

“International Financial Reporting Standards (IFRS). Did They Succeed to Decrease Falsified Financial Statements and Improve Auditors’ Quality? Financial Evidence from Australia, Germany, Greece and the UK”

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Abstract

This project relates to the creative accounting practices that seem to exist even after the official adoption of International Financial Reporting Standards (IFRS) in 2005. IFRS is a set of unique, high-quality standards that aim to increase the transparency and comparability of information in firms’ financial statements. However, there are indications that, under certain circumstances, firms have used earnings management to gain competitive advantage. Earnings management, or the deliberate misstatement of earnings figures, is a form of fraud. It is an important issue because firms that use such techniques disorientate investors and market participants, and increase market imbalances. Many studies have focused on the connection between earnings management and IFRS, provoking three core questions. Would it have been better for countries to apply their own national GAAP? Do earnings management decrease after IFRS? What are the motives behind earnings management? Extending these questions, the study aims to analyse if falsified statements have been declined after IFRS, to examine the extent that individual standards impact on earnings management, and to specify the role of auditors against earnings management. It involves quantitative analysis of secondary numerical data, for the years 2004-2009 focusing on the Australian, German, Greek, and UK stock markets. The findings reveal that IFRS has not succeeded in eliminating falsified statements entirely, but it proves that IFRS managed to improve the quality of smaller auditors. Overall, this study contributes to theory by exploring additional tools and motives for earnings management. It is thus of interest to both academics and market professionals.

Keywords: IFRS; old GAAP; Earnings Management; Falsified Statements; Auditors; Fraud Auditing.

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1. Introduction

1.1 Background

This project was conducted against a rich background of events after the adoption of official International Financial Reporting Standards (IFRS). Indeed, many studies find that IFRS has had substantial positive effects [1], and has reduced information asymmetry [2]. Such research suggests that IFRS has ensured high-quality information and increased the comparability of financial reports, and has thus encouraged international trading and investment efficiency [3,4], and that its merits outweigh its drawbacks. On the other hand, many studies detect controversial effects on firms' financial statements [5]. They state that cross-country differences continue following the implementation of IFRS, and suggest that accounting regimes cannot overcome differentiation between the legal and political environments of each country [6]. It seems, therefore, that during the early years of IFRS adoption, many studies tried to illustrate their performance by focusing on their potential effects, which can be summarised in terms of two significant areas of contention: creative accounting [7], and fair value [8].

Fair value differs from evaluating assets based on historical costs as in old national GAAP, using the cost at which assets were bought. In this approach, companies used to calculate depreciation on their assets up to the ends of those assets' operational lives. However, IFRS requires some financial assets, such as fixed assets and financial instruments held for trading, including derivatives and available-for-sale financial assets (i.e. IAS 16, IAS 39), to be recognised at market value, namely fair value. Many researchers claim that this may increase the volatility of accounting figures and have noticeable financial effects. However, the paper focuses on creative accounting. Indeed, before IFRS introduction, large-scale accounting scandals were revealed, such as the dot-com collapse and Enron in 2001 [9]. These cases differed from reporting errors, in that these companies were accused of accounting irregularities. Operating in an environment in which firms were forced to maximise their profits and stock value, they were driven to satisfy conflicting interests, even by implementing practices designed to manipulate their financial picture [10]. This meant that some business insiders were able to modify financial reports to mislead all interested parties about the firms' financial performance [11].

This intentional misrepresentation and misquotation of accounting measures [12] involved not only artificial increases or decreases in revenues, profits or earnings, but also improper revenue recognition, inappropriate accruals and estimates of liabilities, excessive provisions, generous reserve accounting, and much more. The literature refers to such practices as 'creative accounting' [13]. Creative accounting is a change to a financial reporting or other measure to alter a company's accounting figures and disorientate investors regarding the firm's value [14]. The most common method used is income smoothing or earnings management. Earnings management refers to intentional increases or decreases in revenues, profits or earnings-per-share figures. It is a form of fraud rather than a reporting error.

Although the responsible authorities have developed an appropriate decision panel to change or enhance specific principles of IFRS to remain up to date, many companies take advantage of IFRS tools that allow unrealised profits or future losses to be recorded in their financial statements, using these to display higher gains or losses. This increased the general feeling that nothing has changed, which was confirmed by literature critical about the

disclosure of information under IFRS. In addition to such cases, consideration must also be given to the observation in recent press releases that warning signs went unheeded and still exist in fraudulent auditing cases, such as the recent case of Globo in the UK,¹ and any new crises² that might emerge. Overall, enhancement of accounting regimes seems always to have been regarded as a critical issue, but has failed to achieve the intentions of the IFRS [15].

For example, some listed companies with auditors' opinions without notes collapsed. In other cases, firms made fraudulent statements, yet controlling mechanisms identified them only after years or, even worse, failed to regulate them at all. As aforementioned, in the Enron case, a single auditing company, Arthur Andersen, was responsible for accounting misinterpretations, and because of this one company, a whole professional field in the US was found guilty. Globo is another case study of failure by UK auditors and analysts. Although it may seem unfair, and without ignoring the responsibilities of the authorities, under certain circumstances this criticism holds, raising questions about the implementation of IFRS. These cases reveal that although IFRS had been subject to amendments, they did not deal adequately with all the issues that emerged, and seemed always to be one step behind the facts, enhancing the vicious cycle of crisis.

1.2 Aim and Questions

This research is concerned primarily with experiences following IFRS adoption. Based on the previous background and existing literature, our goal was to critically evaluate the introduction of IFRS by investigating stock market reactions to earnings management cases surrounding the official adoption period. These events triggered debatable results; therefore, we aimed to contribute to the literature by examining problems that needed to be answered for both financial professionals and academics. Although public opinion tends to be positive, in many cases, empirical research has failed to confirm increased transparency and comparability of accounting figures under IFRS. Even when positive economic consequences have been identified, concerns remain about whether these might be attributable to factors other than IFRS [16].

For this reason, we focused on the transition to IFRS, examining earnings management cases. In this way, we were able to critically explore and assess the effectiveness of IFRS against creative accounting techniques and cases of fraud, capturing a range of previously unquestioned experiences. Therefore, aiming to determine further motives and tools for earnings management, the research addressed the following research questions. Have IFRS been more transparent than old GAAP in Europe and Australia? To what extent do the individual IFRS standards have a material impact on earnings management? How have auditors performed under IFRS? Smaller or bigger auditing companies performed better under IFRS?

In order to answer on these questions, we sought to compare the performance of Greece against other indicative countries, such as Australia, Germany, and the UK for the years 2004-2009. In this way, we aimed to illuminate

¹ Globo enterprise is one of the latest cases to shock European stock markets, as the company was delisted from the AIM market in the UK after being accused of market abuse, falsification of accounts and insider dealing. US investment company, Quintessential Capital Management (QCM) was the first to detect this case (<http://www.independent.co.uk/news/business/analysis-and-features/globo-sails-too-close-to-the-wind-a6709986.html>).

² There are increasing concerns about toxic loans in the Italian banking sector (<http://www.cnbc.com/2016/09/03/demand-to-buy-italys-nonperforming-loans-is-growing-bpms-rossi-says.html>).

country risk and determine whether IFRS performs better in weaker countries, such as Greece. Thus, we compared Greece with a country that used to follow a different regime (the UK), with an economy with a similar accounting philosophy (Germany), and with a country that follows IFRS values but has its own accounting board (Australia). This would reveal the extent of harmonisation between different countries that follow IFRS.

The paper proceeds as follows. Chapter 2 presents the literature review. Chapter 3 describes in detail the four hypotheses of the paper, including the individual tests performed to investigate each one. Chapter 4 explains the rationale for the chosen datasets and methods, and Chapter 5 summarises the conclusions of this paper.

2. Literature Review

From 2005 under EC Regulation No 1606/2002, all listed firms in the EU were required to formulate their financials under IFRS. Europe thus aimed to establish a single set of financial reports for all public companies, hoping to improve the quality, comparability and transparency of financial statements [6]. The IFRS values resulted from the previous IAS standards, with several amendments and new inputs. Along with the EU, other countries such as Australia also required their listed firms to report under IFRS from 2005. In addition, many countries, including Japan, were positive about adopting IFRS in the future, while the US established a convergence plan with IFRS, as described in the next sub-sections. This justifies the fact that most studies have focused on the EU, Australia and the US.

This appears to have been a complicated process, although it might have been expected that countries would have been well-prepared as a result of the previous IAS implementation. However, they still had to overcome considerable problems, including technical difficulties [17], statement effects and compliance under the new enforcement and regulations. This review focuses not on technical details but on the statement and market effects of IFRS under several conditions. Following Soderstrom and Sun's [6], it was expected that IFRS introduction would be a positive step for global accounting. However, studies showed increasing debate over the efficiency of IFRS. Official adoption opened up the potential for interesting and accurate research results, seeking to establish whether IFRS managed to overcome any complications.

2.1 General findings after official adoption

Following official IFRS adoption, most studies have focused on the effects of IFRS, aiming to compare them with the old national GAAP. These studies offer interesting information about the effects of IFRS implementation. Most focus on Europe, examining differences in performance between European countries following IFRS introduction, but taking different approaches. Aisbitt [18] indicates that there has been no difference in equity between UK GAAP and IFRS for bigger UK companies. Similarly, Christensen and his colleagues [19] state that IFRS adoption has not benefited all UK companies, while Horton and Serafeim [20] confirm Aisbitt's [18] finding in concluding that IFRS adoption is value-relevant for earnings but not for equity. These studies seem to separate their samples in the same way, leading to common conclusions. For example, Horton and Serafeim [20] only examine 85 companies listed in the UK with high capitalisation. One difference

is that most studies consider the average impact of their examined measures, while Aisbitt [18] also considers the individual performance of her measures, such as retirement benefit obligations and PPE. This reveals differences between IFRS and UK GAAP.

Similarly, Spanish listed companies seem not to have experienced considerable improvements in their reporting after IFRS [21], while in some countries there seem to be considerable transaction costs that may affect companies' performance [22]. On the other hand, Cordazzo [23] states that IFRS adoption has been positive for earnings and capital for Italian listed firms, and Cordeiro and his colleagues [24] argue that, in general, under IFRS Portuguese firms have improved their financials, mainly due to the effects of fair value. However, the latter only examined 39 industrial companies, making generalisation risky. In all cases, researchers focus mainly on equity and earnings, two of the most indicative and important accounting financials on which all market professionals focus. They provide indications of the performance of IFRS during the mandatory adoption, but only reveal average stock market effects, whereas the results reveal many variations between countries.

For this reason, other studies focus on sets of countries, enabling them to better describe any homogeneity or heterogeneity resulting from the introduction of IFRS. For this reason, some researchers enhance their classification criteria to examine countries that have adopted IFRS [e.g. 25,26,27]. O'Connell and Sullivan [28] analyse a group of firms listed in the FTS EuroFirst 80 index. They focus on this index as it includes the biggest companies in Europe, while they exclude UK and Irish companies as they aimed to analyse the remaining countries as members of Continental Europe with common previous accounting values. Their study demonstrates an increase in net income, but no significant impact of IFRS. Furthermore, their sample also includes banking companies which, as revealed in the previous phases, may affect the results. Similarly, Ferrer and his colleagues [29] analyse the impact of IFRS adoption for a set of 11 European countries. They include both code-law and common-law countries, and conclude that IFRS had a material impact in the UK, Ireland, Sweden, France and Spain, relating mainly to fixed and current assets, short-term liabilities and earnings.

