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Compliance with IAS/IFRS and its Determinants: A Meta-Analysis

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Abstract

The objective of this paper is to meta-analyze a set of 17 empirical papers dealing with the determinants of the degree of compliance with IAS/IFRS standards. We consider firm size (proxy for agency theory), profitability (proxy for signaling theory), leverage (proxy for agency and signaling theories), auditor (proxy signaling theory), internationality (proxy for capital need theory), and ownership diffusion (proxy for agency theory). Our results provide evidence that firm size, auditor type, multi-nationality, profitability and ownership dispersion have a positive effect on IAS/IFRS compliance. Compliance with IAS/IFRS in emerging markets is strongly associated with firm size, auditor type, leverage, profitability and ownership dispersion. Given the low disclosure environment, weak investors' protection and capital external need prevailing in these contexts; these factors are likely to enhance corporate reporting policy. Managers comply seriously with IAS/IFRS in developing countries to reduce agency costs, signal a higher financial statements' credibility and get more easily external finance from financial institutions. Compliance with IAS/IFRS in developed countries is associated with corporate size, audit firm size and multi-nationality. In addition, investor protection level also moderates the association between corporate characteristics and compliance IAS/IFRS. For instance, in low investor protection settings, corporate size and profitability are more associated with IAS/IFRS compliance, while audit firm size, leverage and multi-nationality increase the degree of compliance with IAS/IFRS in countries characterized by high protection level. The findings emphasize the need to explicitly consider the legal and institutional setting when one analyzes the effect of corporate characteristics on IAS/IFRS compliance.

Keywords: compliance with IAS/IFRS, positive accounting theories, corporate characteristics, developed and emerging countries, investor protection level.

I. INTRODUCTION

Economic globalization has made harmonization of accounting standards and practices inevitable (Chamisa, 2000; Khelif & Souissi, 2010). However, it is important to note that there are major differences between developing and developed countries' in terms of institutional and legal environments which dramatically impact their accounting systems and degree of adoption of International Accounting Standards and International Financial Reporting Standards (hereafter IAS/IFRS) (Dahawy & Samaha, 2010).

In the case of developing countries there are two conflicting lines of research. On one side IAS/IFRS are seen to offer credible accounting standards for developing

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and emerging countries that do not have resources to develop their own standards or that desire the benefits associated with possessing “globally acceptable accounting standards” (Cairns, 2000; Cairns, 2001; Karim & Ahmed, 2005; Samaha & Stapleton, 2009; Samaha et al., 2009; and Al-Akra et al., 2010). Also, IOSCO, World Bank, IMF and the International Federation of Stock Exchanges and others believe that adoption of IAS/IFRS is important for developing countries. Rationales for the adoption of IAS/IFRS in developing countries include: (1) increasing their competitiveness in world capital markets, (2) improving their level of accounting, (3) reducing the setup and production costs of accounting standards, (4) joining the international harmonization drive, (5) facilitating the growth of foreign investment, (6) fostering the growth of the profession through emulation of well-established professional standards, and (7) legitimating their role in the international community. In recent years, many developing countries have adopted IAS/IFRS (Karim & Ahmed, 2005; Samaha & Stapleton, 2008; and Al-Akra et al., 2010), despite the argument that if accounting and reporting systems are to be effective they must reflect the context within which they function (Dahawy & Samaha, 2010).

On the other side some researchers argue that IAS/IFRS may be harmful to developing countries’ development because their social, cultural, political, and economic environments, as well as their accounting needs, differ from those of developed countries. Therefore, harmonized accounting systems do not meet developing countries’ needs (Perera, 1985; Gray, 1988; Perera, 1989a/b; Hove, 1989/1990; Douppnik & Salter, 1995; Larson & Kenny, 1996; Hassan, 1998; Points & Cunningham, 1998; Abdallah, 2000; Abdel-Karim, 2001; and Dahawy & Samaha, 2010). These studies further assert that there is a need of specific and different developing countries are essential if the issue of the relevance of the IAS/IFRS is to be further explored meaningfully.

Research by Solas (1994), Tower et al. (1999), Street et al. (1999), Cairns (1999), Taplin et al. (2002), Street and Gray (2002), Karim and Ahmed (2005), Samaha and Stapleton (2009), and Al-Akra et al. (2010) provide evidence that the degree of de facto compliance with IAS/IFRS is very mixed and problematic. Researchers show empirically that accounting practice compliance is associated with micro level firm-specific characteristics as a proxy for positive accounting theories (Tower et al., 1999; Taplin et al., 2002; Street & Gray, 2002; Karim & Ahmed, 2005; Fekete, Matis & Lukacs, 2008; Samaha & Stapleton, 2008; and Al-Akra et al., 2010).

Several positive accounting theories have been employed, in the accounting literature, to explain accounting practices in many countries. These theories have been explored in some of the literature on de facto compliance with IAS/IFRS in the developed and developing countries. However, to the best of our knowledge there is no published study, which investigates the relevance of these theories in explaining the degree of compliance with IAS/IFRS. Therefore, the objective of this paper is to meta-analyze a set of empirical papers dealing with the effect of corporate characteristics on the degree of compliance with IAS/IFRS.

Since narrative reviews may suffer from the lack of acceptable rules to go from individual results for a particular research topic to generalizing the findings (e.g., Glass, 1976; Rosenthal, 1979; and Hunter et al., 1982), we try in this study to apply meta-analysis technique to improve our understanding about such research accounting topic. For instance, Glass (1976) and Hunter et al. (1982) state that meta-analysis technique allows more valid statistic inferences as compared to narrative reviews. They add that the sampling error can be quite large for studies using small sample sizes. Therefore,

they conclude that narrative reviews can lead to false conclusions since the differences of the significance in results across studies are generally attributed to the sampling errors.

Glass (1976, p. 3) defines meta-analysis as “the analysis of analyses—the statistical analysis of a large collection of results from individual studies, for the purpose of cumulating and integrating the findings. Meta-analysis accumulates the statistical findings of related research in order to evaluate the findings across studies, and to determine whether differences in results are primarily due to differences in economic variables, research setting, measurement scales or sampling error”. Meta-analysis has been widely used in social sciences with limited application in accounting literature (Ahmed & Courtis, 1999). However, during the last decade such technique has been gaining momentum in accounting literature (e.g. García-Meca & Sánchez-Ballesta, 2009, for the effect of corporate governance attributes on earnings management; Hay et al., 2006, for the relationship between audit fees and firm specific variables; García-Meca & Sánchez-Ballesta, 2010, for the effect ownership dispersion and board independence on voluntary disclosure; Khlif & Souissi, 2010, for the determinants of voluntary disclosure; and Souissi & Khlif, 2012, for the association between disclosure and cost of equity capital).

