IMPACT OF IFRS ON ORGANIZATIONAL INFORMATION SYSTEMS

Alan R. Peslak, Penn State University, arp14@psu.edu

ABSTRACT

One of the most important changes in the history of financial reporting is the change from local or national standards to a uniform, consistent set of rules known as IFRS (International Financial Reporting Standards). These standards are currently being reviewed by the US Securities and Exchange Commission (SEC) to replace US Generally Accepted Accounting Principles (GAAP). There are many advantages of a worldwide standard for accounting. But this change will require significant changes in organizational information systems. This study reviews financial executives views on preparation for this change as well as the impact on their IS (Information Systems). This study finds that 83% of financial executives estimate their Information Systems (IS) effort will be greater than 6 months and 45% estimate the effort to be greater than one year. Despite this however, less than 5% of executives' organizations have conversions in progress or completed. Only another 18% have started planning for the conversion. Little response variance is found due to size of company or industry. There is difference between public and private companies. Finally, this study found little IS involvement is IFRS conversion.

Keywords: Information Systems (IS), Enterprise Resource Planning Systems (ERP), Financial Information Systems

INTRODUCTION

The United States is currently making the slow transition to new accounting standards. Currently, the US uses GAAP or Generally Accepted Accounting principles as the basis for public financial statements. Much of the world, however, has standardized on IFRS or International Financial Reporting Standards. Since 2007, the Securities and Exchange Commission has allowed non-US firms to file statements based on these IFRS [3]. The SEC is now considering allowing US firms to file statements based on IFRS. The effect of these changes to reporting is projected to have a significant impact on accounting in international and domestic firms. Along with accounting, however, there would need to be significant modifications to information systems to support these new standards. The current status and estimated impact of this change on IT staff and systems is the subject of this study.

LITERATURE REVIEW

Prior to reviewing the impact of these standards, this study reviews the background and advantages that moving to a worldwide accounting standard provides. There may be actual organizational value benefits beyond simply being prepared for the inevitable switch to IFRS in the US [8] [18] [21]. Armstrong, Barth, and Reidl [1] found in Europe that corporations can positively influence their stock prices by pre-adoption of IFRS information. This suggests that firms that pre-adopt can actually increase their market value. A similar effect may be expected for US firms prior to required adoption. Barth, Landsman, and Lang [2] found an overall quality improvement between pre and post IFRS adoption in the quality of accounting information that firms provide. They studied 1896 firms from 21 countries. "Our results indicate that the accounting amounts of firms that apply IAS are of higher quality than those of non-US firms that do not". This should translate into higher quality investor information and more efficient markets. Beneish, Miller, and Yohn [5] noted a significant impact between IFRS adoption and improved financial reporting quality and affecting firm debt instruments. Barth, Landsman, Lang, and Williams [4] found capital market benefits of voluntary IFRS adoption. Yip and Young [25] found positive evidence of cross country information comparability. Harris and Muller [13] found IAS valuations were more highly associated with price-per-share than US GAAP. Horton, Serafeim, and Serafeim [15] discovered a casual improvement in "forecast accuracy, following, disagreement and volatility of revisons", collectively called the firms' information environment, after IFRS adoption. Kim and Shi [17], in a study of 34 countries, deternined that voluntary IFRS adoption "facilitates the incorporation of firm-specifiic information into stock prices", thereby enhancing market efficiency.

Similarly, Florou and Pope [10] saw a positive relationship between IFRS adoption and increase in institutional holdings, due to higher quality financial statements. Brochet, Jagolinzer, and Riedl [6] found that when the UK adopted IFRS standards "abnormal returns to insider purchases" were reduced after IFRS. In other words, IFRS resulted in better and more complete information, reducing the potential advantages of insider information that was not included in prior accounting reporting. A similar improvement in the US is certainly likely. DeFranco, Kothari, and Verdi [8] model the benefits of financial statement comparability, namely lowering the cost of investor information and increasing quality and quantity of investor information. Hail, Leuz, and Wysocki [12] suggest improvements in worldwide competitiveness, increasing overall economic value. Hail, Leuz, and Wysocki [11] note investor comparability benefits and cost savings for multinational firms, but do note the large potential one-time cost to moving to IFRS.

