

# INTERNATIONAL ACCOUNTING REGULATIONS RESPONSE FOR THE GLOBAL FINANCIAL CRISIS

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## ABSTRACT

The paper draws on the economics of standards to inform current debates on international accounting standards. It illustrates these benefits and disadvantages with cases from accounting regulation. Equally significant is the need for a more informed understanding of the changes that have occurred in the influence structures in the world of accounting politics both national and international, of the changing role that accounting plays in the informational environment of organizations and with how accounting changes in relation to shifts in the underlying nature of the socio-economic system in which business operates.

This study examined the impact of the adoption of international accounting standards on the economic performance of businesses listed on the Budapest Stock Exchange in Hungary. The samples consist of 65 international adopting and 260 local (Hungarian) accounting rules user firms. Financial data are from published accounting statements in Budapest Exchange Trade and Hungarian Business Information database. The adoption decision model tested if the demand from internal performance evaluations is a factor in businesses decisions to adopt international accounting standards under the global financial crisis situations.

The result of this research suggested that larger businesses, those with higher leverage, with more substantial foreign sales are more likely to adopt international standards. Controlling for the effects of macro-economic conditions by including the market return in Hungary it was pointed that the coefficients on market returns had been insignificant in the various regressions. This suggests that the increase in the sensitivity of turnover to accounting performance post-adoption is primarily driven by heightened turnover sensitivity to accounting losses.

JEL Codes: M16, M41, M48.

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## INTRODUCTION

The global financial crisis really started to show its effects in the middle of 2007 and into 2008. Around the world stock markets have fallen, large financial institutions have collapsed or been bought out, and governments in even the wealthiest nations have had to come up with rescue packages to bail out their financial systems. This caused a global financial crisis that has had far reaching implications on the stability of world financial systems. Glaring examples of this crisis can be seen in the demise of well established entities, such as: Merrill Lynch being bought out by the Bank of America, Lehman Brothers being declared bankrupt. Bear Sterns slowly dissolving into nothing, the Royal Bank of Scotland reporting record losses and the demise of Northern Rock.

Extensive political pressure, encouraged by the business community, from both the European Union and the US Congress have forced the arm of both the

International Accounting Standard Board (IASB) and the Financial Accounting Standards Board (FASB) to accelerate urgently the timetable to rewrite the provisions of the financial instrument standards. One of the examples of political interference was the US Congress issuing a draft bill allowing Congress to withdraw any part of an accounting standard as it so wishes. A further example of political pressure was evident in Europe where the IASB yielded to European Union (EU) pressure to adopt the identical model adopted by the US, being the reclassification of financial instruments.

The enormity of the pressure on the accounting standard setters can be likened to Atlas balancing the world on his shoulders. Numerous parties pounced and were quick to highlight the potential accounting-related issues that were seen to be the cause of this crisis. The parties involved, amongst others, included large

business organisations, the Basel Committee for Banking Supervision (Basel), the Finance Ministers of the G7 group of countries (G7), the US Federal Reserve, the Financial Stability Forum (FSF), the European Commission (EC), the US Congress and the Securities & Exchange Commission (SEC). As time past, the pressure applied on the accounting standard setters to institute corrective action increased exponentially.

The crisis is also encouraging more critical examinations of the managerial innovations that have emerged from the audit industry, not least its pursuit of the bureaucratisation of risk in the name of risk management. Coming through a crisis where risks have been real and perceived, increasingly it is coming to be seen that risk management mechanisms do relatively little to facilitate the real management of risk. Adding as they do to costs – and the income of the consultancies involved, by isolating rather than integrating the management of risk, the bureaucratic mechanisms still promoted by the audit firms and their associates provide yet further evidence of the relatively limited understanding that the audit industry has of real time management in action.

