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IFRS and U.S. GAAP: Assessing the impact of reporting incentives on firm restatements in foreign and U.S. markets

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ABSTRACT

This study examines the impact of reporting incentives on firm restatements in foreign and U.S. markets. We investigate whether financial reporting, using International Financial Reporting Standards (IFRS) results in quality disclosures, given differences in institutional and market forces. This study examines the quality of financial statements prepared in accordance with IFRS and U.S. GAAP by concentrating on firm restatements as a measure of earnings management. Our results indicate that there is no significant difference in the value of restatements due to differences in accounting standards when the rule of law is high in the international market. Furthermore, firms with better law enforcement and higher traditions of law and order, tend to have smaller restatement amounts or less earnings manipulation. This study contributes to the literature by providing evidence of the quality of financial information prepared under IFRS and its dependency on the institutional factors and market forces of a country.

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1. Introduction

This paper examines the impact of reporting incentives on firm restatements in foreign and U.S. markets. In this study, we investigate whether financial reporting, using International Financial Reporting Standards (IFRS) results in quality disclosures, given differences in institutional and market forces. This study examines the quality of financial statements prepared in accordance with IFRS and U.S. GAAP by concentrating on firm restatements as a measure of earnings management. U.S. companies in 2006 issued a record 1420 financial restatements, up from 1255 restatements in 2005. Foreign-based companies registered with the Securities and Exchange Commission for doing business in the United States issued 118 restatements in 2006, up from 103 in 2005. In this study, earnings management is viewed as having an inverse relationship to earnings quality (i.e. high earnings quality is synonymous with low earnings management).

Recent interest in global accounting standards has resulted in considerable debate as to whether IFRS result in high quality financial reporting (Ashbaugh & Pincus, 2001; Barth, Landsman, & Lang, 2008; Cuijpers & Buijink, 2005). U.S. Generally Accepted Accounting Principles (U.S. GAAP) is frequently viewed as the benchmark for high-quality global standards (Levitt, 1998; McGregor, 1999). Moreover, the FASB has published a comparison on the differences in U.S. GAAP and IFRS and finds significant differences between them. Prior studies examining the quality of financial information prepared using IFRS compared to U.S. GAAP have presented mixed results (Ashbaugh & Olsson, 2002; Harris & Muller, 1999; Leuz, 2003).

A number of studies consider the benefits of IFRS by examining the actions of preparers and users of financial reporting information after a firm endorses IFRS. For instance, Covrig, Defond, and Hung (2007) argue that firms voluntarily adopting International Accounting Standards (IAS) attract foreign investors thus improving capital allocation efficiency. However, Ball, Robin, and Wu (2003) indicate that the global accounting debate focuses too much on the choice of accounting standards and too little on market forces and institutional factors. This study contributes to the global accounting debate by utilizing U.S. based companies complying with U.S. GAAP as a benchmark for measuring the quality of IFRS as applied by foreign-based companies registered with the Securities and Exchange Commission. Francis, Khurana, and Pereira (2003) found that common law countries have higher quality accounting and auditing standards and the enforcement of such standards through higher quality auditing is more likely to exist than in civil law countries. Furthermore, Burgstahler, Hail, and Leuz (2006) note that capital market pressures and institutional factors shape firms' incentives to report earnings that reflect economic performance.

Given the differences in institutional and market forces for the U.S. and foreign-based registrants with the SEC, management's incentives to engage in earnings management may outweigh the costs. Ball, Kothari, and Robin (2000) argue that when the costs of complying with IFRS are viewed as exceeding the costs of non-compliance, substantial non-compliance will occur. In this study, earnings management (quality) is determined by examining firm restatements for U.S. and foreign-based companies registered with the SEC. We

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compare firm restatements for the period 2003–2007 for U.S firms and foreign registrants with the SEC. This allows a comparison between companies operating under different institutional factors and market forces that have adopted IFRS versus companies that report under U.S. GAAP.