Not all researchers agree on the improved accounting comparability available with IFRS. Cascino, Stefano, Gassen, and Joachim [7] suggest that country and regional incentives still influence accounting comparability even after IFRS adoption. But the majority of researchers do agree on significant and tangible improvements in markets and firms after IFRS adoption. And, of course, just adopting IFRS is insufficient. Van Tendeloo and Vanstraelen [24] find that enforcement of IFRS standards is necessary to preclude earnings management.

As far as timing of required US adoption, though work has been delayed a bit "for companies subject to the first wave of IFRS reporting in particular, those dates leave little time for procrastination. "We're suggesting that this is not a long timeframe to achieve everything that will need to be done. At the very least, in 2009, some serious planning for conversion needs to take place," said Ken Marshall, a partner with Ernst & Young and the firm's Americas markets leader for IFRS. "How long is the runway you really have between now and then to get your [IFRS] airplane off the ground? Some companies have a very condensed timeframe [while] others will need every bit of the three years to get the opening balance sheet prepared and underway… It's not a trivial job. [IFRS] is a wedge into the overall organization, not just accounting. All aspects of the company, even though these are accounting standards, will be affected by the move to IFRS." [16]

"The SEC in August approved for public comment the "Roadmap" for IFRS, in which it anticipates mandatory reporting under IFRS beginning in 2014 for large accelerated filers, 2015 for accelerated filers and 2016 for non-accelerated filers. It also provides for early adoption in 2009 by a small number of very large companies that meet certain criteria. The possibility also exists that the SEC will at some point allow other companies to voluntarily adopt IFRS prior to the mandatory conversion date." [22]

According to Price, Waterhouse, Coopers [20], a major accounting firm, "while the near-term use of IFRS in the US by domestic public companies will not be required, IFRS remains very relevant to many US businesses. Companies are and will be affected by IFRS at varying times and degrees of magnitude, driven by factors such as size, industry, geography, M & A activity, and global expansion. Despite an unclear SEC adoption timeline, it is believed the impact of accounting changes resulting from the FASB's and IASB's joint efforts will be significant and will have broad based implications."

RESEARCH QUESTIONS

The SEC issued its latest reports in September of 2012. Though it did not endorse a change to IFRS standards at this time, it did support the benefits of a single set of global accounting standards and did suggest that IFRS seems to be that standard. [23] Further study and compliance standards are necessary before a switch from US GAAP to IFRS is recommended, though it does appear that conversion is inevitable. PwC recommends "thoughtful and measured" actions relative to systems that support IFRS. This study supports the cautious view that firms have been adopting. But what of the potential impact and how large is it projected to be? There are four areas that are explored in relation to IFRS preparation

Research Question 1: What is the current status of IFRS preparedness or conversion?

Research Question 2: Is the Information Systems department involved in IFRS preparedness or conversion?

Research Question 3: What is the actual or expected impact of IFRS on organizations' information systems?

Research Question 4: What is the estimated time for conversion of organizational information systems to IFRS?

METHODOLOGY

Given the importance of the move to IFRS, this study explores financial executives' views on their state of preparation as well as their perceived importance for their information systems and organizations. In order to analyze these attitudes, secondary data analysis is performed on a rich data survey set. This study used a large data set that was available from Financial Executives International. Financial Executives International is "the preeminent association for CFOs and other senior finance executives." It has … CFOs, VPs of Finance, Treasurers, Controllers, Tax Executives, Academics, Audit Committee members [in] companies large and small, public and private, cross-industry. [9] The FEI, each year, commissions a large scale study of "technology issues for Financial Executives". The survey instructions follow.

"FEI's Committee on Finance & Information Technology (CFIT) and Financial Executives Research Foundation (FERF), in partnership with Gartner, are conducting the twelfth annual survey of Technology Issues for Financial Executives. This research examines and reports on information technology from the perspective of the financial executive." (FEI, 2010). [9]

As a part of this study, specific information was obtained from top financial executives on information technology actions, as well as attitudes towards IFRS. These questions and responses were sufficiently detailed and pertinent to the research questions to serve as the bases for testing this study's research questions. The main advantage is the large data set and the independent collection from a private membership trade group. All data has been collected and furnished by the Financial Executives International and remains their property. Use for academic and research purposes was obtained by the author. The author wishes to sincerely thank the organizations for their cooperation.

