

# **Is Corporate Board More Effective Under IFRS or “It’s Just An Illusion”?**

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## **Is Corporate Board more effective under IFRS or “it’s just an illusion”?**

### **Abstract**

The present study contends that the claimed higher corporate boards’ effectiveness in constraining earnings management around IFRS introduction might be “transitory”, short lived, and fade away over time. Drawing on the attention based view (ABV) of the firm (Ocasio, 1997), we argue that the higher corporate boards’ effectiveness might have been driven by a temporary higher level of attention which Independent Directors and Audit Committees allocated to accounting issues during one of the largest regulatory experiments in financial reporting ever undertaken (i.e. IFRS transition). Our empirical results highlight that corporate board’s effectiveness reaches its peak around the adoption time, showing an “inverted U” path. This study contributes to the current debate on the extent to which additional contextual factors might prevail on accounting standard regulation – *per se* – in improving earnings quality. We further suggest that boards’ effectiveness in monitoring the corporate financial accounting process is contextually dependent.

*Keywords:* IFRS; Corporate board; Earnings management; Attention based view of the firm

## 1. INTRODUCTION

Recent empirical studies indicate that disclosure quality and market liquidity tend to increase significantly after the adoption of IFRS (Daske and Gebhardt, 2006; Barth et al., 2008; Daske et al., 2008), and that a higher effectiveness of boards and audit committees (ACs) in constraining earnings management follows IFRS mandatory adoption (Marra et al., 2011). However, Daske et al. (2008) suggest that results on IFRS should be cautiously interpreted, as they are based on a relatively short time period and it is possible that the documented effects are determined by other factors and, thus, will fade away over time. In addition, several studies argue that other factors (i.e. market forces and incentives) might play a significant role in determining the success of new standards implementation in improving accounting quality (Ball et al., 2003; Ball and Shivakumar, 2005; Van Tendeloo and Vanstraelen, 2005; Burgstahler et al., 2006).

In this paper, we work to advance this debate by drawing on the attention based view of the firm (ABV) (Ocasio, 1997) to understand whether the claimed higher corporate board effectiveness in constraining earnings management following IFRS adoption is long lasting (i.e. IFRS determined) or has a short lived effect (i.e. it is attention based). According to ABV theoretical framework, the board members attention to “monitoring the corporate financial accounting process” (Klein, 2002a:375) is a critical antecedent of its effectiveness since “what decision makers do depends on what issues and answer they focus their attention on” (Ocasio, 1997:188). Moreover, given that the decision makers attention’s allocation depends on the particular context they find

themselves in and on how the organization distributes and controls the allocation of attention between competing issues (Ocasio, 1997), the board members attention to monitoring is driven by contextual and organizational factors (Tuggle et al., 2010). The adoption of ABV lenses suggests that the IFRS transition represents a relevant contextual and organizational factor which has temporarily increased board members attention to monitoring corporate financial accounting process. We maintain that this, in turn, has induced corporate boards to perform, *for a short while* (i.e. around the IFRS first time adoption), their monitoring role on earnings management more effectively, in order to build/protect their personal reputational value (Yermack, 2004; Srinivasan, 2005; Fich and Shivdasani, 2007; Hunton and Rose, 2008).

Following this line of reasoning, our prediction is that the higher effectiveness of corporate board on earnings management might be “attention based related”, thus short lived, and shows its peak in the adoption year. In fact, we assume that, while boards have selectively re-allocated their attention to monitoring accounting issues during “one of the largest regulatory experiments in financial reporting ever undertaken” (Christensen et al. 2007; p. 342), and to complying with market authorities specific recommendations<sup>1</sup> also, their level of attention towards this specific corporate board function decreased as soon as the contextual and organizational relevance of IFRS implementation had gradually faded away.

The empirical analysis is based on all of those Italian non-financial companies listed consecutively from 2003 to 2007 which mandatorily adopted IFRS in 2005. Our results are, overall, consistent with our predictions. We find that corporate boards were more

effective in constraining earnings management in 2005 and that they are progressively less effective (or even ineffective) when we drift away from the IFRS first time adoption in both directions. Our results are robust to a number of checks.

This paper contributes to the extant literature in several ways and provides a number of insights. First, we complement prior research on IFRS introduction's effects. Following Daske et al. (2008) warning on the possible short-lived benefit of IFRS implementation, this study focuses on the longevity of corporate board's effectiveness in monitoring earnings management after IFRS introduction. It's worth noticing that our results extend and improve preliminary findings on Board and IFRS (Marra et al., 2011), casting doubts on the long lasting effect of boards effectiveness in constraining earnings management under IFRS framework. In addition, by showing that contextual and behavioural level factors might dominate accounting standards in temporarily improving earnings quality, this paper contributes to previous literature on the role of other factors (Ball et al., 2003; Ball and Shivakumar, 2005; Van Tendeloo and Vanstraelen, 2005; Burgstahler et al., 2006; Christensen et al., 2008) in determining accounting quality rather than accounting standards and accounting regulation changes.

Second, the ABV allows us to offer a new and challenging interpretation of the possible determinants of boards' effectiveness on earnings manipulation, which complements the traditional approach based upon boards' characteristics. Approaches which assume that social actors face significant limitations in their information processing and calculation capabilities are well-known in management

(Simon, 1947; Cyert and March, 1992), finance (Merton, 1987; Hirshleifer and Teoh, 2003;) and governance studies (van Ees et al., 2009; Tuggle et al. 2010). Nonetheless to the best of our knowledge, this study is the first attempt to adopt a similar approach with reference to accounting issues by examining earnings management and corporate governance association.

Third, following the call for dismantling the fortress of past research on board of directors demographic that argued that contextual and behavioural variables should be taken into account while analyzing board task performance (e.g. Forbes and Milliken, 1999; Daily, Dalton and Cannella, 2003;Tuggle et al. 2010 ), we explore the influence of a major change in the accounting framework (discontinuity event) (Christensen et al. 2007; Hoogendoorn, 2006) on the corporate boards' attention allocation to monitoring the corporate financial accounting process.

Also, Financial Statements users can benefit from our paper. Our results suggest that an effective analysis of financial statements should consider not only firm's corporate governance characteristics but environmental contingencies that may affect financial reporting quality also.

The paper proceeds as follows. In the next Section, we review the relevant literature and develop our hypotheses. In Sections 3 and 4, we describe the method we used, by explaining the research design and describing the data sample, respectively. Section 5 presents our empirical results. Finally, conclusions and discussion are presented in Section 6.

## **2. THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT**

## 2.1 Theoretical framework

### *IFRS implementation and earnings quality*

As of 2005, publicly listed companies in Europe are required to prepare financial statements in accordance with IFRS (Regulation EC No. 1606/2002). IFRS are deemed to enhance the comparability of financial statements, improve corporate transparency and increase the quality of financial reporting, to the benefit of investors and financial markets functioning (Ashbaugh and Pincus, 2001; Ewert and Wagenhofer, 2005; Daske and Gebhardt, 2006; Barth et al., 2008, Daske et al., 2008). As far as Board effectiveness on earnings management constraint under IFRS setting is concerned, Marra et al. (2011) show that the implementation of the new standards increased, acting as moderator, the effectiveness of board independence and audit committees in constraining earnings management.

However, Daske et al. (2008) argue that results on IFRS are based on a relatively short time period and it is possible that the documented effects are short-lived, determined by other factors and, thus, will fade away over time. Furthermore, several studies maintain and empirically find that other factors might dominate the implementation of the new standards in improving accounting quality at country and firm level (Ball et al, 2003; Ball and Shivakumar, 2005; Van Tendeloo and Vanstraelen, 2005; Burgstahler et al., 2006). Indeed, international accounting standards still allow considerable room for managerial discretion and judgment in addition to the use of private information, thus leaving firms substantial leeway to apply earnings management techniques (Van Tendeloo and Vanstraelen, 2005).

Despite the important role played by companies' corporate governance structure in the quality of financial reporting under the new accounting rules, the extent to which other factors might have influenced the claimed higher corporate board monitoring ability and its longevity remains an interesting and open issue.

### *Attention Based View (ABV)*

The ABV provides the theoretical lenses for investigating whether claimed higher corporate boards' effectiveness in constraining earnings management around the time of IFRS introduction has permanent or short-lived effects. Building on Simon's (1947) concept of bounded rationality, Ocasio (1997) argue that cognition and actions of decision makers are derived from three interrelated principles. The first one – *focus of attention* – indicates that decision makers will selectively attend to a limited set of issues based on the focus of their attention. The second principle – *situated attention* – indicates that decision makers' focus is affected by the context they are located in. The third one – *structural distribution of attention* – indicates that the organization's structure and processes affect decision makers focus of attention. Building on the *focus of attention* principle, we argue that board members effectiveness in monitoring earnings management depends on how much attention they allocate to this specific activity. Board members, like investors (Merton, 1987; Hirshleifer, Teoh, 2003) and, more generally, all social actors (Simon, 1947; Cyert and March, 1992), face significant limitations in their information processing and calculation capabilities (van Ees et al. , 2009; Tuggle et al. 2010). Thus, board members cannot handle all possible matters and



must choose between competing tasks (Ocasio, 1997). Consistently, Tuggle et al. (2010) find that board members selectively allocate the attention to their multiple board roles (Zahara and Pearce, 1999) and do not maintain constant levels of attention toward monitoring. Since there are a variety of issues such as company performance, extraordinary operations, operations with related parties, accounting issues, etc. which might compete for the limited attention that the boards can allocate to the monitoring function, the attention specifically devoted to monitoring the corporate financial accounting process can vary as well.

Furthermore, the principles of *situated attention* and *structural distribution of attention* (Ocasio, 1997) help us to identify the IFRS transition as a “vivid stimuli” (Hirshleifer, Teoh, 2003) salient to board members' allocation of attention. Using the principle of *situated attention*, we argue that IFRS transition represents a temporary and relevant variation of the accounting context in which board members find themselves; context which has been usually based on a long term stability of the accounting framework in the past and which will be stable for the future also. Moreover, IFRS transition constitutes a relevant factor for a temporary reallocation of board members attention towards the monitoring of accounting issues under the *structural distribution of attention principle*. During the IFRS transition, companies had: 1) to implement specific procedures and organize team works in order to make the transition to IFRSs from another basis of accounting (CESR:03-323e) and 2) to comply with a set of specific recommendations and guidelines issued by market authorities and regulators in order to ensure a gradual, but continued and phased communication regarding both: plans

for and the achievement of the transition process (e.g. CESR:03-323e) and the impact on reported financial position, financial performance and cash flows of the transition from previous GAAP to IFRS (CESR:03-323e and IFRS 1, §§ 23 and 24). Since, according to the *structural distribution of attention* principle, a change in “firm’s procedural and communication channels affect the availability and saliency of issues and answer the decision makers will attend to” (Ocasio, 1997: 196), we maintain that the IFRS transition process temporarily affected the board members’ allocation of attention towards monitoring corporate financial accounting process.

Next we develop our hypotheses. Since prior research looked at board effectiveness in constraining earnings management from a demographic perspective, by drawing upon the ABV insights, we investigate the association between corporate board and earnings management during IFRS transition.