Accordingly, our study represents another attempt to apply meta-analysis in accounting literature by conducting a meta-analysis of a set of 17 papers dealing with the determinants of IAS/IFRS compliance in different countries. To the best of our knowledge, our paper is the first attempt to summarize meta-analytically a set of studies dealing with the determinants of IAS/IFRS compliance. Furthermore, we undertake sub-groups meta-analysis with respect to (1) market sophistication (emerging versus developed markets) and (2) the proxy used to measure the compliance level.

In our meta-analysis, we consider firm size (as a proxy for agency theory), profitability (as a proxy for signaling theory), leverage and auditor type (as a proxy for agency and signaling theory), internationality (as a proxy for capital need theory), and ownership diffusion (as a proxy for agency theory). Our overall results provide evidence that firm size, auditor type, multi-nationality, profitability and ownership dispersion have a positive effect on IAS/IFRS compliance. With respect to developing and emerging markets, compliance with IAS/IFRS is associated with firm size, auditor type, multi-nationality, profitability, leverage and ownership dispersion. With reference to developed countries, corporate size, audit firm size and multi-nationality are associated with IAS/IFRS compliance. In addition, investor protection level also moderates the association between corporate characteristics and compliance IAS/IFRS. For instance, in low investor protection settings, corporate size and profitability are more associated with IAS/IFRS compliance, while audit firm size, leverage and multi-nationality increase the degree of compliance with IAS/IFRS in countries characterized by high protection level. Finally, firm size, auditor type, multi-nationality, profitability and ownership dispersion enhance the manager’s decision of reporting financial statements under IAS/IFRS and they contribute strongly to the improvement of the degree of compliance with IAS/IFRS.

This paper is organized as follows: section 2 reviews positive accounting theories related compliance with IAS/IFRS. Section 3 presents a narrative review of the relationship between IAS/IFRS compliance and corporate characteristics. In section 4 and 5 we display the meta-analytic data and the meta-analysis technique respectively. Section 6 reports the findings of our study. Finally section 7 concludes the paper.

II. POSITIVE ACCOUNTING THEORY AND DE FACTO COMPLIANCE WITH IAS/IFRS

Rahman et al. (2002) argued that policy makers have to be aware of the micro (firm) level reasons. Studies dealing with compliance with IAS/IFRS disclosure and measurement practices in different countries (Solas, 1994; Al-Basteki, 1995; Dumontier & Raffournier 1998; Tower et al., 1999; Street & Bryant, 2000; Taplin et al., 2002; Street & Gray, 2002; Karim & Ahmed, 2005; Fekete et al., 2008; Samaha & Stapleton, 2009; and Al-Akra et al., 2010) indicate that factors at the micro level, that is, firm specific variables have explanatory and predictive power in relation to a firm's disclosure or accounting policy choice behavior and thus de facto compliance with IAS/IFRS. They also raise concerns about the extent to which de facto harmonization will benefit from de jure harmonization. Attempts to harmonize accounting practices through regulatory harmonization, without making provision for varying firm characteristics, are likely to be unsuccessful (Rahman et al., 2002). Firm characteristics could be a driving force behind de facto compliance that is independent from the institutional efforts in the form of de jure harmonization.

Positive accounting research shows that firms with different characteristics will adopt different disclosure and measurement practices (Watts & Zimmerman, 1986). This may have implications on de facto compliance with IAS/IFRS in companies. Therefore, current research focuses on positive accounting theory and uses several developments referring to this approach such as signaling theory, agency theory, political process theory and capital need theory to explain de facto compliance with IAS/IFRS. These four theories were employed in the literature to explain the voluntary adoption of or compliance with IAS/IFRS in the context of developed (Dumontier & Raffournier, 1998; El-Gazzar et al., 1999; Murphy, 1999; Street & Bryant, 2000; and Tarca, 2004) and developing countries (Solas, 1994; Al-Basteki, 1995; Owusu-Ansah, 2000; Taplin et al., 2002; Karim & Ahmed, 2005; Fekete et al., 2008; Samaha & Stapleton, 2009; and Al-Akra et al., 2010).

In this section, a brief summary is provided for the theories that will be employed as the framework for deciding on its relevance for explaining differing levels of compliance with IAS/IFRS.

2.1. Agency Theory

Agency theory has identified the existence of two agency relationships (Healy & Palepu, 2001): the manager-shareholder relationship and the shareholder-debtholder relationship. In both of these relationships, the interests of the agent and principal are separated, imposing agency costs (Jensen & Meckling, 1976). In attempting to align the differing interests, agency (monitoring and bonding) costs are incurred. Monitoring costs are associated with overseeing the agent's behavior and while initially borne by the principal, are transferred to the agent through contracting. In the manager-shareholder relationship, monitoring costs are transferred by adjusting the agent's remuneration package according to the perceived level of monitoring required. In the shareholder-debtholder relationship, monitoring costs are transferred via debt covenants, placing restrictions on the investment, dividend and financing activities of a firm. Since agents bear monitoring costs, they are likely to establish mechanisms designed to align the interests of the agent and principal (Marston & Shrivess, 1995). The costs associated with these mechanisms are called bonding costs (e.g., the cost of preparing financial statements). These costs are also borne by the agent.

Managers' accounting choices and disclosure of financial information has been investigated using agency theory (Jensen & Meckling, 1976), which posits that accounting choices and disclosure is used to reduce agency costs and thus information asymmetry that exists between agents (being managers and therefore insiders) and principals (who are outside the firm and less informed). Since compliance with IAS/IFRS may mean that a firm restricts accounting choices and makes more disclosure, therefore the existence of agency costs may be used to explain the attitude of companies towards the compliance with IAS/IFRS.

Agency costs suggest several variables for explaining cross-sectional variation in de facto compliance with IAS/IFRS. In particular, firm size, ownership diffusion, leverage, and type of auditor have frequently been hypothesized (Dumontier & Raffournier, 1998; Tower et al., 1999; Owusu-Ansah, 2000; Street & Bryant, 2000; Street & Gray, 2002; Karim & Ahmed, 2005; Fekete et al., 2008; Samaha & Stapleton, 2009; and Al-Akra et al., 2010) to affect voluntary adoption or compliance with IAS/IFRS by influencing the magnitude of agency costs.

2.2. Signaling Theory

Signaling theory was developed by Spence (1973) to explain behavior in the labor markets (see also Watts & Zimmerman, 1986, p. 165). However, signaling is a general phenomenon applicable in any market with information asymmetry (Morris, 1987). The theory shows how this asymmetry can be reduced by the party with more information signaling it to others.

Applying signaling theory to financial disclosure suggests that managers could use financial statements to signal their expectations and intentions. Compliance with IAS/IFRS could signal to market participants that the firm is prepared to disclose more information, or to use more restrictive accounting standards.