2. Literature and hypothesis

Prior market-based comparison studies examining the quality of financial information prepared under IFRS with financial information prepared under U.S. GAAP have presented mixed results. Harris and Muller (1999) find that U.S. GAAP earnings reconciliation adjustment is value-relevant and that U.S. GAAP amounts are valued differently for market value and return models than IFRS amounts. Similarly, Ashbaugh and Olsson (2002) in an examination of non-U.S./non-U.K. firms find that the earnings capitalization model is the dominant accounting-based valuation model when cross-listed firms report under IFRS. However, the residual income model is the dominant accounting-based valuation model for cross-listed firms reporting under U.S. GAAP. Leuz (2003) examined firms in Germany's "New Market" for growth firms, which are required to choose between IFRS and U.S. GAAP in preparing their financial statements. Leuz's findings do not indicate that U.S. GAAP is of higher quality than IFRS. Differences in the bid-ask spread and share turnover across IFRS and U.S. GAAP firms are statistically insignificant. Similarly, Leuz and Verrecchia (2000) find in a cross-sectional analysis that firms that commit to either IFRS or U.S. GAAP exhibit lower percentage bid-ask spreads and higher share turnover than firms following German GAAP.

Few studies have examined earnings management practices in non-U.S. countries. Darrough, Pourjalali, and Saudagaran (1998) examined the choices of accounting accruals using a large sample of Japanese companies. The results of the study indicate that similar to managers of U.S. firms, managers of Japanese companies chose income-increasing accounting accruals to increase their bonuses and to increase the amount of outside funding. Management's incentive to manage earnings may significantly affect the quality of earnings in cross-listed firms reporting financial information under IFRS. Management has incentives to adjust accounting earnings to maximize firm and/or manager wealth. The more discretion given to management in financial reports, the greater the opportunity for more manipulated and thus less quality reported financial disclosures. While prior research usually focuses on single countries using data from limited time intervals; Barth et al. (2008) examine 21 countries and use an assortment of quality measures during a common time period (1994–2003). Evidence from their study suggests that, in many countries, adoption of IFRS tends to result in higher quality earnings compared to the use of non-U.S. domestic standards. They found that firms endorsing IAS display less earnings smoothing, less management towards positive earnings, and more timely recognition of losses. While including research design features to mitigate the effect, the authors acknowledge that changes in firms' incentives and the economic environment may have contributed to their results. In an investigation of the variation in accounting standards across 13 countries relative to International Accounting Standards (IAS), Ashbaugh and Pincus (2001) find that analyst forecast accuracy improves after firms adopt IAS. The authors suggest that the improvement in analyst forecast accuracy associated with the adoption of IAS indicates that analysts can make more accurate predictions of earnings.

Francis et al. (2003) in an examination of 31 countries found that financial disclosures are more transparent and national accounting standards require timelier (accrual based) reporting in countries with stronger investor protection (common law countries). The authors address the debate regarding international accounting standards by suggesting that in the absence of a change in market forces and institutional factors, simply transplanting accounting rules from one country to another is futile. Similarly, Ball et al. (2003) argue that the global accounting debate focuses too much on the choice of accounting standards and too little on market forces and institutional factors. Although, Francis et al. (2003) found that common law countries have higher quality accounting and auditing standards and the enforcement of such standards through higher quality auditing is more likely to exist than in civil law countries, differences existed in values for variables within common law countries. Given the differences in institutional and market forces for the U.S. companies and foreign-based companies registered with the SEC, management's incentives to engage in earnings management may outweigh the costs. Ball et al. (2000) argue that when the costs of complying with IFRS are viewed as exceeding the costs of non-compliance, substantial non-compliance will occur. Burgstahler et al. (2006) found that legal institutions and capital market forces often appear to reinforce each other. In our study, earnings management (quality) is determined by examining firm restatements for the U.S. and foreign-based firms registered with the SEC. Francis et al. (2003) find that higher quality accounting and auditing are positively associated with financial market development in countries whose legal systems are conducive to protection of investors.