## 2.2 Hypotheses development

### *The transition to IFRS and the effectiveness of outside/independent directors and audit committees in constraining earnings management*

The prevailing view among regulators is that an increased presence of independent directors would improve the quality of corporate governance (Harris, Raviv, 2008; Hunton, Rose, 2008). Prior research provides support for the prediction that the degree of earnings management is negatively related to the proportion of outside directors on the board (Beasley, 1996; Dechow et al. , 1996; Klein, 2002a; Xie et al. 2003) However, empirical studies from non-US economies find mixed results. Park and Shin

(2004), studying Canadian companies, find that outside directors do not induce a reduction in earnings manipulation. Peasnell, Pope and Young (2005) show that the likelihood that British managers record income-increasing abnormal accruals is negatively related to the proportion of outsiders on the board, but they find little evidence that outside directors influence income-decreasing earnings management.

For most large firms, boards of directors usually delegate direct oversight of the financial accounting process to a subcommittee of the full board, the audit committee.

In spite of Xie (2003:299) arguing that “an active well-functioning and well-structured Audit committee might be able to prevent earnings management”, the empirical findings on the role and the effectiveness of the audit committee with regards to earnings management is less unanimous. Beasley (1996) shows that the audit committee does not significantly affect the likelihood of financial statement fraud. In contrast, Klein (2002a) finds that audit committee independence is negatively related to earnings management among US companies and Xie et al. (2003) adds that earnings management is less likely to occur in companies whose audit committee members present corporate or investment banking backgrounds and are active, as proxied by the meetings frequency. Similarly Bédard et al. (2004), show that aggressive earnings management is negatively associated with the financial expertise of audit committee members and with indicators of independence. Outside the US, Peasnell et al. (2005) find no evidence that the presence of an audit committee directly affects upward or downward income manipulation among UK companies.

Most of these studies implicitly assume that directors do maintain a constant level of attention towards the corporate financial accounting process and investigate whether directors with a given characteristic (e.g., if the director is an “independent outsider”), or acting in a specific structure (e.g. if the director is member of the audit committee) are more effective in protecting the integrity of the financial accounting process (Anderson et al, 2004). In our paper, drawing upon the ABV (Ocasio, 1997), we argue that the transition process from local GAAP to IFRS represents a major event which might have temporarily affected board members’ allocation of attention to corporate financial accounting process. We maintain that there has been a gradual increase while approaching IFRS adoption, due to the progressive implementation of procedures and processes to meet reporting requirements in a seamless manner (CESR: 03-323e), and to the compliance with a set of specific communication requirements and guidelines issued by market authorities regarding the move towards IFRS and the financial statements impact of the IFRS adoption (CESR: 03-323e). After reaching its peak in the adoption year (2005), when the IFRS transition received widespread attention from the financial market operators, regulators and media<sup>2</sup>, this contextual and organizational influence should have progressively diminished.

Although overseeing the firm’s financial reporting process constitutes a primary responsibility of the board (Anderson et al., 2004), we expect the contextual and organizational influence of the IFRS transition to be especially salient for independent directors and audit committee members. In fact, according to the reputational

hypothesis (Fama, 1980; Fama and Jensen, 1983), they operate in an environment where they are rewarded in the director labor market for effective monitoring of the integrity of the corporate financial accounting process and punished for ineffective monitoring (Srinivasan, 2005; Fitch, Shidvasani, 2007). Given the financial magnitude of the reputational effect that directors may incur when there are signals of monitoring failure (Fitch, Shidvasani, 2007), independent directors' and audit committee members' motivation to monitor the quality of corporate accounting process is partially based on the self-interested protection of their reputation (Hunton and Rose, 2008).

Based on our theoretical framework, due to the selective allocation of attention, independent directors and audit committees effectiveness in monitoring the corporate financial accounting process will take the graphic form of an “inverted U” curve, being at the highest level (for both size and significance) while approaching IFRS adoption time (i.e. 2005) and then returning to a lower level, once the attention to accounting issues related to the IFRS transition gradually fades away.

Therefore we formulate the following hypotheses:

**Hypothesis 1:** independent directors effectiveness in constraining earnings management will be at the highest level at the IFRS transition time, while it will be lower before and after the adoption year.

**Hypothesis 2:** audit committee effectiveness in constraining earnings management will be at the highest level at the IFRS transition time, while it will be lower before and after the adoption year.

IFRS transition implies a complex process whose implementation may have been progressively perceived as problematic (PWC 2004; Hoogendoorn, 2006). Previous literature shows that boards and audit committees meet more often during periods of turmoil (Vafeas, 1999) or when a problem arises (Ghosh et al., 2010). Since boards and audit committees that meet more often may devote more time to issues such as earnings management, more active boards, as proxied by the number of board meetings, and more active audit committees, as proxied by the number of committee meetings, are associated with a lower level of earnings management (Xie et al.2003). According to our theoretical explanation, however, the change in effectiveness should be associated also with a temporarily re-allocation of board/audit committee members' attention to monitoring the corporate financial accounting process. A selective allocation of attention influences the actions in which decision makers eventually engage (Ocasio 1997) and their level of commitment towards the attended issues. Since previous research highlights how enhanced board members' efforts in board activities results in virtuous circles and board empowerment (Demb and Neubauer, 1992; Hunt, 2007; Lorsch and MacIver, 1989), we predict the marginal contribution of each board and audit committee meeting towards earnings management constraining to take the graphic form of an "inverted U" path, being at the highest level (for both size and significance) while approaching IFRS adoption time and returning thereafter to a lower level.

Therefore, based on this theoretical framework, we formulate the following hypothesis:

**Hypothesis 3A:** the effectiveness of an additional board meeting will be at the highest level around the IFRS transition time and will weaken while we drift away from it.

**Hypothesis 3B:** the effectiveness of an additional AC meeting will be at the highest level around the IFRS transition time and will weaken while we drift away from it.

### *CEO duality and earnings management around IFRS transition*

Kong-Hee and Buchanan (2008) show that CEO duality leads to lower risk-taking propensity of the company and that some traditional managerial behavior control mechanisms are ineffective when CEO duality exists. In a prior study, Worrell et al (1997) show that upon the announcement of CEO duality, the stock market reacts adversely to the news, suggesting that CEO duality weakens the monitoring role of the board. CEO duality has also been linked with other signs of ineffective governance, such as in cases of hostile takeovers (Morck et al., 1988) or in cases of the use of “poison pills” (Mallette and Fowler, 1992). Dechow et al (1996) examine firms subject to SEC enforcement actions for GAAP violations leading to overstated earnings and find that such actions are more likely with insider dominated boards and CEO duality. Finally, combining arguments derived from the power literature with ABV, Tuggle et al. (2010) find that CEO duality negatively affects the board’s allocation of attention to monitoring. These results are consistent with the argument that boards are more effective when the positions of CEO and Chair are split.

However, given the unusual relevance of the complete change of accounting framework and the need to comply with specific communication policies, we expect the structural capability of Dual CEO to divert the board from monitoring the corporate financial accounting process to be limited temporarily during the IFRS transition. Therefore, we predict the CEO duality and earnings management association to take a graphic form of an “U” path, being at the lowest level (for both size and significance) while approaching IFRS adoption time (i.e. 2005) and then returning to its usual level.

**Hypothesis 4:** the positive relationship between CEO duality and earnings management will be at the lowest level around IFRS transition time and will be stronger while we drift away from it.

### **3. METHODOLOGY**

#### *Dependent Variable*

To test our hypotheses we use the absolute value of Abnormal Working Capital Accruals (AWCA), scaled by beginning year total assets, as dependent variable. Absolute value of AWCA is used in this paper because the main objective is to measure the extent of earnings management, regardless of earnings management purpose (i.e. whether it is done to increase or decrease income).<sup>3</sup> There are several suggested models to estimate non-discretionary (or “normal”) accruals and thus estimating discretionary (or “abnormal”) accruals (Jones, 1991; Dechow et al., 1995; Kothari et al., 2005). However, when the number of observations per year/industry is



limited, estimation based on Jones type abnormal accrual measures becomes unreliable (Wysocki, 2004). Given the latter being the case for Italian companies, in the current paper we resort to the De Fond and Park (2001) model to estimate Abnormal Working Capital Accruals (AWCA) as a proxy for earnings management. AWCA is estimated separately for each observation as follows:

$$AWCA_t = WC_t - [(WC_{t-1} / S_{t-1}) \times S_t] \quad (1)$$

Where:

$t$  = year  $t$ ;

$AWCA_t$  = abnormal working capital accrual in year  $t$ ;

$WC_t$  = non cash working capital accruals in year  $t$ , computed as:

(Current assets – cash and short term investments) – (current liabilities – short-term debt);

$WC_{t-1}$  = working capital at the end of year  $t-1$ ;

$S_t$  = sales in year  $t$ ; and

$S_{t-1}$  = sales in year  $t-1$ .

Consistent with prior research (e.g. DeFond and Jiambalvo, 1994; Subramanyam, 1996; DeFond and Subramanyam, 1998; Becker et al., 1998; Teoh et al., 1998; Guidry et al., 1999; Klein, 2002b Park and Shin, 2004; Peasnell et al., 2005), the long-term component of total accruals is not included and is used for robustness tests only (Francis and Wang, 2008).

#### *Independent variables*

Our main explanatory variables are independent directors (*IND*), Audit Committee (*AC*), CEO duality (*DUAL*), the number of board meetings (*BoardMeet*) and the

number of Audit Committee meetings (*ACMeet*). *IND* is defined as the percentage of independent directors on the firm's board. *AC* and *DUAL* are dummy variables, equal to 1 if the firm has an audit committee or a Dual CEO, zero otherwise. Finally, *BoardMeet* and *ACMeet* are, respectively, the number of board and AC meetings in a given year.

### *Control Variables*

We also include in our analysis a number of control variables that might affect the level of accruals. These variables have been selected on the basis of earlier studies on earnings management and are likely to have an impact on *AWCA*. Since it is suggested that larger boards are less effective in performing their duties (Dechow et al., 1996; Peasnell et al., 2005), we control for board size (*BDSZ*) by measuring the total number of board members. Because it is expected that larger firms are more carefully monitored by the market and by other stakeholders than smaller ones (Klein, 2002b; Park and Shin, 2004; Bédard et al., 2004), we control for company size (*SIZE*) by measuring the natural logarithm of previous year total sales. We also control for the presence of a big audit company (*AUD*), which is expected to show negative relationship, by using an indicator variable taking the value of one if the firm has a Big 4 auditor and zero otherwise. In addition, as companies reporting losses in past years have a higher incentive to manage earnings (De George et al., 1999), we control for lagged negative earnings (*NEARN*) by using a dummy variable, taking the value of one if company lagged net income is negative, zero otherwise. We also include the share percentage owned by the majority shareholder of the firm (*MajorSO*), as large

shareholders may have an interest in manipulating earnings in order to extract private benefits to the detriment of minority shareholders (Shleifer, Visny, 1997). Moreover, since prior studies (DeAngelo et al., 1994; DeFond and Jiambalvo, 1994; Park and Shin, 2004; Bédard et al., 2004; Peasnell et al., 2005) indicate that companies facing financial constraints have an incentive to adjust earnings in order to avoid a potential loss from disclosing a financial problem, we control for financial leverage (*LEV*) by measuring the ratio between total Liabilities over total Assets. Finally, consistent with previous research (Klein, 2002b; Bédard et al., 2004; Peasnell et al., 2005), changes in cash-flow from operations (*ChCFO*), measured by the change in operating cash flows over lagged total sales, and changes in return on investments (*ChROI*), measured by the change in return on investments over lagged total assets, are introduced in our models as potential determinants of earnings management and to control for potential confounding effect due to macroeconomic factors.

