# INTERNATIONAL ACCOUNTING STANDARDIZATION PRACTICE IN HUNGARY

## Jenő BEKE

University of Pécs, Hungary bekej@ktk.pte.hu

#### **ABSTRACT**

The goal of this study is to describe and summarize the differences between national accounting rules and international standards and to evaluate and analyze their effects on business decisions, management performance, and the economic environment in Hungary. The unified, standardized accounting information system will lead to new types of analysis and data and the possible integration of new indicators from the business management of certain countries. It is very important for managers and researchers to evaluate and analyze the effects of international accounting standards on the business environment, especially on their contribution to harmonization and globalization. Financial data is from published financial statements and the Hungarian Business Information database. My sample comprises 65 international standards and 260 local accounting rules. This paper shows that both businesses earnings and stock returns affect management turnover. Businesses with lower labour productivity compared to their industry peers have greater incentives to adopt international accounting standards. National accounting rules are followed by firms with higher leverage and lagging sales growth and with more frequent employee layoffs. Standards user enterprises' employee layoffs are more a response to accounting performance in the post-adoption period. However, the results on turnover are sensitive to this change in variable specification. So the increase in the sensitivity of turnover to accounting performance post-adoption is primarily driven by heightened turnover sensitivity to accounting losses. The results of applied regression model support the notion that a business structure wherein accounting earnings are linked to performance evaluations is more frequent in businesses working to adopt international accounting standards.

Keywords: economics of accounting standards, business effects, standardization, harmonization, value based management

### INTRODUCTION

In today's business environment, companies need to take every advantage they can to remain competitive. Global competition, rapid innovation, entrepreneurial competitors, and increasingly demanding customers have altered the nature of competition in the marketplace. This new competitive environment requires companies' ability to create value for their customers and to differentiate themselves from their competitors through the formulation of a clear business strategy. Business strategy must be supported by appropriate organizational factors such as effective manufacturing process, organizational design and accounting information systems too.

Modern business environments are increasingly competitive and dynamic. International competition through e-commerce and demand-based supply chain management dominate business. It is important for companies to develop coherent and consistent business strategies and to utilize management accounting tools to support strategic planning, decision-making and control. To integrate business strategies with various management accounting tools, first companies need to identify which business they are in. It is essential to identify products and services, customer types, geographical markets, and delivery channels. It is useful to match the strategic business unit (SBU) with the related business unit strategy. An SBU is a company department or sub-section which has a distinct external market for goods or services that differ from another SBU. A business unit strategy is about how to compete successfully in particular markets. It is important to focus on a certain segment, such as environmentally friendly cars in the automobile industry or internet and phone banking in the retail banking industry.

To be successful in this cut-throat competition business world is very tough particularly if you are not too familiar with the diverse strategies which are needed to make a business successful. If you cannot make a success story out of your business, there is no use of operating a business. You must have to undertake some strategies to run your business successful. These strategies are accounting, bookkeeping, marketing, promotion, production and manufacturing. Now what a business owner needs to do is prioritize work - what need to be done on priority basis. And this will vary greatly from business to business. Accounting help is something that any business requires to embark on, in particular if you are operating a large scale business. If you are running a small or mid-size business than you can easily handle the accounting work without obtaining professional assistance.

Generally, in a very large company, each division has a top accountant called the controller, and much of the management accounting that is done in these divisions comes under the leadership of the controller. On the other hand, the controller usually reports to the vice president of finance for the division who, in turn, reports to the division's president and/or overall chief financial officer (CFO). All of these individuals are responsible for the flow of good accounting information that supports the planning, control, and evaluation work that takes place within the organization.

Business management requires that resource consumption be measured, rated, assigned, and communicated between appropriate parties. Managers of businesses use accounting information to set goals for their organizations, to evaluate their progress toward those goals, and to take corrective action if necessary. Decisions based on accounting information may include which building and equipment to purchase, how much merchandise inventory to keep on hand, and how much cash to borrow, etc. Modern accounting renders its services to a wide variety of users: investors, government agencies, the public, and management of enterprises, to mention but a few. Many accountants work in business firms as managerial accountants, internal auditors, income tax specialists, systems experts, controllers, management consultants, financial vice presidents, and chief executives.

Accounting will help a business or organization to keep a proper record of all the financial aspect. Therefore, every individual or business requires keeping a track of all the financial dealings that they do on a daily basis. Because this is the only thing that will measure how well or how bad their business is doing. Many times it happens that the person managing the accounting and other financial aspect of the business does not make a habit to keep track on all the financial records on daily or weekly basis. Thus, business owner may not get the proper picture for their business – how good or how bad business is doing. This is true especially with small and mid-size businesses. It is very vital to have all the things well organized and documented, especially if you are of those who forget things.