Signaling theory suggests several variables for explaining cross-sectional variation in de facto compliance with IAS/IFRS. In particular, liquidity, profitability, leverage, type of auditor, size and industry sector has frequently been hypothesized to affect voluntary adoption of or compliance with IAS/IFRS by influencing the problems of information asymmetry in the market (Dumontier & Raffournier, 1998; Tower et al., 1999; Owusu-Ansah, 2000; Street & Bryant, 2000; Street & Gray, 2002; Karim & Ahmed, 2005; Fekete et al., 2008; Samaha & Stapleton, 2009; and Al-Akra et al., 2010).

From the discussion of agency and signaling theories it can be seen that there is considerable overlap between the two. Indeed Morris (1987) explored whether these two theories are consistent, equivalent or competing, by examining the necessary and sufficient conditions for them both. Morris suggests that as the sufficient conditions for signaling theory are consistent with those of agency theory, the two theories are consistent. However, a necessary condition for signaling theory, informational asymmetry, is not shared by agency theory (although it is implied), and therefore they are not equivalent, i.e. one is not implied by the other. Morris (1987) suggests that given this consistency between agency and signaling theory it is possible to combine them to yield predictions about accounting choices. Indeed, he concludes (p. 52) "... the prediction of accounting choices can at least be improved by adding together the predictions from each theory". It seems, therefore, that greater insight can be gained into why companies comply with IAS/IFRS by drawing from both theories.

2.3. Political Process Theory

Positive accounting theory also considers the influence of political costs (Watts & Zimmerman, 1978/1986/1990). Inchausti (1997) argued that the accounting policy

of a firm, its existence and form, is determined by considerations of contracting efficiency. Therefore, firms with serious agency problems will spend more resources on contracting and monitoring than firms with limited agency costs, and therefore, the same logic may be applied to political costs. Political process theories suggest hypotheses about the use of accounting data to fix prices in regulated industries, to fix tax policy or to decide policy on subsidies for companies (Inchausti, 1997). Companies which are politically visible and subject to high political costs, may employ financial information to avoid these risks, and also may execute accounting changes to reduce such risks or even costs. Thus, companies, which are politically visible and subject to high political costs, may comply with IAS/IFRS as a form of restricted accounting choices and expanded disclosures to reduce such risk. Therefore the existence of political costs may be used to explain the attitude of companies towards the compliance with IAS/IFRS.

Political costs suggest several variables for explaining cross-sectional variation in de facto compliance with IAS/IFRS. In particular, firm size, profitability and industry sector have frequently been hypothesized (e.g. Dumontier & Raffournier, 1998; Tower et al., 1999; Owusu-Ansah, 2000; Street & Gray, 2002; Karim & Ahmed, 2005; Fekete et al., 2008; Samaha & Stapleton, 2009; and Al-Akra et al., 2010) to affect adoption of or compliance with IAS/IFRS by influencing the magnitude of political visibility.

2.4. Capital Need Theory

Capital need theory suggests that companies desire to raise capital as cheaply as possible. Increasing compliance with mandatory requirements and the relative amount of voluntary compliance increases the ease by which new capital can be raised (Owusu-Ansah, 2000). Ashbaugh and Pincus (2001) argued that IAS/IFRS adoption is part of a concerted effort by managers to satisfy the increased demand for information that typically occurs as firms issue additional equity.

The capital need theory is employed to support the expectation that public companies, which are issuing securities, will comply more than private companies (which are in most cases closed companies). Finally, international companies are competing for resources. The capital need theory is employed to support the expectation that international companies will comply more than domestic companies.

Capital need suggest several variables for explaining cross-sectional variation in de facto compliance with IAS/IFRS. In particular, foreign listing and Internationality have frequently been hypothesized (e.g. Dumontier & Raffournier, 1998; Tower et al., 1999; Owusu-Ansah, 2000; Street & Gray, 2002; Karim and Ahmed, 2005; Fekete et al., 2008; Samaha & Stapleton, 2009; and Al-Akra et al., 2010) to affect voluntary adoption of or compliance with IAS/IFRS by influencing the magnitude of competing for resources.

III. LITERATURE REVIEW

Several corporate characteristics have been used in empirical literature to examine their effects on the degree of compliance with IAS/IFRS. The most frequent of these characteristics have been firm size, leverage ratio, audit firm size, multinationality, profitability and ownership dispersion. Explanations for selecting these firm characteristics are based on agency costs, political costs, signalling, information asymmetry and capital needs.

A positive association between corporate size and compliance with IAS/IFRS has been hypothesized (Dumontier & Raffournier, 1998; El-Gazzar et al., 1999). Large firms are generally more able to face costs of compliance with IAS/IFRS. According to

Lang and Lundholm (1993), there may be a fixed component of compliance costs with IAS/IFRS, which implies a decreasing cost with unit of size (economies of scales). As a result, the propensity to comply with IAS/IFRS will increase with corporate size. The empirical evidence relating to this hypothesis is mixed. Some studies report a positive and significant relationship (Dumontier & Raffournier, 1998; El-Gazzar et al., 1999; Al Mutawaa & Hewaidy, 2010; and Bova & Pereira, 2011), while others have documented a non-significant or negative relationship (Street & Gray, 2002; Traca, 2004; Karim & Ahmed, 2005; and Al-Akra et al., 2010).

Leverage ratio has been also hypothesized to be positively linked to the degree of compliance with IAS/IFRS. Highly leveraged firms adopt IAS/IFRS to provide their creditors with higher information quality and signal to them their capabilities to meet their short and long term commitments. According to agency theory, the divergence of interests between creditors and management implies the introduction of several covenants into debt contract. Managers will react accordingly to try to reduce agency costs. Empirical studies dealing with the effect of leverage ratio on IAS/IFRS compliance provide mixed evidence. For instance, Dumontier and Raffournier (1998) and El-Gazzar et al. (1999) document a positive and significant relationship between IAS/IFRS compliance and leverage ration, while Van Tendeloo and Vanstraelen (2005), Fekete et al. (2008), and Al Mutawaa and Hewaidy (2010) provide a non-significant relationship between both variables.

Support for the positive relationship between audit firm size and IAS/IFRS compliance is based on the signalling theory hypothesis. For instance, it generally argued that IAS/IFRS are characterized by more complexity compared to local GAAP. Therefore, big four audit firms will be more able to oversee financial statements since they have the necessary technical expertise and superior employees' training to control the application of IAS/IFRS. Managers will react accordingly by appointing big four audit firm to external users of financial statements their serious commitment towards transparency. Several studies have reported a strong and significant relationship between IAS/IFRS compliance and audit firm size such as Al-Akra et al. (2010) in Jordan and Samaha and Stapleton (2009) in Egypt. By contrast, Van Tendeloo and Vanstraelen (2005) report a non-significant relationship between both variables in Germany.