### *The Regression Models*

To test our hypotheses we first consider if the higher effectiveness of Board and ACs in constraining earnings management after IFRS adoption (Marra et al., 2011) holds in our analysis. Thus, consistent with prior research, we investigate the relationship between earnings management estimates (*AWCA*) and the surrogates for corporate governance types. To separate the additional effect of IFRS introduction in our analysis we: 1) introduce IFRS as a dummy variable that assumes value 1 for post IFRS introduction period (i.e. 2005-2007) data set and zero otherwise; 2) interact our

main independent variables (IND, AC, BoardMeet, ACMeet, DUAL) with IFRS. The model is defined as follows:

$$\begin{aligned}
 AWCA_{it} = & \beta_0 + \beta_1 IND_{it} + \beta_2 AC_{it} + \beta_3 BoardMeet_{it} + \beta_4 ACMeet_{it} + \beta_5 DUAL_{it} + \beta_6 IFRS_{it} + \\
 & \beta_7 IND * IFRS_{it} + \beta_8 AC * IFRS_{it} + \beta_9 DUAL * IFRS_{it} + \beta_{10} BoardMeet * IFRS_{it} + \beta_{11} \\
 & ACMeet * IFRS_{it} + \gamma_i Controls_{it} + Industry Controls + Firm Controls + \varepsilon_{it}
 \end{aligned} \tag{2}$$

But, our contribution to the current debate on IFRS introduction relates to the fact that we believe the changes in the association between our main independent variables and earnings management are short-lived and will not last over time. To validate our hypotheses we “vivisection” our sample on year basis and we additionally run year-by-year regression using the identical OLS multivariate regression model as follows:

$$\begin{aligned}
 AWCA_i = & \beta_0 + \beta_1 IND_i + \beta_2 AC_i + \beta_3 BoardMeet_i + \beta_4 ACMeet_i + \beta_5 DUAL_i \\
 & + \gamma_i Controls_i + Industry controls + \varepsilon_i
 \end{aligned} \tag{3}$$

Hypotheses 1 and 2 predict that independent directors (IND) and AC are negatively related to earnings management (AWCA) in the whole sample model, being most effective during the IFRS adoption year. Therefore, these hypotheses will be validated if  $\beta_1$  and  $\beta_2$  in 2005 are negative and show the strongest results in terms of significance and size. Hypothesis 3 posits that, due to the temporary re-allocation of board members' attention towards the corporate financial accounting process, the marginal contribution of an additional meeting to earnings management constraining will be the strongest (in terms of significance and size) around the IFRS transition date. Therefore it will be validated if the level of association between the number of

meetings (*BoardMeet* and *ACMeet*) and earnings management will strengthen in 2005 and weaken before and thereafter.

(Insert **Figure 1** about here)

Finally, our fourth hypothesis posits that the relevance of the complete change of the accounting framework and the need to comply with specific communication policies might limit the structural capability of Dual CEO to divert the board from monitoring the corporate financial accounting process during the IFRS transition. Therefore, we expect  $\beta_5$  to be positively related to earnings management overall, but with a weaker impact on AWCA in 2005.

#### **4. DATA AND SAMPLE**

The sampled companies are selected from all of the non-financial companies listed on the Milan Stock Exchange from 2003 to 2007.

In order to better test the effectiveness of the board monitoring isolating the IFRS transition time we consider only those companies which were listed consecutively from 2003 to 2007, thus excluding the companies that were either listed after the fiscal year 2003 and/or de-listed prior to the fiscal year end 2007. This procedure allows a better comparability of results.

In our sample there are no “early” or “voluntary” IFRS adopters, and all of our sample companies mandatorily switched to IFRS in fiscal year ended in 2005. This means that all companies in our sample are applying Italian GAAP in the years 2003 and 2004 and applying IFRS in the following years.

The total number of non-financial companies listed on the Milan Stock Exchange for the whole period from 2003 to 2007 is 241. A closer examination revealed that 47 companies could not be included in our analysis since either financial or corporate governance data were incomplete. Our final sample is of 970 observations (194 per year). Table 1 describes the sample selection process.

(Insert **Table 1** about here)

Corporate governance data for the sampled firms were hand-collected from the Corporate Governance Report that each company is required to issue annually and accounting and financial data were hand-collected from Financial Statements. Table 2 reports descriptive statistics for the variables in the sample per year.

(Insert **Table 2** about here)

Our dependent variables show that AWCA are in mean (median) between % 9.1% (4.3%) and 9.4% (4.1%) during our sample period. In 2005 AWCA mean is slightly lower 9,1% compared to the pre and post IFRS transition time. Among the independent variables, IND, AC, DUAL and BDSZ show values similar to those found in previous studies based on the Italian setting (Patelli and Prencipe, 2007; Marra et al. 2011). IND range from 36.9% (2004) to 39.5 % (2007) while AC range from 83.5% (2003) to 86.4% (2007). On average the majority of the board is Independent in less than 22% of the cases. The average number of meetings reaches its highest level in 2005 (9.42) and the number of AC meetings for the same year is 4.97. Finally, the roles of the board chairman and the CEO are combined in about 40% of the cases across the years.

The results as a whole seem to suggest that our sample did not change significantly in terms of corporate governance structure across time.

Control variables show values similar to previous studies based on the Italian setting (Patelli and Prencipe, 2007; Marra et al., 2010).

We also analyze correlations using the Pearson correlation Matrix (*untabulated*) on a year basis and check for multicollinearity. We do not find any specific indication of possible multicollinearity problems. A correlation of between approximately 37% and 49% is found between company sizes (SIZE) and the board size (BDSZ). This seems to be reasonable, based on the assumption that bigger companies tend to have larger boards of directors<sup>4</sup>. We do not seem to have problems in terms of high correlation levels for our independent variables.

It is worth noticing that the Italian institutional setting seems particularly suitable for testing our hypotheses for the following reasons: (1) the potential relevance of IFRS transition as a contextual and structural factor affecting board members allocation of attention; (2) the variations among companies in corporate governance structures; (3) the presence of limited confounding effects.

As far as the first reason is concerned, the effects of IFRS introduction have been substantial, since Italy can be classified as having “large GAAP differences” both in term of absence and divergence (Ball et al. , 2003; Ball, Shivakumar, 2005; Burgsthaler et al., 2006; Ding et al., 2007). Moreover, the Italian accounting framework has been described as “change resistant” (Zambon and Saccon, 1993), and IFRS adoption represented not only a tangible, but also a sudden change in the accounting

framework for Italian companies (Provasoli et al. , 2007). Consequently, IFRS introduction and enforcement received a high level of attention from the Italian financial community and media<sup>5</sup>, highlighting: delays<sup>6</sup>, differences<sup>7</sup>, inconsistencies and unresolved issues<sup>8</sup>, amongst other things. In addition, following the initial CESR recommendations, CONSOB, the Italian market authority, issued several documents, recommendations and resolutions to which Italian firms had to comply regarding the disclosure about the move towards IAS/IFRS and the financial statements impact of the switch to the new accounting standards, casting further attention on this shift.

The second characteristic relates to the fact that Italian companies are characterized by a significant variation in corporate governance structure. Based on the fact that the adoption of the Corporate Governance Code is not mandatory (companies operate under a “comply or explain” regime), there is a great deal of variation among the corporate governance structures and functioning of Italian companies.

Finally, the focus on a particular country avoids the need to control for other potentially confounding effects arising from country-specific factors, which are unrelated to the adoption of IFRS reporting rules (Barth et al., 2008). Particularly, according to Christensen et al. (2008), incentives at firm level are likely to be constant around the time of adoption as we consider mandatory adopters only.

## **5. RESULTS AND ROBUSTNESS**

### ***5.1 Results***

Table 3 shows the OLS regression results for equation 2 and 3<sup>9</sup>.

(Insert **Table 3** about here)



For the pooled sample analysis (equation 2), consistently with previous studies, *IND* and *AC* are negatively associated with *AWCA* and statistically significant (at 10% and 5% level, respectively). Our results also show that increasing the number of meetings for boards and ACs strengthens earnings management monitoring activities, and that CEO Duality is positively related to earnings management but statistically not significant. *IFRS* is negatively related to *AWCA* and statistically significant at 10% level, showing that after the IFRS introduction the level of earnings management decreased. Even more interestingly, the interaction variables *IND\*IFRS* and *AC\*IFRS* are negatively related and statistically significant at 10% level, indicating IFRS' additional impact on the capability of the independent directors and the audit committee with reference to earnings management monitoring process. We also find that interaction variables *BoardMeet\*IFRS* and *ACMeet\*IFRS* are negative, but only the latter is significant at 5% level, showing a different impact for an additional meetings held by Boards and ACs under a IFRS environment. One possible argument for these findings is that while IFRS introduction relates to one of the ACs' main topics (i.e. monitoring the integrity of the financial accounting process), boards have more tasks competing for their attention and thus they devote less attention to accounting issues than the ACs. Surprisingly, the interaction term *DUAL\*IFRS* is negatively related to *AWCA* and statistically significant at 10% level. This result is counterintuitive, given prior research on Dual CEO compromising a board's ability to monitor, and suggests that after the IFRS introduction period the Dual CEO worked towards the improvement of financial reporting quality.

To specifically test if our hypotheses on the association between Independent directors, ACs and DUAL CEO and earnings management under IFRS transition time (**H1, H2 and H4**) and on the relative impact of additional meetings for Boards and ACs (**H3A and 3B**) are empirically proven, we run on a one by one year basis five identical OLS regression models (equation 3). We also test the statistical differences among regressions' coefficients. Regression results and differences are reported in Table 3 and Table 4<sup>10</sup>, respectively.

(Insert **Table 4** about here)

The models present an adjusted R-square ranging from 0.133 to 0.177 and our results provide support for the hypotheses. As far as **H1** is concerned, *IND* is constantly negatively related to *AWCA*. The highest level of monitoring effectiveness is associated with the IFRS transition period (-0.029 and p-value at 0.02), while the level of significance and the strength of association seem weaker as we drift away from the introduction year. In addition, Table 4 shows that the differences in coefficients for 2005 vs 2004, 2006 vs 2005 and 2007 vs 2006 are statistically significant. Such results validate our first hypothesis that the transition towards IFRS has made independent directors temporarily more effective in monitoring the corporate financial accounting process. *AC* is also consistently negatively related to earnings management and its effectiveness level shows - both in terms of the size of the coefficient and its significance level - a linear shift in the relationship, with its peak in 2005. The differences in the regression coefficients, in table 4, are statistically significant at the 1% level around the IFRS adoption year (2005 vs 2004 and 2006 vs 2005) and at the

10% level as we drift away from the introduction year (2004 vs 2003 and 2007 vs 2006). These results, providing evidence of a transitory increase in ACs' effectiveness in constraining earnings management around the IFRS introduction, validate **H2**.

