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International Accounting Standardisation in Hungarian Practice

SUMMARY: The purpose of this study was to measure the differences between national rules and international methods, evaluating and analysing their financial effects on the economic environment. To examine decisions made by companies to adopt IFRS, we created a sample comprising Budapest Stock Exchange (BSE) companies that adopted IFRS in Hungary in 2005. The financial data are taken from accounts published on the Budapest Stock Exchange and in the Hungarian Business Information database. In our sample, the firms are classified as either 'following international standards' or as 'using domestic accounting rules'. The results show that larger firms (those with more leverage, higher market capitalisation and substantial exports) were more likely to have adopted international accounting standards. Among these firms, lower profits are declared less frequently—possibly indicative of the quality of earnings management. Companies that had adopted IFRS also provided higher quality and value-relevant accounting information systems.

KEYWORDS: international financial reporting standards (IFRS), harmonisation, globalisation, financial analysis, logistic modelling
JEL CODES: M16, M41, M48

The European Commission (OJ C 154 29.05.2001) and the Economic and Social Committee (OJ C 260 17.09.2001) are of the opinion that the transparency and comparability of annual accounts (Directive 78/660/EEC of 25 July 1978) and consolidated annual reports (83/349/EEC of 13 June 1978), essential for the establishment of an efficient and uninterrupted internal capital market, are no longer ensured for companies of specific legal forms in EU Member States. As a result, the European Council held in Lisbon on 23–24 March 2000 emphasised the need to accelerate the complete roll-out of the internal market for financial services, with the Commission setting 2005 as the final deadline for the implementation of the action plan for financial services.

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For the capital market of the community to be competitive, it is important that the European directives on the preparation of financial statements be approximated to international financial reporting standards (IFRS), with special regard to cross-border transactions, and to listings on any foreign exchange across the globe.

GLOBALISATION OF ACCOUNTING

The continuous changes in the world economy and its constant and accelerating movement affect and influence life in all of its aspects. It is both a consequence and a requirement of globalisation that business communication and its language should be standardised. In financial management, accounting is one of the

tools of communication, its 'lingua franca', as it were. For that reason, efforts have been made worldwide for this 'language' to be standardised, thereby allowing the assets, financial position and profitability of economic entities to be determined by the same accounting standards.

Currently, the profit or loss of a large multinational corporation such as the German parent Daimler Chrysler, with over 900 subsidiaries in some 60 countries across five continents, is, under the international financial reporting standards, one and a half times that reported under the German accounting system (Epstein, 2009). Indeed, if the profit after taxes as reported in American (US GAAP) financial statements is taken to be 100 per cent subject to the same actual tax burden, then, owing simply to national differences in accounting principles and procedures, net profit will be 25 per cent higher in British accounting reports, 3 per cent and 13 per cent higher in France and Germany (HGB), respectively, and 34 per cent lower in Japan (Radebaugh and Gray, 2006).

Researchers at the University of Liverpool (Ormrod and Taylor, 2006) carried out an analysis of FTSE 100 members in respect of the accounts of non-financial enterprises. The survey suggested that the accounting reports drawn up according to international financial reporting standards provided a unique opportunity to collect comparative data, reporting the same period based on both the specific accounting rules of Britain and the IFRS, while following both approaches to assess transactions. The survey found that with 50 out of the 100 companies under review, the adoption of international standards increased profits after taxes by 39 per cent. They also identified the standards the changes in which played a major part in the increase; there were only a few such standards. Surprisingly, the comparison found only minimal differences with most standards. The results were aggregated by factoring in the size of each company in the sample. The greatest

share of the increase in profits (24 per cent) was attributable to the new method of recognising goodwill. The second strongest factor was the difference in evaluating invested assets, with a 13 per cent impact on profits. As far as the impact of international standards on equity capital is concerned, the survey found a 23 per cent decrease. Not surprisingly, the greatest decrease was the result of employees' benefits (pensions), amounting to 26 per cent. A major impact had been expected of the benefits applied, pensions in particular; however, that reflects changes in British rules rather than the adoption of international standards. Even with large corporations such as British Petrol, there is hardly any difference resulting from the application of the two accounting systems.

In summary of the findings of the survey, it is concluded that only a small number of standards caused major differences in profits and equity capital; however, the impact of some was significant.

OVERVIEW OF RELEVANT HUNGARIAN AND INTERNATIONAL LITERATURE

In comparative studies on Hungarian and international rules of accounting, *Lukács* (2006) points out, inter alia, the differences in judging the information content of financial statements, and the resulting interference with business interests and non-recognition of intellectual capital. In his analyses, *Pál* (2006) emphasises the role of a standardised accounting system in corporate strategies, similarly to studies by *Bosnyák* (2005) and *Szirmai – Matukovics* (2005). *Deák* (2005) also points out the benefits of international accounting standards, primarily in the practice of consolidation, complemented by impact assessments on currency conversion and inflation in a multinational corporate group by *Ónodi* (2008), comparative German-Hungarian accounting analyses by *Karai* (2005), and inqui-

ries by *Boros et al.* (2007) into aspects of managerial accounting.