Daske and his colleagues [30] study of IFRS adoption focuses on a sample of 26 countries globally. This study reports interesting results and makes significant contributions. They find that IFRS adopters increase their market liquidity, but the results for a decrease in their cost of capital are unclear. However, they believe that both outcomes cannot have resulted only from IFRS adoption *per se*, but that additional enforcement may have had an effect. They show that both liquidity and cost of capital improved in countries with strong legal systems. Thus, they conclude that firms' reporting quality is a result of many factors, and that one of the biggest factors is the institutional system of the country adopting IFRS. This conclusion was also reached by studies in the previous phase, as well as by [31] who refer to a positive correlation between strong enforcement and market performance. In addition, Byard and his colleagues [1] state that the legal system influences analysts' forecast errors, and claim that earnings disclosures provide better information under IFRS for countries that have strong legal systems. Similarly, Horton and his colleagues [32] state that analysts' forecasts have improved under IFRS, but their results may have been affected by the industry and country on which they focus in their analysis. It seems, therefore, that although IFRS values are common, their implementation differs according to the legal framework of each country. This may partially explain the heterogeneity of results exhibited following IFRS adoption [33].

2.2 Harmonisation after IFRS introduction

Adopting IFRS offer a solution to the barriers to harmonising accounting. This would reduce uncertainty and information asymmetry for investors, enhance financing opportunities, decrease market uncertainty, and lead to higher stock returns [34]. These are strong motives for countries to adopt IFRS [6], and firms in a lower-quality information environment will gain even greater benefits [35]. This may suggest that comparability of accounting reports between companies from different countries may increase under IFRS [36]. However, the heterogeneity of economies that have adopted IFRS, especially those outside Europe, as well as their different reactions under common rules [37], may offer reasons for preserving accounting diversity. Therefore, recent literature has focused on whether IFRS adoption can achieve the desired comparability across countries [38]. Most researchers suggest that harmonisation cannot be achieved simply by implementing the new accounting standards [15], as additional factors must be overcome. Basilio and Johnsen [39, p.9] identify legal, cultural, governance and firm-level incentives for European countries [40,41,30,42,43]. However, additional accounting issues may affect the level of IFRS harmonisation. The formulation process may give an advantage to countries that used to follow the Anglo-Saxon accounting system, as IFRS seems to have assimilated this framework [44]. Analysis of this environment reveals interesting results, as most EU countries follow the Continental accounting system [45,46,47], further influencing the harmonisation of IFRS.

However, it is not only material harmonisation that is questioned, as many researchers suggest that the IASB must also continue to work toward greater formal harmonisation [48]. They suggest that IFRS allow too much freedom of judgment in the same measurements and procedures, which may have adverse effects, as recent studies suggest that introducing common regulations to countries, without common strictness of enforcement, may have the opposite effect to the desired harmonisation [49]. In fact, simply mandating new accounting standards is not sufficient to produce uniformity, if they are not backed by strong, centrally harmonised institutions [50], eliminating any local enforcement [51]. For example, firms' freedom of judgment in the recognition of provisions may affect the comparability of IFRS values. Indeed, they may classify provisions under IAS 12, IAS 38 as capitalisation options or IAS 11 [52].³ These options appear to be influenced by the national accounting culture and regulation of the countries in which companies operate. This, in turn, affects IFRS harmonisation [53]. Further similar cases may relate to the fact that not all countries that have adopted IFRS require listed companies to complete their accounts according to IFRS. Furthermore, in relation to financial reporting for non-listed companies, the IASB seems to have allowed considerable discretion for national enforcement, as some countries have already established their standards according to IFRS, while other economies, such as Greece, have only recently started to harmonise their national accounting values with IFRS for non-listed firms. Such state enforcement favours some countries and companies, giving them an advantage over other IFRS countries and firms [54]. Overall, the literature suggests a lack of consistency in accounting between member states and the standard rules of IFRS, just as in other harmonisation cases [44].

³ There is ongoing debate about the accounting conservatism of IFRS. Both the IASB and the FASB argue that prudence and conservatism are undesirable qualities in financial reporting information (IASB, 2006a, BC2.22), but as IFRS does not provide a strict framework for users, many used to undervalue their net assets, mainly by carrying forward tax losses and credits (IAS 12), development costs (IAS38) and construction contracts (IAS11) in order to gain competitive advantage [52; https://www.researchgate.net/publication/247525447_Accounting_Conservatism_under_IFRS].

2.3 IFRS in Europe

For Greece and weaker economies, adopting IFRS has been a critical factor in attracting investors' interest. Many believed that these countries would not be able to respond to the increased disclosure requirements and procedures of the new regime, especially since Greece had one of the highest levels of earnings management of any country [7]. On the other hand, many expected that their adoption would improve the quality of financial reporting, as well as the reliability, transparency and comparability of financial statements [55]. Many cases examined in the literature confirm that any harmonisation in accounting standards may help smaller economies. Indeed, the results suggest that the value relevance of consolidated figures has increased under IFRS for Greek companies [56]. Karampinis and Hevas [56] observed an unexpected improvement in consolidated accounting net income and book value after IFRS adoption.

Most researchers suggest that the accuracy of Greek firms' accounting statements has improved [57], although some cases of information asymmetry have been identified [58]. These may be attributable to the fair value orientation of IFRS. Furthermore, IFRS seems to have resulted in differences in performance from country to country. Many studies have focused on the influence of IFRS on the value relevance of accounting information, concluding that it differs across jurisdictions. For example, like Greece, the UK's accounting quality has strengthened, leading to more value-relevant accounting information following the introduction of IFRS [59,60]. On the other hand, IFRS has not produced the same results in Poland, where they have not impacted significantly on value relevance [61]. In Spain, early indications suggest that the value relevance of accounting information has not significantly improved as a result of IFRS [21]. This is important because it suggests that the local accounting enforcement applied by each country in conjunction with IFRS values negatively affects IFRS implementation and the comparability of financial statements.

Many studies have sought to examine such cases, and most findings are in line with those of Callao and his colleagues [21]; however, there are cases where local enforcement seems to have produced benefits around IFRS adoption, suggesting that increased liquidity is attributable to the enforcement system of each country [33]. This mixed evidence seems to have led to a broadening debate following IFRS adoption. On the one hand, researchers suggest that IFRS adoption has not instantly delivered improvements in earnings comparability across Europe in relation to accruals and cash flow [62]. They also suggest that harmonisation of accounting standards does not improve analysts' ability to learn from inter-firm comparisons, as accounting comparability does not increase for IFRS adopters [63]. On the other hand, there has been an increase in foreign investors in IFRS firms, which would not have occurred if comparability between these firms had not increased [64]. Finally, researchers have examined the mean of countries' and firms' results to enable better assessments of the harmonisation process. The literature suggests that analysts' forecasts are more accurate since the official adoption of IFRS in the EU [65], while the cost of equity is lower under IFRS, especially for countries with strong legal enforcement [66], as this correlates with reduced earnings management in both private and public firms [42].

2.4 Earnings management under IFRS

In several countries, firms had already been applying IFRS voluntarily before 2005, always in compliance with their national regulations. For example, the Greek government allowed IFRS for listed firms from 2003 onwards. In this way, several studies do examine early IFRS adopters. The most important are those of Daske and his colleagues [30] and Capkun and his colleagues [67], whose frameworks categorise early adopters and examine them in parallel with their main analysis. Daske and his colleagues [30] were the first to consider a separate category for early adopters. They produce interesting results for mandatory adopters, but also suggest that voluntary adopters may display lower information asymmetry resulting from the increased transparency of IFRS. Following a similar categorisation, Capkun and his colleagues [67] did not consider such cases in their 2008 study, but state that early adopters exhibit an increase in earnings management. This finding is contrary to that of Daske and his colleagues [30], and seems extremely important, as most studies conclude that early adopters did not need to engage in earnings management as they voluntarily adopted IFRS. However, the statistical accuracy of these studies is questionable, as their sample seems narrow, as early adopters tended to be bigger firms and were considerably fewer in number than normal adopters, raising additional heterogeneity issues.

Further studies reveal a difference in earnings quality across countries that have applied IFRS [68], confirming that legal enforcement in each country may be a reason for this [69]. Indeed, similarly to Barth and his colleagues [70], Chua and his colleagues [71], state that adoption of IFRS has decreased earnings management for Australian companies. On the other hand, Ahmed and his colleagues [72] examine a sample of 20 countries to determine whether IFRS have decreased income-smoothing activities compared with a matched sample of non-IFRS users. They indicate that IFRS adopters have increased earnings management. Also, as their sample includes countries with strong regulations, and as they prove that accounting quality has decreased under IFRS, they conclude that countries with strong laws perform better under their national GAAP. This is the first study to present such indications. However, their analysis is not statistically significant compared with non-IFRS adopters, raising questions about their findings. In addition, Jeanjean and Stolowy [73] find that earnings-smoothing activities have not declined under IFRS, while in France there is strong evidence of increasing numbers of suspicious cases. Closely related is Djankov and his colleagues [74] research on stock market regulations along with earnings management. They find that large equity markets have better and more restrictive regulations, which may result in less earnings management and more accurate financial reporting.

In addition, Ding and his colleagues [75] examine how a country's legal system may affect earnings management, even if the country has adopted IFRS. They also conclude that the lower the quality of the legal framework, the greater the opportunities for earnings management. Therefore, adopting IFRS seems likely to increase earnings quality but is not the only determinant, as earnings smoothing appears to relate to additional institutional and market regulations [76,77,78]. For example, Ernstberger and his colleagues [79] show a lower level of earnings management for German firms following improvements to the German enforcement system. Therefore, they state that earnings management may even increase under IFRS if countries do not adopt strict legal and market enforcement [80]. On the other hand, Platikanova and Nobes [81] indicate higher quality for UK and German firms under IFRS and, most impressively and similarly to Armstrong and his colleagues [35], they state that firms in a lower-quality information environment benefit more. Moreover, many studies focus on motives for earnings management relating to bonuses. Orszag and Choudhary [82] suggest that most UK listed

companies still use earnings to determine managers' bonuses, although many studies find that it has declined since IFRS adoption [83].

There is also a threshold in earnings below which there are no bonus distributions, making it even more essential for managers to smooth earnings if a company is close to this limit. Managers are under considerable pressure to prove that they can increase stakeholders' profits, thus they may resort to creative accounting practices. Therefore, reporting a profit is still essential under IFRS [84]. Furthermore, in recent years, stock markets have tended to play a crucial role in firms meeting analysts' forecasts, and investors' expectations are essential for their operational performance. Failure to reach their estimates may thus have devastating impacts on access to capital, growth prospects and future potential [84,85]. For this reason, firms may be inclined to use earnings management to meet estimates by achieving significant market premiums [86, 87].

All these cases that motivate firms to engage in earnings management have many extensions. In this way, firms avoid legal procedures such as capital increases, but also shun auditors. Companies are obliged to have their financials examined by auditors, who reduce the probability of firms mis-stating their financials. Any deviation from the rules, as for example to avoid lower capital limits will be detected by the firms' auditors. Failure to do so indicates that the auditors are too lenient, or lack knowledge and training. Audit quality, thus, is very important in order to decrease earnings misstatements, although it has not been extensively analysed under IFRS, as few studies correlate auditors with earnings management. These studies categorised auditors based on their reputation and size (Big 4 and non-Big 4) to examine the extent to which constraints on earnings management are a measure of audit quality. In this respect, most studies claimed that Big 4 companies constrain earnings management [88,89,90, 91]. Furthermore, Francis and Wang [92] find that firms audited by Big 5 auditors presented better earnings quality than firms with smaller auditors, and Ball and his colleagues [93] suggest that Australian listed firms may benefit from auditors' rotation. However, these studies did not consider whether existing regulations on forensic accounting were sufficiently strong to control firms under IFRS, and whether auditors were sufficiently well trained to deal with the new regimes.

2.6 Discussion of literature review

The most important concern has been the introduction of IFRS, which has had a significant impact on companies' financials. Since it is a set of unique, high-quality standards that aim to increase the transparency and comparability of information between adopting countries, most studies have understandably found a decrease in earnings smoothing activities and more truthful accounting figures. Indeed, many researchers argue that IFRS introduction has reduced the need for earnings management [70,71], yet these findings have been challenged by other studies. For example, Jeanjean and Stolowy [73] find that earnings smoothing activities have not declined under IFRS, and Ahmed and his colleagues [72] indicate that IFRS adopters engage more in earnings management.