La Porta, Lopez-De-Silanes, Shleifer, and Vishny (1997) in an examination of the rule of law (character of legal rules and the quality of law enforcement) of 49 countries show that countries with poorer investor protection have smaller and narrower capital markets. They argue that differences in the nature and effectiveness of financial systems in various countries can be traced in part to the differences in investor protections, as reflected by legal rules and the quality of their enforcement. We compare the restatements of foreign-based firms registered with the Securities and Exchange Commission with restatements for U.S. firms. Based on the above arguments, we hypothesize the following:

H1. Financial restatements for foreign firms with strong legal systems associated with greater investor protection are not significantly different from that of U.S. firms.

This study examines the quality of financial statements under IFRS by comparing the issuance of firm restatements under IFRS with firm restatements under U.S. GAAP, given differences in institutional and market forces.

3. Research methodology

3.1. Sample selection

We began our sample selection of companies issuing restatements by searching the Audit Analytics Database for restatements from years 2003–2007. The sample consists of U.S. companies complying with U.S. GAAP and foreign-based companies registered with the SEC. The sample includes only annual restatements because several variables of interest and control variables are defined on an annual basis. We screened sample companies to eliminate restatements caused by routine events such as mergers and acquisitions, divestitures, stock- or tax- related changes, or IPO registrations. We focused on restatements resulting from earnings management and accounting errors. The four primary reasons identified for restatements were errors in the valuation of assets, errors in accounting for stock related compensation, errors in accounting for investments and derivatives, and revenue recognition issues.

We dropped financial institutions and companies from highly regulated industries because the monitoring by additional regulators could distort our results. We also eliminated private companies and companies not regularly traded on U.S. stock exchanges. There were five international companies that did not use either U.S. GAAP or IFRS reporting standards. Our sample selection methodology resulted in a final sample of 468 firms as seen in Table 1.

Table 1
Sample Selection Results.

Panel A: Restatement sample selection			
	US filers	International filers	
		US adopters	IFRS
Restatements reported by Audit Analytics	2759	260	111
Less: duplicate references to same restatement	(463)	(54)	(4)
Less: non-financial statement restatements	(118)	(11)	(9)
Less: registration statement and restatements due to mergers	(288)	(36)	(12)
Less: reference to quarterly statements	(661)	(49)	(3)
Total unique annual restatements	1229	110	83
Additional sample selection criteria			
Less: financial institutions	(161)	(14)	(6)
Less: not on NYSE, AMEX, NASDAQ, or other US market	(297)	(37)	(15)
Less: not on Compustat	(359)	(50)	(10)
Less: non-IFRS/non-US GAAP firms			(5)
Restatement sample	412	9	47

Panel B: restatement sample observations by 2-digit SIC Code		
2-digit SIC Code	US firms	Intl firms
13xx – 14xx Mining	35	13
15xx – 17xx Construction	4	1
20xx – 39xx Manufacturing	178	25
40xx – 49xx Transportation, Communications, and Other Services	47	8
50xx – 51xx Wholesale Trade	21	1
52xx – 59xx Retail Trade	42	2
70xx – 89xx Service	85	6
Restatement sample	412	56

Panel C: restatement sample observations by year		
Year	US firms	Intl firms
2003	147	20
2004	145	20
2005	83	13
2006	37	3
Restatement sample	412	56

The sample is composed of 155 different 4-digit SIC codes and no one code represents more than 5% of the sample. The four largest industries in the sample are 7372 – Prepackaged Software (4.7%), 1311 – Crude Petroleum & Natural Gas (4.4%), 3674 – Semiconductors & Related Devices (3.4%), and 2834 – Pharmaceutical Preparation (3.2%). The number of restatements related to earnings management and accounting errors dropped significantly after 2004. Seventy-one percent of both the US companies' and international companies' restatements occurred prior to 2005. The international sample is composed of 20 countries; 25% from Canada, 11% from France, and all other countries have between 5.4% and 1.7% of the IFRS sample. It is also important to note that IFRS can take at least two forms, IFRS written by the IASB or country-specific variations of IFRS. We examined the financial statements of the international companies and found that 62% of our IFRS firms used IASB written standards.