We should note the assessments made in working papers by *Rabóczy* (2010) and *Filyó* (2010) of the impact of accounting systems on corporate competitiveness, value creation and quality improvement, suggesting that improvements to the regulation of accounting reports at the level of national economy, and the adoption of more developed techniques could help entities gain a competitive advantage. This is supported by practical corporate adoptions as reported in *Lakatos* (2009) and *Reszkető – Váradi* (2010), and by a case study by *Simon* (2009) in a food industry context. The simplified standards introduced in the SME sector in recent years have played a major role in the reduction of administrative burdens and costs associated with the requirements of the European Union. This is supported by a study by *Pál* (2010), and a presentation by *Tóth* (2009) published in conference material.

International research with direct relevance to the subject has shown that the use of accounting standards has made financial statements more comparable, significantly improved their quality, and contributed to the harmonisation of accounting, while driving investments and reducing capital costs (*Pincus et al.*, 2006; *Jermakovicz et al.*, 2007).

In addition to creating differences in technical conditions, changes in the use of accounting methods also generated extra costs, as there was a lack of sufficient time, practical experience and professional knowledge for the transition (*Lere*, 2009). Additionally, the introduction of fair value measurement has added to the volatility of book values and recognised accounting profits (*Nobes*, 2006; *Meeks and Swann*, 2009), leading to ‘distortions’ in indicators expressing the financial and financing position of companies that have already adopted the accounting standards. Such factors can affect the financial stability of enterprises, and can encourage them

to adjust their existing financing strategies and decision planning mechanisms in order to avoid the negative impacts of adopting international standards on their accounting information systems (*Ball et al.*, 2006a).

Practical experience gained in the years following the adoption of standards also proves that accounting reports provide much more fair and reliable information on the performance of the enterprises concerned (*Whittington*, 2008). In countries where the investor protection mechanism and the regulatory system are strong, international accounting standards have been introduced at a relatively low cost. Consequently, the institutional framework of each country may also influence the efficiency of adopting international methods (*Daske et al.*, 2007).

Ball et al. (2006b) examined the practices of four countries in East Asia, which also avoided publicity and disclosures as far as their accounting reports were concerned. In these countries, some shareholders have special political power, but differ from those in codified legal systems in that their political competences are far more limited. Namely, in states where politics exerted a dominant influence on the economy, it also left its mark on the practice of financial reporting, thereby supporting ‘in-house access to data’ rather than public disclosure of information.

BASIC FEATURES AND METHODS OF THE EMPIRICAL RESEARCH

This paper aims to provide an overview of the outcomes of our surveys on Hungarian practice, with particular regard to the impact of international financial reporting standards on the operations and financial performance of the enterprises in our sample. Our base population includes public and private limited companies with a headcount of over 50 and premises in Hungary. Out of the 1,097 companies that

fit this definition, 248 were included in our sample, 35 of which are listed in the Budapest Stock Exchange. The latter sample size should be judged in light of the fact that throughout the period of 2005 to 2007 under review, the number of listed companies remained below 60. The enterprises following the Hungarian rules of accounting were selected by simple random sampling. The scope our examination thus included approximately a quarter of the sample (22.6 per cent). *Table 1* shows the companies in the sample by industry. We did not include financial enterprises, insurers and brokerage firms in our research, as their accounting information systems are more difficult to compare with those in traditional industries. This is borne out by the fact that specific accounting regulations for such enterprises are provided for in government decrees related to Act C of 2000 on accounting. We obtained financial and accounting data from the database of the Budapest Stock Exchange, OPTEN's balance sheet database, and Service of Company Information and Electronic Company Registration of the Ministry of Public Administration and Justice. Information on the entire population was

provided by the Dissemination Database of the Hungarian Central Statistical Office.

Table 2 clearly indicates that the sample is not representative for industries. Although that was not the purpose of the research, we consider it important to note this for the sake of completeness and to avoid any possible misunderstanding. *Chart 1* shows the composition of the base population and the sample in terms of added value¹. Similarities are already greater here, but the sample is not representative for industries in terms of added value either.

We carried out our empirical analyses based on financial information disclosed in accounting reports for the business years 2005 to 2007. An examination of the 2007 business period deserves particular attention also because Recital 17 of Regulation (EC) No 1606/2002 held it necessary to allow Member States to defer the application of certain provisions until 2007 for those companies publicly traded both in the Community and on a regulated third-country market which were already applying another set of internationally accepted standards as the primary basis for their consolidated accounts.