Accounting is something that no one can avoid and therefore one must ensure that they get the best professionals to do the work for them. There are quite a lot of companies that offer accounting help with other bookkeeping and accounting services to individuals and business owners who are looking out for these services. If you have a glance at global accounting outsourcing statistics, you will notice that an increasingly large number of businesses are undertaking this strategy for their business success. Hence, if your name is yet to be in those statistics, it is a good time for you to seek accounting help for your business. There are number of advantages of outsourcing your accounting, and this is the cause why there is a vast flow in the number of business owners and entrepreneurs opening up to the idea of outsourcing their work.

To have strategic value, management accounting must help accomplish the three strategic objectives of quality, cost, and time by providing information that:

- 1. Links the daily actions of managers to the strategic objectives of an organization.
- 2. Enables managers to effectively involve the entire extended enterprise of customers, suppliers, dealers, and recyclers in achieving the strategic objectives.
- 3. Takes a long-term view of organizational strategies and actions.

The purpose of management accounting in the organization is to support competitive decision making by collecting, processing, and communicating information that helps management plan, control, and evaluate business processes and company strategy. The interesting thing about management accounting is that it is rare to find an individual within a company with the title of "management accountant." Often many individuals function as accountants within the organization, but these individuals typically operate as financial accountants, costs accountants, tax accountants, or internal auditors. However, the ability to develop and use good management accounting (which covers a lot more ground than the product costing done by cost accountants) is actually an important ability for many individuals, including finance professionals, operational and marketing managers, top-level executives, and information technologists.

The fundamental purpose of management accounting is to help an organization achieve its strategic objectives. Meeting these objectives satisfies the needs of its customers and other stakeholders. Typical stakeholders include shareholders, creditors, suppliers, employees, and labor unions. Corporations need to implement adequate internal controls, guidelines and policies to stay competitive and increase profit levels. Senior leaders rely on management accounting and strategy tools to review corporate processes and make short-term and long-term decisions.

The role of the management accountant is to perform a series of tasks to ensure their company's financial security, handling essentially all financial matters and thus helping to drive the business's overall management and strategy. A management accountant's responsibilities can range widely. Depending on the company, your level of experience, the time of year and the type of industry, you could find yourself doing anything from budgeting, handling taxes and managing assets to helping determine compensation and benefits packages and aiding in strategic planning.

International management accounting is the practical application of management techniques to control and report on the financial resources of the business entities. This involves the analysis, planning, implementation, and control of programs designed to provide financial reporting for managerial decision making. It is covering the maintenance of the accounts, developing financial statements, cash flow and financial performance analysis. Since accounting applications do not have uniform security and reliability requirements, it is not possible to devise a single accounting protocol and set of security services that will meet all needs. Thus the goal of management accounting is to provide a set of tools that can be used to meet the requirements of each application. International management accounting requires that resource consumption be measured, rated, assigned, and communicated between appropriate parties. Especially the multinational companies spend enormous money for preparing and auditing their accounting reports according to the different national regulations. For these multinational companies the aspects of maximizing the profit is significantly more important than the consideration of national interest or the geographical position. Because of this there is a demand for creating such accounting systems which are evaluating the economic results equally.

With increasing globalization of the marketplace, international investors need access to financial information based on harmonized accounting methods and procedures. Investors constantly face economic choices that require a comparison of financial information. Without harmonization in the underlying methodology of financial reports, real economic differences cannot be separated from alternative accounting methods and procedures. Harmonization is used as a reconciliation of different points of view, which is more practical than uniformity, which may impose one country's accounting point of view on all others. Organizations, private or public, need information to coordinate its various investments in different sectors of the economy. With the growth of international business transactions by private and public entities, the need to coordinate different investment decisions has increased.

According to the business practice it is obvious that the usage of international accounting principles leads to a reduction of the information asymmetry between the owners and the managers. By this information asymmetry are growing the costs of equities and are less accurate the economical and financial forecasts. This requires the development and review of the national accounting rules, the separate validation of the tax and accounting regulation, the repeal of the subordinate role of accounting, issuing international standards with the help of practical and theoretical accounting experts.

