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# Business and economic aspects of accounting standardization in Hungary

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The goal of this study is to describe and summarize how the accounting standards can promote business decisions and influence economic environment. The unified, standardized accounting information system will lead to new types of analysis and data, furthermore with the possible integration of new indicators from the business management of certain countries. The results of applied regression model support that the greater demand for more informative and conservative accounting earnings due to performance evaluations at more widely held by businesses stimulating to adopt international accounting standards. Businesses with lower labour productivity compared to their industry peers have greater incentives to follow accounting standardization.

**JEL Classifications:** M16, M41, M48

**Keywords:** Business environment, economic affects, comparable research, accounting standards, Hungary.

## Introduction

Historically, standardization of the international accounting methods has tended to follow the integration of the markets served by the accounts. For example, the move to unified national accounting in the US in the early 20th century followed the integration of the national economy. Similarly the present impetus for global accounting standards follows the accelerating integration of the world economy. Without the common accounting standards the cross-border portfolio and direct investment may be distorted, the cross-border monitoring of management by shareholders obstructed, and the cross-border contracting inhibited and the cost of these activities may be needlessly inflated by complex translation

The purpose of the use of international accounting methods is that a single set of standards ensures similar transactions are treated the same by companies around the world, resulting in globally comparable financial statements. However, using the accounting standards consistently by firms we will find that they are changeable, because they depend on the varying economic, political, and cultural conditions in one state. Accounting standard-setters and regulators around the globe are planning to harmonize accounting standards with the goal of creating one set of high-quality accounting rules to be applied around the world (Whittington, 2008).

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).

Prior researches (e.g. 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.

Accounting theory argues that financial reporting reduces information asymmetry by disclosing relevant and timely information (e.g. Frankel and Li, 2004). Because there is considerable variation in accounting quality and economic efficiency across countries, international accounting standards provide an interesting setting to examine the economic consequences of financial reporting. The EU's movement to international financial reporting standards (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 general accepted accounting principles (GAAP) that induces higher quality financial reporting. For example, Ball et al. (2006a) find that firms adopting IFRS have less earnings management, more timely loss recognition and more value relevance of earnings, all of which they interpret as evidence of higher accounting quality. Second, the accounting system is a complementary component of the country's overall institutional system (Ball et al., 2006b) and 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. They find 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 (Leuz et al., 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) find 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 standards can provide insights into differences in the economic consequences of changing accounting principles across countries.

### **Hungarian accounting standardization practice**

Hungary has had more than 100 years experience in national accounting. A first attempt to define and compile the value of national income and national wealth in Hungary was made in 1855. The next important step in the development of national accounting in Hungary was the compilation of national accounts for the period of 1920-30. The new period of national accounting started in 1950. In accordance with a general reorganization of the state apparatus and the introduction of soviet-type central planning The theoretical basis of the new, official national accounts was the Marxian concept of "productive work" accounting to which only the production of material goods creates original income, a theory going back before Marx to Adam Smith and Ricardo.

In Hungary, accounting requirements are regulated by law from 1991. The Ministry of Finance is responsible for accounting and auditing regulation. For the operation of the market economy it is essential that objective information based on past data be available on the financial and earnings position of undertakings, non-profit organizations and other types of economic organizations, as well as on the development thereof, in order for the participants on the market to be able to make well-founded decisions based on the information made accessible.

This Act contains accounting rules which are in harmony with the relevant directives of the European Communities and with international accounting principles. It is based upon which reliable information providing an authentic and true overall picture is available in

respect of the income producing capability, the development of the assets, the financial situation and the future plans.