The literature on this key concept reveals mixed results, with no clear agreement on whether IFRS has managed to decrease or increase earnings management. For this reason, many researchers have focused on additional factors that influence the level of earnings management, such as fair value [94], taxation [95], capital market

motivations [96] and managers' compensation [51]. It may also be possible for several companies to engage together in earnings management owing to accounting and legal regulations [72,91,97]. Overall, a large body of literature suggests that firms that follow IFRS may derive significant benefits. However, it does not provide convincing arguments on whether IFRS has succeeded in improving accounting quality, because there is no clear evidence of whether all companies under IFRS have decreased their earnings management. Overall, there is debate about whether IFRS has succeeded in reducing earnings management, while some questions related to this issue still remain unanswered, as for example, to what extent do the individual IFRS standards have a material impact on earnings management?

3. Hypotheses Development and Analysis Models

The general framework of the four following hypotheses sought to compare IFRS with the old national GAAP of Australia, Germany, Greece and the UK. Considering also the amendments to IFRS, we formulated the following hypotheses to detect which country performed better, as they previously exhibited significant differences. This set of hypotheses aimed to answer on practical research questions, like should investors trust IFRS towards earnings management? What specific data and financials should they focus on their analysis? Should they consider investing in weaker economies or to strongest countries like Germany? Should investors and authorities suspect companies with non Big-4 auditors? Thus, through these hypotheses, the research sought not only to discover any decrease in the number of firms with falsified financial statements (FFS), but also to detect specific increases or decreases in each firm's accruals over a period of years. This is the first study to examine accruals in time series, and is also the first attempt to identify the individual standards that have an impact on earnings management. Of equal importance was our intention to contribute information to whether auditors displayed appropriate reflection in IFRS implementation, concerning their quality, technical capability, size and independence.

H1: The introduction of IFRS has decreased falsified financial statements

This first hypothesis aimed to shed light on several issues originating from the official introduction of IFRS and relating to the manipulation of earnings. Although earnings management has been the most investigated theme since the introduction of IFRS, we aimed to initiate more critical values for its detection. Creative accounting and fictional finance have caused many scandals, even though in most cases it has been illegitimate and costly for investors. Therefore, the project aimed to detect any decrease in Falsified Financial Statements (FFS) following the adoption of IFRS and to specify financial ratios that might affect this phenomenon. Focusing on auditors' opinions for each year, authorities' reports and Altman's Z-score, we classified each company for every year as FFS or not.⁴ For FFS, we noted companies with reports giving a qualified auditors' opinion, companies that had been involved in fraud cases and companies with negative or extremely low Altman's Z scores. Altman's Z-score is used to determine the likelihood of a company going bankrupt. For public

⁴ For this test, we initially considered following Spathis's [98] FFS equation. However, we noticed that our results based on this model, or on similar methods as referred to by Dalnial and his colleagues [99], such as multilayer perceptron neural network (MLP), probabilistic neural network (PNN) and radial basic functions network (RBF), did not produce accurate results for the purposes of this project, as we had to formulate new equations for every examined year. This would have been time-consuming, with unpredictable accuracy. Thus, we preferred to manually select the possibility of a firm having FFS.

companies, the Z-score is calculated as follows [100]:

$$Z = 1.2 * (\text{Working Capital} / \text{Total Assets}) + 1.4 * (\text{Retained Earnings} / \text{Total Assets}) + 3.3 * (\text{Earnings Before Interest and Taxes} / \text{Total Assets}) + 0.6 * (\text{Value of Equity} / \text{Book Value of Total Liabilities}) + 1.0 * (\text{Sales} / \text{Total Assets}) \quad (1)$$

Having calculated this possibility for each firm and each year, we performed the next two tests.

Test 1: Multinomial Logistic Regression

In the first sub-test, we tested the next multinomial logistic regression to detect any FFS decrease over the years of IFRS implementation:

$$RR_{i,t} = a_0 + a_1 \text{Size}_{i,t} + a_2 \text{Investment}_{i,t} + a_3 \text{Growth}_{i,t} + a_4 \text{Profitability}_{i,t} + a_5 \text{Liquidity}_{i,t} + a_6 \text{Leverage}_{i,t} + a_7 \text{FFS}_{i,t} + e_{i,t} \quad (2)$$

where, $RR_{i,t}$ is equal to 0 for 2004, 1 for 2005, 2 for 2006, etc., and $FFS_{i,t}$ is a dummy for FFS that takes a value of 1 if falsified and 0 otherwise; for other variables, see Appendix, Table 1; $e_{i,t}$ is the error term. The project implemented this regression type, as it aimed to follow firms' performance for several years (2004–2009) so as to include the effects of adoption in 2005 and any crisis effect in 2008. For this, we chose 2004 as the reference year. A negative FFS value would indicate a decrease in FFS.

Test 2: Logistic Regression

Moving a step further, we examined the association of firms' ratios with FFS. The following binary logistic regression was performed:

$$FFS_{i,t} = a_0 + a_1 \text{Size}_{i,t} + a_2 \text{Investment}_{i,t} + a_3 \text{Growth}_{i,t} + a_4 \text{Profitability}_{i,t} + a_5 \text{Liquidity}_{i,t} + a_6 \text{Leverage}_{i,t} + e_{i,t} \quad (3)$$

where $FFS_{i,t}$ is a dummy for FFS that takes a value of 1 if falsified and 0 otherwise; for other variables, see Appendix, Table 1; $e_{i,t}$ is the error term. This model contributed to the profiling of differences in a number of critical ratios between FFS and non-FFS firms over a period of six years (2004–2009).

H2: Firms with low earnings management, preserve this behaviour under all cases

One significant conclusion from our engagement with the literature was the fact that earnings management continues to be a contemporary issue and that most researchers accept the correlation between accruals and earnings management. Thus, many papers suggest that under IFRS, discretionary accruals are lower as a result of more transparent transactions [101,102]. However, as they all focus on cross-sectional procedures, they usually detect the average effects of the variables examined. Therefore, the results are often mixed, and it is impossible to determine firms' individual accruals performance over a period. Through this test, we aimed to fill this gap, as we attempted to observe firm-by-firm accruals over a period of six years (2004–2009).

This test enabled us to detect whether firms that managed to lower their accruals under IFRS adoption preserved this capacity during the crisis, and vice versa. Thus, we extend the IFRS research agenda by identifying interactions between individual IFRS standards and earnings management. The first step in this test was to determine an appropriate method for accruals calculation. Most models separate accruals into non-discretionary (normal) and discretionary (abnormal). The absolute value of the abnormal component determines the quality of earnings, meaning that the larger the absolute value of discretionary accruals, the lower the quality of earnings. This study used the residuals of the following regression as discretionary accruals (DAC), based on the Jones's [103] model [see also 104,105]:

$$AC_{i,t} = a_0 (1/A_{i,t-1}) + a_1 REV_{i,t} + a_2 PPE_{i,t} + e_{i,t} \quad (4)$$

where $AC_{i,t}$ is accruals in year t scaled by lagged total assets (total assets in year $t-1$); accruals equal the annual change in current assets (excluding cash) minus current liabilities (excluding short-term debt and income tax payable) minus depreciation; $A_{i,t-1}$ is the total assets in year $t-1$; $REV_{i,t}$ is the annual change in revenues in year t scaled by lagged total assets; $PPE_{i,t}$ is property, plant and equipment in year t scaled by lagged total assets; and $e_{i,t}$ is the error term. As previously noted, all variables in the model are scaled by lagged assets, meaning assets from the previous year, to reduce heteroscedasticity (Jones, 1991). In general, a high level of discretionary accruals would indicate relatively low earnings quality.

TEST: Longitudinal analysis of accruals

For the main examination of this hypothesis, multilevel analysis was used.⁵ The model was decomposed into two parts (Level 1 and Level 2), following studies by Liang and Bentler [106], Longford and Muthen [107] and Yuan and Bentler [108]. The Level 1 model represents the amount of change for a specific individual (firm) over the time period of the study, while the Level 2 model represents the relationship between Level 1 growth parameters and time-invariant characteristics of the individuals. More specifically, we implemented the following model:

$$Level-1: y_{i,t} = \pi_{0,i} + \pi_{1,i}(Time_{i,t}) + \pi_{2,i}(TimeGroup_{i,t}) + e_{i,t} \quad (5)$$

where $y_{i,t}$ is the criterion variable for individual i at time t ; $\pi_{0,i}$ is the intercept for individual i ; $\pi_{1,i}$ is the slope for individual i ; $Time_{i,t}$ is an explanatory variable (as time is used as an explanatory variable at Level 1, this model is conceptualised as longitudinal; [109]); $\pi_{2,i}$ is the regression weighting for explanatory variable $TimeGroup_{i,t}$; $TimeGroup_{i,t}$ is an additional dummy explanatory variable (0 for the period 2004–2006 and 1 for the period 2007–2009); and $e_{i,t}$ is the error term.

$$Level-2: \pi_{0,i} = \beta_{0,0} + \beta_{0,1}(FFS_{i,t}) + r_{0,i} \quad (6)$$

⁵ We came to this decision for two reasons. First, multilevel methods present a number of advantages concerning assumptions, such as linearity, normality and independence of observations, compared with similar traditional models such as repeated measures ANOVA [110]. This elasticity was essential for our sample. Second, traditional statistical procedures assess changes in only one type of variable (intra-individual or inter-individual) in a time frame, while multilevel modelling offers the ability to simultaneously assess both types [111]. In this way, we enforced the FFS results of the previous Test 1 by adding this parameter to the Level 2 test.

$$\pi_{1,i} = \beta_{1,0} + r_{1,i}$$

where $\pi_{0,i}$ is the intercept for individual i ; $\pi_{1,i}$ is the slope for individual i ; $\beta_{0,0}$ is the population intercept for individual i ; $\beta_{0,1}$ is the difference in population intercept for a change in FFS; $FFS_{i,t}$ is the dummy variable for FFS from Hypothesis 1; $\beta_{1,0}$ is the population slope; $r_{0,i}$ is the unique effect for individual i on the intercept; and $r_{1,i}$ is the unique effect for individual i on the slope.

The Level 2 model consists of two equations: $\pi_{1,i}$ depicts the Level 1 change coefficients and $\pi_{0,i}$ the Level 2 change. In this equation, we added the FFS variable as a time-invariant predictor because we aimed to examine the interaction of FFS with the individual change intercept rather than the slope. We also intended to detect the relationship between accruals and FFS firms throughout the examined period, rather than for separate time groups. Thus, we considered that there would be no implications if we did not include the $TimeGroup_{i,t}$ explanatory variable in the Level 2 model. The full model is as follows:

$$Full\ model: y_{i,t} = [\beta_{0,0} + \beta_{0,1}(FFS_{i,t}) + r_{0,i}] + [\beta_{1,0} + r_{1,i}(Time_{i,t})] + e_{i,t} \quad (7)$$

All variables have already been defined, and we estimated the nine parameters of the full model using restricted maximum likelihood (REML).⁶

H3: Some individual standards could have more impact on earnings management

Having examined firm-by-firm accruals performance in the previous hypothesis, it seemed interesting to examine the individual standards that had the most effect. As referred to before and applied in this case, most studies examine specific variables to detect earnings management, without considering separate standards that might affect these values. We aimed to contribute to the literature in this way, as this is the first study to correlate accruals with the materiality of the impact caused by each standard and the frequency with which these individual standards appear to affect earnings management.

TEST: Individual standards and earnings management

Based on Tsalavoutas and Evans [114] and similar studies, we assessed the partial index to compare two consecutive years of IFRS implementation.⁷ We were thus able to consider which particular standards correlated most with creative accounting practices, and whether any of their amendments had been effective. The research focused on firms that provided information in their statements in relation to the financial measures that we aimed to examine. More specifically, our analysis was based on a partial index of materiality, as introduced by Gray [115] and proposed by Cordazzo [23]. The equation for the partial index of this proportionality for

⁶ In general, likelihood models seek to estimate the probability of a parameter for a given outcome. The REML approach differs from maximum likelihood (ML) estimation in considering that some parameters have little importance for the model. It uses transformed data to eliminate the effects of these parameters and then calculates the likelihood function, whereas ML does this for all parameters [112]. Overall, REML seems to produce more accurate estimates of random variances, while ML is appropriate for fixed regression parameters [113].