The overall questionnaire included 44 questions in the noted categories, but sub-questions and ranked responses raised the overall individual data points to more than 220. From this overall report a small subsection was used to analyze the relevant research questions. Selected responses from the Demographics section were included as well. The specific questions used to test the research questions are detailed in the results section.

RESULTS

Using the FEI secondary data each research question is explored as well as analyzed whether there is any demographic variation in response to the question based on organizational size, industry the company competes in, and whether the firm is publicly traded or privately held.

Research Question 1: What is the current status of IFRS preparedness or conversion?

The actual FEI survey question that maps to this RQ (research question) follows.

12a. In light of the SEC's road map for the transition to IFRS, in what time frame would your company plan to implement?

1. All conversion activities to be deferred until closer to the required adoption date
2. Planning and impact analysis in progress, but implementation to be deferred until closer to the required adoption date
3. All conversion activities are in progress
4. Conversion activities are complete
5. Not applicable for my organization

Overall 46% of respondents did not see the IFRS requirement to be applicable to their organization. Of the group that did see applicability, the impact of IFRS was delayed in most organizations based on 2010 data (Table 1). 56% were delaying all conversion activities until closer to the required adoption date and 35% only started planning and impact analysis. Conversion in progress or complete were exhibited in only 8.9% of firms. Thus, major information systems work remained to be done at that time.

A comprehensive chi square analysis was performed to see if these results were significantly different based on size of the organization, industry the organization competes in, and whether the firm was publicly traded or private. For all the variables, there were significant variances (Ownership and Industry at p < .001 and Size at p<.02). Private firms had a much higher level of non-applicability (Table 2). Also, there is a much higher percentage of private firms have not done any planning or impact analysis. This is most likely due to the lack of SEC oversight for privately held firms. Industries that have begun planning include Hi-tech, Utilities, and Aerospace (Table 3). In general, larger firms are much more likely to have started planning for IFRS conversion (Table 4).

Table 1 IFRSTimeplanA12a

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1- Deferred	101	20.9	30.4	56.4
	2 -Planning	62	12.8	18.7	34.6
	3- In Progress	8	1.7	2.4	4.5
	4- Completed	8	1.7	2.4	4.5
	5- Not applicable	153	31.7	46.1	100
	Total	332	68.7	100	
Missing	System	151	31.3		
Total		483	100		

Table 2 Pub/Priv * IFRSTimeplanA12a

		IFRSTimeplanA12a					Total
		1.00	2.00	3.00	4.00	5.00	
Pub/Priv	0	4	0	0	0	20	24
	1-Public	46	40	4	4	7	101
	2-Private	51	22	4	4	126	207
Total		101	62	8	8	153	332

Table 3 Industry * IFRSTimeplanA12a

	IFRSTimeplanA12a					Total
	1.00	2.00	3.00	4.00	5.00	
Aerospace and Defense	1	2	3	0	5	11
Chemicals	3	0	0	0	3	6
Consumer Goods Mfg.	2	1	0	0	2	5
Consumer Goods Mfg.	4	3	0	1	8	16
Distribution	3	1	0	0	5	9
Engineering and Construction	2	0	1	1	11	15
Financial Services – Banking	3	2	0	0	2	7
Financial Services – Insurance	1	3	1	0	7	12
Financial Services – Other	1	2	0	0	3	6
Government	0	0	0	0	2	2
Healthcare – Payor	0	0	0	0	2	2
Healthcare – Provider	2	0	0	0	4	6
Healthcare – Pharmaceuticals	5	2	0	0	2	9
Higher Education	1	0	0	0	2	3
High-tech	13	15	0	0	12	40
Leisure and Hospitality	2	0	0	0	2	4
Industrial Manufacturing – Discrete	6	3	0	1	13	23
Industrial Manufacturing – Process	7	3	0	1	6	17
Media and Entertainment	1	0	0	1	4	6
Mining and Metals	1	1	0	0	1	3
Oil and Gas	3	3	0	0	1	7
Nonprofit (non-Governmental)	2	0	0	0	10	12
Professional Services	9	5	3	0	13	30
Publishing and Printing	2	1	0	0	0	3
Real Estate	3	2	0	0	5	10
Retail	8	1	0	0	1	10
Telecommunications	1	2	0	0	4	7
Transportation Services	2	0	0	0	3	5
Utilities	1	5	0	0	0	6
Wholesale	4	0	0	0	5	9
Other	8	5	0	3	15	31
Total	101	62	8	8	153	332