International Financial Reporting Standards (IFRS) are accounting principles, methods ('standards') issued by the International Accounting Standards Board (IASB),

an independent organization based in London. They purport to be a set of standards that ideally would apply equally to financial reporting by public companies worldwide. Between 1973 and 2000, international standards were issued by IASB's predecessor organization, the International Accounting Committee (IASC), a body established in 1973 by the professional accountancy bodies in Australia, Canada, France, Germany, Japan, Mexico, Netherlands, United Kingdom and Ireland, and the United States. During that period, the IASC's principles were described as 'International Accounting Standards' (IAS). Since April 2001, this rule-making function has been taken over by a newly-reconstituted IASB. From this time on the IASB describes its rules under the new label 'IFRS', though it continue to recognize (accept as legitimate) the prior rules (IAS) issued by the old standard-setter (IASC). The IASB is better-funded, better-staffed and more independent than its predecessor, the IASC. Nevertheless, there has been substantial continuity across time in its viewpoint and in its accounting standards.

Standardization is the process of developing and agreeing upon technical standards. The standard is a document that establishes uniform engineering or technical specifications, criteria, methods, processes, or practices. Some standards are mandatory while others are voluntary. Voluntary standards are available if one chooses to use them. Some are de facto standards meaning a norm or requirement which has an informal but dominant status. Some standards are de jure meaning formal legal requirements. Formal standards organizations such as the International Organization for Standardization or the American National Standards Institute are independent of the manufacturers of the goods for which they publish standards.

The objective of this study was the measuring the differences between the national rules and the international methods, the valuing and analyzing their effects on the business decisions. This study examines the periods before and after the official adoption of IFRS. My paper investigates whether IFRS adoption reduces the level of earnings management and enhances the value relevance of international methods-based accounting numbers, especially in business performances.

This study examines the impact of the adoption of international accounting standards on the management performance of businesses listed on the Budapest Stock Exchange in Hungary. The research work also seeks to identify the financial attributes of enterprises that national rules employed by the requirements of the Hungarian Financial Ministry.

This survey contains information on how local, national accounting rules differ from IFRS on incorporating recognition, measurement, and disclosure rules.

#### PREVIOUS RELATED LITERATURE REVIEW

International accounting literature provides evidence that accounting quality has economic consequences, such as costs of capital (*Leuz and Verrecchia*, 2000), efficiency of capital allocation (*Bushman and Piotroski*, 2006) and international capital mobility (*Guenther and Young*, 2002).

Epstein (2009) compared characteristics of accounting amounts for companies that adopted IFRS to a matched sample of companies that did not, and found that the former evidenced less earnings management, more timely loss recognition, and

more value relevance of accounting amount than did the latter. This study found that IFRS adopters had a higher frequency of large negative net income and generally exhibited higher accounting quality in the post-adoption period than they did in the pre-adoption period. The results suggested an improvement in accounting quality associated with using IFRS.

Botsari and Meeks (2008) found that first time mandatory adopters experience statistically significant increases in market liquidity and value after IFRS reporting becomes mandatory. The effects were found to range in magnitude from 3 to 6% for market liquidity and from 2 to 4% for company by market capitalization to the value of its assets by their replacement value.

Daske et al. (2007) also found that the capital market benefits were present only in countries with strict enforcement and in countries where the institutional environment provides strong incentives for transparent filings. In the order of the IFRS adoption countries, market liquidity and value remained largely unchanged in the year of the mandate. In addition, the effects of mandatory adoption were stronger in countries that had larger differences between national GAAP (General Accepted Accounting Principles) and IFRS, or without a pre-existing convergence strategy toward IFRS reporting.

The increased transparency promised by IFRS also could cause a similar increase in the efficiency of contracting between firms and lenders. In particular, timelier loss recognition in the financial statements triggers debt covenants violations more quickly after firms experience economic losses that decrease the value of outstanding debt (*Ball and Shivakumar*, 2005; *Ball and Lakshmann*, 2006).

Accounting theory argues that financial reporting reduces information asymmetry by disclosing relevant and timely information for example Frankel and Li (2004). Because there is considerable variation in accounting quality and economic efficiency across countries, international accounting systems provide an interesting setting to examine the economic consequences of financial reporting. The European Union's (EU) movement to IFRS may provide new insights as firms from different legal and accounting systems adopt a single accounting standard at the same time. Improvement in the information environment following change to IFRS is contingent on at least two factors, however. First, improvement is based upon the premise that change to IFRS constitutes change to a GAAP that induces higher quality financial reporting. For example, Ball et al. (2006a) found that the accounting system is a complementary component of the country's overall institutional system and it is also determined by firms' incentives for financial reporting. La Porta et al. (1998) provide the first investigation of the legal system's effect on a country's financial system. The results suggested that common law countries have better accounting systems and better protection of investors than code law countries.