⁷ Most research that applies partial index methods focuses on reconciliation statements to detect individual standards' effects on shareholders' equity and net income for a specific year. In our research, rather than reconciliation statements, we focused on two different years; and rather than shareholders' equity or net income, we examined accruals.

accruals was:

$$PI(DAC)_{i,j,t} = \frac{PA_{i,t}}{|DAC_{i,t-1}|} \quad (8)$$

where $PI(DAC)_{i,j,t}$ is the partial index of materiality for item j to accruals of company i at time t ; $PA_{i,t}$ is the partial adjustment, meaning the difference between the amount of individual standards in years t and $t-1$; and $DAC_{i,t-1}$ is the discretionary accruals of company i at time $t-1$. If the partial index equals 0, the individual standard has no impact on accruals; if the index assumes a value greater than 0, this indicates that accruals have increased, so there has been a negative impact of this standard for our analysis; and if the result is lower than 0, this indicates a positive impact.

The index was calculated for each country for the years 2005–2009. We excluded 2004, as we aimed to focus only on the IFRS period. Materiality was divided into five categories according to the mean and standard deviation of the examined parameters. Finally, to develop our dataset of the individual standards examined, we focused on direct and indirect measures that affect discretionary accruals calculation according to the literature. Thus, we detected any separate standards that influenced these measures to complete our dataset.

H4: IFRS have improved auditing quality

All listed firms are required to have their financial statements audited. Yearly forensic accounting procedures aim to provide stakeholders with an assurance of proper financial statements and discover any material misstatements or cases of fraud [116]. However, many studies concern about the qualifications of accountants and auditors to enable them to respond to the requirements of the new standards. Although, after the official IFRS adoption, these concerns reduced, through this test we aimed to re-surface this issue by determining the relationship between auditors and earnings management. Thus, it is essential to detect whether big auditing companies have benefited from IFRS implementation or whether smaller auditors have managed to eliminate their distance, performing equally well in crucial matters such as accruals detection. In addition, as legislation concerning auditors' reports differs among countries that follow IFRS, this was a good opportunity to test each country's performance, taking into account cases where auditors changed.

This hypothesis is critical to IFRS implementation, with additional extensions that apply even in their convergence with US GAAP. Many consider that postponement of this venture was attributable to differences in auditors' regulation, as US authorities provide more restricted and responsible roles for auditors than IFRS. Thus, we ran the next tests.

Test 1: OLS Regression of Accruals on Firm Financial Measures for Big-4 Auditors

Previous studies focusing on auditing firms separate their samples according to size. This is a common practice that has led to the adoption of two categories: the Big 4 audit firms comprising the four largest firms, and the

non-Big 4 auditors that include the remaining companies.⁸ The research followed this categorisation to answer the question of whether, following IFRS implementation and the outbreak of the crisis, an auditor's size was still a factor that might eliminate earnings management. Early studies conclude that larger audit firms place greater constraints on earnings management [117]. However, given that our dataset contained a different profile of auditors, it seemed interesting to compare countries where listed firms tend to put their trust in companies other than the Big 4, such as Greece, with countries where Big 4 auditors are in the majority, as in the UK. For this, the following linear regression model was used:

$$DAC_{i,t} = a_0 + a_1 DV_{i,t} + a_2 DV_{i,t} Size_{i,t} + a_3 DV_{i,t} Profitability_{i,t} + a_4 DV_{i,t} Leverage_{i,t} + e_{i,t} \quad (9)$$

where $DAC_{i,t}$ is discretionary accruals estimated using the cross-sectional Jones [103] model; $DV_{i,t}$ is a dummy variable representing whether a company has a big auditor; $DV_{i,t}$ equals 1 if a firm is audited by a Big 4 company and 0 otherwise; $DV_{i,t} Size_{i,t}$ is the size ratio as described in Appendix , Table 1, multiplied by $DV_{i,t}$ (used to examine the impact of auditors' size on the association between discretionary accruals and firm size); $DV_{i,t} Profitability_{i,t}$ is the profitability ratio as described in Appendix, Table 1, multiplied by $DV_{i,t}$ (used to examine the impact of auditors' size on the association between discretionary accruals and profitability); $DV_{i,t} Leverage_{i,t}$ is the leverage ratio as described in Appendix, Table 1, multiplied by $DV_{i,t}$ (used to examine the impact of auditors' size on the association between discretionary accruals and leverage); and $e_{i,t}$ is the error term.

Test 2: OLS Regression of Accruals on Firm Financial Measures for Auditors Change

An equally important consideration relating to earnings management is auditors' rotation. From our working experience, we have noticed that a longstanding business relationship with auditors may lower auditors' reflectiveness. Therefore, a change in auditor may decrease fraud motives, suggesting that a more rapid mandatory change would result in cost reductions and a decrease in Big-4 dominance, but most importantly in increased quality. We followed the previous regression model (9) to detect whether firms that had rotated their auditors had lower accruals. The $DV_{i,t}$ value equals 1 for firms that had changed their auditors and 0 for firms that had not. The remaining variables remain the same as in Equation 9.

4. Datasets and analysis models

4.1 Data Sample

As described in Chapter 1, the paper focused on Australia, Germany, Greece and the UK. It includes all companies that had shares listed on the stock markets of these countries. Following previous research [7,86,118,], we excluded the financial sector, i.e. banks, and insurance and investment companies. In this way, we increased the homogeneity of our data, as financial firms must follow additional enforcement protocols that might affect IFRS implementation. We also excluded firms that had been delisted during the examined period,

⁸ The Big 4 refers to the four largest accounting firms in the world: Deloitte Touche Tohmatsu Ltd (DTTL), Pricewaterhouse Coopers (PwC), Ernst and Young (E&Y) and Klynveld Peat Marwick Goerdeler (KPMG). All other companies are characterised as non-Big 4 auditors.

and firms that were early adopters, meaning they had adopted IFRS before the official year of 2005, as they had an advantage compared with normal adopters and this might affect the results. Furthermore, we detected many cases of firms listed simultaneously on various stock markets, such as on both the London and Frankfurt Stock Exchanges. Hence, to avoid double-listed firms, we examined such firms only in the stock market of the country in which they had their official head office. In contrast to many previous studies that have used small samples, our research sought to investigate most listed companies of the aforementioned countries, in order to avoid any sampling bias.

Overall, a total of 1,366 listed companies was examined for the period 2004–2009. This analysis period was chosen to integrate the impact of IFRS implementation and their improvements, as well as the first consequences of the global financial crisis of 2008. Following the literature, in most cases we decided to expand our analysis to a year before and after the examined issues. This would reduce bias by examining long-term IFRS performance. An appropriate timeframe was therefore essential. For example, Stenheim and Madsen [119] exhibit different results for the same country, in contrast to Gjerde and his colleagues [120] who examine a shorter period of firm-year observations. Finally, we assumed that the fiscal year of each company was a full year. This is important because most firms in Australia prefer to release mid-term financial statements. For these data to be gathered, we first focused on databases such as Amadeus and Screener, but since they did not provide all the data needed, we searched separately for each firm's financials. In these cases, we also had recourse to economic websites such as Bloomberg, MarketWatch, Morningstar and The Financial Times, and databases such as Factiva and LexisNexis to access companies' announcements, find their official websites, and download firms' annual reports and statements. We also focused on detailed information from the footnotes of annual reports and firms' disclosures and announcements.

4.2 Data Analysis Models

For the main data analysis, we aimed to test data associations, to assess the strength of their relationships and differences, and to examine any trends, based on classical statistical methods [121]. As described previously, these methods focus on a number of parametric statistics and, more specifically, on univariate and multivariate statistical tests, such as Pearson's correlation coefficient, binary and multinomial logistic regression analysis, ordinary least squares (OLS) regression analysis and multilevel models. In addition, independent sample F-tests and t-tests were performed to test the accuracy of the standard deviation and significance of the mean respectively, to contribute to the comparability of the index across values [122]. Each test is useful for analysing specific value categories according to the needs of each hypothesis,⁹ and despite their differences, as parametric analysis methods they follow a number of shared assumptions, including levels of measurement and sample size requirements.

In particular, the project considered the assumptions of linearity, normality, homogeneity and independence. Linearity refers to the relationship between the dependent and independent variables, which should be linear and

⁹ Logistic regression, for example, is useful in analysing categorical data, as the dependent variable is dichotomous and takes only two values, i.e. 0 and 1 [125,126]. Multinomial regressions are appropriate for more than one explained variable, while linear regression cannot be used with categorical dependent variables.

is easily examined through residual plots. Furthermore, the numerical data were examined to establish whether they followed a normal distribution. For this reason, the study employed Wilcoxon, skewness and kurtosis tests [122,123]. Although the sample was relatively large, applying the central limit theorem [124], the data were treated carefully because of possibly skewed distributions [123]. Outliers that might significantly affect the empirical results were excluded from the standardised residuals. Concerning the homogeneity of variance, we tested whether controlled and measured data had equal variances (homoscedasticity) or not (heteroscedasticity). The analysis software contains statistical tests for this purpose, and we used Levene's [125] test. Finally, particular attention was paid to the independence of measures, meaning the absence of correlation between two or more independent variables, to avoid collinearity or multicollinearity, respectively. Multicollinearity might potentially cause misinterpretation of the contribution of independent variables, as this makes it difficult to determine their separate effects, leading to numerical problems. Possible cases of multicollinearity were detected through examination of standard errors. A standard error larger than 2.0, excluding the constant, might indicate this problem [127].

All these methods were assessed according to the relative significance of the estimated coefficients (p-value < 0.01, two-tailed), and additional parameters were also measured. The parameters for logistic regressions were determined based on the maximum likelihood method, and diagnostic tests of significance were based on the Wald statistic. The Wald test evaluates whether the independent variable is statistically significant in differentiating between two groups. In addition, utility estimations were based on proportional by chance accuracy criteria, which were preferred over proportional reduction in error. These were computed by squaring and summing the proportion of cases for each group [128,129]. For the OLS regression, a White test was performed, focusing on the correlation coefficients among the test variables and the R-squared measure. The predictive accuracy of the models and the consistency of the estimates were assessed in this way.

5. Empirical findings

5.1 Descriptive statistics

Table 2 in Appendices reports the descriptive statistics of the sample. These provide a better understanding of the particularity of the dataset, and will assist in explaining the main analysis and results.

2004–2006 (Panel A)

Panel A presents statistics for the IFRS adoption period. In Australia (Panel A1), the results indicate that during the first year of adoption, firms had lower size measures (SALETAS, RESSFU) and leverage ratios (DEBT), but higher liquidity measures, except for the CASH ratio which was lower. Profitability measures do not give a clear picture. In every case they remained negative and operating profits were lower under IFRS in the first year (OPM), while investments increased (DIVYI, HOLTA). Panel A2 presents descriptive statistics for German firms before and after the adoption of IFRS. The results for falsified firms (FFS) are encouraging as they show signs of decreases in both 2005 and 2006. German companies, like Australian ones, exhibit lower size measures (SALESHA, SALETAS). However, a potential cause for concern, as it is potentially unfavourable to all other

countries, is that Germany had lower liquidity measures (CASH, QUI). Otherwise, German firms exhibit greater investment prospects (PE), profitability (EPS) and leverage (DEBT, INTCOV). It seems, therefore, that negative results did not deprive German companies of borrowing opportunities, promoting their increased profitability and accounting accuracy as collateral benefits.

The same motive applies to Greece, where the number of FFS cases reduced under IFRS and which is the first country with higher size ratios (RESTAS, RESSFU). The results also improved for growth (MVBV) and liquidity (CUR, QUI) measures. The fair value orientation seems not to have had any adverse effects on the market value of Greek firms, suggesting that IFRS helped smaller economies to become more competitive. On the other hand, more steps need to be taken by Greek companies, as investment (DIVCOV, HOLTA), profitability (ROSC, ROCE) and leverage (INTCOV, DEBTE) ratios decreased. New accounting methods may always influence net profit results [130], while lack of familiarity with new procedures and higher transaction costs may make smaller economies more vulnerable to these measures.