Table 4 Size * IFRSTimeplanA12a

		IFRSTimeplanA12a					Total
		1.00	2.00	3.00	4.00	5.00	
Less than $100 Million	Size 1	45	12	2	2	89	150
$100 Million – $499 Million	2	30	12	2	3	39	86
$500 Million – $999 Million	3	9	7	0	0	12	28
$1 Billion – $5 Billion	4	10	12	3	2	7	34
Greater than $5 Billion	5	7	19	1	1	6	34
	Total	101	62	8	8	153	332

Research Question 2: Is the Information Systems department involved in IFRS preparedness or conversion?

The second question reviews whether the IT department is involved in IFRS conversion planning.

12b. How involved is the IT Department in the planning and/or project management of the IFRS conversion initiative?

1. Active participant on IFRS conversion steering committee.
2. Active participant on IFRS conversion project management office.
3. Kept apprised of IFRS conversion efforts, but not an influencer.
4. No role for IT Department in early stages of conversion.
5. Not applicable, organization has not commenced IFRS conversion planning.

Of the 135 applicable respondents, participation is noted. Though only 4% are active participants in the steering committee, another 15% are active in the conversion project management office. Thirty-four percent are kept in the loop, but not noted as influencers, and a large 47% are not involved in the early stages of conversion. A detailed statistical review by ownership, size, and industry shows NO significant differences in any industry demographics.

Table 5 IFRSITinvolved

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Active participant on IFRS conversion steering committee.	5	1.0	3.7	3.7
	Active participant on IFRS conversion project management office.	20	4.1	14.8	18.5
	Kept apprised of IFRS conversion efforts, but not an influencer.	46	9.5	34.1	52.6
	No role for IT Department in early stages of conversion.	64	13.3	47.4	100.0
	Total	135	28.0	100.0	
Missing	System	348	72.0		
Total		483	100.0		

Research Question 3: What is the actual or expected impact of IFRS on organizations' information systems?

The third area reviewed was a review of the specific impact that IFRS was currently having on the organization.

12c. What is the actual or expected impact of IFRS on your organization's IT business applications?

1. We plan on making addressing requirements in our financial reporting (or Corporate Performance

2. Management) solution only.
3. We plan on managing all GAAP to IFRS activities offline in spreadsheets.
4. We envision minor changes to our ERP (or integrated financial management) system.
5. We are using this to justify an ERP upgrade, where we will configure IFRS requirements.
6. We are using this to justify a new ERP system to replace our existing.
7. We have not begun to size this activity.
8. We are not worried about this at this time

Similarly to question 1, most organizations have not seen much impact at this time on information technology. There is some recognition that changes will need to be made (Table 6). One percent is using IFRS to justify a new ERP and another one percent is using IFRS to justify and ERP upgrade. Another 9 percent see minor changes coming to their ERP systems. But there is much uncertainty remaining. Over 60% of firms either did not respond or are not worried at this time. A large group, 22%, has not begun sizing the activity. It is clear that organizations have not yet addressed the extent that IFRS will have on their information systems.

An analysis by public/private, industry, and company size has shown that this perception and situation is not significantly affected by organizational demographics. All industries, size organizations, and ownership type view the IT impact to be the same.

Table 6 IFRSITimpact

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		152	31.5	31.5	31.5
	We are not worried about this at this	145	30.0	30.0	61.5
	We are using this to justify a new ERP	5	1.0	1.0	62.5
	We are using this to justify an ERP upgr	5	1.0	1.0	63.6
	We envision minor changes to our ERP (or	44	9.1	9.1	72.7
	We have not begun to size this activity.	107	22.2	22.2	94.8
	We plan on making addressing requirement in financials only	19	3.9	3.9	98.8
	We plan on managing all GAAP to IFRS act in spreadsheets	6	1.2	1.2	100.0
	Total	483	100.0	100.0	

Research Question 4: What is the estimated time for conversion of organizational information systems to IFRS?

The final question explores the perceived complexity of the IFRS transitions by financial executives.