Figures 2A and 2B graphically show the linear shift of the size of the coefficient and of its significance level over time for *IND* (Blue lines) and *AC* (Red Lines). Solid lines show that the differences in coefficients between two points (i.e. years) are statistically different, while broken lines show that the differences in coefficients between the two points are not statistically significant.

(Insert **Figure 2A** and **2B** about here)

Overall these findings support the predicted transitory re-allocation of board members' and ACs' attention towards the corporate financial accounting process.

Our empirical findings provide us with interesting insights for hypotheses 3A and 3B. On the one hand, the effectiveness of one more board meeting (*BoardMeet*) increases (differences are statistically significant) until the IFRS adoption year, while effectiveness decreases after the IFRS introduction but differences in the regression coefficients are slightly insignificant. On the other hand, the contribution of an additional Audit committee meeting (*ACMeet*) in constraining earnings management shows the predicted trend ("inverted U") for both size and significance level. *ACMeet* is negatively related and statistically significant at the 10% or more level and has the strongest negative size in 2005, where it becomes significant at the 1% level. Differences in regression coefficients are statistically significant at the 5% level around

the IFRS adoption year and at the 10% level as we drift away from the introduction time.

Figures 3A and 3B graphically show the linear shift of the size of the coefficient and of its significance level over time for *BoardMeet* (Blue lines) and *ACMeet* (Red Lines). Solid lines show that the differences in coefficients between two points (i.e. years) are statistically different, while broken lines show that the differences in coefficients between the two points are not statistically significant.

(Insert **Figure 3A** and **3B** about here)

One argument for *AcMeet* and *BoardMeet* different results is that the IFRS transition contextual and organizational influence was especially salient for ACs, given their primary role in monitoring the accounting information process (Klein, 2002a; Xie et al., 2003; Anderson et al., 2004). Instead, “board room” as a whole, having a larger set of competing tasks, re-focuses its attention on accounting issues on a shorter time frame, i.e. while approaching IFRS transition.

Overall, these findings are consistent with our prediction that boards' and ACs' effectiveness in constraining earnings management is not only driven by their activism (proxied by the number of meetings) (Xie et al., 2003; Ghosh et al., 2010), but also by the different level of attention directed at accounting issues during each meeting. We argue that the re-allocation of attention that boards' and ACs' members devoted to accounting issues while approaching to the IFRS transition year has enhanced boards' and ACs' efforts in activities performed before and during the meetings (Demb and Neubauer, 1992; Huse, 2007; Lorsch and MacIver, 1989), thus

increasing their effectiveness in monitoring earnings management. In addition, the documented trend in ACMeeting effectiveness gives a further support to our assertion that this re-allocation has been transitory.

Finally, our prediction is confirmed also for hypothesis four. Table 3 shows that CEO duality is negatively related to earnings management and strongly significant in 2005 (-0.012 and p-value at 0.03), that it remains negatively related and significant in 2006, but with a lower coefficient and p-value (-0.001 and 0.079, respectively), and that it is positively related and significant prior to the IFRS transition year (i.e. 2003 and 2004) and in 2007. In addition, Table 4 highlights that the differences in coefficients for 2005 (vs 2004) and 2006 (vs 2005) are statistically significant at the 1% and 10% levels, respectively. Our interpretation for these results is that most probably the unusual relevance of the change of accounting framework and the need to comply with specific communication policies limit the structural capability of Dual CEO to divert the board from monitoring the corporate financial accounting process for a short while, i.e. during the IFRS transition year. While drifting away from IFRS implementation time, media and stakeholders devoted less attention to a set of standards already in place; boards and ACs re-allocated their attention to other competing tasks, thus leaving Dual CEOs with a relatively greater freedom.

As far as the control variables are concerned, results in the two regression models seem consistent with our prediction and aligned to previous literature.

## *5.2 Sensitivity Analysis*

Aware that changes in Boards' and ACs' effectiveness in monitoring earnings management may be due to board and AC turnover, we check for independent members and AC turnover in the years surrounding the IFRS introduction (2004, 2005 and 2006). Firstly, we analyse boards' turnover over the three years (2005 vs 2004 and 2006 vs 2005), trying to understand whether a larger turnover was to be observed between pre and post IFRS transition. The changes across years were about 13%. More precisely, from 2004 to 2005 13.9% of the board members changed, while from 2005 to 2006 the changes amounted to 14.5%. These percentages are even lower for ACs. The test on the differences show that there is no statistical difference across time. This confirms that our results are not contaminated by a larger turnover around the time of the IFRS adoption. Secondly, we re-run the analyses (equations 2 and 3) on a subsample composed only of those firms whose board and AC committee composition and structure did not change during the analyzed period. Such subsample includes 515 observations and 103 companies. The results are reported in Table 5.

(Insert **Table 5** about here)

The main results of our analyses are confirmed. The identical trend for the sub sample in terms of size and significance is shown in Figures 4A, 4B and 5A and 5B.

(Insert **Figure 4A, 4B** and **5A** and **5B** about here)

Figures 4A and 4B refer to the IND and AC and show paths similar to the full sample ones in terms of size and significance levels. Differences in the regression coefficients (*untabulated*) are statistically significant as per the main model with the only exception

of IND coefficient difference for 2007 vs 2006 which is slightly not significant ( $p > 0.105$ ). This might be due to the sample size. Figures 5A and 5B show the size and significance for BoardMeet and ACMeet and highlight paths similar to the main model in terms of size and significance. Differences in the regression coefficients (*untabulated*) are statistically significant as per the main model with the only exception of the ACMeet coefficient difference for 2007 vs 2006 which is marginally not significant ( $p > 0.104$ ). Also in this case, this might be due to the sample size. The sub sample further validate our findings and endorse even more our predictions and empirical findings.

Because interested earnings management effectiveness, thus in both directions, we use the absolute value of discretionary accruals, (e.g., Warfield et al., 1995; Klein, 2002 (a); Bergstresser and Philippon, 2006). However, (1) under the reputational hypothesis (Fama, 1980; Fama and Jensen, 1983) corporate boards are likely to be concerned about the use of aggressive accounting, because “penalties are strongest for outside directors of the income-decreasing restatement” (Srinivasan, 2005: 293); (2) accumulated evidence suggests that income increasing earnings management is more pervasive than income decreasing earnings management (Beneish, 2001). Accordingly, it could be argued that board members would not allow their firm to report too high earnings in the year of the IFRS adoption, if they were concerned about their reputational loss due to lax financial reporting. In our sensitivity test we replicate our analyses for negative accruals only, by running empirical models identical to equations 2 and 3.

The regression results and differences in coefficients for income decreasing accruals firms are reported in Tables 6 and 7 respectively.

(Insert **Table 6** and **7** about here)

The main findings for income decreasing accruals in terms of coefficients' trend and statistical differences in regression coefficients show that the association between boards and ACs and earnings management is not constant over time, but might also be affected by different levels of attention aimed at accounting issues. Precisely, we interpret IND<sup>11</sup> variable's trend, as the effect of reputational concerns inducing a temporarily conservative financial reporting choices attitude around IFRS transition. Instead, *AC's* and *ACMeet's* trends, suggest that during IFRS transition the committee having a primary role in overseeing the accounting information process temporarily increased its effectiveness in monitoring the financial accounting process. Not surprisingly, DUAL CEO is not significant being usually not related to income decreasing earnings management activities.

Finally, we perform a battery of robustness analyses. First, we ran all our models (results untabulated) by using two alternative Earnings management measures: Small Positive Earnings - SPOS - (Lang, Raedy and Yetman, 2003) and the Francis and Wang (2008) model which includes PPE in equation (1) for AWCA calculation. Second, to analyze the association between accruals and our variables of interest under the IFRS environment we introduce in our pooled regression a "two time" dummy. IFRS is set equal to 1 in 2005 and 0 otherwise and set equal to 1 for 2006-2007 and 0 otherwise. Third, we use alternative measurements for "independence" (in equations 2 and 3 we



include all “outside directors” instead of just “independent directors” and we measure the level of independence (IND) by using a dummy set at 1 for boards with more than 50% of board members classified as independent and 0 otherwise, instead of using the percentage of independent directors). All in all, regression results are consistent with our predictions.

## 6. DISCUSSION AND CONCLUSIONS

In this paper, we investigate whether the claimed higher corporate boards’ effectiveness in constraining earnings management around the time of the IFRS introduction is permanent or short-lived and, as such, is “just an illusion”. Drawing upon the attention based view of the firm (Ocasio, 1997), we suggest that the transition process to IFRS represents a factor which might have affected independent directors’ and audit committees members’ allocation of attention to the corporate financial accounting process, thus temporarily increasing their effectiveness in monitoring earnings management.

Our results are generally consistent with our predictions.

The highest level of monitoring effectiveness of both independent directors and ACs is associated with 2005 (i.e. the IFRS transition year), while the level of significance and the strength of the association seem to weaken as we drift away from the introduction year, showing a linear shift in the relationship between Earnings management and the tested variables. For ACs, the differences in regression coefficients are statistically significant for the entire period, while for independent directors the differences are statistically significant for a shorter period (i.e. 2005 -

2007). We also find that the marginal contribution of each board and audit committee meeting to earnings management constraint is not constant. For board meetings we find a statistically significant increase while approaching the IFRS transition period, for ACs' meetings our results show the graphic form of an “inverted U” path, being at the highest level (for both size and significance) while approaching the IFRS adoption time and then returning to a lower level. We interpret these changes in effectiveness as a consequence of the temporary re-allocation of independent directors'/audit committee members' attention to monitoring the corporate financial accounting process. One argument for the different results we find for AC meetings and board meetings is that the IFRS transition contextual and organizational influence was especially salient for ACs, given their primary role in monitoring the accounting information process (Klein, 2002a; Xie et al., 2003; Anderson et al., 2004).

Finally, CEO duality is negatively related to earnings management and strongly significant in 2005 and the size of the coefficient increases while we drift away from the IFRS implementation year. Since differences in regression coefficients are statistically significant in 2005 and 2006, we argue that the boards' higher attention to monitoring the corporate financial accounting process during the IFRS transition year has temporarily limited the structural capability of DUAL CEO to divert the board from its monitoring function and responsibility.

We are aware of a possible different interpretation suggesting that our results might have been the consequence of preparers' and users' learning processes. Firms in our sample might engage in earnings management practices and the final outcome

might have more to do with the expertise of accountants (under the old regime, they were expert and under the new regime, they needed some time to catch up) rather than the board's behaviour. Although we cannot completely rule out that learning played a role, we believe that it hasn't been the major determinant of the boards' effectiveness trend for at least 2 reasons. First, the learning process implicitly assumes that preparers learn faster than Independent directors and Audit Committee members, even if it is hard to believe, at least for the latter. Second, the learning process is not consistent with our findings for 2003-2004: although we do have local GAAP (and therefore expert preparers), we see that the ACs', *ACMeet* and *BoardMeet* effectiveness starts going up.