Finally, the UK presents a clearer picture concerning IFRS performance. Indeed, UK companies increased their sales (SALESHA) and managed to perform better on almost all the examined measures. Taking advantage of this more objective global accounting system and its external orientation, UK firms increased their profitability (OPM, EPS), leverage (ETL, INTCOV) and liquidity (CUR, WCR). Similarities between the UK's old GAAP and IFRS seem to have given UK firms an advantage in the transition process. Overall, the new accounting methods influenced many measures in their first implementation year, probably owing to their fair value orientation [130].

Concerning the post-adoption period (2006), in most cases the results are insignificant, with no major differences in most values. In other words, during 2006, firms from all countries maintained their performance. This may indicate that IFRS provided a more stable business environment, absorbing any disturbances in the initial adoption period. However, this does not seem to have been preserved under the crisis, as analysed in the next paragraph, while differences in changes to the variables between countries are notable, as described below.

2007–2009 (Panel B)

Panel B presents descriptive statistics for the period 2007–2009. This period was characterised by turmoil and unprecedented conditions for IFRS. The results reflect these difficult circumstances, as the values for all countries were lower for 2008 than for 2007. Noteworthy exceptions were Australia's accruals performance (Panel B1) in 2008, which decreased, although the following year they unexpectedly increased, and there are some indications that Australian companies managed to increase their leverage ratios (DEBT, TLSFU) despite the crisis. These negative outcomes were not sustained for long, as already in the next year, there are indications that the environment improved significantly. In this respect, Australia managed to balance its size ratios (SALESHA), improve its growth ratios (MVBV) even more than in the year before the crisis, and increase its liquidity (CFSH, WCR) and leverage (ETL, IGEAR).

On the other hand, Germany measurements for Germany (Panel B2) and Greece (Panel B3) did not improve.

Indeed, the results indicate that size (RESSFU), investment (PE) and leverage (TLSFU, DEBTE) ratios decreased further, while the most worrying factor is the increase in FFS firms. However, there are signs that profitability (OPM) was higher, but the most promising outcome was the increase in growth ratio (MVBV). On the other hand, the UK (Panel B4) again performed best after the crisis, and indeed was close to fully recovering from the effects of the crisis. The results indicate that all of its ratios increased. However, the huge increase in the number of FFS firms raises questions about this positive performance. Overall, all countries seemed to handle the crisis effectively, but there are obvious signs that more actions were necessary.

Country-level comparison (Panel C)

Comparisons between the countries' descriptive statistics (Panel C) are equally important. In this respect, the results reveal interesting information about the performance of these countries over the entire period. Once again, there are signs that smaller economies performed better under IFRS [35]. For example, Greece exhibited better growth (MVBV) measures. Taking advantage of the accuracy of IFRS and the safety of participating in the EU, Greece over-performed. Although its firms had the smallest mean of Big 4 auditors and it exhibited the highest mean of FFS during this period, these factors did not prevent it from exhibiting better results than the worst-performing country on each measure. With regard to the other countries examined, there was a clear ascendancy of Germany in terms of size measures, followed by the UK and Australia. Germany and the UK also had higher profitability (EPS), while Australian companies preferred to keep high retained earnings (PLOWB) and, in conjunction with higher leverage (DEBT, ETL), also maintained high liquidity (CUR, QUI). Overall, all countries maintained their characteristics during the difficult conditions of this period.

5.2 Falsified financial statements (FFS) and IFRS (H1)

Recent debates continue to focus on whether IFRS has managed to eliminate cases of falsified statements. The results of the first test reveal that under the first two years of IFRS adoption, both Australia and Germany eliminated such phenomena (Appendix, Table 3/Panel A), indicating that IFRS did indeed succeed in reducing FFS cases for Australian and German firms compared with previous GAAP. Nevertheless, during the latter stages of the crisis, FFS performance deteriorated for these countries, as the number of cases increased. It seems, therefore, that amendments to IFRS did not cause appropriate reactions during the crisis. This supports the critical opinion of those who consider that under old GAAP, firms would have performed better. This may also be reinforced by the results for the UK, where the results show an increase in the FFS measure for every examined year (Panel A4). In contrast, Greece (Panel A3) performed best among all the countries examined, reducing its FFS cases every year, even during the crisis, compared with old GAAP. This unexpected performance is important; however, until 2009, Greece had the highest mean of FFS incidents detected (Descriptive Statistics).

Additional tests were run in order to identify characteristics of firms with falsified statements. Detailed information is provided in Appendix, Table 3/Panel B, while Table 1 below shows overall relationships between FFS and the ratios.

Table 1: Relationships between FFS and ratios.

	Australia						Germany					
Year	Size	Inves.	Growth	Prof.	Liq.	Lev.	Size	Inves.	Growth	Prof.	Liq.	Lev.
2004	-	+	0	-	-	+	-	0	0	-	-	-
2005	-	-	0	-	-	+	0	0	0	+	+	+
2006	-	0	0	-	-	+	-	0	0	+	-	-
2007	-	0	0	-	-	-	-	0	0	-	+	+
2008	-	0	0	-	-	-	+	0	0	-	-	-
2009	-	-	0	-	-	+	+	-	0	-	-	-
	Greece						UK					
Year	Size	Inves.	Growth	Prof.	Liq.	Lev.	Size	Inves.	Growth	Prof.	Liq.	Lev.
2004	-	0	0	-	-	-	-	0	0	-	0	-
2005	-	-	-	0	-	-	+	0	0	-	+	-
2006	-	+	-	0	-	+	-	0	+	-	0	-
2007	0	0	0	0	-	+	-	0	0	-	-	-
2008	-	+	-	-	-	-	-	0	0	-	-	-
2009	-	0	0	-	-	-	-	-	0	-	-	-
(-) stands for a negative relationship, (+) for a positive relationship and (0) for no relationship												

The results reveal that from 2004 to 2009, Australian FFS firms displayed negative coefficients with regard to size (SALESHA), profitability (EPS) and liquidity (CUR, CFM) ratios. This indicates that under both old national GAAP and IFRS, even during the crisis, large Australian companies with high profitability and liquidity did not engage in FFS. However, the leverage ratios are higher for all years except for the period 2007–2008, indicating that firms with high leverage tended to falsify their statements, and that IFRS did not succeed in alleviating this phenomenon. Germany, on the other hand, seems to exhibit the most turbulent results. In 2004, under national GAAP, there were decreases in all ratios for FFS firms, namely size (SALESHA), profitability (EPS), liquidity (CASH) and leverage (CLSFU), whereas during IFRS implementation there were examples of positive correlations between these ratios and FFS firms. The most indicative case is increases in the size measure (RESTAS) in 2008 and 2009, meaning that during the crisis, even big companies engaged in falsified statements in Germany.

With regard to Greece and the UK, the results show that under both old GAAP and IFRS, FFS firms had lower size, profitability, liquidity and leverage ratios. The only exception for Greece was in 2006 and 2007, when firms with high leverage ratios (TLSFU, CGEAR) produced inaccurate statements; and for the UK, in 2005 even big companies (SALESHA) resorted to fraudulent reports, perhaps seeking to overcome the effects of the IFRS transition process. Overall, the results indicate that although IFRS adoption resulted in a decrease in FFS in some cases, it did not succeed in improving the qualitative characteristics of firms that took such action. Thus, under both old GAAP and IFRS, smaller firms with low profitability and liquidity continued to be more vulnerable to fraudulent statements.

5.3 Longitudinal analysis of accruals (H2)

Firms that engage in FFS aim to alter their financial reports in order to mislead with regard to their financial appearance and performance. Apart from artificial increases or decreases in revenues and earnings, this may involve using discretionary accruals. Our Level 1 model reveals interesting results concerning the accruals performance of individual firms over time (Figure 1). Figure 1 depicts firm-by-firm growth measures for accruals. Only significant results (not tabled) are displayed in order to enable their interpretation. The most interesting picture is of Australia, which displayed the most volatile measures and seems to have used accruals during crucial periods. Similarly, UK firms also seem to have engaged in accruals techniques in difficult situations, such as IFRS introduction and during the crisis. In addition, Germany shows signs of accruals application mainly during the crisis, while for Greece there is a smooth curve with extreme cases of deviation. However, the main aim of this test was to determine whether a firm that applied accruals assistance in one year would find it easier to use such procedures subsequently

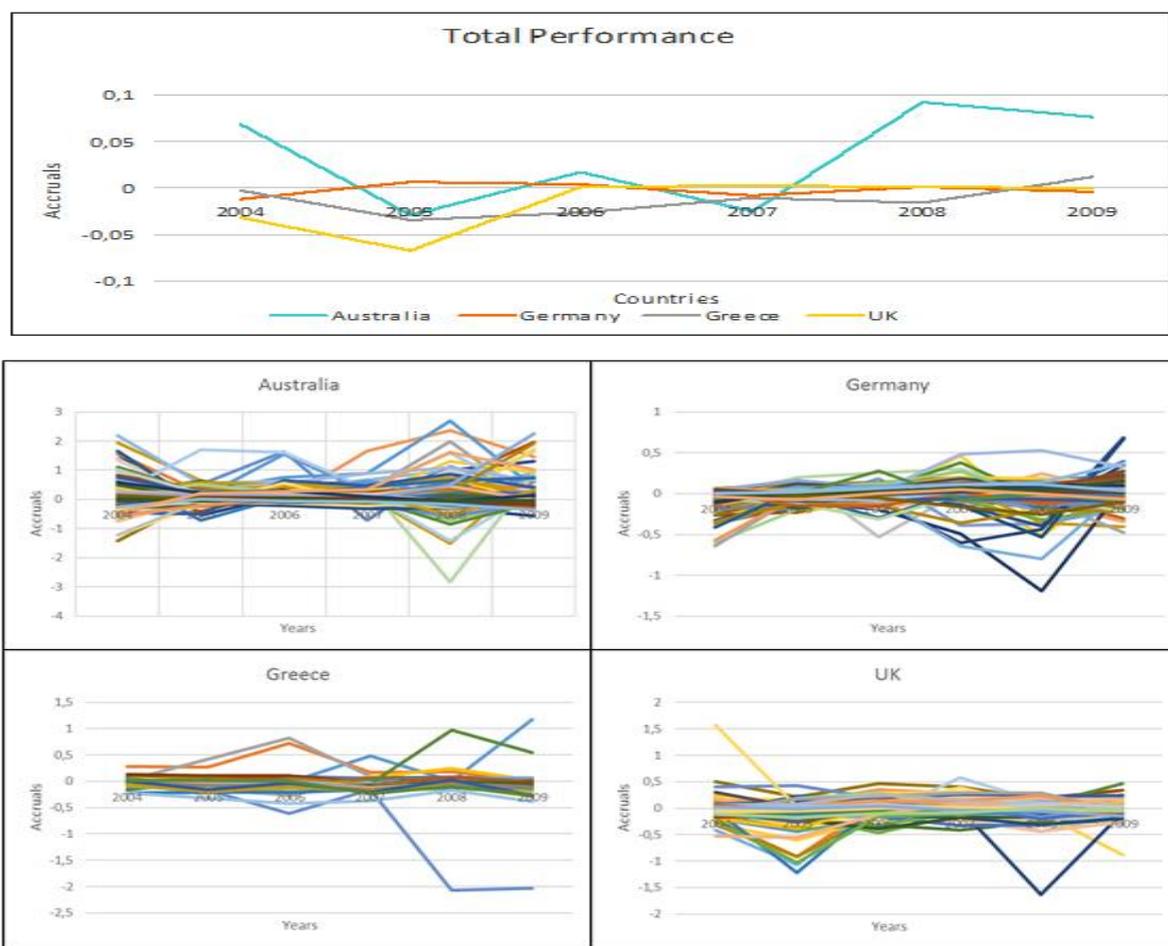


Figure 1: Accruals performance over the examined years.

The results reveal that this was not the case (Table 2).