The Financial Government is hereby authorized to decree

- a. the reporting and bookkeeping obligations of budgetary organizations, the special turnover related definitions used for their annual accounts and bookkeeping in line with the provisions laid down in the Act on the State Budget;
- b. the special regulations concerning the annual accounts and bookkeeping obligations of the National Bank of Hungary, of credit institutions, financial firms, insurance companies, the stock exchange, clearing houses and other similar bodies providing clearing or settlement services, investment funds and other funds, following consultation with the national Bank of Hungary;

These regulations concerning the activities and the requirements of the body designated to maintain the register of providers of accounting services, the procedure for the admission into and removal from the register, the detailed regulations for keeping the register, compulsory professional training, and the legal remedies available.

The Act on Accounting includes very detailed accounting requirements based on the Fourth and Seventh EU Company Law Directives and IFRS. From 2005 these Standards will apply only to the legal entity financial statements of companies and to the consolidated financial statements of non-stock exchange listed companies that do not opt to present financial statements prepared in accordance with IFRS.

The Hungarian Accounting Standards Board has recently been established to take over the responsibility for setting Hungarian Accounting Standards (HAS) from the Ministry of Finance. The Board was established by Government Decree 2002 of 2003 under the authority of the Accounting Act. Its establishment reflects the desire of the Ministry of Finance for accounting standards to be developed by the accounting and auditing professions rather than by government.

The Hungarian Accounting Standards, according to a 2004 World Bank assessment of accounting and auditing practices, differ from the International Financial Reporting Standards, despite significant efforts at harmonization. Being a European Union member, Hungary complies with the European Commission (EC) Regulation No. 1606/2002, which requires the application of IFRSs in the preparation of consolidated financial statements of listed companies. The 2008 EC report on the implementation of Regulation No. 1606/2002 points out that Hungary permits application of IFRSs in consolidated accounts of all entities within the scope of the Act on Accounting, but not in the annual accounts. The use of IFRSs in the annual accounts is allowed for informal purposes only. In this regard, the 2004 World Bank assessment recommended adoption of IFRSs for all public interest entities in the country.

In June 2009, the World Bank conducted a review of accounting and auditing practices in Hungary in order to evaluate the weaknesses and strengths of the accounting and auditing requirements and to compare the reporting requirements with actual practices. International Financial Reporting Standards (IFRSs), formerly International Accounting Standards (IASs), and International Standards on Auditing (ISAs) were used as the benchmarks for assessing national standards. The Report on the Observance of Standards and Codes (ROSC) was published the same year, summarizing the results of the assessment and suggesting a reform agenda. The report noted that the Hungarian accounting framework is governed by the Act on Accounting, which is based on the EU 4th and 7th directives on the harmonization of accounting standards. The Act on Accounting lays down the Hungarian Accounting Standards and is supplemented by government decrees based on special requirements for banks, insurance companies, stockbrokers, investment funds, pension funds, and various non-profit institutions. As detailed in the ROSC, in addition to the Accounting Act, financial statements of banks must comply with Government Decree No. 250/2000 on Special Provisions Regarding the Annual Reporting and Bookkeeping Obligations of Credit Institutions and Financial

Enterprises. For insurance companies, the Accounting Act is supplemented by the Government Decree No. 192/2000 on Reporting and Bookkeeping Requirements of Insurers. According to the description of the regulatory framework provided in the 2005 Chamber of Hungarian Auditors (MKVK) self-assessment, the securities market, banks, and insurance companies are regulated by the Hungarian Financial Supervisory Authority (PSZAF). All listed companies, banks, and insurance companies are required to prepare and publish quarterly financial statements, which are reviewed by the PSZAF. Sanctions for non-compliance include delisting from the stock exchange. With regard to banks and insurance companies, the PSZAF can also perform an on-site inspection when irregularities are observed. Further action can include the recall of the auditor and management. In addition to quarterly reporting, banks are also required to tender an overall supervisory report every two years.