Table 1

COMPANIES IN THE SAMPLE BY INDUSTRY AND TYPE OF ACCOUNTS

Industry (based on Hungarian NACE 2003)	Type of accounts	
	national regulations	IFRS-based
Agriculture	59	0
Manufacturing	29	15
Electricity, gas, steam and water supply	40	3
Trade and repair	47	4
Accommodation and food service	23	2
Transportation, storage, post and telecommunications	15	4
Financial service	0	2
Real estate activities, economic services	0	5
Total	213	35

Source: own calculations

Table 2

COMPANIES IN THE SAMPLE AND THE ENTIRE POPULATION BY INDUSTRY

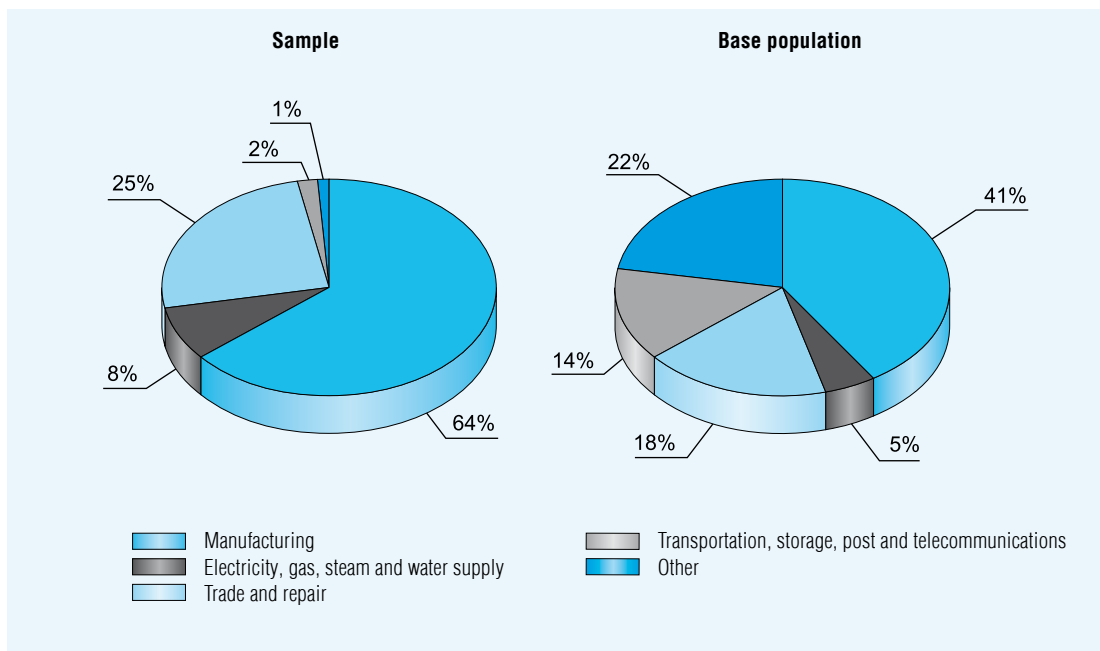
Industry (Hungarian NACE 2003)	Number and percentage of companies in the sample	Number (percentage) of public and private limited companies with a headcount of over 50 and premises in Hungary ²
Agriculture	59 (23.8%)	173 (15.8%)
Manufacturing	44 (17.7%)	358 (32.6%)
Electricity, gas, steam and water supply	43 (17.4%)	62 (5.7%)
Trade and repair	51 (20.6%)	169 (15.4%)
Accommodation and food service	25 (10.1%)	28 (2.6%)
Transportation, storage, post and telecommunications	19 (7.7%)	82 (7.5%)
Financial service	2 (0.8%)	82 (7.5%)
Real estate activities, economic services	5 (2.0%)	143 (13.0%)
Total	213	1,097

Note: Data for 2007

Source: Author's own editing based on sample data and the Dissemination Database of the Hungarian Central Statistical Office

Chart 1

ADDED VALUE OF COMPANIES IN THE SAMPLE AND THE ENTIRE POPULATION BY INDUSTRY



Source: Author's own editing based on sample data and the Dissemination Database of the Hungarian Central Statistical Office

Companies which had only publicly traded debt securities would also be exempt. It was nonetheless held crucial that by 2007 at the latest a single set of global international accounting standards, the IAS, applied to all Community companies publicly traded on a Community regulated market. Another reason for not taking into account data on subsequent business years for the purpose of our research is that the global financial crisis, starting in 2008, would have prevented comparable results from being obtained. We used IBM SPSS Statistics 19 for financial analysis.