This paper contributes to the extant literature in several ways. First, we contribute to the debate on the longevity of the IFRS effects by showing that the higher corporate board's effectiveness in constraining earnings management following the IFRS adoption has a short lived effect. In addition, consistent with Christensen et al. (2008), who suggest that incentives at firm/company level dominate accounting standards in determining accounting quality, we suggest that the presence of behavioral contingencies affecting independent directors' and audit committee members' performance in their monitoring role might have prevailed over the higher level of disclosure and transparency that characterizes the IFRS. Second, our approach departs from prior studies in assuming that board's members have limited attention. While similar approaches have been adopted in management (Simon, 1947; Cyert and March, 1992), finance (Merton, 1987; Hirshleifer, Teoh, 2003) and governance studies

(van Ees et al., 2009; Tuggle et al. 2010), to the best of our knowledge this is the first attempt to adopt a similar approach in examining earnings management and corporate governance association. Third, following the call for dismantling the fortress of past research on board of directors demographic and arguing that contextual and behavioural variables should be taken into account also while analyzing board task performance (e.g. Forbes and Milliken, 1999; Daily, Dalton and Cannella, 2003; Tuggle et al. 2010), we explore the influence of a major change in the accounting framework (Hoogendoorn, 2006; Christensen et al. 2007) on the corporate boards' effectiveness in "monitoring the corporate financial accounting process" (Klein, 2002a:375).

Finally, our results may provide useful indications to regulators and standard setters interested in evaluating the effectiveness of different corporate governance systems. More precisely, our study contributes to the recent debate on the harmonization of corporate governance. Some believe that either functional or formal convergence is inevitable because of global competition (Hansmann and Kraakman 2001; Gilson 2001), while others highlight the importance of distinguishing "on-the-book" convergence from "effective" convergence (Pistor et al. 2000). Our results suggest that the introduction of new regulations (broadly speaking) may not be effective in setting up a better model to improve financial reporting. Regulators may need to look beyond the current regulation when considering its improvement: firm and people' incentives might be a better driver for a more effective regulation.

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Table 1 – Sample selection process

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<i>Sample period 2003 - 2007</i>	
Population of non financial listed companies (per year)	241
Companies not consecutively listed over the analyzed period	-27
Companies with missing data (Compustat or corporate governance)	-20
<hr/>	
Final sample (per year)	194
<i>Comprehensive sample observations (194*5)</i>	970

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*Note:* To keep the same companies over the whole period, not consecutively listed companies, companies with missing values have been eliminated entirely.

Table 2 – Descriptive Statistics

Year	2003			2004			2005			2006			2007		
Variable	Mean	Median	StDev	Mean	Median	StDev	Mean	Median	StDev	Mean	Median	StDev	Mean	Median	StDev
<i>AWCA</i>	0.093	0.047	0.168	0.094	0.041	0.102	0.091	0.046	0.119	0.093	0.043	0.134	0.092	0.044	0.109
<i>IND</i>	0.383	0.333	0.200	0.397	0.355	0.197	0.379	0.333	0.195	0.369	0.333	0.197	0.395	0.345	0.397
<i>BDSZ</i>	9.268	9.000	3.325	9.713	9.000	3.254	9.365	9.000	3.146	9.566	9.000	3.191	9.780	9.000	3.301
<i>ROI</i>	-0.009	0.015	0.087	0.008	0.021	0.102	0.012	0.012	0.066	0.017	0.014	0.151	0.011	0.013	0.060
<i>CFO</i>	0.052	0.051	0.122	0.046	0.041	0.083	0.070	0.068	0.0116	0.069	0.074	0.132	0.079	0.082	0.121
<i>SIZE</i>	5.662	5.553	1.801	5.757	5.681	1.757	5.797	5.603	1.716	5.864	5.688	1.726	5.899	5.922	1.691
<i>LEV</i>	0.751	0.519	0.753	0.716	0.621	0.188	0.710	0.629	0.180	0.771	0.536	0.711	0.719	0.640	0.178
<i>MajorSO</i>	46.500	51.100	19.680	47.880	51.950	19.100	48.210	52.440	19.170	47.050	52.130	18.850	48.932	51.107	19.792
<i>AC</i>	0.849			0.845			0.835			0.858			0.864		
<i>DUAL</i>	0.390			0.408			0.375			0.377			0.395		
<i>AUD</i>	0.847			0.859			0.852			0.884			0.849		
<i>NEARN</i>	0.670			0.680			0.750			0.720			0.710		
<i>BoardMeet</i>	8.410	7.000	3.240	8.450	7.000	3.210	9.420	8.000	3.540	9.090	8.000	3.160	8.640	8.000	3.310
<i>ACMeet</i>	3.820	3.000	2.200	4.520	4.000	2.190	4.970	4.000	2.230	4.340	3.000	2.200	4.260	3.000	2.470
<i>AWCA NO Abs</i>	-0.001	-0.007	0.123	0.004	-0.111	0.127	-0.002	-0.021	0.125	-0.003	-0.014	0.133	-0.001	-0.004	0.147

**Note:** This table reports the descriptive statistics (mean, median and standard deviation) for the sample between 2003 and 2007. *AWCA* is absolute value of abnormal working capital accruals scaled by total assets, estimated using the Defond and Park model (2001). *IND* is the percentage of independent directors on the firm's board. *BDSZ* is the total number of board members. *ROI* is the return on investments on year *t*, calculated as operating income over total assets. *CFO* is operating cash flow over total sales. *SIZE* is the natural logarithm of last year total sales. *LEV* is Total Liabilities over Total Assets. *MajorSO* is the share percentage owned by the first shareholder of the firm. *AC* is an indicator variable taking the value of one if an audit committee exists and zero otherwise. *DUAL* is an indicator variable taking the value of one if the roles of Chairman and CEO are combined and zero otherwise. *AUD* is an indicator variable taking the value of one if the firm has a Big 4 auditor and zero otherwise. *NEAR* is a dummy variable taking the value of one if company lagged Net Income is negative and zero otherwise. *BoardMeet* is the number of board meeting in a given year. *ACMeet* is the number of Audit Committee meeting in a given year. *AWCA NO Abs* is the abnormal working capital accruals scaled by total assets, estimated using the Defond and Park model (2001).

**Table 3 – OLS Regressions Main model**

*OLS regression model whole sample (Equation 2):*

$$AWCA_{it} = \beta_0 + \beta_1 IND_{it} + \beta_2 AC_{it} + \beta_3 BoardMeet_{it} + \beta_4 ACMeet_{it} + \beta_5 DUAL_{it} + \beta_6 IFRS_{it} + \beta_7 IND*IFRS_{it} + \beta_8 AC*IFRS_{it} + \beta_9 DUAL*IFRS_{it} + \beta_{10} BoardMeet*IFRS_{it} + \beta_{11} ACMeet*IFRS_{it} + \gamma_i Controls_{it} + Ind. Controls + Firm Controls + \varepsilon_{it}$$

*OLS regression model for years 2003 to 2007 (Equation 3):*

$$AWCA_i = \beta_0 + \beta_1 IND_i + \beta_2 AC_i + \beta_3 BoardMeet_i + \beta_4 ACMeet_i + \beta_5 DUAL_i + \gamma_i Controls_i + Ind. Controls + \varepsilon_i$$

Variables	Exp sign	Pooled Coefficient (p-value)	2003 Coefficient (p-value)	2004 Coefficient (p-value)	2005 Coefficient (p-value)	2006 Coefficient (p-value)	2007 Coefficient (p-value)
Observations		970	194	194	194	194	194
INTECEPT	?	<b>0.259</b> (0.001)***	<b>0.178</b> (0.001)***	<b>0.219</b> (0.001)***	<b>0.204</b> (0.001)***	<b>0.133</b> (0.001)***	<b>0.234</b> (0.001)***
IND	-	<b>-0.019</b> (0.071)*	<b>-0.017</b> (0.085)*	<b>-0.023</b> (0.044)**	<b>-0.047</b> (0.02)**	<b>-0.026</b> (0.055)*	<b>-0.02</b> (0.108)
AC	-	<b>-0.028</b> (0.038)**	<b>-0.017</b> (0.091)*	<b>-0.032</b> (0.095)*	<b>-0.077</b> (0.011)**	<b>-0.038</b> (0.074)*	<b>-0.035</b> (0.092)*
BoardMeet	-	<b>-0.012</b> (0.036)**	<b>-0.023</b> (0.071)*	<b>-0.052</b> (0.045)**	<b>-0.097</b> (0.022)**	<b>-0.027</b> (0.120)	<b>-0.019</b> (0.099)*
AC Meet	-	<b>-0.022</b> (0.020)**	<b>-0.027</b> (0.061)*	<b>-0.029</b> (0.043)**	<b>-0.077</b> (0.001)***	<b>-0.058</b> (0.047)**	<b>-0.039</b> (0.049)**
DUAL	+	<b>0.015</b> (0.141)	<b>0.014</b> (0.092)*	<b>0.016</b> (0.069)*	<b>-0.012</b> (0.03)**	<b>-0.001</b> (0.079)*	<b>0.034</b> (0.091)*
BDSZ	?	<b>0.002</b> (0.322)	<b>-0.004</b> (0.152)	<b>0.005</b> (0.178)	<b>0.048</b> (0.209)	<b>0.006</b> (0.097)*	<b>-0.003</b> (0.120)
AUD	-	<b>-0.017</b> (0.057)*	<b>-0.005</b> (0.259)	<b>0.007</b> (0.066)*	<b>-0.021</b> (0.094)*	<b>-0.07</b> (0.111)	<b>-0.053</b> (0.094)*
SIZE	-	<b>-0.076</b> (0.000)***	<b>-0.032</b> (0.000)***	<b>-0.013</b> (0.042)**	<b>-0.022</b> (0.012)**	<b>-0.022</b> (0.000)***	<b>-0.026</b> (0.000)***
LEV	+	<b>0.085</b> (0.001)***	<b>0.077</b> (0.035)**	<b>0.082</b> (0.06)*	<b>0.095</b> (0.023)**	<b>0.107</b> (0.000)***	<b>0.089</b> (0.045)**
ChCFO	-	<b>-0.108</b> (0.026)**	<b>-0.132</b> (0.000)***	<b>-0.061</b> (0.013)**	<b>-0.062</b> (0.043)**	<b>-0.057</b> (0.052)**	<b>-0.092</b> (0.000)***
ChROI	-	<b>-0.131</b> (0.000)***	<b>0.095</b> (0.04)**	<b>-0.077</b> (0.000)***	<b>-0.066</b> (0.004)***	<b>-0.081</b> (0.021)**	<b>-0.088</b> (0.009)***
NEARN	-	<b>0.028</b> (0.062)*	<b>0.044</b> (0.011)**	<b>0.057</b> (0.094)*	<b>0.016</b> (0.095)*	<b>-0.041</b> (0.160)	<b>-0.039</b> (0.099)*
MajorSO	?	<b>-0.129</b> (0.257)	<b>0.078</b> (0.109)	<b>0.036</b> (0.217)	<b>-0.077</b> (0.167)	<b>0.094</b> (0.111)	<b>-0.113</b> (0.192)
IFRS	-	<b>-0.006</b> (0.098)*					
IND*IFRS	-	<b>-0.005</b> (0.058)*					
AC*IFRS	-	<b>-0.024</b> (0.063)*					
DUAL*IFRS	?	<b>-0.013</b> (0.072)*					
BoardMeet*IFRS	-	<b>-0.013</b> (0.136)					
ACMeet*IFRS	-	<b>-0.007</b> (0.046)**					
Firm Controls		Included					
Industry Controls		Included	Included	Included	Included	Included	Included
Adjusted-R square		(0.194)	(0.133)	(0.146)	(0.177)	(0.156)	(0.174)
Prob. F		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