Act on Accountancy is promulgating the Europe Agreement establishing an association between the Republic of Hungary and the European Communities and their Member States, signed on 16 December 1991 in Brussels, this Act contains regulations which may be fully approximated with the following legal regulations of the European Communities:

- a. Fourth Council Directive of 28 July 1978 on the annual accounts of certain types of companies (78/660/EEC);
- b. Seventh Council Directive of 13 June 1983 on consolidated accounts (83/349/EEC);
- c. Directive 2001/65/EC of the European Parliament and of the Council of 27 September 2001 amending Directives 78/660/EEC, 83/349/EEC and 86/635/EEC as regards the valuation rules for the annual and consolidated accounts of certain types of companies as well as of banks and other financial institutions;
- d. Regulation No. 1606/2002/EC of the European Parliament and of the Council of 19 July 2002 on the application of international accounting standards;
- e. Eleventh Council Directive 89/666/EEC of 21 December 1989 concerning disclosure requirements in respect of branches opened in a Member State by certain types of company governed by the law of another State.

The detailed regulations, methods and procedures implemented to supplement the legal provisions which are necessary for the principle of true and fair view shall be prescribed in national accounting standards. These national accounting standards shall not contradict the objectives and principles of this Act, nor the process of harmonization of legal systems defined in Act I of 1994 promulgating the Europe Agreement establishing an association between the Republic of Hungary and the European Communities and their Member States, signed in Brussels.

## Methodology

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 differs 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 from 2005. My final sample comprises 65 IFRS adopting and 260 local (Hungarian) standards firms. It is included all local standards enterprises in this analysis. An alternative approach it to create a matched sample of local standards businesses based on criteria such as year and industry. It is chosen to incorporate all local standards 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. For the IFRS adopting enterprises the adoption year is treated as event year 0

The adoption decision models are expanded relying Nobes (2008) researches and test if the demand from internal performance evaluations is a factor in businesses decisions to adopt international accounting standards.

It is estimated in the following logistic regression model after the prior literature (Wu and Zhang, 2009):

$$\begin{aligned} Prob [Adopt = 1] = & Logit (a_0 + a_1 Close\_Held_0 + a_2 Labor\_Prod_{-1} + a_3 RET_{-1} \\ & + a_4 ROA_{-1} + a_5 Size_{-1} + a_6 Lev_{-1} + a_7 Growth_{-1} \\ & + a_8 Foreign\_Sales_{-1}). \end{aligned}$$

Where:

*Close\_Held*: Percentage of closely held shares at the end of event year 0 (event year  $t$  for the management turnover and employee layoffs analyses);

*Labor\_Prod*: Labour productivity (sales per employee) minus the median labour productivity in the same industry group;

*RET*: Annual raw stock return;

*ROA*: Return on assets, accounting earnings is defined as net income before extraordinary items;

*Size*: Natural logarithm of market capitalization;

*Lev*: Leverage, defined as long-term debt divided by total assets;

*Growth*: Sales growth, current year's sales change divided by prior year's sales;

*Foreign\_Sales*: Foreign sales divided by total sales.

The dependent variable *Adopt* is equal to 1 for adopting firms, and 0 otherwise. All the independent variables are measured around event year 0. This model includes year and industry dummy variables.

TABLE 1. RESULT OF LOGISTIC ANALYSIS IN IFRS ADOPTION DECISION

Denomination	Estimate	Standard Error	Marginal Effects*
<i>Close_Held</i> <sub>0</sub>	-0.00435	0.0024**	-0.11%
<i>Labor_Prod</i> <sub>-1</sub>	-0.00004	0.0002**	-1.05%
<i>RET</i> <sub>-1</sub>	-0.1124	0.1247	-0.20%
<i>ROA</i> <sub>-1</sub>	-0.4609	0.6148	-0.21%
<i>Size</i> <sub>-1</sub>	0.1659	0.0261***	3.21%
<i>Lev</i> <sub>-1</sub>	1.2004	0.3881***	1.02%
<i>Growth</i> <sub>-1</sub>	-0.1883	0.1021	-0.40%
<i>Foreign_Sales</i> <sub>-1</sub>	1.1085	0.1301***	2.08%

Note: \*Marginal effects measure the changes in the predicted probability from a one standard deviation increase from the mean for a continuous variable and from 0 to 1 for an indicator variable with the other variables measured at the mean.