Other factors associated with financial reporting quality include the tax system (Daske and Gebhardt, 2006), ownership structure (Jermakovicz et al., 2007, Burgstahler et al., 2006), the political system (Li and Meeks, 2006), capital's structure and capital market development (Ali et al., 2000). Therefore, controlling for these institutional and firm-level factors becomes an important task in the empirical research design. As a result of the interdependence between accounting standards and the country's

institutional setting and firms' incentives, the economic consequences of changing accounting systems may vary across countries. Few papers have examined how these factors affect the economic consequences of changing accounting standards. For example, *Pincus et al.* (2007) found that accrual anomaly is more prevalent in common law countries. *Maskus et al.* (2005) found that accounting quality is associated with tax reporting incentives. Exploration of the interaction between these factors and the accounting information system can provide insights into differences in the economic consequences of changing accounting principles across countries.

Prior researches for example, *Meeks and Meeks* (2002) have raised substantial doubt regarding whether a global accounting standard would result in comparable accounting around the world. But differences in accounting practices across countries can result in similar economic transactions being recorded differently. This lack comparability complicates cross-border financial analysis and investment. In the researches of *Iatridis and Rouvolis* (2010) are some evidence of earning management (e.g. reducing of transition costs and information asymmetry, benefits of investors in investment strategy). They showed how firms that operate in a non-common-lax countries (e.g. Greece), which is stakeholder-based respond to international accounting standards adoption as compared to shareholder-based systems (e.g. United Kingdom).

No matter how similar the accounting standards in different countries are, there will be slight or even bigger differences in the way they are applied by companies due to the differences in the economical, political and cultural environment. Prior researches have raised substantial doubt regarding whether a global accounting information system would result in comparable accounting around the world. But differences in accounting practices across countries can result in similar economic transactions being recorded differently. *Chatterjee* (2006) presented in his study how cultural differences can affect accounting practices is that in the countries which are characterized with small power distance and weak uncertainty avoidance accounting measures are more likely to be used as an indicator of a manager's performance than as a measure of the effectiveness of policies and procedures prescribed for them. Various researches draw the conclusion that countries having different cultures have also different accounting rules and practices.

#### MATERIALS AND METHODS

My research is based on a qualitative comparative approach. In order to identify the results of my scientific research about the evaluation of the accounting standards in Hungary I have elaborated the following hypotheses:

H<sub>1</sub>: The Balance Sheet indexes deteriorated especially regarding solvency and prosperity after adaptation of IFRS in the examined companies' case.

H<sub>2</sub>: IFRS adoption reduced earnings management.

H<sub>3</sub>: Large losses tend not to be frequent after IFRS adoption decisions.

H<sub>4</sub>: Business management has higher value relevance after post-adoption period.

The purpose of this study was the measuring the differences between the national rules and the international methods, the valuing and analyzing their effects on the business

decisions. This survey contains information on how local, national accounting rules differ from IFRS on incorporating recognition, measurement, and disclosure rules.

To analyze business adoption decision my sample consists of Budapest Exchange Trade (BET) companies who compulsory adopted international financial reporting standards in Hungary, from 2007. In this research the pre-adoption examination period is in year of 2006 and the post-adoption is in year of 2007. My final sample comprises 65 IFRS adopting and 260 local (Hungarian) accounting rules user firms. The manufacturing enterprises have the largest representation in my sample. The study excluded banks, insurances, pensions and brokerages since their accounting measures are not always comparable with industrial sectors. My samples consist of shareholders companies with Hungarian headquarters and employed more than yearly average 50 employees.

### RESULTS

For the chosen of the national accounting rules user enterprises I introduced mathematic-statistic methods. An alternative approach it to create a matched sample of local rules businesses based on criteria such as year and industry. It is chosen to incorporate all local rules firms due to methodological concerns about the matched-pairs research design. Financial data are from published accounting statements in BET and Hungarian Business Information database. In my sample the businesses are classified into those following IFRS and those following national accounting rules.

## Accounting methods and Balance Sheet effects

This set of analyses measures how Hungarian enterprises have been affected on management performance by IFRS. The logistic regression models employed are as follows (1, 2):

$$RR_{i,t} = a_0 + a_1 \operatorname{Size}_{i,t} + a_2 \operatorname{Dividend}_{i,t} + a_3 \operatorname{Growth}_{i,t} + a_4 \operatorname{Profitability}_{i,t} + a_5 \operatorname{Liquidity}_{i,t} + a_6 \operatorname{Leverage}_{i,t} + \operatorname{ei}_{i,t}$$
 (1)

$$PA_{i,t} = a_0 + a_1 Size_{i,t} + a_2 Dividend_{i,t} + a_3 Growth_{i,t} + a_4 Profitability_{i,t} + a_5 Liquidity_{i,t} + a_6 Leverage_{i,t} + ei_{,t}$$
 (2)

Where:

RRi,t = dummy variable, indicating the regulatory system,

RRi,t = 1, financial numbers are reported under IFRS,

RRi,t = 0, financial numbers are reported under National GAAP,

PAi,t = dummy variable, indicating the post-adoption effects.