FINDINGS AND EVALUATION

At the beginning of our empirical study, we carried out a comparative analysis for any significant difference between the economic performance of companies already applying international standards and of those following national rules of accounting. The economic performance of the companies under review was compared against 16 financial indicators for the period between 2005 and 2007 (see *Annex 1* for the definition and calculation method of each indicator).

In addition to the averages of the financial indicators, *Table 3* includes their standard deviations and the values of the skew indicator. The latter indicates that the distribution of the 16 financial indicators is asymmetric, showing varying degrees of skewness, i.e. deviations from normal distribution. Previous research on similar subjects published in international accounting literature (e.g. Lantto and Shalström, 2009) has also demonstrated similar statistical characteristics in financial impact assessments of adopting the standards in practice. That is why we also calculated the median values for our financial indicators.

Our key finding based on the descriptive statistics presented in the table is that there is

no statistically significant difference between the two 'accounting clusters' under review (companies that adopted international standards and those following national rules) in terms of financial ratios. Nevertheless, with a two-third majority of our financial indicators, the higher median values belong to companies that previously adopted the international standards. Significant differences ($p < 5\%$) between the two accounting groups were found with only four of the indicators (return on assets and equity, initial capital, and changes in net asset value). An analysis of averages showed significant differences with two variables (working capital ratio and the chain index of net asset value). The positive accounting conclusion offered by this may suggest that the economic and financial performance of companies adopting the international standards did not decrease following the mandatory transition in accounting methodology in 2005.

At the same time, papers published in recent years in international accounting journals on similar subjects by a number of authors include conclusions that the change in financial reporting (the transition from national regulations to accounting standards) did in fact involve a decrease in economic and financial performance, and indeed, in some countries, measures such as cut-backs affecting senior financial officers and certain employee groups (cf. Wu and Zhang, 2009). Iatridis and Rouvolis (2010), for example, report that in the case of Greek companies, the transition to IFRS led to a significant increase in the volatility of profitability indicators. Indeed, the profits of companies that had adopted international standards also suffered significantly, resulting in lower executive incomes and higher leverage, and thus poorer liquidity. This was owed to the fact that increased leverage and capital costs had reduced the profitability of such firms. In their study, Lantto and Sahlström (2009) found that a positive change (significant at 1% level)

**RESULTS DESCRIBING THE INDICATORS UNDER REVIEW,
COMPARED BY TYPE OF ACCOUNTS***

Indicator	Enterprises preparing accounts under national regulations				Enterprises preparing accounts according to IFRS			
	Median	Mean	Standard deviation	Skewness**	Median	Mean	Standard deviation	Skewness
Sales to taxed profit	0.02	0.11	0.47	9.62	0.06	-0.57	3.95	-5.89
Sales to assets	1.06	1.35	1.11	2.40	0.93	1.35	1.89	3.49
Sales to operating profit	0.03	0.14	0.69	8.59	0.06	-0.58	4.07	-5.89
Change in sales (previous year=1)	1.06	1.19	1.93	14.29	1.06	1.28	0.74	3.24
Change in sales (2005=1)	1.14	1.95	8.88	12.87	1.23	1.76	1.82	3.27
Change in assets to equity	1.79	2.49	2.25	3.68	1.61	2.11	1.26	2.21
Liquidity	1.05	1.23	0.97	2.31	1.35	2.46	4.59	5.00
Working capital ratio	0.02	-0.05*	0.51	-7.53	0.10	0.09*	0.33	-0.27
Leverage	0.67	1.38	2.16	3.76	0.60	1.07	1.21	2.13
Return on equity (ROE)	0.05*	0.19	0.67	6.23	0.11*	0.19	0.53	5.45
Return on assets (ROA)	0.02*	0.15	0.60	6.19	0.05*	0.07	0.10	1.71
Initial capital to assets	0.24*	0.30	0.48	9.01	0.18*	0.25	0.26	1.69
Initial capital to equity	0.49	0.49	0.31	1.29	0.28	0.55	1.04	5.11
Increase in initial capital (previous year=1)	2.02	4.45	7.03	4.72	3.59	6.16	6.67	1.85
Change in net asset value (previous year=1)	1.04	1.15*	1.24	13.84	1.09	1.31*	0.54	1.78
Change in net asset value (2005=1)	1.11*	1.60	5.25	13.56	1.18*	1.52	0.94	1.95

Notes: *With both mean and median, significance (p) is below 5 per cent for hypothesis testing to compare the value of the two groups.

** The SPSS suite uses the following formula to quantify skewness, (for a detailed description of the indicator, see Pintér – Rappai 2007, p. 138).