Table 2: Accruals performance.

Characteristics	Australia	Germany	Greece	UK
Initial sample	456	404	205	297
Sig. results	285 (62,50%)	324 (80,20%)	133 (64,88%)	246 (82,83%)
<u>2004–2006</u>	<u>Cases</u>			
Increased accruals	196 (68,77%)	197 (60,80%)	71 (53,38%)	180 (73,17%)
Decreased accruals	89 (31,23%)	127 (39,20%)	62 (46,62%)	66 (26,83%)
<u>2007-2009</u>	<u>Cases</u>			
Increased accruals	79 (27,72%)	114 (35,19%)	47 (35,34%)	132 (53,66%)
Companies with decreased accruals	206 (72,28%)	210 (64,81%)	86 (64,66%)	114 (46,34%)
<u>Longitudinal Analysis</u>	<u>Cases</u>			
Preserved increased accruals	42 (14,74%)	65 (20,06%)	28 (21,05%)	94 (38,21%)
Preserved decreased accruals	52 (18,25%)	78 (24,07%)	52 (39,10%)	28 (11,38%)
Increased to decreased accruals	154 (54,04%)	132 (40,74%)	19 (14,29%)	86 (34,96%)
Decreased to increased accruals	37 (12,98%)	49 (15,12%)	34 (25,56%)	38 (15,45%)

The general outcomes indicate that firms in some countries used more accruals to overcome the transaction effects than to deal with crisis phenomena, those in other countries increased their accruals during the crisis, and many did so in both situations. Accruals increased for the period 2004–2006 and decreased from 2007 to 2009 (Table 2), but this does not indicate that firms exhibited less accruals in 2008 than, for example, in 2005. This performance can be determined only from the descriptive statistics but is beyond the purpose of this test, the sole aim of which was to detect the trend in accruals for each firm for these two periods. Indeed, in the cases examined, longitudinal analysis reveals that more than half of companies in Australia that applied earnings management during the adoption period did not use accruals during the crisis. Germany and the UK exhibited similar performance, indicating that firms that attempt earnings managements once will not necessarily use these methods forever, but that every such case is particular and requires further analysis. Equally interesting is the indication that fewer than 16 per cent of firms in countries that had decreased accruals during the adoption period increased their use during the crisis. Thus, the results are encouraging, as most firms that previously used misstatement techniques tended to stop doing so, and companies that had kept their accruals low tended not to increase them. The results of the Level 2 multilevel analysis (Appendix, Table 4) confirm this reflection. Unfortunately, the estimates of fixed effects (Panel A) exhibit a positive relationship between time and accruals for Australian FFS firms, indicating that they tended to increase their accruals every year. This result may explain their volatility in the Level 1 test. On the other hand, there is a significant negative relationship between time and accruals for FFS firms in all European countries. This suggests that, year on year, FFS firms tended to decrease their accruals in Europe. This would be a beneficial outcome for Europe were it not for the following issues. First, the increase in FFS firms for Germany and the UK, determined in the previous Test 1, means that firms may have focused on methods of earnings management other than accruals. Second, there is evidence of a significant positive interaction between time and non-FFS firms, indicating that in every year, non-FFS firms in Germany and the UK tended to increase their accruals. Thus, there was an increased likelihood that these firms

would become FFS firms, and in Germany this started to appear, as Panel B indicates that, for the first time, non-FFS German firms had a higher mean of accruals than FFS firms (there is a negative difference between them).

Overall, this test overturns the general estimations for accruals, leading to the conclusion that, when a firm has high accruals, there is high potential for it to produce falsified statements; but this does not mean that if a firm has falsified statements, it necessarily uses accruals. At the same time, if a firm uses earnings management once, there is high possibility that it will not do so again in similar situations.

5.4 Individual standards and earnings management (H3)

The third hypothesis (Appendix, Table 5) aimed to shed more light on discretionary accruals, focusing on individual standards of IFRS that might affect them. For Australia, the results indicate that, during the first year of IFRS implementation, IAS 12, 16 and 36 had a negative effect on accruals, meaning that they led to the elimination of accruals by Australian firms (Panel A), and in the case of IAS 12 the outcome was impressive. Indeed, this individual standard positively affected more than 66 per cent of the companies examined. However, this performance did not last long. During the ensuing years, the effects of IAS 16 and 36 became negative, while IAS 12 also contributed to an increase in accruals during the crisis. On the other hand, apart from the initial and crisis years, cash flow statements (IAS 7) seemed not to be a preferred tool for companies to increase earnings management. Only IAS 32–39 resulted in decreased accruals during the crisis, indicating that the amendments to these standards that took effect in 2008–2009 were fully effective for Australian firms.

Similarly, for the first two years of IFRS implementation, there was an impressive positive effect of individual standards for Germany (Panel B), as most of them (IAS 7, 12, 16, 23, 33 and 38) contributed to the elimination of accruals. This corresponds entirely with the result of Test 1, which showed a decrease in FFS firms during this period. Nevertheless, in 2007, a year characterised by early manifestations of crisis effects, there are indications that some of the previous standards did not succeed so well. Indeed, the average material impact of IAS 7, 23 and 38 was positive in relation to accruals, while improvements to IAS 32–39, which were effective in Australia, did not seem to have the same effect for Germany during the crisis. However, the most encouraging fact is that, under crisis conditions, German firms did not use IAS 33 (EPS) to improve their financials. Since many have expressed concern that IAS 18 and IAS 33 were the first individual standards used to increase accruals, it is highly important that Germany was the only country examined that did not apply this option.

Proceeding to the results for Greece (Panel C), during the first implementation year and during the crisis, the average impact on accruals of most individual standards was positive, while in all other years most (IAS 12, 16 and 18) had negative effects. As in Australia, IFRS improvements to IAS 32–39 were successful. Finally, the UK (Panel D) exhibited an impressive first year of IFRS implementation, using the least possible individual standards to increase accruals, but its performance over the following years declined. The year 2008 was the peak of this achievement, where only two individual standards (IAS 16 and 36) contributed to the decrease in accruals. Similarly to Germany, in the UK the improvements to IAS 32–39 had no positive effects.

Overall, the results indicate that once again each country performed differently, although the effects on European countries were similar to Australia. For example, IAS 16 and 33, which for most years had a positive impact on accruals in Australia, had the opposite effect for all other countries. The only individual standards showing a common reaction are IAS 12 and IAS 32–39, which made negative and positive contributions respectively. Under such circumstances, IAS 12 indicates that low taxation reduces earnings management, while the fact that, in all countries, IAS 32–39 were positively related to accruals may indicate that the IFRS board should introduce further amendments. Thus, as proved by these results, and considering the indications of the previous Hypothesis, it is crucial for investors and authorities to have a clear picture of each separate firm's and standard's performance.

5.5 Auditors' size and quality of financial statements (H4)

Since its introduction in 1992, statutory auditing has expanded [131], making forensic accounting necessary for listed companies. However, the effectiveness of auditing has been constantly questioned [132], especially under IFRS where expectations seem to be higher. Previous studies find that companies that select Big 4 auditors have less scope for earnings management procedures, although the quality difference due to auditors' size attenuates in countries with stronger investor protection [7,116]. Following this rule, Australia, Germany and the UK should have overperformed compared with Greece. However, in our analysis, the findings (Appendix, Table 6/Panel A) reveal a more complicated situation. Indeed, Australian firms audited by Big 4 companies displayed a positive relationship with accruals for all years of IFRS adoption except 2006 (DV value).

The outcome of this test is also revealing about the characteristics of firms that employed such practices. More specifically, there is a positive relationship between accruals and size ratios (SALETAS) from 2005 to 2007, suggesting that larger firms may be inclined to use earnings management in order to retain the security of a Big 4 auditor. However, this trend ceased during the crisis (LNMV). Australian firms also displayed a positive association between accruals and profitability ratios (OPM, EPS), proving that highly profitable firms may have employed high accruals. The first encouraging results are indicated by the correspondence between accruals and leverage, which was significantly negative (DEBTE) for most years. Thus, highly leveraged firms audited by Big 4 companies did not use high accruals in order to overcome debt issues.

Furthermore, the results reveal that German firms with Big 4 auditors had a negative accruals correlation under IFRS, except for 2006 and 2008. Although this performance may be justifiable under crisis conditions, during 2006 companies seem to have taken advantage of the elastic regulations of the first implementation year in order to gain competitive advantage. Similarly to Australia, German firms exhibited a positive relationship between accruals, size (SALETAS, LNMV) and leverage (DSFU, DEBT, IGEAR) measurements for all years. This indicates that Big 4 auditors did not prevent large German companies with high leverage ratios from using high accruals.

With regard to profitability, during the crisis there was a negative relationship, meaning that companies with low profitability seemed to engage in earnings management in order to improve their financial figures. Moreover, there appears to have been a negative correlation between Greek and UK firms with Big 4 auditors

and accruals, except during the crisis period. They exhibited similar results in relation to size ratios as the aforementioned countries. Concerning the other ratios, UK firms exhibited a negative correlation between accruals and profitability (NPM), while Greece showed no clear trend in performance for these ratios throughout the examined years. Finally, another striking result is that under old GAAP, all countries except Germany had a negative correlation with accruals, meaning that firms with Big 4 auditors appeared to engage in fewer earnings management cases.

In addition, as already mentioned, apart from auditors' size, recent debates focus on their rotation. Most people consider that a more rapid change procedure should be introduced for auditors, as in the UK, but many oppose this on the grounds of increased cost and potentially disruptive effects. The results (Appendix, Table 6/Panel B) in this case are revealing. Indeed, the UK authorities might feel justified, as UK firms that changed their auditors decreased their accruals under IFRS. In Germany as well, most firms that rotated auditors exhibited negative accruals. Greece did not display significant results as few firms made such changes, while Australia displayed a negative correlation only for the years 2006 and 2009. Concerning additional characteristics, in Australia there was a negative correspondence between accruals and profitability (NPM) and a positive correspondence with leverage (DEBT), indicating that firms with low profitability and/or high leverage took advantage of this change in order to increase their accruals. The results for the remaining ratios were similar, with the exception of the UK, which exhibited a negative relationship between leverage and accruals for most years (DEBT). This indicates that in every case of change, there was a high possibility that the new auditors would not use earnings management techniques.

Overall, this hypothesis sought to examine a crucial concept relating to IFRS implementation during these years. FFS is a complicated notion that relates to many aspects of IFRS performance. In order to determine whether these aspects had improved, the study combined a number of parameters, as expressed in the tests performed. The results indicate that IFRS did indeed improve the qualitative characteristics of FFS cases and the quality of smaller auditors.

6. Conclusions

IFRS implementation has been the most significant reform in accounting. The above results raise interesting issues over the ten years of IFRS implementation. Following the literature, we conclude that IFRS have performed better in most crucial cases compared with old national GAAP, and even in cases where they did not succeed, they recovered quickly. It seems, therefore, that European and Australian listed firms in our sample successfully transferred from one system to another with the least possible effects, revealing that adopting IFRS was a helpful tool for improving financial figures. Furthermore, the amendments to IFRS also seem to have been successful in most cases; hence we deduce that, in general, the objectives of IFRS have been realised. However, study's empirical findings, as described in the previous chapter, indicate considerable diversity in the reactions of different countries for the same tests. For example, with regard to the individual standards responsible for encouraging speculation, we noticed subsequent differentiation in our sample. Therefore, the harmonisation process seems questionable. Through the literature review, we realised the importance of harmonisation between countries that follow IFRS. Ball [51] concludes that, despite the implementation of international standards, local

practices have great effects on them, increasing her scepticism about IFRS adoption. Thus, she asks: “Does anyone seriously believe that implementation will be of equal standard in all countries that have announced the adoption of IFRS in one way or another?” [51, p.31,133] is similarly concerned about whether variations between different regimes are observable following IFRS adoption. Although we had not considered this question when we planned this research, and contrary to Ramanna and Sletten [134], our empirical results question the harmonisation of accounting standards under IFRS.