PAi,t = 1, financial numbers are reported under IFRS in 2007

PAi,t = 0, financial numbers are reported under IFRS in 2006

Size: Natural logarithm of market capitalization:

- NAVSH: Net asset value per share

- RESSFU: Reserves to shareholders' funds

## Dividend:

- DIVCOV: Dividend cover

- DIVSH: Dividend per share

- DIVYI: Dividend yield.

#### Growth:

MVBV: Market value to book value

## Profitability:

EPS: Earnings per shareNPM: Net profit margin

- ROCE: Return on capital employed

## Liquidity:

CFM: Cash flow marginCUR: Current ratio

- OCF: Operating cash flow scaled by total assets

- QUI: Quick ratio

WCR: Working capital ratio

### Leverage:

DEBTE: Debt to equity

- DSFU: Debt to shareholders' funds

CGEAR: Capital gearing

 $e_{i,t} =$  the error term

It is provable by the *Table 1* that the average index of dividend, share (coming from earnings after tax) is more prosperous at companies which already adapted the international financial reporting standards (IFRS) than in case of others. However, the relative average value (DIVYI) contains a high deviation (the deviation value is almost 30 in case of companies operating with IFRS).

The companies applying the national accounting standards are gaining more than double (5.8152) in terms of growth, measured by market value of assets to historical value of assets, respect to other enterprises. In this sense the IFRS user companies' average index is much lower.

The monitored enterprises had a negative average net profit value (loss) in both group in the covered period. However the return on equity and the average return on capital employed give better results in case of national accounting standards users. The latter index showed a declining tendency (-0.0081) at companies which adapted the IFRS.

The examined national accounting standard user companies' average indexes, measuring solvency (OCF, CUR, CFM) and leverage were more prosperous than the other ones'. The Cash Flow, for instance, decreased (-0.0408) at IFRS user companies, though around the relative average value of Operating Cash Flow on assets the deviation is quite high (it is between 15 and 17). As the indebtedness of companies accounting according to national regulation was lower, the leverage indexes (DEBTE, CGEAR, DSFU) were better than the other companies which adapted IFRS.

Table 1

#### **Balance Sheet effects**

| Denomination | National GAAP employed enterprises |                | IFRS adopter enterprises |                |
|--------------|------------------------------------|----------------|--------------------------|----------------|
|              | Mean                               | Std. deviation | Mean                     | Std. deviation |
| DIVSH        | 0.0846                             | 0.1986         | 0.1557                   | 0.2106         |
| DIVYI        | 17.5764                            | 19.8721        | 22.8705                  | 25.4457        |
| MVBV         | 5.8152                             | 7.8125         | 2.5478                   | 8.1547         |
| NPM          | -0.2945                            | 4.5412         | -0.1031                  | 7.4581         |
| EPS          | 0.1987                             | 1.0561         | 0.1897                   | 1.5061         |
| ROCE         | 0.2008                             | 0.3051         | -0.0081                  | 0.6401         |
| OCF          | 3.8812                             | 15.4421        | 4.8512                   | 16.8041        |
| CUR          | 1.9911                             | 6.9105         | 2.9814                   | 3.1125         |
| CFM          | 0.8029                             | 2.3126         | -0.0408                  | 1.5974         |
| DEBTE        | 1.9843                             | 2.3566         | 2.3099                   | 2.1577         |
| CGEAR        | 0.3454                             | 0.2325         | 0.8714                   | 0.3115         |
| DSFU         | 0.3258                             | 0.1353         | 0.5469                   | 0.8540         |

To sum up, it can be stated that the Balance Sheet indexes deteriorated especially regarding solvency and prosperity after adaptation of IFRS in the examined companies' case.

## Accounting methods and earnings management

The first earnings management test measured the volatility of the change in net profit scaled by total assets,  $\Delta NP$ , and the volatility of the change in net profit to the change in operating cash flows,  $\Delta CF$  for the national GAAP employed and the IFRS adopted enterprises.

The second earnings management test examined the associations between accruals and cash flows. My scientific research evaluated the Pearson correlation between accruals and cash flows separately in the pre-official, official and post-official adoption periods. Then the author employed an Ordinary Least Square (OLS) regression, followed *latridis and Rowolis* (2010) researches, to analyze the associations between accruals and cash flows, profitability, leverage and size. The regression model that is used is as follows (3):

$$ACCR_{i,t} = a_0 + a_1FRS_{i,t} + a_2FRSOCF_{i,t} + a_3FRSLNMV_{i,t} + a_4FRSOPM_{i,t} + a_5FRSTLSFU_{i,t} + e_i,$$
(3)

Where:

ACCRi,t= Accruals scaled by total assets.