Source: own calculation

followed the transition from Finnish accounting regulations to international standards with the financial indicators of sales to operating income, return on equity and assets, and leverage. However, the liquidity and market indicators of the companies deteriorated following the transition in accounting methods.

The findings of the international papers referred to in the previous paragraph also demonstrated that the impacts of the changes in accounting methodology are primarily caused by the application of rules concerning

valuation (fair value rather than cost) and deferred taxation (separated application of accounting and taxation rules), by the broader or narrower interpretation of employees' benefits (particularly in the field of pensions), and by differences in procedures for the recording, amortisation and consolidation of certain asset groups (capitalisation of research and development, accounting for operating and financial leases). For instance, in Hungarian accounting regulations, fair value measurement is a requirement only for financial instruments,

historic cost being used otherwise for both financial accounts and statements. Nevertheless, the research papers referred to above also give accounts of the specific practices associated with the introduction of accounting standards in continental law, in countries where private undertakings played a major role in corporate lending subject to the requirements of governments and tax authorities, such as Finland and Greece, as compared with countries following UK and US accounting principles. Research reported in international literature (e.g. Easton, 2006) has also demonstrated that the accounting practices of Anglo-Saxon countries such as Great Britain are similar to IFRS in many aspects and also have higher value relevance, as a result of which the transition from national regulations to standardisation (the adoption of standards) has been less expensive in those countries.

In an attempt to model the business decisions of companies with Hungarian premises concerning the adoption of international accounting standards, we used a logistic regression function. Our dependent variable is the fact of adoption (IFRS=1 – the company has adopted the international system, IFRS=0 – the company applies the national rules of accounting). The most efficient model used only four of the 16 financial indicators available or calculated. The growth of the companies under review was quantified by the dynamic changes in their sales. Liquidity was measured through the assessment of the coverage of liabilities. Finally, our model incorporated the base and chain ratios of business assets, i.e. net asset value (*DeltaM52*). These produced the following function:

$$IFRS_i = \beta_0 + \beta_1 Growth07_05_i + \beta_2 Liquidity_i + \beta_3 DeltaM52_2006_i + \beta_4 DeltaM52_2005_i + \varepsilon_i$$

We evaluated the quality of the model from three aspects. The value of significance associated with the global test of the model is

virtually 0, i.e. we found an existing model. Nagelkerke's R^2 , indicating the explanatory power of our model, is 0.165; this is a relatively low value (Hajdu, 2003). The third tool to test the model fit and judge its quality is a so-called classification table (see *Table 4*). The table shows that our model has produced an overall match rate of 87.7 per cent. This means that it correctly classified 214 companies out of 244. However, in order to judge the actual quality of the model, it is also important to take into account the match rate at line level. We can see that the model correctly classified virtually all of the companies that follow national accounting rules. At the same time, it could only identify and thus correctly classify six of the companies that adopted IFRS. This corresponds to a rate of 17.1 per cent, which is relatively low. Overall, then, even the most effective model incorporating the indicators available could not capture, in good enough quality, the differences between the companies grouped by the accounting reports that they use.

Previous international studies on similar subjects produced similar quality, with a fair degree of variation in the selection of sample size and methodology. For example, while explanatory power was demonstrated at 40 per cent in the IFRS adoption studies by *Leuz and Verrechia* (2000), the same rate was only 18 per cent in *La Porta* (1998).

Consequently, the results of our model should be evaluated with findings on quality in mind. The results for the explanatory (independent) variables of the model are presented in *Table 5*.

Results of the partial tests (Wald tests) for the logistic regression model (see *Table 5*) show that the value of each parameter to the variables incorporated in the model are significant. The last column of the table includes the so-called *odds*, expressing the ratio of the chances of the phenomena marked 1 (adoption of international standards) and 0 (rejection of adoption) occurring (Hajdu, 2003). The data in the table

Table 4

CLASSIFICATION TABLE FOR THE LOGISTIC REGRESSION MODEL			
Observed classification	Classification forecast		Ratio of correctly classified cases (%)
	National regulations	Standards	
National regulations	208	1	99.5
IFRS-based	29	6	17.1
Ratio of all correct classifications			87.7

Source: own calculations

Table 5

RESULTS FOR EXPLANATORY VARIABLES					
Variables	Coefficients (B)	Standard error	Wald	p*	Exp(B) (odds)
Change net in sales (2005=1)	0.133	0.059	5.073	0.024*	1.142
Liquidity	0.353	0.151	5.507	0.019*	1.424
Chain index of net asset value	3.090	0.911	11.515	0.001**	21.970
Base index of net asset value	-0.825	0.263	9.848	0.002**	0.438
Constant	-4.974	0.874	32.415	0.000**	0.007

Notes: * $p < 5\%$; ** $p < 1\%$

Source: own calculations

offer the conclusion that the greatest impact on the adoption of international standards in Hungary was made by the increase in net asset value, i.e. business assets, as their increase multiplied the chances of adoption over 21-fold. A beneficial impact was also found in connection with the growth and liquidity of the companies under review, since these factors improved the chances of introducing the international standards by 14 and 42 per cent, respectively. At the same time, the more than 50 per cent decrease of odds in line 4 of the table may be linked to early expectations for adoption results as occurring in the business years immediately following the 2005 accounting standardisation in Hungary. Experience reported in the Greek literature detailed earlier also includes such findings.