12d. What is the expected length of time necessary to modify and/or replace your organization's IT applications as part of the IFRS conversion?
(Please mark all that apply)

1. Less than 6 months
2. Between 6 and 12 months
3. Between 12 and 24 month
4. More than 24 months
5. Not yet known
6. Not applicable

Of the 80 respondents, most recognize the significance of IFRS transition on their organizations' information technology departments. Fully 83% of the respondents see the effort as greater than 6 months and 45% see the effort greater than one year. Public companies see the effort as significantly greater than private companies at $p < .05$. This is most likely due to the lowered reporting requirements for privately held companies. There is no noted significant difference by industry. Also, surprisingly, there is no significant difference based on size of the organization. All sizes of organizations see this as a significant effort.

Table 7 IFRStimeInvoved

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 6 months	14	2.9	17.5	17.5
	Between 6 and 12 months	30	6.2	37.5	55.0
	Between 12 and 24 month	29	6.0	36.3	91.3
	More than 24 months	7	1.4	8.8	100.0
	Total	80	16.6	100.0	
Missing	System	403	83.4		
Total		483	100.0		

Table 8 Pub/Priv * IFRStimeInvoved

		IFRStimeInvoved				Total
		1.00	2.00	3.00	4.00	
Pub/Priv	0	0	1	0	0	1
	1	2	16	21	4	43
	2	12	13	8	3	36
Total		14	30	29	7	80

Table 9 Chi-Square Tests 12d

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.756[a]	6	.022
Likelihood Ratio	15.781	6	.015
Linear-by-Linear Association	6.879	1	.009
N of Valid Cases	80		

a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is .09.

CONCLUSIONS

This study has important implications particularly for practitioners. The move for US corporations to move to IFRS accounting appears to be on an inevitable track. The recognition of this effort however has only been recognized by a small percentage of organizations. This study was a review of the current state of IFRS recognition and effort needed by information technology departments to address this major accounting change into organizational information systems. The current situation is that though the SEC will likely move US corporations to IFRS, the date is not finalized. This may be a reason that many organizations have delayed any planning or work on conversion. But time is running short for organizations, however. According to the AICPA (American Institute for Certified Public Accountants) "Today there are only three longer-term priority MoU projects for which the boards have yet to finalize all of the technical decisions—Financial instruments, Revenue recognition and Leases. The timelines on revenue recognition and leases were extended at the request of many stakeholders to ensure that their interests could be given full consideration." [14]. This suggests that adoption may come very soon.

For organizations that recognize the importance of IFRS, 83% believe the IT effort will take more than 6 months. This statistics suggests a significant effort on the part of organizations. There is opportunity for future study to explore the proposed difficult and costly future modifications

This study found that most organizations are deferring activities until closer to required adoption date. Of those that believe IFRS is applicable to their organization however, about 10% have work completed or in progress. Analysis of ownership status reveals that public companies are much more likely to have worked on IFRS conversion. Most major accounting organizations are recommending that efforts be started with regard to IFRS conversion planning. There is a significant gap between work required to meet IFRS conversion and actual planning work performed. This gap exists in all sizes of companies and all industries. It is imperative that work be started to plan for this major change to organizational information systems.