FRSi,t= Dummy variable indicating the financial reporting system in use.

FRSi,t = 1 for firms reporting under IFRS in 2007,

FRSi,t = 0 for firms reporting under the National GAAP in 2006.

OCF = Multiplication of IFRS and operating cash flows.

FRSOCFi,t = Variable used to examine the impact of IFRS on the association

between accruals and cash flows.

LNMV = Multiplication of IFRS and the natural logarithm of market value.

FRSLNMVi,t = Variable used to examine the impact of IFRS on the association

between accruals and size.

OPM = Multiplication of IFRS and operating profits margin.

FRSOPMi,t = Variable used to examine the impact of IFRS on the association

between accruals and profitability.

TLSFU = Multiplication of IFRS and total liabilities to shareholders' funds.

FRSTLSFUi,t = Variable used to examine the impact of IFRS on the association between accruals and leverage.

The results of the previous regression model (3) the author summarized in *Table 2*.

Table 2

Earnings management effects

| Denomination                     | National GAAP followed enterprises | IFRS adopter enterprises |
|----------------------------------|------------------------------------|--------------------------|
| ΔNP volatility                   | 4.1581                             | 6.1021                   |
| $\Delta NP/\Delta CF$ volatility | 11.4401                            | 12.0120                  |
| FRSOCF                           | -1.21**                            | -0.7145**                |
| FRSLNMV                          | -0.025**                           | -0.014*                  |
| FRSOPM                           | 0.5541**                           | 0.2145**                 |
| FRSTLSFU                         | -0.2574**                          | -0.1941**                |
| $\mathbb{R}^2$                   | 0.784                              | 0.815                    |

<sup>\*</sup>Statistical significance at 10% level (two-tailed); \*\*Statistical significance at 1% level (two-tailed).

According to the results of the table it can be stated that the companies which adapted IFRS reached a higher volatility in Net Profit value change ( $\Delta$ NP) and in Net Profit value change/Operating Cash Flow value change ( $\Delta$ NP/ $\Delta$ CF). Being so, the volatility did not decline after the standard adaptation, contrary to the companies using national accounting standards.

The coefficient of correlation between deferred items, namely Accrued Charges and Cash Flow (FRSOCF) had a negative value in a significance level of 5 % in both group, even so, the leaders of the national accounting principle user companies gained higher income (-1.21).

The coefficient showing correlation between deferred items (accruals) and size of the company (FRSLNMV) was also negative: (-0.025) in a significance level of 10%, (-0.014) in a significance level of 5%; accordingly even the bigger companies using IAS/IFRS could not insert totally the principles of accounting accruals in their system yet.

Similarly, the companies which already adapted IFRS did not increase their Accrued Charges as a consequence of high indebtedness, which is showed by the coefficient of correlation between deferred items (accruals) and leverage (FRSTLSFU) being (-0.1941).

The coefficient of correlation between deferred items and profitability (FRSOPM) is significantly positive in both groups of companies. However, it is worthy of note that the companies achieving lower profitability are less willing to adapt accrual principles into their accounting policy.

As a conclusion, it is my conviction that the practical results for instance, in case of FRSOCF, have proven my assumption that the income level of concerned leaders of companies which adapted the IFRS is decreased in a significance level of 5%.

## Accounting methods and P&L effects

This research examined whether enterprises determine small positive profits than large losses. Previous studies [e.g. Burgstahler and Dichev (1997), Leuz et al. (2003) suggested that large losses tend not to be frequent. Our analysis employed the next model (4):

$$RR_{i,t} = a_0 + a_1 Profitability_{i,t} + a_2 Dividend_{i,t} + a_3 Growth_{i,t} + + a_4 Size_{i,t} + a_5 Likvidity_{i,t} + a_6 Leverage_{i,t} + a_7 SP_{i,t} + a_8 LL_{i,t} + e_{i,t}$$
(4)

Where:

SP<sub>i,t</sub> = dummy variable indicating a measure of small positive profits.

SPi,t = 1 if net profit scaled by total assets is between 0 and 0.01,

SPi,t = 0 otherwise.

LL<sub>i.</sub> = dummy variable indicating a measure of timely loss recognition.

LLi, t = 1 if net profit scaled by total assets is less than - 0.20,

LLi,t = 0 otherwise.

The results of model (4) are reported in Table 3.