Furthermore, we contribute new insights into the earnings management debate, as this is the first such study to apply longitudinal analysis, enabling us to determine accruals performance through a year-by-year examination of each firm separately. It is easy to claim that accruals increased during the crisis, but it is more difficult to detect whether firms that increased their accruals during the crisis also increased their accruals following IFRS introduction. Similarly, we contribute new knowledge relevant to academics and professionals, as we have proved that IFRS was ineffective in controlling falsified statements. We have revealed that larger companies were often more vulnerable to earnings management, and have found that big auditing companies do not always prevent falsified statements, while when firms change their auditors there is a reduced incidence of earnings management. Furthermore, our results provide insights into another major issue relating to IFRS: the initial advantages of adoption do not seem to be maintained, as we detected differences in year-on-year performance, even in the same country.

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Appendix (Tables display only significant results)

Table 1: Applied Ratios.

The research capture the aspects of firms using the following ratios			
1. Market Value-SIZE		2. Investement	
<u>SALESHA</u>	Sales per share	<u>DIVSH</u>	Dividend per share
<u>NAVSH</u>	Net Asset Value per share	<u>DIVYI</u>	Dividend yield (div per share/share price)
<u>SALETAS</u>	Turnover/Total Assets	<u>DIVCOV</u>	Dividend Cover (Net profit/dividend)
<u>RESTAS</u>	Reserves/Total Assets	<u>PE</u>	P/E
<u>RESSFU</u>	Res/Shareholders Funds	<u>HOLTA</u>	Holdings/Total Assets
<u>LNMV</u>	Natural Argorithm of MV	4. Profitability	
3. Growth		<u>PLOWB</u>	Plowback Ratio (Retained Profit/Operating Profit)
<u>MVBV</u>	Market to Book Value	<u>OPM</u>	Operating Profit Margin (oper profit/sales)
<u>EPSG</u>	Earnings per Share Growth	<u>NPM</u>	Net Profit Margin (net profit/sales)
<u>PEG</u>	PE Ratio/Annual EPS growth	<u>ROSC</u>	(Profit after tax/Equity+Reserves)
<u>DIVSHG</u>	Dividend per Share Growth	<u>EPS</u>	EPS
5.Leverage		<u>ROCE</u>	(PBIT/Equity+Reserves+Lt loans)
<u>DEBT</u>	debtor turnover (sales/debtors)	5. Liquidity	
<u>ETL</u>	Equity/Total Liabilities	<u>CUR</u>	Current Ratio
<u>TLSFU</u>	Total Liabilities/Shareholders Funds	<u>CASH</u>	Cash Ratio
<u>CGEAR</u>	TL/Capital Employed-Intangibles +Short-term Liabilities	<u>QUI</u>	Quick Ratio
<u>CLSFU</u>	Current Liabilities/Shareholders Funds	<u>CFSH</u>	Operating Cash Flow per share [(Oper profit+depreciation)/No of shares]
<u>INTCOV</u>	Operating Profit/Interest Charge	<u>CFM</u>	Cash Flow Margin (earnings + dep/sales)
<u>IGEAR</u>	Interest Charge/Operating Profit	<u>WCR</u>	Working Capital Ratio (Sales/Working Capital)
<u>DEBTE</u>	Debt/Equity	<u>STOCKT</u>	Stock turnover (cost of sales/stock)
<u>DSFU</u>	Debt/Shareholders Funds		

Table 2 : Descriptive Statistics.

Panel A:IFRS vs Old GAAP							Pair-wise t-tests for equality of means		
	2004		2005		2006		2004 vs 2005	2004 vs 2006	2005 vs 2006
	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev			
1.Australia									
NAVSH	1,4952	3,1354	1,7611	4,4103	1,3937	2,5089			*
SALETAS	1,0698	1,7468	0,9206	1,3916	0,7958	0,8425	*	***	*
RESTAS	0,0518	0,4128	0,0861	0,5612	0,1213	0,7729		*	
RESSFU	0,0837	0,4360	0,0185	0,6599	0,0688	0,5735	**		*
LNMV	3,2182	3,0454	3,3588	3,0391	3,7479	3,0207		***	*
DIVYI	0,0243	0,1353	0,0535	0,4349	0,0322	0,2836	*		
DIVCOV	1,0533	7,7775	0,7931	4,2952	1,1972	2,7760			*
HOLTA	0,0289	0,1210	0,0394	0,1132	0,0385	0,1013	*	*	
MVBV	3,1676	13,8328	3,6739	9,7222	2,8267	6,5761			*
PLOWB	3,0469	13,9822	2,6041	13,4560	3,7078	12,7515			*
OPM	-0,4100	2,0474	-0,7943	2,9266	-0,6778	1,7437	**	**	
NPM	-1,2767	3,3331	-1,1059	2,7556	-1,3988	3,2771			*
ROSC	-0,1795	1,5714	-0,0279	1,5006	-0,0832	1,5358	*		
CASH	1,9784	5,2730	1,3600	3,4553	1,4362	3,9644	**	*	

QUI	2,6516	3,6306	3,2067	5,1986	3,5588	6,3378	*	***	
WCR	4,0357	15,9593	3,0024	11,5861	2,2015	14,0555		*	*
STOCKT	6,2317	11,4941	7,8350	14,4088	8,1828	16,1229	*	**	
DEBT	10,807	14,7790	8,8864	10,5082	8,9864	13,2470	**	**	
CLSFU	0,7078	4,9077	0,5390	1,3408	0,3968	1,3955		*	*
DEBTE	0,2657	1,3784	0,2872	0,9961	0,3525	1,0674		*	
2.Germany									
FFS	0,0594	0,2367	0,0223	0,1478	0,0173	0,1306	***	***	
SALESHA	5,1935	3,8847	4,6151	3,4375	3,8905	2,7648	**	***	***
SALETAS	1,1909	0,6925	1,0913	0,6274	1,1289	0,6426	**		
RESTAS	0,3713	0,3104	0,2669	0,4656	0,2511	0,4401	***	***	
LNMV	4,3441	2,2974	4,6534	2,2473	4,7716	2,3533	*	***	
DIVYI	0,0324	0,2936	0,0166	0,0740	0,0130	0,0371	*		
DIVCOV	1,2111	4,6444	1,1650	4,0218	1,7317	6,6815			*
PE	9,6265	24,4322	13,6744	22,3777	13,2751	20,0454	**	**	
OPM	0,0209	0,4137	0,0540	1,7974	0,0538	0,3636		*	
ROSC	0,0212	0,5963	0,0876	0,7240	0,1016	1,4894	*		
EPS	0,7262	8,2000	1,7206	8,7721	1,6248	5,5413	*	*	
CUR	2,3739	3,8277	2,1762	2,9171	2,0519	3,3706		*	
CASH	4,8018	52,1461	1,1168	4,0035	1,1986	8,1140	*		
QUI	2,3580	8,0834	1,6036	2,2552	1,6254	2,2342	*	*	
DEBT	4,3000	2,6894	4,5162	2,5553	4,7006	2,3900	*	**	
ETL	1,1380	1,7128	1,2964	1,8163	1,3166	1,8184	*	*	
INTCOV	3,9855	15,9924	7,6858	45,1589	4,9733	16,7322	*		
DEBTE	0,9320	2,5839	0,7991	2,1255	0,7458	1,8639		*	
3.Greece									
FFS	0,2585	0,4389	0,1805	0,3855	0,1756	0,3814	*	**	
NAVSH	3,3048	8,3533	3,3184	5,5931	2,6335	5,7629			*
RESTAS	0,1295	0,1486	0,3022	0,2472	0,2774	0,2669	***	***	*
RESSFU	0,1633	0,3973	0,3504	0,1838	0,3296	0,1950	***	***	*
LNMV	4,0834	1,1808	3,8145	1,6018	4,1548	1,5820	*		**
DIVSH	0,0782	0,2265	0,1147	0,2904	0,1171	0,3350		*	
DIVYI	0,0166	0,0197	0,0320	0,0644	0,0220	0,0738	***		*
DIVCOV	2,9541	4,9360	1,2277	9,1653	0,7750	11,0371	**	**	
HOLTA	0,1794	0,2251	0,0909	0,3272	0,1046	0,4548	***		
MVBV	1,8881	1,8909	6,1334	11,2420	8,0356	13,7108	***		*
OPM	0,0124	0,8451	1,3762	14,5055	0,2498	4,7509			*
ROSC	0,1151	0,7960	0,0236	0,1974	-0,9995	14,6643	*		*
ROCE	0,1263	0,4456	0,0547	0,1687	0,0685	0,1305	**	*	
CUR	2,5085	5,3267	6,8317	11,7128	1,8849	2,4848	***	*	***
CASH	0,6026	4,9610	0,3689	2,9970	0,0931	0,2313		*	
QUI	1,8680	4,7763	6,3509	11,6404	1,3867	1,9338	***	*	***
CFM	-0,1053	3,3770	0,3067	1,6832	0,2448	1,3055	*		
ETL	4,5689	17,9645	2,8758	9,1012	1,6826	6,8325		**	*
TLSFU	0,6256	2,6378	0,8356	1,1763	1,2759	1,5098		***	***
CGEAR	0,4663	0,3376	0,4846	0,3817	0,6152	0,5549		***	***
CLSFU	0,4176	2,5438	0,5863	0,9452	0,8687	1,2403		**	**
INTCOV	7,2911	18,8463	3,6028	10,3199	2,7258	8,6334	**	***	
IGEAR	1,1259	5,3321	0,7079	6,4158	0,3221	3,2480		*	
DEBTE	0,2568	0,4490	0,3711	1,0691	2,0293	21,5315	*		
4.UK									
SALESHA	1,9733	1,4965	2,8917	2,3239	2,9164	2,3473	***	***	
SALETAS	1,0327	0,6542	1,0941	0,7261	1,0398	0,6606			*
RESTAS	0,2116	0,2669	0,1580	0,3003	0,1589	0,3369	**	**	
RESSFU	0,3141	0,2522	0,2075	0,7363	0,2060	0,5424	**	***	
LNMV	5,7945	2,1177	5,9253	2,1891	6,0976	2,0789		*	
DIVYI	0,2271	0,2050	0,3071	0,2697	0,2938	0,2564	***	***	
PE	2,0453	4,7893	12,9472	14,6634	12,9394	13,8582	***	***	

HOLTA	0,2216	0,2716	0,1662	0,2563	0,0245	0,0779	**	***	***
MVBV	0,3491	1,3963	1,7296	3,8446	1,8504	3,7847	***	***	
OPM	0,1063	0,3611	0,1563	0,3924	0,1737	0,3214	*	**	
ROSC	0,1481	0,2295	0,2449	0,6635	0,2740	0,6759	**	***	
EPS	0,2184	0,3538	0,3007	0,8473	0,3708	1,1832	*	**	*
ROCE	0,1072	0,1346	0,1240	0,1325	0,1309	0,1935	*	*	
CUR	1,3930	0,4754	1,1784	0,5157	1,5212	0,4968	***	***	***
QUI	1,1035	0,3208	1,1462	0,3694	1,1501	0,4694	*		
CFSH	0,3679	0,4652	0,6868	0,9549	0,7774	1,1444	***	***	
CFM	0,1001	0,2300	0,1561	0,2844	0,1573	0,2978	***	***	
WCR	0,4146	4,4972	4,6145	13,7949	6,3122	12,6316	***	***	*
ETL	0,8979	0,7559	0,9357	1,0334	1,1587	1,6848		**	*
CGEAR	0,7741	1,6042	1,0748	3,2764	1,0355	2,0116	*	*	
INTCOV	2,8593	3,2790	3,3227	4,9571	3,3083	4,5732	*	*	
IGEAR	0,1312	0,2830	0,2073	0,5154	0,1688	0,3860	**	*	
DEBTE	0,5729	0,6653	0,8249	1,5687	0,7058	1,6465	**		

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% level respectively.