*Note:* Dependent Variable is Abnormal Working Capital Accruals (AWCA) which is absolute value of abnormal working capital accruals scaled by total assets, estimated using the Defond and Park model (2011). IND is the percentage of independent directors on the firm's board. AC is an indicator variable taking the value of one if an audit committee exists and zero otherwise. BoardMeet is the number of board meeting in a given year. ACMeet is the number of Audit Committee meeting in a given year. DUAL is an indicator variable taking the value of one if the roles of Chairman and CEO are combined and zero otherwise. BDSZ is the total number of board members. AUD is an indicator variable taking the value of one if the firm has a Big 4 auditor and zero otherwise. SIZE is the natural logarithm of last year total sales. LEV is Total Liabilities over Total Assets. ChCFO is the change in the operating cash flow over lagged total sales. ChROI is the change in return on investments on year t, calculated as operating income over lagged total assets. NEAR is a dummy variable taking the value of one if company lagged Net Income is negative and zero otherwise. MajorSO is the share percentage owned by the first shareholder of the firm. IFRS is a dummy variable taking the value of one for IFRS time (i.e. 2005-2007) and zero otherwise (2003-3004). IND\*IFRS is the interaction variable for IND and IFRS dummy. AC\*IFRS is the interaction variable for AC and IFRS dummy. DUAL\*IFRS is the interaction variable for DUAL and IFRS dummy. Boardmeet\*IFRS is the interaction variable for BoardMeet. and IFRS. ACMeet\*IFRS is the interaction variable for ACMeet and IFRS. Significance at p<0.01\*\*\*, p<0.05, p<0.10 (in parenthesis) is based on a two tailed t-test if no sign prediction is made and one tailed otherwise. In the pooled regression T-statistics are calculated using firm-clustered standard errors.

Table 4 - Differences in Regression Coefficients

Table 4 - Differences in Coefficients - Full Sample

Variables	Differences in coefficients			
	04 vs 03 (p-value)	05 vs 04 (p-value)	06 vs 05 (p-value)	07 vs 06 (p-value)
<i>IND</i>	<b>-0.005</b> (0.111)	<b>-0.024</b> (0.001)***	<b>0.021</b> (0.044)**	<b>0.006</b> (0.091)*
<i>AC</i>	<b>-0.015</b> (0.071)*	<b>-0.045</b> (0.001)***	<b>0.039</b> (0.001)***	<b>0.003</b> (0.084)*
<i>BoardMeet</i>	<b>-0.029</b> (0.095)*	<b>-0.045</b> (0.051)*	<b>0.004</b> (0.120)	<b>0.008</b> (0.105)
<i>AC Meet</i>	<b>-0.002</b> (0.095)*	<b>-0.065</b> (0.001)**	<b>0.039</b> (0.041)**	<b>0.003</b> (0.097)*
<i>DUAL</i>	<b>0.002</b> (0.485)	<b>-0.028</b> (0.001)***	<b>0.011</b> (0.081)*	<b>0.035</b> (0.195)

**Note:** Table 3 shows differences in regression coefficients for our variable of interest related to Table 4. Significance at  $p < 0.01$ \*\*\*,  $p < 0.05$ ,  $p < 0.10$  (in parenthesis) is based on a two tailed t-test. Differences in regression coefficients and significance values for control variables are untabulated.

**Table 5 – OLS Regression - No changes in Board structure**

*OLS regression model whole sample (Equation 2):*

$$AWCA_{it} = \beta_0 + \beta_1 IND_{it} + \beta_2 AC_{it} + \beta_3 BoardMeet_{it} + \beta_4 ACMeet_{it} + \beta_5 DUAL_{it} + \beta_6 IFRS_{it} + \beta_7 IND*IFRS_{it} + \beta_8 AC*IFRS_{it} + \beta_9 DUAL*IFRS_{it} + \beta_{10} BoardMeet*IFRS_{it} + \beta_{11} ACMeet*IFRS_{it} + \gamma_i Controls_{it} + Ind. Controls + Firm Controls + \epsilon_{it}$$

*OLS regression model for years 2003 to 2007 (Equation 3):*

$$AWCA_i = \beta_0 + \beta_1 IND_i + \beta_2 AC_i + \beta_3 BoardMeet_i + \beta_4 ACMeet_i + \beta_5 DUAL_i + \gamma_i Controls_i + Ind. Controls + \epsilon_i$$

Variables	Exp sign	Pooled Coefficient (p-value)	2003 Coefficient (p-value)	2004 Coefficient (p-value)	2005 Coefficient (p-value)	2006 Coefficient (p-value)	2007 Coefficient (p-value)
Observations		515	103	103	103	103	103
INTECEPT	?	<b>0.314</b> (0.001)***	<b>0.207</b> (0.001)***	<b>0.299</b> (0.001)***	<b>0.227</b> (0.001)***	<b>0.183</b> (0.001)***	<b>0.254</b> (0.001)***
IND	-	<b>-0.022</b> (0.078)*	<b>-0.014</b> (0.089)*	<b>-0.018</b> (0.049)**	<b>-0.029</b> (0.016)**	<b>-0.029</b> (0.043)**	<b>-0.017</b> (0.071)*
AC	-	<b>-0.038</b> (0.043)**	<b>-0.015</b> (0.088)*	<b>-0.023</b> (0.074)*	<b>-0.051</b> (0.009)***	<b>-0.039</b> (0.041)**	<b>-0.025</b> (0.093)*
BoardMeet	-	<b>-0.016</b> (0.056)*	<b>-0.011</b> (0.091)*	<b>-0.012</b> (0.073)*	<b>-0.054</b> (0.054)*	<b>-0.017</b> (0.158)	<b>-0.009</b> (0.100)
AC Meet	-	<b>-0.027</b> (0.040)**	<b>-0.022</b> (0.075)*	<b>-0.036</b> (0.033)**	<b>-0.045</b> (0.009)***	<b>-0.011</b> (0.070)*	<b>-0.007</b> (0.050)*
DUAL	+	<b>0.030</b> (0.151)	<b>0.027</b> (0.078)*	<b>0.031</b> (0.089)*	<b>-0.019</b> (0.043)**	<b>-0.003</b> (0.119)	<b>0.022</b> (0.096)*
BDSZ	?	<b>0.007</b> (0.351)	<b>-0.009</b> (0.162)	<b>0.010</b> (0.218)	<b>0.028</b> (0.169)	<b>0.016</b> (0.112)	<b>-0.013</b> (0.140)
AUD	-	<b>-0.018</b> (0.066)*	<b>-0.013</b> (0.219)	<b>0.009</b> (0.088)*	<b>-0.027</b> (0.091)*	<b>-0.05</b> (0.157)	<b>-0.033</b> (0.111)
SIZE	-	<b>-0.056</b> (0.000)***	<b>-0.047</b> (0.012)**	<b>-0.083</b> (0.052)*	<b>-0.052</b> (0.011)**	<b>-0.072</b> (0.000)***	<b>-0.056</b> (0.030)**
LEV	+	<b>0.091</b> (0.005)***	<b>0.055</b> (0.046)**	<b>0.066</b> (0.079)*	<b>0.082</b> (0.003)***	<b>0.097</b> (0.001)***	<b>0.069</b> (0.055)*
ChCFO	-	<b>-0.128</b> (0.016)**	<b>-0.132</b> (0.000)***	<b>-0.141</b> (0.002)***	<b>-0.112</b> (0.047)**	<b>-0.127</b> (0.069)*	<b>-0.102</b> (0.000)***
ChROI	-	<b>-0.150</b> (0.000)***	<b>0.125</b> (0.045)**	<b>-0.102</b> (0.006)***	<b>-0.099</b> (0.003)***	<b>-0.121</b> (0.031)**	<b>-0.131</b> (0.019)**
NEARN	-	<b>0.031</b> (0.112)	<b>0.055</b> (0.101)	<b>0.031</b> (0.088)*	<b>0.023</b> (0.102)	<b>-0.037</b> (0.199)	<b>-0.045</b> (0.139)
MajorSO	?	<b>-0.100</b> (0.194)	<b>0.058</b> (0.102)	<b>0.055</b> (0.097)*	<b>-0.002</b> (0.102)	<b>0.094</b> (0.111)	<b>-0.173</b> (0.130)
IFRS	-	<b>-0.016</b> (0.088)*					
IND*IFRS	-	<b>-0.015</b> (0.078)*					
AC*IFRS	-	<b>-0.024</b> (0.083)*					
DUAL*IFRS	?	<b>-0.022</b> (0.052)*					
BoardMeet*IFRS	-	<b>-0.023</b> (0.111)					
ACMeet*IFRS	-	<b>-0.014</b> (0.049)**					
Firm Controls		Included					
Industry Controls		Included	Included	Included	Included	Included	Included
Adjusted-R square		(0.150)	(0.107)	(0.116)	(0.128)	(0.126)	(0.134)
Prob. F		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

*Note:* Dependent Variable is Abnormal Working Capital Accruals (AWCA) which is absolute value of abnormal working capital accruals scaled by total assets, estimated using the Defond and Park model (2011). IND is the percentage of independent directors on the firm's board. AC is an indicator variable taking the value of one if an audit committee exists and zero otherwise. BoardMeet is the number of board meeting in a given year. ACMeet is the number of Audit Committee meeting in a given year. DUAL is an indicator variable taking the value of one if the roles of Chairman and CEO are combined and zero otherwise. BDSZ is the total number of board members. AUD is an indicator variable taking the value of one if the firm has a Big 4 auditor and zero otherwise. SIZE is the natural logarithm of last year total sales. LEV is Total Liabilities over Total Assets. ChCFO is the change in the operating cash flow over lagged total sales. ChROI is the change in return on investments on year t, calculated as operating income over lagged total assets. NEAR is a dummy variable taking the value of one if company lagged Net Income is negative and zero otherwise. MajorSO is the share percentage owned by the first shareholder of the firm. IFRS is a dummy variable taking the value of one for IFRS time (i.e. 2005-2007) and zero otherwise (2003-2004). IND\*IFRS is the interaction variable for IND and IFRS dummy. AC\*IFRS is the interaction variable for AC and IFRS dummy. DUAL\*IFRS is the interaction variable for DUAL and IFRS dummy. Boardmeet\*IFRS is the interaction variable for BoardMeet. and IFRS. ACMeet\*IFRS is the interaction variable for ACMeet and IFRS. Significance at p<0.01\*\*\*, p<0.05, p<0.10 (in parenthesis) is based on a two tailed t-test if no sign prediction is made and one tailed otherwise. In the pooled regression T-statistics are calculated using firm-clustered standard errors.