\*\*, \*\*\* Indicate that a coefficient is significantly different from zero at the 10 percent, 5 percent, 1 percent levels, respectively (one-sided tests for coefficients with predictions and two-sided tests for those without a prediction)

Hypothesis predicted that the businesses with lower labour productivity face a greater need for informative measures of firm performance to facilitate internal performance evaluation, therefore a higher probability of IFRS adoption. It was expected that the coefficients on the percentage of closely held shares (*Close\_Held*<sub>0</sub>) and labour productivity (industry-adjusted sales per employee, *Labor\_Prod*<sub>-1</sub>) variables to be negative, because

prior researches (e.g. Meeks and Swann, 2009) are established that these variables associated with disclosure incentives have predictive power for the adoption decision. It is included that lagged variables on businesses performance ( $RET_{-1}$  and  $ROA_{-1}$ ), firm size ( $Size_{-1}$ ), leverage ( $Lev_{-1}$ ), growth ( $Growth_{-1}$ ) on the right-hand side of the regression model and expected that the coefficients on firm size, leverage, growth to be positive. The regression results are reported in Table 1, if IFRS are adopted by businesses.

In Table 1 the coefficients estimates, standard errors, and the marginal effects are reported in columns (1) to (3), respectively. The  $Close\_Held_0$  has a negative coefficient, -0.00435, and significant at the 0.05 level. The marginal effect suggests that a one standard deviation increase in the percentage of closely held shares decreases the adoption likelihood by 0.61 percent or 5 percent of unconditional adoption probability of 20 percent (65/325).

The coefficient on  $Labor\_Prod_{-1}$  is -0.00004 negative as expected and significant as the 0.05 level. The marginal effect indicates that a one standard deviation increase in labour productivity reduces the likelihood of adoption by 1.05 percent. Regression has reasonable predictive power with a Pseudo  $R^2$  of 32 percentages. Regarding the significance of the individual explanatory variables in the adoption decision regression that potential informational benefits drive the adoption of international accounting standards, the results on individual variables vary across studies, likely due to differences in sample selection and methodology. For choosing of the numbers of the Sample I used mathematical-statistical methods.

## Empirical results

The results of applied regression model support that the greater demand for more informative and conservative accounting earnings due to performance evaluations at more widely held by businesses stimulating to adopt international accounting standards.

Businesses with lower labour productivity compared to their industry peers have greater incentives to adopt international accounting standards.

The control variables are suggested that larger businesses with higher leverage and more substantial foreign sales are more likely adopt IFRS

Analyzing the changes of labour productivity at the adopting businesses the tests did not show a significant decreasing in the productivity over the last 5 years (2005 - 2009). It could be that businesses labour productivity is persistently low, not necessarily deteriorating continuously, in the several years leading up to the adoption. Meanwhile, there is a significant increase in labour productivity over event years.

## Conclusion

The present impetus for global accounting information system follows the accelerating integration of the word economy. The application of international financial reporting standards will allow greater comparison of international financial results. More sources and reports will be available to a greater audience of analysts to follow trends in countries where previously due to different regulations and thus different reports these were less meaningful. The unified accounting information system will probably lead to new types of analysis and data, furthermore with the possible integration of new indicators from the practice of certain countries.

The accounting information system differences matter even to financial analysts who specialize in collecting, measuring and disseminating business information about the covered companies suggests that there are potential economic costs, associated with

variation in national rules across countries. Besides it is very important task for managers and researchers the valuation and analyzing the effects of international accounting standards on the business environment, especially their contribution to standardization and globalization. While a large body of this study is devoted to understanding the causes and consequences of the adoption of international accounting standards, researcher's attention has thus far focused almost exclusively on the informational benefits for the business environments, like evolution of labour productivity, sales growth and economic resources.

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