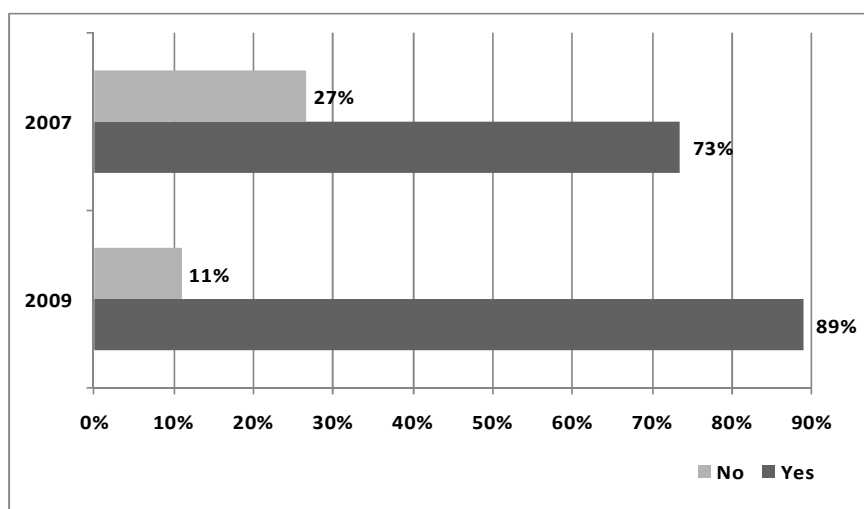


Fig. 5 – Put together the cash flow statement. Source: Own processing.

The financial analysis prepared 72 % (2007) and 78 % (2009) enterprises in the Czech Republic. This analysis is very important to managers and controllers. It often shows the first indicator of enterprise financial position and productivity. For managerial accounting is important to classify costs into fixed and variable. Fixed costs are incurred in order to ensure that the company can produce and sell. Variable costs arise because a product is manufactured or a service is delivered. About 64 % (2007) and 67 % (2009) companies do not make this classification.

Controlling can be characterized as a specific concept of enterprise management based on complex and organizational interconnection of planning and control processes. Science and

practice have the same opinion that controlling is an important and specific part of modern concept of financial management. Controlling is the whole process of setting objectives, of planning and controlling, in the sense of steering and regulating, where money and activities are important. Controlling embraces such activities as decision-making, defining and determining. A well-operating controlling can't do without high-quality input data, which are presented in financial reporting statements. The following figure shows results only from 2009, because this object was related to structured projective interviews in the companies.

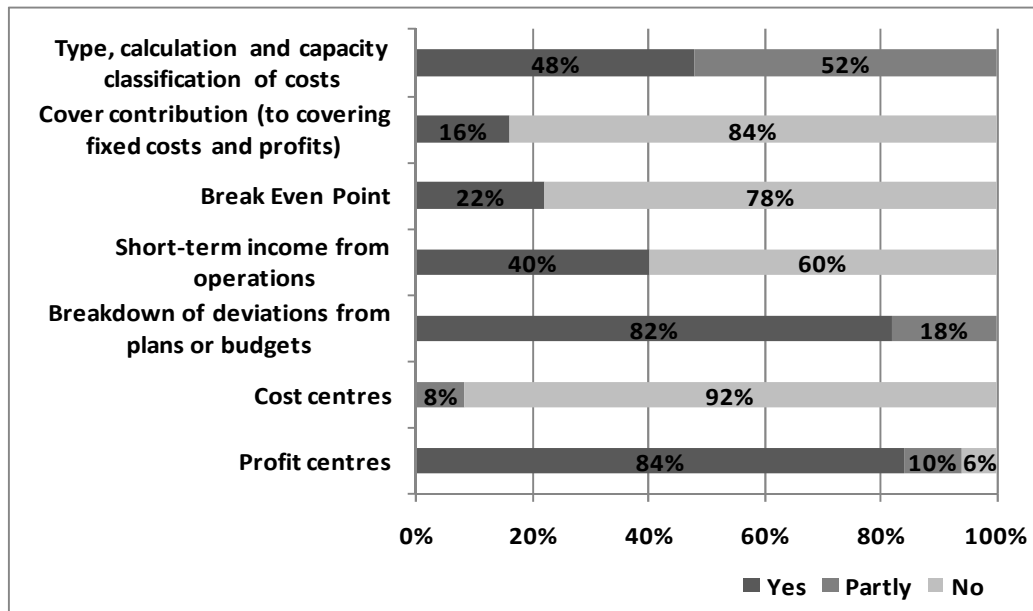


Fig. 6 – Instruments of controlling. Source: Own processing.