Table 3

P & L effects

| Denomination | IFRS adopter enterprises | National GAAP followed enterprises |
|--------------|--------------------------|------------------------------------|
| SP           | -1.194**                 | 0.451                              |
| LL           | 2.581*                   | 1.324                              |

<sup>\*</sup> at 10% level significante, \*\*at 5% level significante

The data of the table prove that the companies which already adapted the IFRS were less willing to hide the realized profit in the P&L when it was low, doing so, the probability of reporting the small amount of profit (SP) was significantly negative (-1.194) in their case. Furthermore, it can be stated that they did not tend to hide their large loss either. The latter statement is a consequence of the positive and high value of the coefficient of LL (2.581). It is rather specific for national accounting standard user companies to be in favor of reporting smaller amount of

profit (0.451) and avoid large losses to be reported in P&L, which is possible because of following the accrual-based accounting.

## Accounting methods and value relevance

The first value relevance test is an OLS regression of share price on book value per share and net profit per share. Its model was followed by *Hung and Subramanyam* (2007) researches (5).

$$P_{i,t} = a_0 + a_1 BVPS_{i,t} + a_2 NPPS_{i,t} + e_{i,t}$$
(5)

Where:

Pi,t = Total market value of equity deflated by number of shares outstanding,

BVPSi,t = Total book value of equity deflated by number of shares outstanding,

NPPSi,t = Total net profit deflated by number of shares outstanding.

The second value relevance test is an OLS regression of profits on stock returns. Its model was employed by *Lang et al.* (2005) researches (6).

$$NPP_{i,t} = a_0 + a_1 AR_{i,t} + e_{i,t}$$
 (6)

Where:

NPPi,t = Net profit divided by beginning of year share price,

 $ARi_{t}$  = Annual stock return at year-end.

The third value relevance test measured the association between IFRS-based book value and net profit figures, then stock returns. Its OLS regression model was used by Gassen and Sellhorn (2006) researches (7).

$$AR_{i,t} = a_0 + a_1BVPS_{i,t} + a_2BVCHA_{i,t} + a_3NPPS_{i,t} + a_4NPCHA_{i,t} + e_{i,t}$$
 (7)

Where:

BVCHA<sub>i,t</sub>= Variable indicating the change in firm book value following the transition to IFRS,

NPCHAi,t= Variable indicating the change in firm net profits following the transition to IFRS.

The results of value relevance models are summarized in Table 4.

Table 4

## Accounting methods and value relevance

|                | Coefficients                       |                          |  |
|----------------|------------------------------------|--------------------------|--|
| Denomination   | National GAAP followed enterprises | IFRS adopter enterprises |  |
| NPPS           | 2.041**                            | 3.025**                  |  |
| BVPS           | 0.547**                            | 1.354**                  |  |
| AR             | 2841.145**                         | 3694.124*                |  |
| BVCHA          | 0.1941**                           | 0.2941*                  |  |
| NPCHA          | 0.0182**                           | 1.3541                   |  |
| $\mathbb{R}^2$ | 0.689                              | 0.799                    |  |

<sup>\*</sup>Statistical significance at 10% level; \*\*Statistical significance at 1% level.

My H<sub>6</sub> assumption, namely that the information system of companies which adapted the IFRS shows a higher value relevance than other national accounting standard user companies, is proven by the data of table.

The first test of value relevance gave a result for earnings after tax/share (EPS) coefficient (3.025) and for book value of equity/share (1.354) which is significantly (at 1%) positive and higher at IFRS applier companies than at others. These companies had also more prosperous, higher correlation coefficient of financial indexes ( $R^2 = 0.799$ ).

The second test of value relevance gave similar results because the coefficient of return on equity is also significantly (at 10%) positive and higher (3694.124) at companies which already have adapted the IFRS.

The coefficient of book value change (1.3541) resulted significantly more positive at the IFRS user companies according to the third test of value relevance. These results obviously prove that the companies which adapted IFRS have an orientation towards a reporting policy based on stronger reliability and more realistic/proper evaluation. However, the index presenting the change of Net Profit (NPCHA) was also positive but not significantly at these companies (1.3541).

### **CONCLUSIONS**

My study scrutinized the consequences of the IFRS adoption. The practical results showed an unpleasant picture regarding solvency and profitability at the examined companies.

My analyses have proven that the internal efficiency measured by accounting indicators of the concerned companies depended on their financial situation, their capitalization also after IFRS adaptation. As stated before, the IFRS adaptation had an influence on decreasing income of leaders/managers too.