3.2. Research design

Prior international research shows that the quality of legal enforcement affects financial reporting quality across international markets. We assess the law and order tradition in each country using a measure of country risk that includes judicial system efficiency, rule of law, and a level of corruption. The measure is an average of the *PRS Group International Country Risk Guide's* risk assessment score over the 24 month period prior to the restatement. The score is scaled from 0 to 10 with higher scores for less legal risk. The *PRS Group International Country Risk Guide's* monthly composite score was used by La Porta, Lopez-De-Silanes, Shleifer, and Vishny (1998), DeFond and Hung (2004), and Gong, Ke, and Yu (2007). We also include an interaction between the type of accounting standards and the strength of the home country legal system as a direct test of the hypothesis.

To address the institutional factors and other market forces, we include variables related to the legal origin of the countries' laws. La Porta et al. (1997, 1998) provide evidence that the legal origin of Company Law or Commercial Code affects financial reporting quality and external capital markets. Street, Nichols, and Gray (2000) found that the size of the home equity market and the country of domicile may also affect the degree of compliance with IFRS. We examine this effect by including the Gross National Product and the growth in Gross Domestic Product as control variables.

A univariate analysis examines the differences between financial restatements for U.S. firms and foreign-based firms registered with the SEC. We compare earnings management across groups of countries defined by their legal origins, which broadly captures investor protection and ownership regimes across countries (La Porta et al., 1997).

We also perform a multivariate test that includes additional controls for differences in firm characteristics.

3.3. Regression model

$$\begin{aligned}\text{Restatement}_i = {} & a_0 + a_{1j}\text{Origin}_j + a_2\text{RoL}_{kt} + a_3\text{AcctStd}_i \\ & + a_4\text{RoLbyAcctStd}_{ikt} + a_5\text{GDPGrowth}_{kt} \\ & + a_6\text{LogGDP}_{kt} + a_7\text{Size}_i + a_8\text{LEV}_i + a_9\text{GROWTH}_i \\ & + a_{10}\text{ROA}_i + a_{11}\text{Auditor}_i + e_i\end{aligned} \quad (1)$$

where:

Origin	Identifies the legal origin of the Company Law or Commercial Code of each country. Represented by two dummy variables for French Code Law (1) and German Code Law (1).
RoL	Assessment of the law and order tradition in the country. Average of the monthly index for the 2 year period prior to the restatement. Scale from 0 to 10, with lower scores for less tradition for law and order.
AcctStd	1 if the firm uses IFRS and 0 otherwise.
GDP Growth	Average annual percent growth of per capita gross domestic product for the 10 year period prior to the restatement.
Log GNP	Logarithm of the average nominal gross domestic product for the 10 year period prior to the restatement.
Size	Natural log of the average of total assets for the two years ending before the year of the misstatement.
LEV	Average total long-term debt to total assets for the two years ending before the year of the misstatement.
Growth	Average percentage change in total revenues for the two years ending before the year of the misstatement.
ROA	Average return on assets for the two years ending before the year of the misstatement.
Auditor	1 if the auditor is a Big Four auditor and 0 otherwise.

We include financial variables to control for factors that have been shown to motivate earnings management behavior. The control variables include size (total assets), financial leverage, growth, and return on assets. The accounting control variables are based on the most accurate (restated) financial statements from the two years prior to the restatement of interest. Prior studies have found that the type of auditor (Big 4 versus Non-Big 4) influences the level of IFRS compliance. We control for this factor by including a dummy variable for auditor size; 1 for Big 4 firms and 0 otherwise. Each variable is described in Table 2. Our measure of firm size is the average book value of assets for the firm in the two fiscal years prior to the

Table 2
Description of the variables.