A positive association between multi-nationality, as proxied by foreign ownership or multiple listing, and the degree of compliance with IAS/IFRS has been also hypothesized (Dumontier & Raffournier, 1998). The support for the positive relationship between both variables comes from the capital need theory since foreign listing allows firms to get external finance more easily. However, empirical evidence appears to be less mixed. For instance, several studies indicate a significant positive association between both variables such as Traca (2004) and Dumontier and Raffournier (1998). Only Van Tendeloo and Vanstraelen (2005) report a non-significant association between both variables in the German setting with an effect size accounting for 0.053.

By complying with IAS/IFRS, managers of profitable firms wish to signal to investors their strong financial position. Besides, according to agency theory, managers of very profitable firms use high level of compliance with IAS/IFRS to ensure shareholders about the credibility of earning reported under restrictive standards (IAS/IFRS) requiring more impairment tests (e.g. IAS 36, IFRS 5) compared to local GAAP. By doing this, managers try to support the continuance of their position and compensation arrangements. Results from empirical studies are also inconclusive since

Al Mutawaa and Hewaidy (2010) and El-Gazzar et al. (1999) report a significant and positive relationship between IAS/IFRS compliance and profitability ratio, while others (e.g. Dumontier & Raffournier, 1998; Karim & Ahmed, 2005) document a non-significant association between both variables.

Finally, ownership dispersion has been hypothesized to have a positive effect on the degree of compliance with IAS/IFRS (Dumontier & Raffournier, 1998). Due to the separation of ownership and control, the likelihood of agency costs increases since there will be more conflicts of interest between contracting parties (Jensen & Meckling, 1976). This is particularly true for firms where shares are widely held and the information asymmetry between management and investors is high. Managers comply strongly with IAS/IFRS to ensure shareholders that the corporation is being effectively managed on their behalf and thus reduce information asymmetry and agency costs. Empirical results are also inconclusive in this regard. For instance, Samaha and Stapleton (2009) in Egypt and Dumontier and Raffournier (1998) in Switzerland document that ownership dispersion exerts a significant effect on IAS/IFRS compliance. By contrast, Al-Shammari et al. (2008) in Gulf member states and Al-Akra et al. (2010) in Jordan report a non-significant relationship between both variables.

The above narrative review of prior studies indicates that there is inconclusive evidence about the association between compliance levels with IAS/IFRS and (1) firm size, (2) leverage, (3) size of audit firm, (4) multi-nationality, (5) profitability, and (6) ownership dispersion. No literature review has summarized these diverse results in a statistically systematic manner to explain their variation. Meta-analysis technique represents an appropriate tool to evaluate varying results, and thereby improve our understanding of the association between corporate characteristics and the degree of compliance with IAS/IFRS.

IV. META-ANALYTIC DATA

In order to obtain relevant meta-analytic data dealing with the determinants of the degree of compliance with IAS/IFRS standards, we consult several accounting journals. Key words used to search for database, from different editorial sources such as Science Direct, EJSEbsco, Blackwell, Springer, Emerald, ABI Inform, and SSRN, included “the determinants of IAS/IFRS compliance” and “corporate characteristics and IAS/IFRS compliance”. Our initial sample consists of 25 papers published between 1998 and 2012. Among these 25 papers, 8 articles do not provide sufficient data to compute effect size. Thus our final sample consists of 17 papers that yield 21 independent samples. Table 1 summarizes the results of these 21 studies by year of publication, country, proxy used to measure compliance with IAS/IFRS and effect size for each corporate characteristic considered in our study. It should be noted here that the degree of compliance was generally measured by a compliance index that incorporates numerous items and also proxied by a dummy variable that equals to 1 if the firm complies with IAS/IFRS and 0 otherwise.

Insert Table 1 here.

V. META-ANALYSIS TECHNIQUE

Meta-analysis is a statistical technique for summarizing and reviewing previous quantitative empirical literature. Over the last decade, meta-analysis has been gaining momentum in the accounting field (Ahmed & Courtis, 1999, for the determinants of disclosure level; García-Meca & Sánchez-Ballesta, 2009, for the relationship between earning management and voluntary disclosure). In this paper we apply the meta-analysis

Table 1
Meta-Analytic Data

Study	Country	Investor Protection Rank (A)	No. of Firms	Reporting Years	Compliance Proxy	Auditor	Leverage	Size	Effect Size			Sources of Information
									Profitability	Multi-Nationality	Ownership Dispersion	
Dumontier and Raifournier (1998)	Switzerland	169	133	1994	DV	0.163	0.158	0.455	0.025	0.367	0.291	Table 6, p. 236
EL-Gazzar et al. (1999)	USA	6	87	1995	DV		0.174	0.183	0.286	0.516		Table 3, 246
Street and Bryant (2000)	SC	-	82	1998	CDI					0.278		Table, 4 c, 318
Cuipers et al. (2002)	SC	-	163	1999	DV		-0.071	0.338			0.020	Table 6, p. 29
Street & Gray (2002)	SC	-	279	1999	CDI	0.171		-0.144		0.265		Table 6, p. 64
Abd-Elasalam and Weetman (2003)	Egypt	82	72	1995	CDI	0.241	-0.285					Table 8 (panel B), p. 78
Traca (2004)	UK	10	108	1999	CDI		-0.204	-0.042		0.920		Table 10, p. 80
Traca (2004)	France	82	96	1999	CDI		0.154	0.096		0.789		Table 10, p. 80
Traca (2004)	Germany	100	92	1999	CDI		-0.623	0.034		0.607		Table 10, p. 80
Traca (2004)	Japan	19	100	1999	CDI		0.353	0.520		0.790		Table 10, p. 80
Traca (2004)	Australia	70	110	1999	CDI		0.279	0.153		0.814		Table 10, p. 80
Karim and Ahmed (2005)	Bangladesh	25	188	2003	CDI	0.290	0.191	-0.275	-0.085			Table 3, p. 16
Van Tendeloo and Vanstraelen (2005)	Germany	100	250	1999-2001	DV	0.060	-0.048	0.045		0.053		Table 8, p. 172
Al-Shammari et al. (2008)	Gulf member states	-	137	1996-2002	CDI		0.121	0.157		0.160	0.062	Table 8, p. 441
Chatham (2008)	SC	-	213	1996-1998	CDI			0.208				Table 2
Fekete et al. (2008)	Hungary	128	18	2006	CDI	0.191	-0.09	0.676	0.206	0.431		Table 5, p. 14
Samaha and Stapleton (2009)	Egypt	82	281	2000	CDI	0.539		0.319			0.232	Table 7, p. 282
Al-Akra et al. (2010)	Jordan	128	80	2004	CDI	0.339	0.139	0.019	0.145		0.010	Table 4 (2004; full model), p. 182
Al Mutawaa and Hewaidy (2010)	Kuwait	32	121	2006	CDI	0.152	0.034	0.415	0.286			Table 6, p. 44
Bova and Pereira (2011)	Kenya	100	29	2006	CDI		0.420	0.232	0.108			Table 6, p. 40
Juhmani (2012)	Bahrain	82	41	2010	CDI	0.686	0.377	0.383	-0.071			Table 2

Notes: CDI refers to compliance disclosure index; DV when authors proxy for IAS/IFRS compliance by a dummy variable: 1 if firm adopts IAS/IFRS and 0 otherwise. SC refers to several countries used in the analysis; (a) <http://www.domingbusiness.org/data/explorotopics/protecting-investors>.

developed by Hunter et al. (1982) and Hunter and Schmidt (2000) to examine the relationship between IAS/IFRS compliance and corporate characteristics.

