International Accounting Standardization Effects On Business Management: Evidence From Hungary

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Abstracts - This paper traces the benefits of international accounting standards and their contribution to harmonization in business practice. In this review, the goal is to describe and summarize how the accounting standards promote management decisions and influence the business environment in a global scale. It is expected that 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 practice of certain countries. In the scientific research methodology the author assigned that the Balance Sheet indexes deteriorated especially regarding solvency and prosperity after adaptation of IFRS. Earnings management reduced after the post-adoption period.

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I. INTRODUCTION

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.

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

II. 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, 2008). The accounting system is a complementary component of the country’s overall institutional system (Ormrod et al., 2006) and is also determined by businesses’ incentives for financial reporting. Li and Meeks (2006) provide the first investigation of the legal system’s effect on a country’s financial system.

The financial reporting quality include the tax system (Shleifer and Vishny, 2003) ownership structure (Easton, 2006; Ball and Lakshmann, 2005), the political system (Radebaugh and Gray, 2007), capital structure (Daske et al., 2006) and capital market development (Botsari and Meeks, 2008). Therefore, controlling for these institutional and firm-level factors becomes an important task in the empirical research design too.

One study (Meeks and Swamm, 2009) characterises of accounting amounts for businesses that adopted international standards 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. They found, that international standards 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 international standards.

Another study (Jermakowicz et al., 2007) found that first time mandatory adopters experience statistically significant increases in market liquidity and value after international standards reporting becomes mandatory. The effects were found to range in magnitude from 3 % to 6 % for market liquidity and from 2 % to 4 % for businesses by market capitalization to the value of its assets by their replacement value.

III. METHODOLOGY

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:

H1: The Balance Sheet indexes deteriorated especially regarding solvency and prosperity after adaptation of IFRS in the examined companies’ case.

H2: IFRS adoption reduced earnings management.

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. 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.

IV. ACCOUNTING RULES 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):

\[
RR_{i,t} = a_0 + a_1 \text{Size}_{i,t} + a_2 \text{Dividend}_{i,t} + a_3 \text{Growth}_{i,t} + a_4 \text{Profitability}_{i,t} + a_5 \text{Liquidity}_{i,t} + a_6 \text{Leverage}_{i,t} + \epsilon_{i,t}
\]  

\[
PA_{i,t} = a_0 + a_1 \text{Size}_{i,t} + a_2 \text{Dividend}_{i,t} + a_3 \text{Growth}_{i,t} + a_4 \text{Profitability}_{i,t} + a_5 \text{Liquidity}_{i,t} + a_6 \text{Leverage}_{i,t} + \epsilon_{i,t}
\]

Where:

- \(RR_{i,t}\) = dummy variable, indicating the regulatory system,
  \(RR_{i,t} = 1,\) financial numbers are reported under IFRS,
  \(RR_{i,t} = 0,\) financial numbers are reported under National GAAP.
- \(PA_{i,t}\) = dummy variable, indicating the post-adoption effects.
  \(PA_{i,t} = 1,\) financial numbers are reported under IFRS in 2007
  \(PA_{i,t} = 0,\) 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 share
- NPM: Net profit margin
- ROCE: Return on capital employed

Liquidity:
- CFM: Cash flow margin
- CUR: 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

\(\epsilon_{i,t}\) = the error term
The results are reported in table 1.