Trying to understand the crisis and reflect on its implications also illustrates the dangers of the drift away from the world of accounting practice that has been a characteristic of so much accounting research for the last few decades. Indeed at times it is possible to think that for some there has been a drift away from accounting itself: at the very least there has been a pronounced move towards studying accounting at a distance. As yet this has not been as severe in its implications as for those of our colleagues in finance research where increasing numbers have a very limited appreciation of the complexities of practice and its institutional context. There nevertheless has been a move away from analysing just such complexities and institutional contexts in the accounting

area, often in the name of theoretical elegance and methodological rigour. Interestingly this is true for both statistically based capital market studies and a great deal of more critical theorizing. Of course theoretical and methodological issues are of real importance, not least in helping to avoid methodological capture by practice norms, frameworks and ways of looking at the world. But as numerous other social science disciplines illustrate, there are ways of balancing interests in the need for sound and reliable research with genuine interests in the complexities of practice. It really is important to understand how accounting has become implicated with the creation of new financial practices, with objectifying and simplifying the increasingly complex financial transactions that have emerged from an ever expanding investment in financial engineering. Equally significant is the need for a more informed understanding of the changes that have occurred in the influence structures in the world of accounting politics both national and international, of the changing role that accounting plays in the informational environment of organizations and with how accounting changes in relation to shifts in the underlying nature of the socio-economic system in which business operates.

International accounting literature provides evidence that accounting quality has economic consequences, such as costs of capital, efficiency of capital allocation and international capital mobility.

### **Enhanced disclosure of fair value measurement**

Criticism was levelled at the IASB because many stakeholders felt that insufficient disclosure was provided on various components of fair value measurement, including the sensitivities of inputs in the determination of the fair value and the effect of fair value measurements on profit and loss. The IASB has recently released amendments to the existing IFRS 7:

Financial Instruments: Disclosures. These amended disclosures are required for entities with financial reporting periods commencing on or after 1 January 2009, and are based on the United States General Accepted Accounting Principles (US GAAP) standard, FAS 157, Fair Value Measurements.

#### **Reclassification of financial instruments**

The IASB was subject to an enormous amount of political pressure with the European Union (EU) threatening to withdraw its endorsement of International Financial Reporting Standards (IFRS) if it did not permit the reclassification of certain financial instruments. Previously, the EU had required all EU publicly listed entities to adopt IFRS for reporting periods commencing on or after 1 January 2005.

In an unprecedented step, the IASB, without due process being followed, in October 2008, released an amendment to the existing standard allowing for the reclassification of financial assets previously carried at fair value to be carried at amortised cost, depending on various circumstances. This allowed entities not only to reverse previously recognised losses, but also allowed these instruments to be carried now at amortised cost. The amount of disclosure required for the reclassification is fairly onerous.

#### **Off-balance sheet structures and de-recognition**

Standard setters have been criticised as to the reasons why accounting standards allowed for certain transactions to be derecognised from the balance sheet and for allowing special purpose vehicles, created by a group, not to be consolidated.

The existing accounting treatment of the consolidation of special purpose vehicles, including securitisation vehicles, when evaluated against the current accounting requirements may not have required such vehicles to be consolidated in the groups' financial statements. The reason for the non-consolidation of these vehicles was that the focus for the evaluation of control was on the legal obligations of the creator

of the vehicle, with constructive obligations largely ignored.

This has resulted in loan obligations, related financial assets and profits or losses in these vehicles not being included in the financial results of the group. However, when these vehicles went into default, the group took ultimate responsibility for making good losses to investors and thereby, through their actions, acknowledged that they had indeed controlled these vehicles. In evaluating whether control existed, a legalistic approach was followed that resulted in constructive obligations being ignored in concluding whether these vehicles should be included in the group financial statements.

The US standards are currently more rule based in comparison to the IFRS. Studies have shown that if entities currently applying US Generally Accepted Accounting Practice (US GAAP) had applied the provisions contained in IFRS rather than that of US GAAP, it would have drastically increased the number of special purpose vehicles requiring consolidation. An exposure draft was released by the IASB in December 2008 that proposed that a control model should be applied when assessing whether a special purpose vehicle should be consolidated. Other requirements include the continual re-assessment of whether or not an entity controls another entity, including the potential consolidation of entities where the consolidating entity does not hold a majority interest. Non-consolidation of an entity requires onerous disclosures.

With regard to recognition of financial instruments, current standards written by the IASB and the FASB contain a complex set of rules against which entities have to evaluate specific transactions, in order to derecognise financial instruments off their balance sheet. The US standard contains more rules for de-recognition when compared to those contained in IFRSs. In the development of accounting standards,

the IASB has always attempted to develop principle-based standards.