Meta-analysis approach reports findings in terms of effect sizes. The effect size provides information about how much change is evident across all studies and the magnitude of the association between dependent variable (degree of compliance with IAS/IFRS) and the independent variables including corporate size, leverage ratio, auditor size, multi-nationality, profitability and ownership dispersion.

In computing the effect size from the reported statistics, different procedures can be used. When a study reports Person’s *r* coefficient, such statistic is used to calculate the effect size between the compliance level with IAS/IFRS and explanatory variable. Whenever other statistics are reported such as Student *t* and *Z* value, the following formulas are used to compute the effect size respectively

$$\sqrt{\frac{t^2}{(t^2 + df)}}$$

Where *df* is the degree of freedom and $\frac{Z}{\sqrt{N}}$.

Meta-analytic database should be analyzed using the following three steps suggested by Hunter et al. (1982) and Hunter and Schmidt (2000):

1. First, the mean correlation (\bar{r}) is calculated as:

$$\bar{r} = \frac{\sum(r_i \cdot N_i)}{\sum N_i} \dots\dots\dots 1$$

Where:

N_i : Sample size for study *i*.

r_i : Pearson correlation coefficient for study *i*.

2. Second, the observed variance (S_r^2) and the sampling error variance (S_e^2) are calculated using the following formulas:

$$S_r^2 = \frac{\sum N_i (r_i - \bar{r})^2}{\sum N_i} \dots\dots\dots 2$$

$$S_e^2 = \frac{(1 - \bar{r}^2)^2 K}{\sum N_i} \dots\dots\dots 3$$

Where:

K is the number of individual studies included in the meta-analysis.

3. Finally, the estimates of population mean (\bar{r}) and the standard deviation $\sqrt{S_r^2/K}$ are normally used to construct a 95% confidence interval.

In order to test for moderating variables and determine whether the observed variance is trivial or higher than expected, a chi-square statistic test is suggested to assess whether the observed variance is due to moderating effects or to some statistical errors.

$$\chi_{k-1}^2 = \frac{N S_r^2}{(1 - \bar{r}^2)^2} \dots\dots\dots 4$$

If the computed chi-square statistic is trivial compared to tabulated one, the association is considered unmoderated and homogeneous. The variation across studies is due only to some statistical errors. Nevertheless, if the computed chi-square statistic is significant, further analyses are conducted to test for moderators and reduce

heterogeneity across studies. Therefore, subgroup meta-analyses are undertaken according to data characteristics (moderators) and study features. In our meta-analysis, we conduct a sub-group meta-analysis according to the level of market development, the level of investor protection and the proxy used to measure the dependent variable. We classify studies into two groups: (a) emerging countries and (b) developed economies. In our sample emerging countries include Bangladesh, Bahrain, Egypt, Kenya, Kuwait, Jordan, Hungary and Gulf member states. Such classification is made since emerging markets have less developed accounting and legal systems and more need for external finance compared to developed economies (e.g. Stulz & Williamson, 2003; Khlif & Souissi, 2010). In addition, we conduct a sub-group meta-analysis with respect to investor protection level since such aspect may influence the effect of corporate characteristics on reporting quality (e.g. compliance with IAS/IFRS) (La Porta et al., 1998; García-Meca & Sánchez-Ballesta, 2010). Low (high) investor protection group includes all countries having an investor protection ranking superior (inferior) to the median. All studies that consider more than one country are excluded. With regard to the proxy used to measure the dependent variable, we distinguish between the dummy variable (DV) which proxies for the decision of the voluntary adoption of IAS/IFRS by management and the compliance disclosure index (CDI) which represents a more refined proxy of disclosure requirements in accordance with IAS/IFRS.

VI. FINDINGS

6.1. Firm Size

As shown in Table 2A (A), Firm size has a mean correlation of 0.135 ($Z^1 = 2.966$) with a 95% confidence interval between 0.050 and 0.220. Since only 14% of the observed variance can be explained by sampling error, further tests for moderator variables were conducted. When we study the moderator effect played by the degree of market development we find that corporate size increases the degree of compliance with IAS/IFRS in both emergent and developed countries with two mean correlations accounting for 0.161 ($Z = 2.273$) and 0.119 ($Z = 2.167$) respectively. In addition, investor protection level moderates the association between corporate size and the degree of compliance with IAS/IFRS since such relationship is significant only in countries characterized by low investor protection level² with a mean correlation of 0.162 ($Z = 2.968$). Under low disclosure environment, large companies tend to comply strongly with IAS/IFRS to distinguish themselves from others. With respect to the proxy used to measure IAS/IFRS, findings show that corporate size has a significant effect on manager's decision to report financial statements under IAS/IFRS as proxied by a dummy variable and it also enhances the degree of compliance of IAS/IFRS is also enhanced by corporate size with mean correlations accounting for 0.125 ($Z = 2.261$) and 0.157 ($Z = 1.999$) respectively.

The significant association between corporate size and IAS/IFRS compliance can be justified by two reasons. First, large firms have more capability to face the costs of compliance with IAS/IFRS compared to small and medium firms. Second, companies' shares are held by more sophisticated investors (e.g. institutional investors,

¹ Z statistic is computed as follows:
$$Z = \frac{\bar{r}}{\sqrt{S_r^2/K}}$$

² The protecting investor rank includes a component dealing with the extent of disclosure which is lower for countries with low investor protection level.

foreign investors) which imply that firms will try to give their financial statements superior confidence by high level of compliance with IAS/IFRS. The positive and significant association between corporate size and the degree of compliance with IAS/IFRS corroborates also the agency theory predictions suggesting that larger firms have higher agency cost because of a more complex organizational structure and subject to more political costs and thus use compliance with IAS/IFRS to reduce agency costs.