**Table 6 – OLS Regressions Negative Accruals**

*OLS regression model whole sample (Equation 2):*

$$AWCA_{it} = \beta_0 + \beta_1 IND_{it} + \beta_2 AC_{it} + \beta_3 BoardMeet_{it} + \beta_4 ACMeet_{it} + \beta_5 DUAL_{it} + \beta_6 IFRS_{it} + \beta_7 IND*IFRS_{it} + \beta_8 AC*IFRS_{it} + \beta_9 DUAL*IFRS_{it} + \beta_{10} BoardMeet*IFRS_{it} + \beta_{11} ACMeet*IFRS_{it} + \gamma_i Controls_{it} + Ind. Controls + Firm Controls + \varepsilon_{it}$$

*OLS regression model for years 2003 to 2007 (Equation 3):*

$$AWCA_i = \beta_0 + \beta_1 IND_i + \beta_2 AC_i + \beta_3 BoardMeet_i + \beta_4 ACMeet_i + \beta_5 DUAL_i + \gamma_i Controls_i + Ind. Controls + \varepsilon_i$$

Variables	Pooled Coefficient (p-value)	2003 Coefficient (p-value)	2004 Coefficient (p-value)	2005 Coefficient (p-value)	2006 Coefficient (p-value)	2007 Coefficient (p-value)
Observations	504	97	101	104	110	98
INTECEPT	<b>-0.123</b> (0.000)***	<b>-0.205</b> (0.001)***	<b>-0.224</b> (0.014)**	<b>-0.140</b> (0.003)**	<b>-0.180</b> (0.001)***	<b>-0.139</b> (0.083)*
IND	<b>0.020</b> (0.065)*	<b>0.015</b> (0.039)**	<b>0.001</b> (0.099)*	<b>-0.012</b> (0.039)**	<b>0.010</b> (0.048)**	<b>0.014</b> (0.034)**
AC	<b>0.011</b> (0.048)**	<b>0.012</b> (0.003)***	<b>0.015</b> (0.050)*	<b>0.020</b> (0.047)**	<b>0.010</b> (0.084)*	<b>0.010</b> (0.061)*
BoardMeet	<b>0.003</b> (0.103)	<b>0.007</b> (0.410)	<b>-0.005</b> (0.127)	<b>-0.008</b> (0.092)*	<b>0.003</b> (0.340)	<b>0.005</b> (0.490)
AC Meet	<b>(0.089)</b> (0.069)*	<b>0.020</b> (0.038)**	<b>0.040</b> (0.096)*	<b>0.044</b> (0.053)*	<b>0.034</b> (0.088)*	<b>0.014</b> (0.089)*
DUAL	<b>0.022</b> (0.207)	<b>0.023</b> (0.658)	<b>0.034</b> (0.308)	<b>0.060</b> (0.129)	<b>0.002</b> (0.925)	<b>0.074</b> (0.245)
BDSZ	<b>-0.001</b> (0.711)	<b>-0.008</b> (0.246)	<b>0.004</b> (0.537)	<b>-0.003</b> (0.617)	<b>-0.007</b> (0.049)**	<b>0.004</b> (0.653)
AUD	<b>0.039</b> (0.135)	<b>0.047</b> (0.190)	<b>-0.095</b> (0.107)	<b>-0.041</b> (0.086)*	<b>0.007</b> (0.458)	<b>-0.099</b> (0.236)
SIZE	<b>0.017</b> (0.004)**	<b>0.019</b> (0.347)	<b>0.018</b> (0.157)	<b>0.014</b> (0.243)	<b>0.013</b> (0.132)	<b>0.032</b> (0.067)*
LEV	<b>0.064</b> (0.058)*	<b>-0.110</b> (0.150)	<b>-0.046</b> (0.027)**	<b>-0.088</b> (0.364)	<b>-0.066</b> (0.302)	<b>-0.192</b> (0.060)*
ChCFO	<b>0.168</b> (0.021)**	<b>0.139</b> (0.006)***	<b>0.193</b> (0.000)***	<b>0.146</b> (0.012)**	<b>0.027</b> (0.008)***	<b>0.132</b> (0.010)***
ChROI	<b>0.169</b> (0.001)***	<b>0.146</b> (0.002)***	<b>0.197</b> (0.000)***	<b>0.117</b> (0.009)***	<b>0.032</b> (0.003)***	<b>0.090</b> (0.007)***
NEARN	<b>0.013</b> (0.594)	<b>0.059</b> (0.376)	<b>0.008</b> (0.875)	<b>-0.016</b> (0.761)	<b>0.001</b> (0.974)	<b>0.042</b> (0.589)
MajorSO	<b>-0.001</b> (0.203)	<b>-0.002</b> (0.223)	<b>-0.000</b> (0.509)	<b>-0.003</b> (0.112)	<b>-0.000</b> (0.157)	
IFRS	<b>0.002</b> (0.069)*					
IND*IFRS	<b>-0.010</b> (0.091)*					
AC*IFRS	<b>0.004</b> (0.078)*					
DUAL*IFRS	<b>0.112</b> (0.169)					
BoardMeet*IFRS	<b>0.012</b> (0.154)					
ACMeet*IFRS	<b>0.013</b> (0.085)*					
<b>Firm Controls</b>	<i>Included</i>					
<b>Industry Controls</b>	<i>Included</i>	<i>Included</i>	<i>Included</i>	<i>Included</i>	<i>Included</i>	<i>Included</i>
Adjusted-R square	(0.116)	(0.121)	(0.196)	(0.181)	(0.121)	(0.099)
Prob. F	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

Note: Dependent Variable is Abnormal Working Capital Accruals (AWCA) which is negative abnormal working capital accruals scaled by total assets, estimated using the Defond and Park model (2011). IND is the percentage of independent directors on the firm's board. AC is an indicator variable taking the value of one if an audit committee exists and zero otherwise. BoardMeet is the number of board meeting in a given year. ACMeet is the number of Audit Committee meeting in a given year. DUAL is an indicator variable taking the value of one if the roles of Chairman and CEO are combined and zero otherwise. BDSZ is the total number of board members. AUD is an indicator variable taking the value of one if the firm has a Big 4 auditor and zero otherwise. SIZE is the natural logarithm of last year total sales. LEV is Total Liabilities over Total Assets. ChCFO is the change in the operating cash flow over lagged total sales. ChROI is the change in return on investments on year t, calculated as operating income over lagged total assets. NEAR is a dummy variable taking the value of one if company lagged Net Income is negative and zero otherwise. MajorSO is the share percentage owned by the first shareholder of the firm. IFRS is a dummy variable taking the value of one for IFRS time (i.e. 2005-2007) and zero otherwise (2003-2004). IND\*IFRS is the interaction variable for IND and IFRS dummy. AC\*IFRS is the interaction variable for AC and IFRS dummy. DUAL\*IFRS is the interaction variable for DUAL and IFRS dummy. BoardMeet\*IFRS is the interaction variable for BoardMeet. and IFRS. ACMeet\*IFRS is the interaction variable for ACMeet and IFRS. Significance at p<0.01\*\*\*, p<0.05, p<0.10 (in parenthesis) is based on a two tailed t-test if no sign prediction is made and one tailed otherwise. In the pooled regression T-statistics are calculated using firm-clustered standard errors.

Table 7 - Differences in Regression Coefficients

Table 7 - Differences in Coefficients - Negative Accruals

Variables	Differences in coefficients			
	04 vs 03 (p-value)	05 vs 04 (p-value)	06 vs 05 (p-value)	07 vs 06 (p-value)
<i>IND</i>	<b>-0.014</b> (0.094)*	<b>-0.013</b> (0.003)***	<b>0.022</b> (0.021)**	<b>0.004</b> (0.165)
<i>AC</i>	<b>0.003</b> (0.040)**	<b>0.005</b> (0.009)***	<b>-0.010</b> (0.019)**	<b>0.000</b> (0.031)**
<i>BoardMeet</i>	<b>-0.012</b> (0.175)	<b>-0.003</b> (0.052)	<b>0.011</b> (0.162)	<b>0.002</b> (0.217)
<i>AC Meet</i>	<b>0.002</b> (0.056)*	<b>0.004</b> (0.041)**	<b>-0.010</b> (0.043)**	<b>-0.020</b> (0.034)**
<i>DUAL</i>	<b>0.011</b> (0.275)	<b>0.026</b> (0.185)	<b>-0.058</b> (0.158)	<b>0.072</b> (0.231)

Note: Table 7 shows differences in regression coefficients for our variable of interest related to Table 6. Significance at  $p < 0.01$ \*\*\*,  $p < 0.05$ ,  $p < 0.10$  (in parenthesis) is based on a two tailed t-test. Differences in regression coefficients and significance values for control variables are untabulated.