Restatement	Percent change in net income due to the restatement of earnings in the first year of the restatement period. Source: *Mergent Database*.
Origin	Identifies the legal origin of the Company Law or Commercial Code of each country. Represented by two dummy variables for French Code Law and German Code Law. Source: *La Porta* et al. *(1997)*.
Accounting standards	A dummy variable equal to 1 for use of IFRS and 0 otherwise.
Rule of law	Assessment of the law and order tradition in the country. Average of the monthly index for the 2 year period prior to the restatement. Scale from 0 to 10, with lower scores for less tradition for law and order. Source: *PRS Group International Country Risk Guide*.
GDP Growth	Average annual percent growth of per capita gross domestic product for the 10 year period prior to the restatement. Source: *Marketline Website*.
Log GNP	Logarithm of the average nominal gross domestic product for the 10 year period prior to the restatement. Source: *Marketline Website*.
Size	Natural log of the average of total assets for the two years ending before the year of the misstatement.
Leverage	Average total long-term debt to total assets for the two years ending before the year of the misstatement.
Growth	Average percentage change in total revenues for the two years ending before the year of the misstatement.
Return on assets	Average return on assets for the two years ending before the year of the misstatement.
Auditor	A dummy variable equal to 1 for Big Four Auditor and 0 otherwise.

restatement. Mean and median firm sizes for our sample are $1.37 billion and $189 million, respectively. The measure of growth opportunities is calculated as the average percent change in sales for the two years prior to the restatement. Leverage is the average of the ratio of long-term debt to assets over the two years prior to the restatement.

4. Results

4.1. Descriptive statistics and univariate analysis

Table 3 presents the means, medians, and standard deviations for the U.S. GAAP and the IFRS restatement companies. The U.S. GAAP and IFRS companies differ significantly ($p<.01$) in the growth of GDP, the log of GNP, the company size, and the size of audit firm variables. The companies that have adopted U.S. GAAP have only a slightly higher rule of law score than the companies following IFRS. This indicates that legal risk may be less in some of the international markets that use IFRS.

In addition, the international companies that follow IFRS tend to operate in countries with much higher GDP growth. These countries tend to have larger than average home equity markets. The average size of IFRS companies with restatements is significantly larger than US GAAP companies with restatements. This is not unusual considering the fact that international companies that cross-list in the U.S. are larger than the average U.S. issuer (Ammer, Clinton, & Nini, 2005; Flannery, Kwan, & Nimalendran, 2004; Lang, Lins, & Miller, 2003). Our sample of companies using U.S. GAAP is almost nine times larger than the sample using IFRS and the former has a much greater degree of variation in size versus the latter. A significant proportion of both samples use Big 4 auditors; 71% of the U.S. GAAP restatement sample and 89% of the IFRS restatement sample. The 18 percentage point differential is a significant difference between the two samples (p-value<0.01).

4.2. Multivariate results

Table 4 shows that the results of the regression analysis support H1. To test the hypothesis, we run a regression with an interaction variable for type of accounting standards (GAAP versus IFRS) with the strength of the home country legal system (average rule of law score). Only the 47 companies that use IFRS have a value greater than zero for the interaction variable. The coefficient on this variable is marginally significant and negative as expected (p-value<0.10). This implies that cross-listed companies from markets with strong legal systems do not have larger restatements than firms using U.S. GAAP. In other words, there is no significant difference in the value of a restatement due to differences in accounting standards when the rule of law is high in the international market.

Our coefficient estimates indicate that larger firms have significantly larger earnings restatements than smaller firms. Prior research shows that Big 4 auditors tend to have a significantly negative effect on the amount of earnings restatements in both U.S. GAAP firms and IFRS firms. Our results support this finding; the coefficient on the auditor variable is negative and significant (p-value<0.01). We also ran the model without the interaction variable. The reduced model did not reveal any additional information (see Table 5).

4.3. Sensitivity analysis

Sensitivity analysis addressed two primary issues: sample selection and alternative test variable definitions. With respect to sample selection, we test for the possibility that firm size may be skewing the results since there is a significant difference between the mean and median firm size. The sample is segmented into quarters and the tests are run on the upper two size quartiles without significant difference in the results. We only use the upper two size quartiles because the international sample is small or non-existent in the lower two quartiles. In terms of alternative definitions of our test variables, we

Table 3
Univariate results.