Most managers (about 30 % in 2009) sense the controlling like evaluation of expenses and revenues. The next answers were integration of planning & control (20 %) and getting & presenting information (22 %). These processes include a choice between own production and purchasing, valuations of investments and pricing decisions. All companies in qualitative questionnaire stated this pricing decision. This is an important managerial decision. In the area of valuations of investments the interviewees mentioned rate of return, confrontation of expenses and return on investment.

4. Discussion

One of the ways how a company can stay in touch with competitors is improving internal and external processes. The field of financial management deals with the system of powerful usage of available accounting information. The base is to use appropriately obtained information and consequently to make decisions. For such a process it is necessary to have a support in the quick information search form, suitable communication channels, correct system of work and proper data flow order. We can assume the focal point that the management of economic processes within the enterprise must have well-mastered financial and managerial accounting sub-processes. The information from these areas is then used by the controller. Financial statements (balance sheets, profit/loss statements and cash flow statements) provide input information for financial analysis. For financial analysis, it is important to guarantee the comparability of data included in financial statements.

The major question to be answered is whether a change of the concept of financial reporting affects performance measurement. One of the interests of owners and managers is emphasis

on business performance. If we accept the performance characteristics of each stakeholders' perspective as the ratio of outputs to inputs (or the difference between inputs and outputs), then to assess the performance and hence competitiveness it is necessary to obtain the most accurate accounting information. Financial statements prepared under the same rules may help a lot in this comparison. However, it must be noted that after the introduction of IFRS, differences may arise in the value of balance sheet total, assets, profit or loss and equity (sometimes up to tens of millions of CZK). If we want to assess financial performance, inputs and outputs are either financial in nature (sales, costs) or are converted into the financial form (risk, value). The presentation of assets and liabilities as well as costs and revenues under IFRS brings substantial changes in classification, content and pricing when compared to the Czech Accounting Standards. This is reflected in almost all items of financial statements. As it can be judged from past experience of firms using IFRS when preparing their financial statements, financial statements prepared under International Financial Reporting Standards provide substantially different set of data, giving a different picture of the property and financial situation of the company (Eierle, Haller, 2009; Struhařová, Šteker, Otrusínová, 2010; Struhařová, Šteker, 2010). This naturally has an impact on assessment of financial stability and performance of firms using the methods of analysis of accounting information.

Conclusion

In the current economic situation a fundamental criterion to business success is applying new adequate methods, which are the basis for decision-making processes of financial management aiming to achieve competitiveness. In order to maintain competitiveness it is important to continually assess the current status, analyze financial information, evaluate financial indicators and compare own results with competing as well as foreign companies. It can be concluded that the financial statements prepared under IFRS have clearly a better explanatory power for international comparison and thus companies reporting under international concept have a competitive advantage. The characteristic of financial management, the delimitation of the appropriate terminology and the results set out above will serve in the future as starting points for deeper and more detailed research into the whole system of managing the economic issues within enterprises.

One of the researched fields of economic processes is the in-house accounting system, which the great majority of enterprises do not have sufficiently worked through at the moment and which is often not in accord with financial accounting principles. Another neglected area is the system for calculations. An example might be the state of in-house inventory stocks (and this way even of the whole company's operational results), which are reported the wrong way. Different concepts of financial reporting gives different input dates. Also the resulting calculations are not elaborated systematically for all of the enterprise's products and services. In addition, these enterprises do not even make money based upon these erroneous calculations of real production costs to cover their future investment needs. It often happens that an enterprise has not mapped its processes precisely enough and thus often performs activities which repeat themselves and contribute to the overall ineffectiveness of the enterprise's operations – which represents one of the key insufficiencies of the economic processes management.

Acknowledgements

Authors are thankful to the Grant Agency in the Czech Republic (GA CR) No. 402/09/0225 “IAS/IFRS Usage in Small and Medium-sized Enterprises and its Influence on Performance Measurement” for financial support to carry out this investigation.