Figure 1 - Research Model

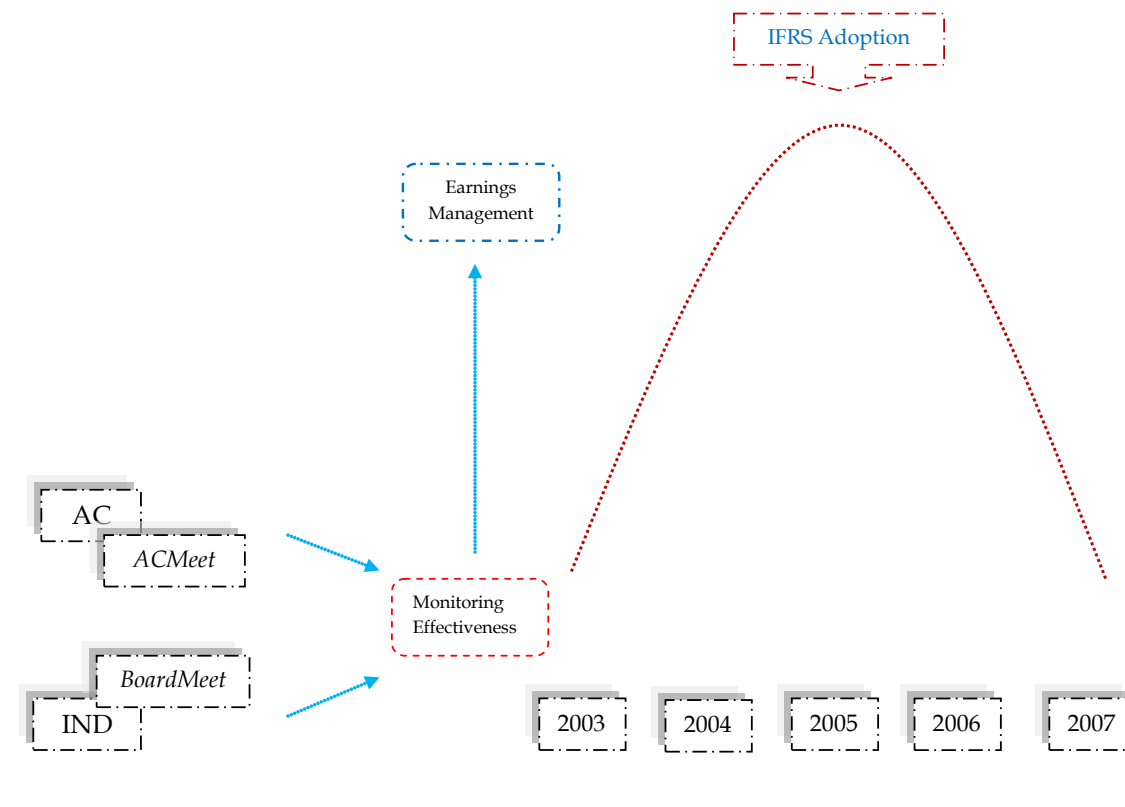


Figure 2A - IND & AC Effectiveness - FULL Sample

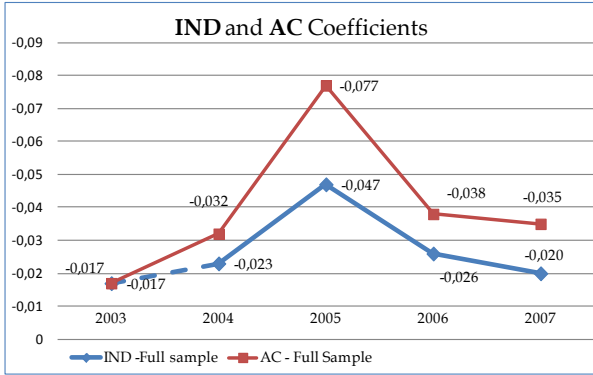


Figure 2B - IND & AC Effectiveness - FULL Sample

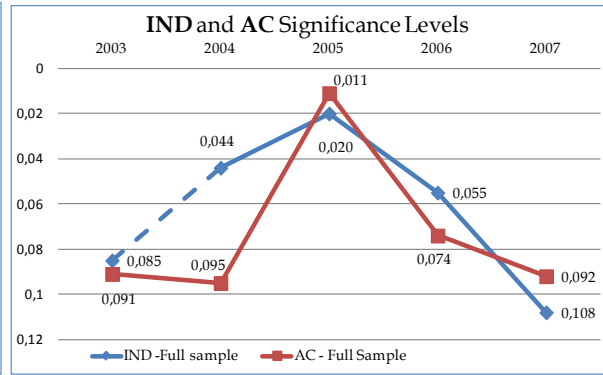


Figure 3A - BoardMeet & AC Meet Effectiveness - FULL Sample

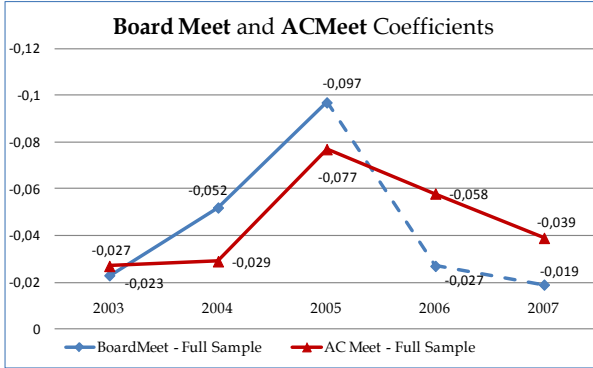


Figure 3B - BoardMeet & AC Meet Effectiveness - FULL Sample

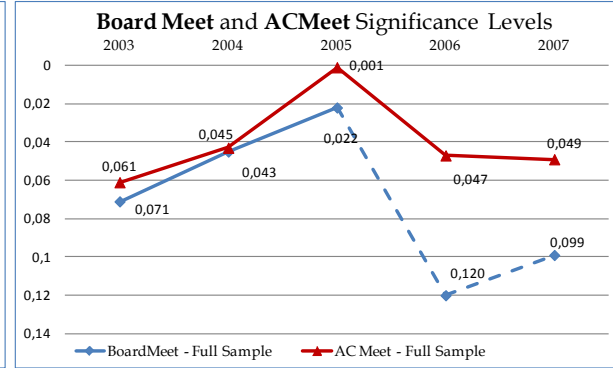


Figure 4A - IND & AC Effectiveness - SUB Sample

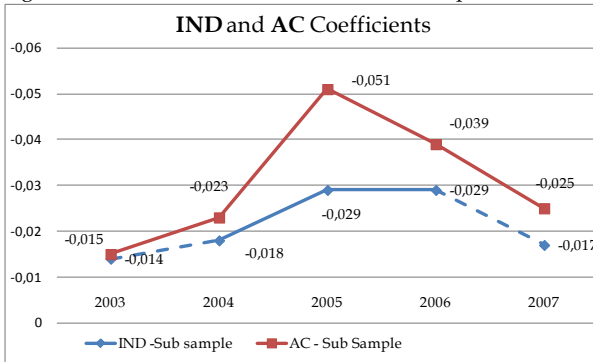
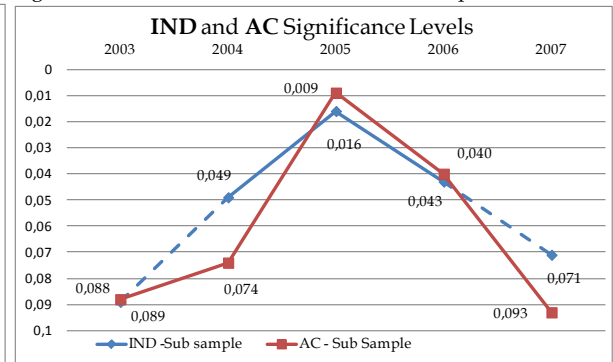


Figure 4B - IND & AC Effectiveness - SUB Sample



5A - BoardMeet & AC Meet Effectiveness - SUB Sample

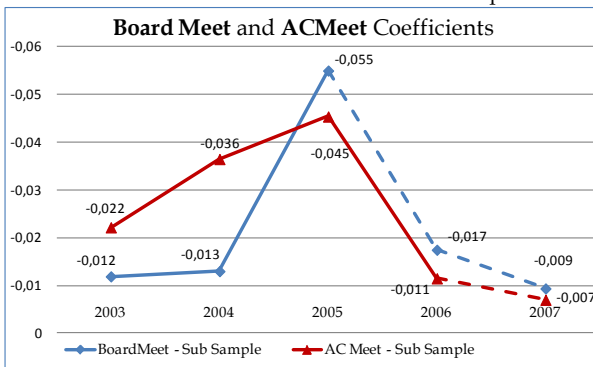
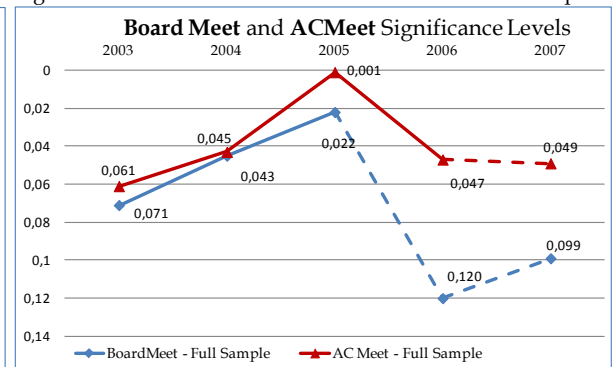


Figure 5B - BoardMeet & AC Meet Effectiveness - SUB Sample





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<sup>1</sup> E.g. according to §§ 10 and 11 of CESR:03-323e: 1) As the 2005 deadline is getting closer, all companies affected by the IFRS transition should be encouraged to devote sufficient resources and to prepare this change as early as possible as it is vital that they have necessary procedures and processes in place to continue to meet reporting requirements in a seamless manner; 2) Open communication on the transition process will be a positive signal that will help users of the financial statements becoming aware of the potential impact of the 2005 change in accounting policies and it will provide evidence that this project is properly carried out; 3) The change towards IAS/IFRS implies a complex process that could usefully be accompanied by a particular effort of financial communication in order to prepare gradually the market to assess its impact on the consolidated financial statements; 4) CESR has identified four different milestones in the transition process that coincide with the publication of the 2003 annual financial statements, 2004 annual financial statements, 2005 interim financial statements and 2005 annual financial statements.

<sup>2</sup> As PWC pointed out, “IFRS has increasingly featured in the financial media over the past six months and, even as we write, the temperature is rising as investors and others search for a clear understanding of what IFRS will mean [...] 96% of companies have not yet communicated with the markets about the likely impact of IFRS on their business. This seems to be because most are not yet certain of the full implications themselves. Only 4% of companies had released any ‘broad picture’ IFRS communications to the markets by September this year, and the disclosures that have been made are often very limited in scope” (PWC, 2004, p. 5).

<sup>3</sup> Other studies that use the absolute value of discretionary accruals as a proxy for the combined effect of income-increasing and income-decreasing earnings management include Becker, DeFond, Jiambalvo and Subramanyam (1998).

<sup>4</sup> We use also as alternative test Ln(BDSZ) with no significant differences in our results.

<sup>5</sup> More than 30 articles highlighting differences, inconsistencies, unresolved issues, and regulators or company delay related to the new accounting standard setting appeared on leading Italian business newspapers. We looked at *Il Sole 24 Ore*, *Milano Finanza* and *Italia Oggi* over the period ranging from March to December 2004.

<sup>6</sup> An article published on the Italian leading business newspaper reported that, according to the PWC study issued in May 2004, Italian companies were far behind the European average in term of IFRS adoption readiness and urged them to quickly start the needed activities (L. Silvestri, *Il Sole 24 ORE*, 27 maggio, 2004, “IAS, l’Europa annaspa. Pronti per un tuffo nella rivoluzione contabile targata Ias/Ifirs? Se l’Europa galleggia, ma con il salvagente, l’Italia ammette di non saper ancora nuotare”).

<sup>7</sup> For example, the articles published by *ItaliaOggi* on January 2004 underlined the most important differences between the Italian Gaaps and the IFRS under exam of the national standard setter (Cornaggia, F. and Villa, F., *Tutti i punti critici del passaggio agli Ias sotto la lente dell’Oic*, *ItaliaOggi*, 12 January, 2004), identified 13 “undermined areas” for firms preparing for IFRS (Cornaggia, F. and Villa, F., *Ias in bilancio, 13 territori minati per le imprese.*, *ItaliaOggi*, 19 January, 2004).

<sup>8</sup> In several articles published in one of the Italian leading business newspaper, Cornaggia and Villa highlighted how relevant was the difference between Italian Gaaps and IFRS (Cornaggia, F. and Villa, N., *Principi contabili, Ias e prassi interna a confronto*, *ItaliaOggi*, 19 Gennaio, 2004); they also argued that the introduction of fair value system came with several and relevant doubts and critics (Cornaggia, F. and Villa, N., *Fair Value al debutto. Le aziende in pressing per il bilancio*, *ItaliaOggi*, 24 november, 2003).

<sup>9</sup> Aware of the potential “misleading” interpretation of our results due to changes in the AWCA level, Governance structure and firm characteristics, running univariate analysis (untabulated) we found no consistent shift in earning management, governance and/or firm characteristics during the analyzed period.

<sup>10</sup> We tabulate only differences in coefficients and statistical difference levels for our variable of interest only.

<sup>11</sup> In our sub sample *BoardMeet* is mostly not statistically significant.