6.2. Audit Firm Size

As shown in Table 2A (B), Audit firm size has a mean correlation of 0.220 ($Z= 3.955$) with a 95% confidence interval between 0.110 and 0.330. This statistic indicates that audit firm size has a significant effect on the degree of compliance with IAS/IFRS. However, the chi-square statistic is significant at ($p<0.01$) indicating a high degree of variation (heterogeneity) across 10 studies. Therefore, further analysis is conducted with respect to emerging and developed markets. When studies are sub-grouped according to the proxy used to measure IAS/IFRS, findings show that the presence of big auditor increases the likelihood of adopting IAS/IFRS by managers and it exerts a strong impact on the degree of compliance with IAS/IFRS with two mean correlations amounting to 0.077 ($Z= 2.824$) and 0.322 ($Z= 5.514$) respectively. Further sub-group meta-analyses are conducted with regard to country's investor protection level. Findings show that the relationship is significant for low and high protection level groups with a strong association observed for countries characterized by high investor protection level with a mean correlation of 0.383 ($Z= 5.071$). Thus, the high level of legal enforcement strengthens the role played by auditor to improve information quality through an increased compliance with IAS/IFRS.

Finally, we study the moderator effect of market sophistication on the relationship between audit firm size and IAS/IFRS compliance. Emerging markets group shows a high mean correlation of 0.375 ($Z= 2.573$), while developed countries group has a mean correlation of 0.102 ($Z= 3.353$). Hence our results suggest that the presence of big four audit firm increases the likelihood of complying with IAS/IFRS especially in emerging markets where there is a very low disclosure environment. In this regard, the strong correlation between the presence of big four audit firms and the degree of compliance with IAS/IFRS in emergent countries can be mainly justified by the potential knowledge shortfall of IAS/IFRS by local audit firms in these settings. In fact, only very few professional accountants (big four audit firms), in emergent countries, have a detailed knowledge of IAS/IFRS and the requisite skills to apply them (Alp & Ustundag, 2009). Management will have more incentives to comply with IAS/IFRS when its financial statements are audited by big four audit firms since they have a competitive advantage in controlling the conformity of application of IAS/IFRS. Under low disclosure environment, the presence of big four auditor combined with a high degree of compliance with IAS/IFRS will increase the credibility of financial statements.

6.3. Leverage

The relationship between leverage and compliance level with IAS/IFRS is reported for 17 studies. In Table 2A (C) the latter relationship is further studied. A mean correlation of 0.042 ($Z= 0.887$) suggests a non-significant effect of leverage ratio on compliance level. When the compliance level is classified into two groups, results show that neither the decision to adopt IAS/IFRS (dummy variable), nor the compliance degree with IAS/IFRS (compliance checklist) are significantly associated

with leverage ratio with two mean correlations accounting for -0.005 ($Z = -0.130$) and 0.061 ($Z = 0.983$) respectively. When studies are sub-grouped on the basis of investor protection level, the relationship is significant only in settings with high legal enforcement, where financial institutions enjoy more power to influence corporate reporting policy, with a mean correlation of 0.138 ($Z = 1.964$) and a confidence interval between 0.000 and 0.280.

Finally, when we study the moderating effect of market sophistication, we document that leverage ratio has a significant positive on compliance level only in emerging markets with a mean correlation of 0.111 ($Z = 2.019$) and confidence interval between 0.014 and 0.207. One explanation for the result is due to the fact that companies in emerging economies are in dire need of external finance and financial institutions (e.g. banks) play a crucial role in this respect (Barako et al., 2006). In this regard, Ahmed and Nicholls (1994) and Barako et al. (2006) argue that in emergent countries where financial institutions are a primary source of company funds, companies with high leverage ratio will show more compliance level with IAS/IFRS. Management will react accordingly by improving corporate reporting policy and increase the degree of compliance with IAS/IFRS in an attempt to reduce monitoring costs and the adverse effects of covenants introduced into the debt contracts as predicted by agency theory.

Insert Table 2A here.

6.4. Multi-Nationality

Table 2B (D) shows the results of the meta-analysis of the effect of multi-nationality (e.g. listing on foreign stock exchange) on IAS/IFRS compliance. The overall meta-analysis provides evidence that multi-nationality strongly improves the degree of compliance with IAS/IFRS since the mean correlation accounts for 0.482 ($Z = 5.250$) and a confidence interval between 0.268 and 0.588. The relationship remains significant for both emerging and non-emerging markets with a higher mean correlation for developed countries (0.542; $Z = 6.663$). When we study the moderating effect of investor protection level, findings show that multi-nationality has a significant effect on the degree of compliance with IAS/IFRS for low and high investor protection groups with a strong association for settings characterized by high investor protection level with a mean correlation of 0.756 ($Z = 7.940$). Similarly, the association is also significant when the level of compliance is proxied by either a dummy variable or a compliance checklist with a higher mean correlation for the latter amounting to 0.428 ($Z = 5.276$).

Under multi-national operations, management is inclined to provide foreign investors with high information quality and international recognized accounting standards to get more easily foreign finance and reduce home bias generally faced by foreign investors. Hence our results provide strong support for the capital need theory suggesting that increased compliance with IAS/IFRS allows companies to get more easily external foreign finance.

6.5. Profitability

As shown in Table 2B (E), Profitability has a mean correlation of 0.100 ($Z = 2.337$) with a 95% confidence interval between 0.016 and 0.185. This statistic indicates that profitability increases the likelihood of compliance with IAS/IFRS. However, the chi-square statistic is significant at ($p < 0.01$) indicating a high degree of variation (heterogeneity) across 9 studies. When further meta-analytic analysis is conducted according to the proxy use to measure the compliance level with IAS/IFRS,