### **Measurement of own credit in financial liabilities**

Due to the existing stringent requirements contained in IAS 39, Financial Instruments: Recognition and Measurement for the hedging of financial instruments, many entities have been unable to apply hedge accounting due to incompatible policies and procedures. This has resulted in many entities applying the fair value option (FVO) to fixed rate financial liabilities in cases where interest rate derivatives are used to hedge interest rate risk.

The FVO requires entities to measure the full fair value of the liability, including the impact of own credit, when applying the fair value option. This has led to the ludicrous situation where an entity would recognise a profit on the deterioration of its credit rating. This is contradictory to the economic reality, as the deterioration in an entity's credit rating indicates that the entity is not performing well and should by no means recognise a profit on the deterioration of its own credit.

An exposure draft was issued in June 2009 on how an entity's own credit should be included in the determination of the fair value of financial liabilities.

### **Measurement and classification of financial instruments**

The existing standards on financial instruments stretches over 750 pages in the Bound Volume of IFRS, and contain a combination of rules and principles that make it difficult to comprehend. The current version of IAS 39 includes four different categories of financial assets, two categories of financial liabilities and a further option for entities to designate financial instruments at fair value through profit and loss, if certain criteria are met.

The approach likely to be followed by the IASB is to mirror the principles contained in the International Financial Reporting Standard for Small and Medium Entities (IFRS for SMEs), which contains a more

simple approach to the classification of financial instruments. This approach includes only two categories of financial instruments: those that are categorised at fair value and those measured at amortised cost. The IFRS for SMEs would be supplemented by the business overlay model when evaluating the appropriate classification of financial instruments.

The exposure draft states that financial instruments with the profile of interest yielding instruments may be measured at fair value, and with all other financial instruments recognised at fair value, and with changes recognised through the income statement. Changes in fair value can only be recognised in Other Comprehensive Income (OCI) for equity instruments that an entity holds for strategic business purposes. There will be no recycling of amounts recognised in OCI with regard to these instruments.

### **Impairment provisioning**

There is a great debate about whether or not the current accounting standards model for determining impairments is appropriate. Various European Central Banks have recommended different models that would allow entities effectively to spread impairment losses over the periods of prosperity. Alternatively, the Bank of Spain, which was the least affected European financial system during the crisis, has recommended the use of a complicated mathematical equation for the determination of impairment provisions.

Further questions surrounding this issue include whether the 'incurred loss method' of recognising impairment or the Basel II method of 'expected losses' is the correct method of recognising impairment. An exposure draft relating to impairments is expected to be released in September 2009.

### **Hedge accounting**

Current provisions to apply hedge accounting are extremely onerous. Many simple transactions such as the hedging of simple inventory transactions or capital

assets are disallowed, or are prohibitively too expensive to be implemented. The IASB has committed to re-evaluating the provisions of hedge accounting, which would hopefully ease the ability of entities to apply hedge accounting. An exposure draft on this is expected towards the end of 2009.

This study examines the impact of the adoption of international accounting standards on the financial 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 international accounting standards were functioned by the global financial crisis.

## **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 (Zeff, 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.

## **METHODOLOGY AND RESULTS**

This study examines the impact of the adoption of international accounting standards on the economic 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.

To analyze business adoption decision my sample consists of Budapest Exchange Trade (BET) companies who compulsory adopted international financial reporting standards in Hungary, from 2009. In this

research the pre-adoption examination period is in year of 2008 and the post-adoption is in year of 2010. 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 Budapest

$$\text{Prob [Adopt=1]} = \text{Logit} (a_0 + a_1 \text{Close\_Held}_0 + a_2 \text{Labor\_Prod}_{-1} + a_3 \text{RET}_{-1} + a_4 \text{ROA}_{-1} + a_5 \text{Size}_{-1} + a_6 \text{Lev}_{-1} + a_7 \text{Growth}_{-1} + a_8 \text{Foreign\_Sales}_{-1}). \quad (1)$$

Where:

**Close Held:** Percentage of closely held shares at the end of event year (event year of 2009 for the management turnover and employee layoffs analyses)

**Labour Prod:** Labour productivity (sales per employee) minus the median labour productivity

**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.

I included lagged variables on businesses performance ( $RET_{-1}$  and  $ROA_{-1}$ ), firm size ( $Size_{-1}$ ), leverage ( $Lev_{-1}$ ), growth

Exchange Trade and Hungarian Business Information database. In my sample the businesses are classified into those following IFRS and those following national accounting rules.