In my previous assumptions I have already supposed that the adoption of the IFRS can cause a change in the internal evaluation methods of the accounting indicators regarding the concerned companies. In fact, these changes are correlating with the impact on management fluctuation and cut-back of reported profitability.

According to the previously quoted studies and researches, the reported accounting results after IFRS adaptation are no more flexibly changeable and as a consequence of cost-benefit accounting, they are transparent too. Being so, the IFRS are becoming one of the most efficient tools for internal performance measurement and evaluation.

I have examined the practical realization of the assumptions supposed, through accounting data of national companies (in the sample) and I found that – except for some case – the results were in correlation with my previous statements.

Finally, the value relevance of internal accounting information system was much higher in the years after the IFRS adaptation than before.

As a consequence of the IFRS adaptation the policy and requirements became gradually more transparent and bright, so as became the application of the standards and the implementation process more user friendly.

The author can advise for international management researchers to employ these methods and measure their effects on practical management functions.

## **REFERENCES**

- Ball, R., Laksmann, S. (2005): Earnings quality in UK private firms. In: Journal of Accounting and Economics, 39. 83-128. p.
- Ball, R., Shivakumar, L. (2005): The effect of international institutional factors on properties of accounting earnings. In: Journal of Accounting and Economics, 29. 417-434. p.
- Botsari, A., Meeks, G. (2008): Do acquirers manage earnings prior to share for share bid? In: Journal of Business Finance and Accounting, 35. 633-670. p.
- Burgstahler, G., Dichev, I. (1997): Earnings management to avoid earnings decreases and losse. In: Journal of Accounting and economics, 24. 3. 99-126. p.
- Burgstahler, D., Hail, L., Leuz, C. (2006). The importance of reporting incentives: earnings management in European private and public firms. In: Journal of Economics, 23. 48-69. p.
- Bushmann, R., Piotroski, J. (2006): Financial reporting incentives for conservative accounting: the influence of legal and political institutions. In: International Journal of Business and Management, 27. 148-161. p.
- Chatterjee, R. (2006): Performance pricing and covenants in debt contracts in the UK. Judge Business School Working Paper 7, University of Cambridge
- Daske, H., Gebhardt, G. (2006): International Financial Reporting Standards and Experts. Perceptions of Disclosure Quality. In: Abacus, 42. 3-4. p.
- Daske, H., Hail, L., Leuz, C., Verdi, R. (2006): Mandatory IFRS on the economic Consequences. University of Chicago
- Epstein, B.J. (2009). The Economic Effects of IFRS Adoption. In: The CPA Journal, 3. 26-31. p.
- Frankel, M.R., Li, X. (2004): Characteristic of a Firm's Information Environment and the Information Asymmetry between Insiders and Outsiders. In: Journal of International Business Studies, 37. 1. 229-259. p.
- Gassen, J., Sellhorn, T. (2006): Applying IFRS in Germany: Determinants and consequences. University of Berlin
- Guenther, A., Young, P. (2008): Financial Reporting Environments at International Capital Mobility. In: Journal of Accounting Researches, 8. 41-57. p.
- Hung, M., Subramanyam, K. (2007): Financial statement effects of adopting international financial reporting standards: The case of Germany. In: Review of Accounting Studies, 12. 21-48. p.
- Iatridis, G., Rouvolis, S. (2010): The post-adoption effects of the implementation of International Financial Reporting Standards in Greece. In: Journal of international accounting, auditing and taxation, 19. 55-65. p.
- Jermakovicz, K., Kinsey, P., Wulf, I. (2007): The Value Relevance of Accounting Income Reported by DAX-30, German Companies. In: Journal of International Financial Management & Accounting, 18. 611-641. p.
- La Porta, R. (1998): Law and Finance. In: The Journal of Political Economy, 106. 1113-1155. p.
- Leuz, C., Verrecchia, R.E. (2000): The economic consequences of increased disclosure. In: Journal of Accounting Research, 38. 91-124. p.

- Li, K., Meeks, G. (2006). The impairment of purchased goodwill: effects on market value. Working Paper. Institute of Chartered Accountants in England and Wales. Centre for Business Performance, 239. p.
- Maskus, K.E., Otsuki, T., Wilson, J.S. (2005): An empirical framework for analyzing technical regulations and trade. In. Henson, J.S., Wilson S. (eds.): The WTOÖ and Technical Barriers to Trade. Cheltenham, Edward Elger
- Meeks, G., Meeks, J. (2002): Towards a Cost-Benefit Analysis of Accounting Regulation. London. Centre of Business Performance
- Pincus, M., Rajgopal, S., Venkatachalam, M. (2006): The Accrual Anomaly: International Evidence. In: The Accounting Review, 8. 104-111. p.