Table 2A
Meta-Analytic Findings

Sample Size (N)	No. of Studies (K)	Mean Correlation (r̄)	Observed Variance (S _r ²)	Esti. Error Var. (S _e ²)	Percentage Explained (S _e ² /S _r ²)	Z-Statistic	95% Confi. Internal	χ^2_{K-1}	Fail-Safe N
Size (A)									
Overall meta-analysis	3,238	0.135	0.039	0.005	14.324	2.966***	0.050; 0.220	132.640***	11
Moderating factors									
DV	2,219	0.125	0.045	0.006	14.258	2.261***	0.020; 0.230	105.200***	7
CDI	1,119	0.157	0.024	0.004	15.105	1.999*	0.000; 0.310		4
Emerging markets	1,221	0.161	0.040	0.006	15.433	2.273**	0.022; 0.300	51.836***	7
Non-emerging	2,017	0.119	0.030	0.005	15.836	2.167**	0.011; 0.227	69.343***	4
High investor	714	0.110	0.082	0.008	9.907	0.938	-0.120; 0.340	60.558***	-
Low investor	1,406	0.162	0.026	0.006	22.755	2.968***	0.050; 0.270	39.551***	8
Audit (B)									
Overall meta-analysis	1,849	0.220	0.031	0.005	15.727	3.955***	0.110; 0.330	63.581***	15
Moderating factors									
DV	769	0.077	0.001	0.002	100.000	2.824***	0.020; 0.130	1.181	1
CDI	1,080	0.322	0.027	0.006	21.761	5.514***	0.210; 0.440	36.761***	22
Emerging markets	801	0.375	0.148	0.006	4.300	2.573***	0.090; 0.660	161.239***	23
Non-emerging	1,048	0.102	0.003	0.003	99.743	3.353***	0.040; 0.160	3.007	1
High investor	703	0.383	0.029	0.005	18.525	5.071***	0.240; 0.530	27.697***	17
Low investor	867	0.104	0.007	0.004	62.631	2.456**	0.020; 0.190	6.386*	1
Leverage (C)									
Overall meta-analysis	2,537	0.042	0.039	0.006	17.060	0.887	-0.050; 0.140	99.645***	-
Moderating factors									
DV	1,019	-0.005	0.008	0.004	48.738	-0.130	-0.090; 0.080	8.207***	-
CDI	1,681	0.061	0.053	0.008	15.401	0.983	-0.060; 0.180	90.901***	-
Emerging markets	1,012	0.111	0.019	0.007	39.751	2.257**	0.014; 0.207	20.125***	3
Non-emerging	1,525	-0.003	0.047	0.006	12.546	-0.041	-0.140; 0.140	71.731***	-
High investor	714	0.138	0.029	0.008	26.987	1.964*	0.000; 0.280	22.239***	5
Low investor	1,197	-0.029	0.050	0.007	14.955	-0.398	-0.180; 0.120	60.177***	-

Notes: *p < .10; **p < .05; ***p < .01; ****p < .001; CDI refers to compliance disclosure index; DV when authors proxy for IAS/IFRS compliance by a dummy variable; 1 if firm adopts IAS/IFRS and 0 otherwise.

results show that corporate profitability exert a significant impact on the degree of compliance with IAS/IFRS since the mean correlation accounts for 0.092 ($Z= 1.907$; $p<10\%$), while it does not enhance the manager's decision to adopt IAS/IFRS as proxied by a dummy variable. When we study the moderating effect of investor protection level, we document that corporate profitability exerts a significant impact on the degree of compliance with IAS/IFRS only in countries characterized by low investor protection level with a mean correlation of 0.107 ($Z= 4.541$). Such result can be justified also by the low disclosure environment prevailing in these settings implying that high profitable firms tend to distinguish themselves for others operating in the same context.

Further analysis is conducted with respect to market sophistication for emerging and developed markets. Emerging markets group has a mean correlation of 0.092 ($Z= 1.907$; $p<10\%$) with a confidence interval between -0.003 and 0.188, while developed countries group has a mean correlation of 0.128 ($Z= 1.420$) with a confidence interval ranging from -0.050 to 0.310. Hence our results suggest that corporate profitability slightly increases the likelihood of complying with IAS/IFRS especially in emerging markets where profitable firms are more able to face costs incurred to provide high information quality by more compliance with IAS/IFRS. Therefore, they will increase the level of compliance with IAS/IFRS to improve financial statements credibility and thereby increase investors' confidence as predicted by signalling theory. For instance, high degree of compliance with IAS/IFRS could signal to market participants that the firm uses more restrictive accounting recognition rules (e.g. fair value measurement and disclosures, impairment tests), which imply more value relevance of positive reported earnings.

6.6. Ownership Dispersion³

The association between ownership dispersion and IAS/IFRS compliance is reported in Table 2B (F). The overall meta-analysis of 5 studies provides evidence ownership dispersion has a positive and significant effect on IAS/IFRS compliance since the mean correlation accounts for 0.122 ($Z= 2.685$). When further analysis is conducted according to the proxy used to measure the compliance level with IAS/IFRS, results show that corporate ownership dispersion exerts a significant impact on the degree of compliance with IAS/IFRS since the mean correlation accounts for 0.115 ($Z= 2.327$), whereas it is not significant when the level of compliance is measured by a dummy variable. When we study the moderator effect played by the degree of market development we find that ownership dispersion improves the degree of compliance with IAS/IFRS only in developing and emergent markets since there is already a low disclosure environment in these settings and management will react accordingly to satisfy the information needs of individual investors and increase thereby the marketability of their securities. However, these results should be interpreted with caution since the number of studies is limited.

Insert Table 2B here.

6.7. Sensitivity Analysis

Since the number of studies included in our meta-analysis is limited due the small number of papers published in this respect, we conduct a sensitivity analysis to account for the publication bias. The most commonly suspected publication bias is the tendency

³ The number of studies is limited, therefore, we don't conduct a sub-group meta-analysis with respect to investor protection level.

Table 2B
Meta-Analytic Findings

Sample (N)	No. of Studies (K)	Mean Correlation (r)	Observed Variance (S _e ²)	Esti. Error Var. (S _e ²)	Percentage Explained (S _e ² /S _e ²)	Z-Statistic	95% Confi. Internal	I ²	Fail-Safe N
Multi-nationality (D)									
Overall meta-analysis	1,818	0.376	0.079	0.005	6.085	4.620***	0.216; 0.536	197.179***	40
Moderating factors									
DV	470	0.227	0.037	0.005	15.464	2.050**	0.009; 0.445	19.399***	5
CDI	1,348	0.428	0.084	0.004	5.276	4.430***	0.239; 0.618	170.572***	35
Emerging markets	481	0.170	0.002	0.004	100.000	4.680***	0.098; 0.241	1.349	2
Non-emerging markets	1,377	0.451	0.087	0.005	5.470	4.840***	0.260; 0.633	182.798***	52
High investor	295	0.756	0.027	0.002	6.819	7.940***	0.570; 0.943	43.992***	23
Low investor	548	0.427	0.122	0.005	3.985	2.450***	0.085; 0.770	100.364***	16
Profitability (E)									
Overall meta-analysis	978	0.100	0.016	0.009	53.896	2.337*	0.016; 0.185	16.698***	2
Moderating factors									
DV	220	0.128	0.016	0.009	54.001	1.420	-0.050; 0.310	3.703***	-
CDI	758	0.092	0.016	0.009	54.756	1.907†	-0.003; 0.188	12.783***	1
Emerging markets	758	0.092	0.016	0.009	54.756	1.907†	-0.003; 0.188	12.783***	1
Non-emerging markets	220	0.128	0.016	0.009	54.001	1.420	-0.050; 0.310	3.703***	-
High investor	437	0.092	0.034	0.009	26.549	1.009	-0.087; 0.273	15.066	-
Low investor	541	0.107	0.003	0.009	100.000	4.541***	0.060; 0.153	1.540	2
Ownership dispersion									
Overall meta-analysis	1120	0.122	0.010	0.004	41.956	2.685***	0.032; 0.211	11.917***	2
Moderating factors									
DV	296	0.141	0.018	0.006	35.703	1.487	-0.045; 0.328	5.601***	-
CDI	824	0.115	0.007	0.003	48.452	2.327**	0.018; 0.211	6.191***	1
Emerging markets	824	0.115	0.007	0.003	48.452	2.327**	0.018; 0.211	6.191***	1
Non-emerging markets	296	0.141	0.018	0.006	35.703	1.487	-0.045; 0.328	5.601***	-