Variable name	US GAAP restatement firms (N=421)			IFRS restatement firms (N=47)			Diff. in means	t-statistic
	Mean	Median	Std. dev.	Mean	Median	Std. dev.		
Restatement	−0.219	0.000	1.241	−0.161	0.000	0.427	−0.058	−0.34
Rule of law	7.798	7.698	0.153	7.830	8.102	0.776	−0.032	−0.72
GDP Growth	0.040	0.039	0.095	0.562	0.042	1.254	−0.522	−3.06***
Log GNP	6.912	6.950	0.379	5.554	5.830	1.236	1.358	8.32***
Size	5.184	5.122	2.046	6.503	6.406	2.328	−1.319	−3.90***
Leverage	0.182	0.089	0.227	0.202	0.197	0.176	−0.020	0.06
Growth	5.042	0.059	90.425	0.435	0.108	1.044	4.607	1.01
Return on assets	−0.075	0.004	0.413	−0.039	0.005	0.172	−0.036	−1.02
Auditor	0.710	1.000	0.452	0.890	1.000	0.317	−0.180	−3.24***

*, **, *** Significant at p-value<0.10, 0.05, 0.01, respectively.

Table 4
Multivariate regression of financial restatements on accounting regulation and market related variables.
Restatement = $a_0 + a_1$Origin + a_2RoL + a_3AcctStd + a_4RoLbyAcctStd + a_5GDP Growth + a_6LogGDP + a_7Size + a_8LEV + a_9GROWTH + a_{10}ROA + a_{11}Auditor + e.

Variables	Expected sign	Coefficient estimate	t-statistic
Intercept		6.007	−1.585
Accounting standards		−6.637	−1.586
Rule of law	–	−0.809	−1.756*
Interaction of acct. standards and rule of law	–	0.860	−1.610*
French Code Law	+	−0.034	−0.088
German Code Law	+	0.187	0.208
GDP Growth	–	−0.003	−0.018
Log GNP	–	0.004	0.026
Size	+	0.062	1.692*
Leverage	+	0.178	0.648
Growth	+	0.000	−0.074
Return on assets	+	−0.055	−0.358
Auditor	–	−0.426	−2.593***
N = 467			
Adjusted R^2 = 0.027			

*, **, *** Significant at p-value < 0.10, 0.05, 0.01, respectively.

combine French and German common law companies into one sample to increase the sample size. There are only two German common law companies in the sample. The results are not significantly different. We also examine the percent change in total net assets as the measure of restatement value. Again the results are not significantly different than those reported.

We realize our measures of country risk may create some controversy. Specifically, Australia, Belgium, Canada, Ireland, the Netherlands, Singapore, and the United Kingdom have higher rule of law scores than the United States consistently across the sample period (see Table 6). Based on our data, the U.S. has a similar rule of law ranking as China and Chile, and a lower ranking than France. We are using a source that has been found to be credible in the past (see La Porta et al., 1998; Leuz, Nanda, & Wysocki, 2003). The principal difference in prior scoring versus those in our research is the time period. Previous researchers have averaged composite scores over several decades. Our study is examining annual restatements and we choose to use a much shorter window (prior 2 years) for the average composite score. Given that the earliest scores are from 2001 and the latest are from 2004, we believe our average composite scores to be reasonable. This timeframe holds many problems for the US markets and the US economy; including deregulation, earnings management, accounting fraud, and internal control weaknesses.

Table 5
Multivariate regression of financial restatements on accounting regulation and market related variables.
Restatement = $a_0 + a_1$Origin + a_2RoL + a_3AcctStd + a_5GDP Growth + a_6LogGDP + a_7Size + a_8LEV + a_9GROWTH + a_{10}ROA + a_{11}Auditor + e.

Variables	Expected sign	Coefficient estimate	t-Statistic
Intercept		1.317	0.542
Accounting standards		0.080	0.245
Rule of law	–	−0.175	−0.732
French Code Law	+	−0.091	−0.238
German Code Law	+	0.273	0.305
GDP Growth	–	−0.075	−0.446
Log GNP	–	−0.031	−0.199
Size	+	0.065	1.783*
Leverage	+	0.166	0.604
Growth	+	−0.000	−0.013
Return on assets	+	−0.066	−0.430
Auditor	–	−0.454	−2.779***
N = 467			
Adjusted R^2 = 0.021			

*, **, *** Significant at p-value < 0.10, 0.05, 0.01, respectively.