The adoption decision models are expanded relying Nobes (2006) researches and test if the demand from internal performance evaluations is a factor in businesses decisions to adopt international accounting standards under the global financial crisis situations. It is estimated in the following logistic regression model (1) after the prior literature (Wu and Zhang, 2009):

( $Growth_{-1}$ ) on the right-hand side of the regression model and I expected the coefficients on firm size, leverage and growth to be positive. I also included foreign sales as a percentage of enterprise total sales ( $Foreign\_Sales_{-1}$ ). I expected these variables to have positive signs.

The regression results are reported in Table 1. In Table 1 the coefficients estimates, standard errors, and the marginal effects are reported in columns (1) to (3), respectively. The *Close\_Held<sub>0</sub>* has a negative coefficient, -0.00445, and significant at the 0.05 level. The percentage of closely held shares can also vary with business' incentives to access the capital market as more closely held business may have lower demand for external capital. This is the reason why the research controls for various factors related to business financing needs in the regression model.

The coefficient on *Labor\_Prod<sub>1</sub>* is -0.00005 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 1.08 percent. Regression has reasonable predictive power with a *Pseudo R<sup>2</sup>* of 32 percentages.

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 suggested that these variables associated with disclosure incentives have predictive power for the adoption decision (e.g. Ball and Shivakumar, 2005, Whittington, 2008). The control variables signed that larger businesses, those with higher leverage, with more substantial foreign sales are more likely to adopt international

standards. I found that *Close\_Held* are consistent with compensation contracting demands affecting business decisions to adopt international accounting standards.

The marginal effect suggest that a one standard deviation increase in the percentage of closely held shares decreases the adoption likelihood by 0,64 percent, or 5 percent of unconditional adoption probability of 20 percent (65/325). This supports a greater demand for more informative and conservative accounting earnings due to economic performance evaluations at more widely held by businesses stimulating to adopt international accounting standards.

Table 1. Logistic analysis of accounting standards adoption decision

Analysis	Estimate	Standard Error	Marginal Effects*
Close_Held <sub>0</sub>	-0.00445	0.0026**	-0.64%
Labor_Prod <sub>-1</sub>	-0.00005	0.0003 **	-1.08%
RET <sub>-1</sub>	-0.1134	0.1447	-0.30%
ROA <sub>-1</sub>	-0.5609	0.7148	-0.31%
Size <sub>-1</sub>	0.2659	0.0461***	4.21%
Lev <sub>-1</sub>	1.3004	0.4882***	1.12%
Growth <sub>-1</sub>	-0.2883	0.2021	-0.50%
Foreign_Sales <sub>-1</sub>	1.2085	0.2301***	3.08%

(Source: Author’s own construction)

\*\*,\*\* \*\* 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)

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

**CONCLUSION**

Just as in the wider world there is a hope and expectation that the current economic and financial crisis might result in a degree

of reflection, learning and real change, so the following group of articles together constitute the basis for a similar plea in the area of accounting research. Hopefully by

more closely observing and reflecting on both practice and its context and the changes that have occurred within them in recent times, the accounting research community might recognize the advantages of moving beyond their current focus on research at a distance. While more abstract conceptions or organizational functioning can be important, it also needs to be realised that many issues of real significance and importance can only be investigated by delving into the complexities of accounting in action. An improved understanding of accounting and its consequences does require an exploration of the functioning of accounting institutions, an understanding of the issues at stake in accounting change, an appreciation of the ever growing consequences of the commercialisation of the international audit industry and so on. My research paper investigates the effects of international accounting system on economic decisions, financial performance and business environment. As I predicted that businesses face a better need for informative measures of enterprises performance to facilitate internal performance evaluation, therefore a higher probability of international standards. Controlling for the effects of macro-economic conditions by including the market return in Hungary it was pointed that the coefficients on market returns had been insignificant in the various regressions. Analyzing the changes in labour productivity at the adopting businesses the tests did not show a significant decreasing in the productivity over the last 5 years. 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. I measured earnings and stock performances with indicator variables of negative Return on Assets (ROA) and

stock returns, respectively. The indicators with continuous measures of ROA and stock returns were replaced. This suggests that the increase in the sensitivity of turnover to accounting performance post-adoption is primarily driven by heightened turnover sensitivity to accounting losses.

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