<table>
<thead>
<tr>
<th>Denomination</th>
<th>National GAAP employed enterprises</th>
<th>IFRS adopter enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. deviation</td>
</tr>
<tr>
<td>DIVSH</td>
<td>0.0946</td>
<td>0.1986</td>
</tr>
<tr>
<td>DIVYI</td>
<td>17.5764</td>
<td>19.8721</td>
</tr>
<tr>
<td>MVBV</td>
<td>5.8152</td>
<td>7.8125</td>
</tr>
<tr>
<td>NPM</td>
<td>-0.2945</td>
<td>4.5412</td>
</tr>
<tr>
<td>EPS</td>
<td>0.1987</td>
<td>1.0561</td>
</tr>
<tr>
<td>ROCE</td>
<td>0.2008</td>
<td>0.3051</td>
</tr>
<tr>
<td>OCF</td>
<td>3.8812</td>
<td>15.4421</td>
</tr>
<tr>
<td>CUR</td>
<td>1.9911</td>
<td>6.9105</td>
</tr>
<tr>
<td>CFM</td>
<td>0.8029</td>
<td>2.3126</td>
</tr>
<tr>
<td>DEBTE</td>
<td>1.9843</td>
<td>2.3566</td>
</tr>
<tr>
<td>CGEAR</td>
<td>0.3454</td>
<td>0.2325</td>
</tr>
<tr>
<td>DSFU</td>
<td>0.3258</td>
<td>0.1353</td>
</tr>
</tbody>
</table>

(Source: Author’s own constructions)

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.

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.

V. 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 Iatridis, G. and Rouvolis, S. (2010) researches, to analyse the associations between accruals and cash flows, profitability, leverage and size. The regression model that is used is as follows (3):

$$ACCR_{it} = a_0 + a_1FRSi_{it} + a_2FRSOCFi_{it} + a_3FRSLNMV_{it} + a_4FRSOPM_{it} + a_5FRSTLSFU_{it} + e_{it}$$

(3)
Where:

\[ AC_{CR,t} = \text{Accruals scaled by total assets.} \]

\[ FRS_{t} = \text{Dummy variable indicating the financial reporting system in use.} \]

\[ FRS_{t} = 1 \text{ for firms reporting under IFRS in 2007,} \]

\[ FRS_{t} = 0 \text{ for firms reporting under the National GAAP in 2006.} \]

\[ OCF = \text{Multiplication of IFRS and operating cash flows.} \]

\[ FRSOCF_{t} = \text{Variable used to examine the impact of IFRS on the association between accruals and cash flows.} \]

\[ LNMV = \text{Multiplication of IFRS and the natural logarithm of market value.} \]

\[ FRSLNMV_{t} = \text{Variable used to examine the impact of IFRS on the association between accruals and size.} \]

\[ OPM = \text{Multiplication of IFRS and operating profits margin.} \]

\[ FRSOPM_{t} = \text{Variable used to examine the impact of IFRS on the association between accruals and profitability.} \]

\[ TLSFU = \text{Multiplication of IFRS and total liabilities to shareholders' funds.} \]

\[ FRSTLSFU_{t} = \text{Variable used to examine the impact of IFRS on the association between accruals and leverage.} \]

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

### Earnings management effects

<table>
<thead>
<tr>
<th>Denomination</th>
<th>National enterprises</th>
<th>GAAP followed enterprises</th>
<th>IFRS adopter enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \Delta NP ) volatilitása</td>
<td>4,1581</td>
<td>6,1021</td>
<td></td>
</tr>
<tr>
<td>( \Delta NP/\Delta CF ) volatilitása</td>
<td>11,4401</td>
<td>12,0120</td>
<td></td>
</tr>
<tr>
<td>( FRSOCF )</td>
<td>-1,21**</td>
<td>-0,7145**</td>
<td></td>
</tr>
<tr>
<td>( FRSLNMV )</td>
<td>-0,025**</td>
<td>-0,014*</td>
<td></td>
</tr>
<tr>
<td>( FRSOPM )</td>
<td>0,5541**</td>
<td>0,2145**</td>
<td></td>
</tr>
<tr>
<td>( FRSTLSFU )</td>
<td>-0,2574**</td>
<td>-0,1941**</td>
<td></td>
</tr>
<tr>
<td>( R^2 )</td>
<td>0,784</td>
<td>0,815</td>
<td></td>
</tr>
</tbody>
</table>

*Statistical significance at 10% level (two-tailed).

**Statistical significance at 1% level (two-tailed).

(Source: Author’s own construction)

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 %.

VI. CONCLUSION

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. 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