Table 6
2 year average rule of law measure composite legal risk score by country.

Country	2003	2004	2005	2006
Australia	8.16	8.20	8.18	8.23
Belgium	8.40	8.43	8.46	8.43
Brazil	6.31	6.38	6.64	6.86
Canada	8.50	8.54	8.63	8.54
Chile	7.61	7.63	7.76	8.01
China	7.40	7.58	7.67	7.71
France	8.10	8.02	7.86	7.77
Hong Kong	8.40	8.35	8.30	8.39
India	6.54	6.68	6.98	7.17
Ireland	8.86	8.80	8.68	8.59
Israel	6.79	6.83	7.07	7.20
Japan	8.46	8.52	8.60	8.51
Mexico	7.18	7.08	7.28	7.51
Netherlands	8.70	8.49	8.51	8.49
Singapore	9.07	8.96	8.87	8.84
South Africa	6.95	6.84	7.10	7.33
Spain	8.05	8.05	7.98	7.88
Taiwan	8.22	8.28	8.31	8.33
United Kingdom	8.34	8.36	8.36	8.20
United States	7.97	7.70	7.68	7.68

5. Conclusions and implications

Our study contributes to two areas that have become increasingly important in recent years; the acceptance of IFRS by the SEC and potential investor losses from financial restatements. Our results indicate that there is no significant difference in the value of restatements due to differences in accounting standards (IFRS versus U.S. GAAP) when the rule of law is high in the international market. Furthermore, firms with better law enforcement and higher traditions of law and order, tend to have smaller restatement amounts or less earnings manipulation. This research supports the adoption of IFRS by suggesting that the occurrence of earnings manipulation under IFRS is not significantly different than the occurrence under U.S. GAAP. The results indicate that a key factor to protecting investors is implementation of the rule of law. La Porta et al. (1997) indicates that the U.S. had rule of law measures that were consistently among the highest in the world during the period 1982–1995. The deregulation of U.S. financial markets and the increased incidence of financial restatement and fraud have significantly reduced the confidence in the U.S. rule of law. Although the U.S. rule of law remains high, it is no longer consistently higher than other countries (See Table 6). Furthermore, even with a high rule of law based on the character of legal rules and the quality of enforcement, management may be motivated to manipulate earnings given higher levels of debt, low and negative return on assets, and declining rates of growth. Our results suggest that the quality of financial reporting is not affected by the use of IFRS or U.S. GAAP, but rather the country's legal rules and quality of law enforcement for the capital markets of the reporting entity.

One limitation of the study is that the sample of IFRS restatements is significantly smaller than the sample of U.S. GAAP restatements. The number of cross-listed international companies registered with the SEC is significantly smaller than the number of domestic registrants. In each year of our sample, there were more than 10 times as many U.S. companies with restatements. Cross-listed companies are subject to the US legal system as well as the home-country legal system. The bonding hypothesis in prior literature purports that cross-listed companies will be subject to the more stringent U.S. financial reporting regime and stronger enforcement power of the U.S. Securities and Exchange Commission (SEC) (Coffee, 1999, 2002; Karolyi, 2006; Stulz, 1999). However, critics of the bonding hypothesis argue that the risks of SEC enforcement and shareholder litigation are lower for cross-listed firms than for U.S. firms. Licht (2003) claims that the U.S. regulatory regime that applies to foreign firms often cuts corners; in addition, the SEC has largely adopted a “hands-off”

enforcement policy toward foreign issuers. Siegel (2005) finds that for the entire period since the enactment of the Securities Acts, there are virtually no reports regarding public enforcement steps for cross-listed firms, even when misconduct has been publicized in the foreign firms' home countries. Siegel (2005) also finds little evidence of successful litigation cases against cross-listed firms who violated U.S. securities laws. This research contributes to the discussion of IFRS adoption in the U.S. by comparing the value of restatements made by cross-listed international companies and U.S. companies.

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