Notes: †p < .10; *p < .05; **p < .01; ***p < .001; CDI refers to compliance disclosure index; DV when authors proxy for IAS/IFRS compliance by a dummy variable: 1 if firm adopts IAS/IFRS and 0 otherwise.

for journals to only publish studies with statistically significant results; the lack of non-significant published studies has been termed the “file-drawer problem” (Rosenthal, 1979). Accordingly, the fail-safe N is computed to estimate the number of unpublished studies reporting null results that can reduce the significance of the relationships considered⁴. The results reported in Table 2 (column: fail-safe N) indicate that significant associations (corporate size, audit firm size and multi-nationality) do not suffer from file-drawer problem. Besides, results for leverage ratio (emergent markets and high investor protection group) do not suffer from file drawer problem. Therefore, our sensitivity analysis suggests the stability of the findings of our meta-analysis.

Meta-analysis literature suggests also that journal quality may also moderate the meta-analytic results since ranked journals generally accept articles with significant findings and reject papers with insignificant results (Moller & Jennions, 2001). Therefore, we conduct another sensitivity analysis to examine whether this criterion moderates the associations investigated. Accordingly, we divide each sample to ranked journals versus low quality journals and unpublished papers. Ranked journals in our sample are The International Journal of Accounting, Journal of International Accounting Auditing and Taxation, Journal of International Accounting Research, The British Accounting Review, European Accounting Review and Journal of International Financial Management and Accounting. Results (not tabulated) show that the journal quality moderates the association between corporate profitability and the degree of compliance with IAS/IFRS since the relationship is significant for quality journals with a mean correlation of 0.116 ($Z= 2.206$), while it is non-significant for low quality journals and unpublished papers 0.092 ($Z= 1.490$). By contrast, for corporate size, audit firm size and ownership dispersion, the associations are both significant for low quality and unpublished papers and quality journals’ articles. For leverage ratio, the relationship is non-significant for either quality or non-quality papers. With respect to multi-nationality, only one study is non-published and the others have appeared in quality journals.

VII. CONCLUSION

This paper examines de facto compliance with IAS/IFRS, focusing on positive accounting theories (agency theory, political process theory, signaling theory, and capital need theory). We use a meta-analysis technique to examine the relevance of positive accounting theories in explaining de facto compliance with IAS/IFRS in different countries in general and developing countries in particular. Emerging markets

⁴ A method, proposed by Orwin (1983) consists of computing the number of missing studies using the following formula. This approach is used for correlational meta-analyses as in our paper:

$$K_0 = K \left[\frac{ES_k}{ES_0} - 1 \right]$$

Where:

K_0 : fail-safe N or the number of nonsignificant, unpublished studies.

K : number of studies included in the meta-analysis.

ES_k : effect size of studies included in the analysis.

ES_0 : the criterion effect size level which will reduce the effect size to lower value. Following García-Meca and Sánchez-Ballesta (2010), we use a critic value of 0.088.

are generally characterized by low accounting and legal enforcement and more need for external finance compared to developed economies.

In order to test the relevance of these theories in emerging markets, a meta-analytic review is conducted to analyze the empirical results of 17 studies dealing with the determinants of IAS/IFRS compliance. We consider firm size (as a proxy for agency theory), profitability (as a proxy for signaling theory), leverage (as proxy for agency theory), auditor (as a proxy signaling theory), internationality (as a proxy for capital need theory), and ownership diffusion (as a proxy for agency theory). Our results provide evidence that firm size, auditor type, multi-nationality, profitability and ownership dispersion have a positive effect on IAS/IFRS compliance. Compliance with IAS/IFRS in emerging markets is associated with firm size, auditor type, multi-nationality, profitability, leverage ratio and ownership dispersion. Given the low disclosure environment, weak investors' protection and capital external need prevailing in these contexts, these factors are likely to enhance corporate reporting policy. Managers comply seriously with IAS/IFRS in developing countries to reduce agency costs, signal a higher financial statements' credibility and get more easily external finance from financial institutions. With respect to developed countries, findings show that firm size, audit firm size and multi-nationality are strongly associated with compliance with IAS/IFRS.

With regard to investor protection level, our meta-analytic findings show that corporate size and profitability are more associated with IAS/IFRS compliance in low investor protection settings, while audit firm size, leverage and multi-nationality increase the degree of compliance with IAS/IFRS in countries characterized by high protection level. Our results emphasize the need to consider the legal and institutional when examining the degree of compliance with IAS/IFRS. For instance leverage ratio affects significantly the compliance with IAS/IFRS in emergent markets where financial institutions represent a primary source of company funds in these contexts. Furthermore, ownership dispersion influences significantly the compliance with IAS/IFRS in developing countries where there is a low disclosure environment and family ownership. Management will try to satisfy individual investors' needs of individual investors the increase the marketability of their securities. Finally, big four audit firms exert a strong effect on the compliance with IAS/IFRS in emergent markets where the local audit firms suffer from a potential knowledge shortfall of IAS/IFRS.

Overall, the identification of the factors that can affect the compliance with IAS/IFRS is crucial for emergent countries that intend to adopt IAS/IFRS and developed countries that have adopted IAS/IFRS in 2005. For instance, since size increases the likelihood of complying with IAS/IFRS, small and medium firms in these settings will show some reticence in complying with IAS/IFRS. Therefore, if regulators decide to adopt IAS/IFRS, they have to opt for IAS/IFRS for small and medium firms as these companies represent a prevailing feature in emergent and developing countries. Furthermore, if regulators in emergent markets decide also to adopt IAS/IFRS, they have to improve and align accounting and auditing practices with recent IFAC-issued International Education Standards especially with respect to local audit firms to limit the adverse effect of the potential knowledge shortfall of IAS/IFRS by these local audit companies.

Our study contributes also to the recent strand of the international accounting literature that investigates the determinants of the properties of actual reports. This literature (Ball & Shivakumar, 2005) has shown that the properties of published accounting numbers depend more on the incentives managers face to provide

informative numbers than on standards and regulations especially in emerging markets where there is low regulation and enforcement levels. Our results confirm the hypothesis that firm-level incentives also play a significant role on firms' financial reporting practices. Managers comply with IAS/IFRS to reduce agency costs, signal the high credibility of their financial statements under IAS/IFRS accounting rules and get more easily external finance.

Future research have to focus more on developing compliance index with IAS/IFRS and examine their determinants especially in the European Community where these standards have been mandated in 2005. Furthermore, the same analysis can be conducted when more studies are available.

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