References:

- [1] DRURY, C. *Management and Cost Accounting*. London: Thomson Learning, 2004. ISBN 1-84480-028-8.
- [2] DVOŘÁKOVÁ, D. *Finanční účetnictví a výkaznictví podle mezinárodních standardů IFRS*. Brno: Computer Press, 2008. ISBN 978-80-251-1950-1.
- [3] EDMONDS, T. P. *Fundamental Managerial Accounting Concepts*. Boston: McGraw-Hill/Irwin, 2006. ISBN 0-07-299105-4.
- [4] EIERLE, B., HALLER, A. Does Size Influence the Suitability of the IFRS for Small and Medium Sized Entities? – Empirical Evidence from Germany. *Accounting in Europe*. 2009, no. 6, pp.195-230. ISSN 174-9480.
- [5] EPSTEIN, B., MIRZA, A. *Interpretation and Application of International Accounting and Financial Reporting Standards*. Wiley, 2004. ISBN 0-471-47302-2.
- [6] ESCHENBACH, R. *Controlling*. Praha: ASPI Publishing, 2004. ISBN 80-7357-035-1.
- [7] ERNST&YOUNG. *Stručný přehled rozdílů mezi Mezinárodními standardy účetního výkaznictví a Českou účetní legislativou 2009*. Available at: <http://www.ey.com/CZ/cs/Issues/IFRS>.
- [8] GILL, J., JOHNSON, P. *Research Methods for Managers*. London: Paul Chapman Publishing, 1991.
- [9] INTERNATIONAL ACCOUNTING STANDARDS BOARD. *International Financial Reporting Standards*. London: IASCF. Available at: <http://www.ifrs.org/IFRSs/IFRS.htm>.
- [10] KOVANICOVÁ, D. *Finanční účetnictví: světový koncept*. Praha: Polygon, 2005. ISBN 8072731297.
- [11] MECHELLI, A. Accounting Harmonization and Compliance in Applying IASB Standards: An Empirical Survey about the First Time Adoption of IAS 7 by Italian Listed Groups, *Accounting in Europe*. 2009, no. 6, pp. 231- 268. ISSN 174-9480.
- [12] OTRUSINOVÁ, M. *Controlling ve veřejné správě*. Zlín: UTB ve Zlíně, 2008.
- [13] PASEKOVÁ, M., STRUHAŘOVÁ, K., ŠTEKER, K. *Implementation of IAS/IFRS financial reporting in small and medium-sized enterprises (SMEs) in the Czech Republic*. In Proceedings of the 11th International Conference of the Society for Global Business and Economic Development. Bratislava, 2009. ISBN 978-0-9797659-5-7.
- [14] PAVLICA, K. *Sociální výzkum, podnik a management*. Praha: Ekopress, 2000. ISBN 80-86119-25-4.
- [15] PRICEWATERHOUSECOOPERS. *IFRS a české účetní předpisy – podobnosti a rozdíly*. 2009. Available at: <http://www.pwc.com/cz/cs/ucetnictvi/ifrs-publikace/index.jhtml>.
- [16] STRUHAŘOVÁ, K., ŠTEKER, K., OTRUSINOVÁ, M. *Challenges and opportunities represented by shift to IFRS in the Czech Republic*. In Proceedings of the 5th WSEAS International Conference on Economy and Management Transformation. Timisoara, 2010. ISBN 978-960-474-242-4.
- [17] STRUHAŘOVÁ, K., ŠTEKER, K. *Experience with the adoption of International Financial Reporting Standard for Small and Medium-sized Entities in selected companies in the Czech Republic*. In Proceedings of the 18th Annual Conference on Marketing and Business Strategies for Central and Eastern Europe. Vienna, 2010. ISBN 978-3-9502045-9-9.
- [18] ŠTEKER, K. *Informační systémy podniků a jejich praktická aplikace pro řízení ekonomického procesu*. Zlín: UTB ve Zlíně, 2010.
- [19] ŠTEKER, K., OTRUSINOVÁ, M. *Using Accounting for Financial Management in the Czech Republic*. In Proceedings of the 2nd International Conference – Economies of

- Central and Eastern Europe: Convergence, Opportunities and Challenges. Tallinn, 2010. ISBN 978-9949-430-37-6.
- [20] ŠTEKER, K., OTRUSINOVÁ, M. *The current state of the application of international accounting standards in the Czech Republic*. In Proceedings of the Recent Researches in Social Science, Digital Convergence, Manufacturing & Tourism. Lanzarote, 2011. ISBN 978-1-61804-003-9.
- [21] Zákon č. 563/1991 Sb., o účetnictví, ve znění pozdějších předpisů.

JEL M41, M48, M49

Ing. Karel Šteker, Ph.D., Ing. Milana Otrusínová, Ph.D.

Ústav financí a účetnictví

Fakulta management a ekonomiky

Univerzita Tomáše Bati ve Zlíně

Mostní 5139, 760 01 Zlín

steker@fame.utb.cz, otrusinova@fame.utb.cz