REFERENCES

1. Armstrong, C., Barth, M., Jagolinzer, A., and Riedl, E.. (2010). Market Reaction to the Adoption of IFRS in Europe. *The Accounting Review 85*: 31-61.
2. Barth, M. Landsman, W., and Lang, M. (2008). International Accounting Standards and Accounting Quality. *Journal of Accounting Research 46*: 467-498.
3. Barth, M., W.R. Landsman, Lang, M., and Williams, C. (2012). Are IFRS-based and US GAAP-based Accounting Amounts Comparable? *Journal of Accounting and Economics 54*:68-93.
4. Barth, M., Landsman, W. Lang, M. and Williams, C. (2013) Effects on Comparability and Capital Market Benefits of Voluntary Adoption Available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2196247
5. Beneish, M., Miller, B. and Yohn, T., (2012). The Impact of Financial Reporting on Equity versus Debt Markets: Macroeconomic Evidence from Mandatory IFRS Adoption. Available at SSRN: http://ssrn.com/abstract=1403451 or http://dx.doi.org/10.2139/ssrn.1403451
6. Brochet, F., Jagolinzer, A., and Riedl, E. (2011). Mandatory IFRS Adoption and Financial Statement Comparability. Contemporary Accounting Research.
7. Cascino, S., and Gassen, J. (2012). What Drives the Comparability Effect of Mandatory IFRS Adoption? Humboldt-Universität zu Berlin, working paper.
8. De Franco, G., Kothari, S. and Verdi, R. (2011). The Benefits of Financial Statement Comparability. *Journal of Accounting Research 49*: 895-931.
9. FEI (2010). 2010 FEI/Gartner Study of Technology Issues for Financial Executives, *Financial Executives International.*
10. Florou, A. and Pope, P., (2012) Mandatory IFRS Adoption and Institutional Investment Decisions Available http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1362564
11. Hail, L., Leuz, C., Wysocki, P. (2010a). Global Accounting Convergence and the Potential Adoption of IFRS by the U.S. (Part I): Conceptual Underpinnings and Economic Analysis. *Accounting Horizons 24*: 355-394.
12. Hail, L., Leuz, C., and Wysocki, P. (2010b). Global Accounting Convergence and the Potential Adoption of IFRS by the U.S. (Part II): Political Factors and Future Scenarios for U.S. Accounting Standards. Accounting Horizons 24: 567-588.
13. Harris, M., and Muller, K. (1999). The Market Valuation of IAS versus US GAAP Accounting Measures Using Form 20-F Reconciliations. *Journal of Accounting and Economics 26*: 285-312.
14. Hoogervorst, H. and Seidman, L. (2012) IASB-FASB Update Report to the FSB Plenary on Accounting. Available: http://www.ifrs.org/Use-around-the-world/Global-convergence/Convergence-with-US-GAAP/Documents/r_120420d.pdf
15. Horton, J., Serafeim, G., & Serafeim, I. (2012). Does Mandatory IFRS Adoption Improve the Information Environment?*. *Contemporary Accounting Research*. Available http://onlinelibrary.wiley.com/doi/10.1111/j.1911-3846.2012.01159.x/abstract

16. Kforce (2008) Companies Should be Proactive About IFRS Available: http://www.kforce.com/JobSeekers/FinanceAccounting/Newsletter/November2008Kronicle/PlanningAheadforIFRSReporting.aspx
17. Kim, J.-B. and Shi, H. (2012). IFRS Reporting, Firm-Specific Information Flows, and Institutional Environments: International Evidence. *Review of Accounting Studies 17*: 474-517.
18. Leuz, C. (2003). IAS Versus U.S. GAAP: Information Asymmetry-based Evidence from Germany's New Market. *Journal of Accounting Research 41*: 445-472.
19. Office Of The Chief Accountant United States Securities And Exchange Commission. (2012). Work Plan for the Consideration of Incorporating International Financial Reporting Standards into the Financial Reporting System for U.S. Issuers. Final Staff Report. Available: http://www.sec.gov/spotlight/globalaccountingstandards/ifrs-work-plan-final-report.pdf
20. Price, Waterhouse, Coopers (2012). IFRS: Current situation and next steps. Available: http://www.pwc.com/us/en/issues/ifrs-reporting/transition-to-ifrs-status.jhtml
21. Price, Waterhouse, Coopers. (2012). US GAAP convergence & IFRS Available: http://www.pwc.com/us/en/issues/ifrs-reporting/index.jhtml?WT.mc_id=cs_Global+IFRS+home+promo_US+IFRS+home
22. Securities and Exchange Commission. (2008). Roadmap for the Potential Use of Financial Statements Prepared in Accordance with International Financial Reporting Standards by U.S. Issuers; Proposed Rule. Available: http://www.sec.gov/rules/proposed/2008/33-8982.pdf
23. Securities and Exchange Commission. (2012). Work Plan for the Consideration of Incorporating International Financial Reporting Standards into the Financial Reporting System for U.S. Issuers: Final Staff Report. Available http://www.sec.gov/spotlight/globalaccountingstandards/globalaccountingstandards.pdf
24. Van Tendeloo, B. and Vanstraelen, A.. (2005). Earnings Management under German GAAP versus IFRS. *European Accounting Review 14*: 155-180.
25. Yip, R.W.Y, and Young, D.. (2012). Does Mandatory IFRS Adoption Improve Information Comparability? *The Accounting Review 87*: 1767-1789.