For example, in their logistic model *Li* and *Meeks* (2006) found the positive coefficient of return on assets (ROA) to have the highest odds, i.e. the favourable change of this financial indicator made the greatest impact on the adoption of the standards. By contrast, *Bushman* and *Piotroski* (2006) attributed the strongest positive impact (highest odds) to the size of the companies adopting the standards (in our analyses, the increase in business assets-total assets to equity capital). It is to be noted that research by *Leuz* and *Verrecchia*, referred to earlier, did not demonstrate a positive significant coefficient associated with company size. In their paper, *Frankel* and *Li* (2004) attributed the strongest positive impact (highest odds) to the capitalisation of the companies (increase in equity capital) in terms

of the adoption of international accounting standards.

Wu and Zhang (2009) also demonstrated a positive adoption aptitude for the values of the same coefficients, although to a somewhat lesser extent. Moreover, it is worth noting the impact of an increased ratio of export sales on the increased adoption of IFRS adoption. Among the financial impact assessments following the introduction of accounting standards, the scope of their research included decreased productivity (sales per employee) countering IFRS adoption despite the fact that the companies concerned were far less productive than the industry average, which, in turn, provided an increasing impulse for the adoption of international methods. Nevertheless, in their final conclusions the authors found that enterprises with more assets, higher leverage and a higher ratio of exports were adopting international accounting standards at an increased rate. Additionally, negative coefficients (such as in connection with ROA and ROE indicators) increasingly called for the establishment of a financial information system that had a higher value relevance.

SUMMARY, CONCLUSIONS

The research reported in this paper was concerned with the impacts of the transition from national accounting rules to international methods. Earlier papers referred to here also demonstrated that accounting results disclosed following the adoption of standards were less susceptible to influence and could be treated with greater care, and that early expectations for financial and economic performance might only be realised in business years far ahead. It is on such grounds that international accounting methods can become increasingly effective tools as part of the financial management of corporate governance, as well as a means to define internal performance and to express its evaluation.

The first point addressed in our research was whether the economic and financial indicators of companies – primarily those listed in the Budapest Stock Exchange – that had adopted the international standards and had premises in Hungary showed any significant differences from those of enterprises with a headcount of over 50 that prepared annual accounts but applied Act C of 2000. Our experience with international literature, primarily in the context of the practice in Western Europe, Greece and Finland, was that several financial indicators of the companies concerned showed a statistically significant decrease following the adoption of the standards. However, based on the Hungarian practice, we have not been able to demonstrate any significant difference between our two ‘accounting clusters’ in the period of 2005 to 2007. Presumably, this may be due partly to the fact that our model included relatively few companies that had adopted the international standards. One reason for that is that the financial and insurance sectors were not included in our analysis because of the specificities and, in several cases, differences of their accounting systems, which would have prevented comparability. The other reason is that in Hungary, the number of voluntary decisions concerning adoption is relatively small, as a result of which even the base population includes few enterprises applying the international standards.

In the subsequent part of our study, we were able to demonstrate the financial and economic factors (indicators) that could exert a statistically significant impact on the adoption of international methods. Based on the four indicators explained (growth in sales and asset ratios, and liquidity), we modelled IFRS adoption and drew conclusions as to the extent of their impacts (odds). That said, practical experience convinced us that companies listed on the Budapest Stock Exchange had adopted the international standards

primarily in compliance with EU regulations, adoption being a requirement for them. The impact of financial and economic factors were thus eliminated, although their role cannot be ruled out. In fact, experience from international literature provides examples for relationships between the factors under review. In Western European and American practice, there were cases of some companies making a voluntary transition to the use of international standards before mandatory adoption, particularly with multinationals with premises in several countries. The latter adopted the international standards, considered as a consistent set, primarily in order to standardise and align their system of financial statements, their main goal being financial and accounting harmonisation and the elimination of differences between internal regulations that varied by country.

This paper may provide information to bodies and committees addressing both national and

international standards, especially in terms of the impacts of changes in accounting methods. Additionally, Hungarian and foreign investors may also incorporate into their strategies the experience of individual countries with the adoption of standards in their attempts to implement a harmonised and aligned financial information system. In our opinion, entry into international capital markets and the accounting practice of the subsidiaries of multinationals could be greatly facilitated by the increased adoption of international standards, the reduction of information asymmetry, the improvement of the quality of accounting information, as well as the improvement of financial performance and the reliability of the reporting system.

We consider this research an initial step towards additional, more detailed and broader analysis, including inquiries into the period following the financial crisis starting in 2008.

Annex 1

DESCRIPTION OF THE INDICATORS USED FOR THIS STUDY

Indicator	Calculation
Sales to taxed profit	Taxed profit/Net sales
Sales to assets	Net sales/Total assets
Sales to operating profit	Operating profit/Net sales
Change net in sales since 2006	Net sales (2007)/Net sales(2006)
Change net in sales since 2005	Net sales (2007)/Net sales(2005)
Assets to equity	Total assets/Equity capital
Liquidity	Current assets/Liabilities
Working capital ratio	(Current assets–liabilities)/Total assets
Leverage	Liabilities/Equity
Return on equity (ROE)	Taxed profit/Equity
Return on assets (ROA)	Taxed profit/Total assets
Initial capital to all assets	Registered capital/Total assets
Initial capital in equity	Registered capital/Equity
Increase in initial capital	Equity/Registered capital
Change in net asset value (previous year=100%)	Total assets (2007)/Total assets (2006)
Net asset value (2005=100%)	Total assets (2007)/Total assets (2005)

NOTE

¹ The table shows net sales for the sample, and gross added values for the base population

LITERATURE

- BALL, R. – ROBIN, A. – SADKA, G. (2006): The effect of international institutional factors on properties of accounting earnings. *Journal of Accounting and Economics*. 29, pp. 417–434
- BALL, R. – LAKSMANN, S. (2006): Earnings quality in UK private firms. *Journal of Accounting and Economics*. 39, pp. 83–128
- BORDÁNÉ RABÓCZKI, M. (2010): Számviteli információk a versenyképesség szolgálatában (Accounting information for competitiveness). *Műhelytanulmány* (Working paper), BCE, Budapest, p. 85
- BOSNYÁK, J. (2005): Nemzetközi számviteli trendek (International trends in accounting). *Műhelytanulmányok* (Working Papers). BCE, Budapest
- BOSNYÁK, J. – LUKÁCS, J. – PAVLIK, L. – SZÉKÁCS, T. (2005): *Külföldi számviteli rendszerek (Foreign accounting systems)*. BCE, Budapest
- BUSHMANN, R. – PIOTROSKI, J. (2006): The importance of reporting incentives: earnings management in European private and public firms. *Journal of Accounting and Finance*. 27, pp. 149–161
- CSAJBÓK, I. (2007): Az összehasonlító számvitel módszertana (Comparative accounting methodology). Konferenciakiadvány (Conference paper), Debreceni Egyetem, p. 194
- DEÁK, I. (2005): A globalizálódó számvitel (Globalising accounting). In: Botos, K.(ed.): Pénzügyek és globalizáció (Finances and globalisation), SZTE Tudományos Közleményei (Scientific Papers of the University of Szeged), Szeged, pp. 201–214
- DASKE, H. – HAIL, L. – LEUZ, C. - VERDI, R. (2007): Adopting a Label: Heterogeneity in the economic Consequences of IFRS Adoptions. *Journal of Business Finance & Accounting*. 4, pp. 329–375
- EASTON, P. (2006): Use of forecasts of earnings to estimate and compare cost of capital across regimes. *Journal of Business Finance and Accounting Research*. 23/2. pp. 49–71
- EPSTEIN, B. J. (2009): The Economic effects of IFRS Adoption. *The CPA Journal*. 03, pp. 26–31
- FILYÓ, J. (2010): Kkv-k számviteli beszámolási rendszere (Financial reporting for SMEs). *Műhelytanulmány* (Working paper), BCE, Budapest, p. 57
- FRANKEL, M. R – LI, X. (2004): Characteristic of a Firm's Information Environment and the Information Asymmetry between Insiders and Outsiders. *Journal of International Business Studies*. 37, pp. 229–259
- HAJDU, O. (2003): *Többváltozós statisztikai számítások (Multivariable statistical calculations)*. Központi Statisztikai Hivatal (Hungarian Central Statistical Office), Budapest, p. 457
- IATRIDIS, G. – ROUVOLIS, S. (2010): The post-adoption effects of the implementation of International Financial Reporting Standards in Greece. *Journal of International Accounting, Auditing and Taxation*. 19, pp. 55–65
- JERMAKOVICZ, K. – KINSEY, P. – WULF, I. (2007): The Value Relevance of Accounting Income Report-

- ed by DAX-30, German Companies. *Journal of International Financial Management & Accounting*. 18, pp. 611–641
- KARAI, É. (2005): Számviteli alapelvek értelmezése a nemzetközi számviteli standardok szerint (Interpreting accounting principles according to international accounting standards). *Harvard Business Manager*. 10. pp. 12–15
- KAZAINÉ ÓNODI, A. (2008): Nemzetközi számvitel kérdései vállalati nézőpontból (International accounting issues from a corporate perspective). BCE, *Műhelytanulmányok* (Working Papers), p. 30
- LAKATOS, L. P. (2009): A számvitel szabályozása és a pénzügyi kimutatások hasznosságának megítélése (Accounting regulations and the utility of financial statements). PhD thesis, BCE, Budapest, p. 189
- LA PORTA, R. (1998): Law and Finance. *The Journal of Political Economy*. 106. pp. 1113–1155
- LANTTO, M. – SHALSTRÖM, P. (2009): Impact of International Financial Reporting Standard adoption on key financial ratios. *Journal of Accounting and Finance*. 49. pp. 341–361
- LERE, J. C. (2009): Benchmarking Accounting Practices in a Global Economy. *The CPA Journal*. 10, pp. 10–12
- LEUZ, C. – VERRECCHIA, R. E. (2000): The economic consequences of increased disclosure. *Journal of Accounting Research*. 38, pp. 91–124
- 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
- LUKÁCS, J. (2006): Különbségek a magyar számvitel és a nemzetközi számviteli standardok között (Differences between Hungarian accounting and international accounting standards). *Társadalom és Gazdaság* (Society and Economy). 28. pp. 8–15
- MEEKS, G. – SWANN, P. (2009): Accounting standards and the economics of standards. *Accounting and Business Research*. 39. pp. 191–210
- NOBES, G. (2006): *A Survey of National Accounting Rules Benchmarked Against International Accounting Standards*. London, 9th Edition
- ORMROD, P. – TAYLOR, P. (2006): A study of the impact of IFRS adoption has looked beyond the early adopters for evidence. *Journal of Accounting*. 12, pp. 82–84
- PÁL, T. (2004): A számvitel jövőképe – elvárások és lehetőségek az integrációban (The vision of accounting – expectations and opportunities in integration). Manuscript, Miskolci Egyetem (University of Miskolc), Miskolc, p. 125
- PÁL, T. (2006): A standardizálás szerepe a számviteli előrejelzésekben (The role of standardisation in accounting forecasts). In: Globális és hazai problémák tegnaptól holnapig (Global and Hungarian problems from yesterday to tomorrow). Magyar Jövőkutatási Konferencia kiadványa (Paper from the Hungarian Conference on Future Research), Budapest
- PINCUS, M. – RAJGOPAL, S. – VENKATACHALAM, M. (2006): The Accrual Anomaly: International Evidence. *The Accounting Review*. 6, pp. 89–111
- PINTÉR, J. – RAPPAL, G. (eds.) (2007): *Statisztika* (Statistics). Pécs. Pécsi Tudományegyetem Közgazdaságtudományi Kar (University of Pécs, Faculty of Economics), p. 508
- RADEBAUGH, L. – GRAY, S. (2007): *International Accounting and Multinational Enterprises*. 4th Edition. London

RESZKETŐ, M. – VÁRADI, P. (2010): A vállalkozásokat érintő adminisztratív terhek, versenypolitikai következmények (Administrative burdens on enterprises and their consequences on competition policy). Műhelytanulmány (Working paper), BCE, Budapest, p. 97

SIMON, SZ. (2009): Nemzetközi számviteli standardok alkalmazása az élelmiszer-ipari vállalkozások konszolidációjánál (Applying international accounting standards for the consolidation of enterprises in the food industry). BGF PSZK konferencia kiadványa (Paper from the BGF PSZK Conference), Budapest, p. 155

SZIRMAI, A. – MATUKOVICS, G. (2005): *A nemzetközi számviteli standardok alapelvei és fő tartalmi elemei (Basic principles and key elements of*

international accounting standards). MKVK, Budapest

TÓTH, Á. (2009): Nemzetközi számviteli integrációs lehetőségek a KKV-szektorban (Opportunities for international accounting integration in the SME sector). Széchenyi Egyetem konferencia kiadványa (Conference paper from the Széchenyi University), Győr. p. 254

WHITTINGTON, G. (2008): Harmonization or discord? The critical role of IASB conceptual framework review. *Journal of Accounting and Public Policy*. 27, pp. 495–502

WU, S. – ZHANG, P. (2009): International Accounting Standards and Internal Performance Evaluation. *The Accounting Review*. 19, pp. 1285–1304