Panel B:IFRS vs Crisis							Pair-wise t-tests for equality of means		
	<u>2007</u>		<u>2008</u>		<u>2009</u>		2007 vs 2008	2007 vs 2009	2008 vs 2009
	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.			
1.Australia									
Accruals	-0,0217	1,4976	-0,3383	1,7506	0,6015	0,5783		*	**
FFS	0,1798	0,3845	0,2522	0,4347	0,1952	0,3968	***		
SALESHA	1,4812	2,2613	1,4753	2,2290	1,3424	2,0841		*	*
SALETAS	0,7827	0,7706	0,8849	1,0749	0,8015	1,0867	*		*
RESTAS	0,3204	2,1300	0,4476	2,7488	0,6234	3,8599		*	
RESSFU	0,0768	0,4808	0,1039	0,8163	0,1187	0,3435		*	
LNMV	3,9924	2,9765	3,2803	2,9180	3,7862	2,9504	***	*	***
DIVYI	0,0142	0,0313	0,0348	0,1158	0,0309	0,2030	***	**	
DIVCOV	1,0735	2,7269	0,8794	3,1596	0,6206	5,8144	*	*	*
PE	7,0045	24,9862	3,6764	14,9594	4,8436	28,4246	**	*	
MVBV	2,8111	6,7729	1,6064	6,2610	3,7492	12,9698	***	*	***
OPM	-0,5306	1,6650	-0,7258	1,8770	-0,9531	3,6191	*	**	*
NPM	-1,0414	2,4801	-1,3380	3,1667	-1,2253	3,2128	*		
ROSC	-0,0781	0,9708	-0,3172	1,4843	-0,1854	1,3061	***	*	*
EPS	-0,0016	0,8713	0,0131	0,8127	0,0601	0,6288		*	
CUR	4,0579	6,8339	3,9347	7,9909	3,6301	5,2447		*	
CASH	1,0350	3,2166	0,9065	3,2699	0,8429	2,2056		*	
CFSH	0,1621	0,9403	0,1203	1,1030	0,2289	1,2199			*
CFM	-0,8125	2,8276	-1,1623	3,1993	-0,9149	4,3117	*		*
WCR	4,9853	14,0087	1,9704	13,8906	3,9043	13,8157	***	*	**
DEBT	8,6022	10,8707	9,6493	12,3658	9,4058	12,5149	*		
ETL	5,6207	10,5587	5,6250	12,1035	6,5515	14,3817		*	*
TLSFU	0,7778	2,3849	0,9506	3,0601	0,7723	2,4155	*		
INTCOV	1,3739	17,4252	0,1887	14,7271	0,1001	18,3680	*	*	
IGEAR	0,1987	1,9732	-0,0344	0,9764	0,3182	3,3021	**		**
DEBTE	0,3309	0,8076	0,3916	1,0132	0,2280	0,9472		*	**
DSFU	0,2944	1,0094	0,3418	1,2411	0,2560	0,9042			*
2.Germany									

SALESHA	3,6203	2,4982	3,9456	2,7626	3,9057	2,7720		*	
NAVSH	9,3706	11,7850	9,1309	11,3985	8,1815	10,5589		*	*
SALETAS	1,1206	0,6040	1,1620	0,6639	1,0536	0,6147	*	*	**
LNMV	4,8958	2,3891	4,3621	2,3949	4,5654	2,4093	***	*	
DIVYI	0,0177	0,0612	0,0342	0,1024	0,0271	0,1231	***		
DIVCOV	1,1648	2,8238	0,8656	3,0045	0,8896	6,3313	*		
PE	11,3875	20,6887	7,6974	20,1307	8,2726	24,1211	**	**	
HOLTA	0,0513	0,1423	0,0484	0,1370	0,0634	0,2118			*
MVBV	2,3591	11,1471	1,1955	10,1666	1,7576	9,3409	*		
OPM	0,0417	0,4461	-0,0132	0,5811	-0,0039	1,0167	*		
NPM	0,0229	0,4255	-0,0297	0,5746	0,0009	0,9010	*		
ROSC	0,1264	1,0063	0,0438	0,4705	0,0138	0,8498	*	*	
ROCE	0,0850	0,1753	0,0714	0,1805	0,0352	0,2985		***	**
CASH	0,5712	1,0395	0,5815	1,0221	0,9406	3,6436		**	
CFSH	2,1556	3,8807	2,2058	4,8408	1,3499	2,5510		***	**
STOCKT	3,0718	2,2290	3,2191	2,4173	2,8879	2,2949			**
INTCOV	6,5106	19,6079	4,1361	19,0525	3,1489	19,6758	*	**	*
3.Greece									
FFS	0,1171	0,3223	0,1366	0,3442	0,1756	0,3814		*	
NAVSH	3,4883	5,5179	3,3523	5,9556	2,6530	6,4583		*	
RESSFU	0,4429	0,1676	0,4399	0,1703	0,3506	0,2065		***	***
LNMV	4,2876	1,5989	3,3806	1,6190	3,4760	1,7108	***	***	
DIVYI	0,0242	0,1203	0,0603	0,2122	0,0355	0,1301	**		*
DIVCOV	0,9755	6,1683	0,2396	10,6356	-0,8311	8,0265		**	
PE	17,4977	29,9540	9,6418	24,8139	5,8320	28,8944	***	***	*
MVBV	2,3826	9,5384	0,9521	2,7503	1,4022	6,4495	**		*
OPM	-0,2239	9,6973	-0,0481	1,0654	0,1678	2,3907			*
ROSC	0,0757	0,1794	0,0332	0,4652	0,0037	0,2171		***	
EPS	0,2110	0,9046	0,0454	0,6167	0,0405	0,6292	**	**	
ROCE	0,0795	0,1462	0,0282	0,1793	0,0462	0,2462	*	*	
CUR	1,7497	1,3267	1,6761	1,3032	2,9910	4,2543		***	***
CASH	0,5674	2,6310	0,3201	1,0830	0,5790	1,3572			**
QUI	1,3108	1,3123	1,2451	1,2019	2,3967	4,7023		***	***
CFM	0,1986	1,5616	0,0133	0,2944	0,3292	1,8841	*		**
WCR	2,4370	13,8111	4,0441	14,7373	-0,1834	20,3203		*	**
STOCKT	7,2417	8,7443	8,2060	9,8764	6,8154	10,3790			*
ETL	0,7657	1,4914	0,6887	1,1459	1,6853	2,5863		***	***
TLSFU	1,7028	1,5063	1,9760	1,9648	1,0890	1,8522	*	***	***
CGEAR	0,7888	0,4998	0,8064	0,4666	0,5479	0,7579		***	***
CLSFU	1,0667	1,0604	1,2171	1,3409	0,7008	1,4974		***	***
INTCOV	2,2289	7,0110	0,9233	4,7741	0,9078	7,1681	**	*	
IGEAR	-0,1395	3,2933	0,3252	2,4668	0,1987	3,3352	*		
DEBTE	1,2553	1,6124	1,5603	2,3450	0,5386	0,8955	*	***	***
DSFU	0,6076	0,6432	0,7589	0,9501	0,3882	0,5230	*	***	***
4.UK									
FFS	0,0673	0,2510	0,1044	0,3063	0,1953	0,3971	*	***	***
SALESHA	2,9663	2,3666	3,2329	2,4576	3,0199	2,3884	*		
RESTAS	0,2143	0,6402	0,1339	0,2647	0,1427	0,3251	**	*	
LNMV	5,9440	2,1509	5,2514	2,2909	5,6840	2,2688	***	*	**
DIVSH	0,2408	0,2218	0,3039	0,2868	0,2673	0,2974	***		
DIVYI	0,3400	0,2910	0,3169	0,2947	0,2981	0,2944		**	
DIVCOV	0,9669	1,6420	0,6240	2,1533	0,6564	2,5054	**	**	

PE	11,9978	19,0841	6,1535	16,3231	10,0661	22,9346	***		**
HOLTA	0,2093	0,2695	0,1968	0,2731	0,0525	0,1728		***	***
MVBV	2,4537	14,7323	0,7512	14,3459	1,0175	14,2823	*		
OPM	0,1480	0,9416	0,0711	0,3896	0,0935	0,2821	*		
ROSC	0,2546	0,5352	0,0984	0,5862	0,1657	0,5829	***	*	*
EPS	0,3509	1,0318	0,1715	0,8916	0,1822	0,7046	**	**	
ROCE	0,1206	0,2715	0,0773	0,2235	0,0923	0,1835	**	*	
CASH	0,4178	0,3413	0,3585	0,2929	0,4122	0,3253	**		**
CFM	0,1251	0,1854	0,0864	0,2589	0,1005	0,2452	**	*	
DEBT	3,3747	1,6221	3,4578	1,7529	3,5589	1,7747		*	
ETL	1,1880	1,8164	1,0084	1,5471	1,0759	1,6334	*		
CGEAR	0,9573	1,6562	1,2487	2,7880	1,1232	1,7964	*		
INTCOV	6,3387	11,2326	3,9382	13,1282	4,0268	7,5237	**	***	
DSFU	0,5207	0,7484	0,6849	1,7760	0,6870	2,1055	*	*	

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% level respectively.

Panel C: All Countries (2004-2009)									Pair-wise <i>t</i> -tests for equality of means					
	Australia		Germany		Greece		UK		Aus vs Ger	Aus vs Gr	Aus vs UK	Ger vs Gr	Ger vs UK	Gr vs UK
	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.						
FFS	0,184	0,387	0,062	0,242	0,174	0,379	0,088	0,283	***		***	***	***	***
Big 4	0,530	0,499	0,560	0,496	0,213	0,409	0,872	0,333	**	***	***	***	***	***
SALESHA	1,442	2,185	4,195	3,102	2,711	2,262	2,833	2,286	***	***	***	***	***	***
NAVSH	1,553	3,921	9,339	12,646	3,125	6,3460	1,517	1,654	***	***		***	***	***
SALETAS	0,875	1,2022	1,124	0,6426	1,109	10,950	1,044	0,692	***		***		***	
RESTAS	0,275	2,171	0,289	0,693	0,473	8,040	0,169	0,379			**		***	
RESSFU	0,078	0,573	0,319	0,469	0,346	0,251	0,245	1,015	***	***	***	*	***	***
LNMV	3,564	3,003	4,598	2,355	3,866	1,592	5,783	2,197	***	***	***	***	***	***
DIVSH	0,063	0,245	0,640	3,135	0,115	0,374	0,278	0,272	***	***	***	***	***	***
DIVYI	0,031	0,239	0,021	0,081	0,031	0,120	0,297	0,272	**		***	***	***	***
PE	4,860	22,403	10,65	22,138	12,50	28,167	9,374	16,742	***	***	***	**	**	***
HOLTA	0,037	0,1301	0,052	0,174	0,125	0,595	0,145	0,244	***	***	***	***	***	
MVBV	2,972	9,867	2,068	12,497	3,465	9,114	1,359	10,484	***		***	***	**	***
PLOWB	4,188	16,037	0,930	10,021	0,913	14,550	1,270	7,695	***	***	***			
OPM	-0,68	2,425	0,025	0,922	0,255	7,470	0,124	0,5020	***	***	***		***	
NPM	-1,23	3,052	0,015	2,039	0,010	1,853	0,055	0,297	***	***	***			
ROSC	-0,14	1,4121	0,065	0,9176	-0,12	6,0008	0,1978	0,5686	***		***		***	**
EPS	0,016	0,9479	1,281	7,160	0,165	0,894	0,265	0,877	***	***	***	***	***	***
ROCE	-0,12	1,891	0,068	0,545	0,067	0,245	0,108	0,196	***	***	***		***	***
CUR	3,819	6,130	2,202	4,441	2,940	5,944	1,423	0,539	***	***	***	***	***	***
CASH	1,259	3,699	1,533	21,668	0,421	2,695	0,407	0,338		***	***	*	**	
QUI	3,350	6,161	1,661	4,112	2,426	5,859	1,134	0,417	***	***	***	***	***	***
CFSH	0,175	1,243	2,500	7,851	0,538	1,681	0,663	1,185	***	***	***	***	***	**
CFM	-1,23	6,504	0,065	1,565	0,164	1,918	0,121	0,254	***	***	***	*		
WCR	3,350	13,973	4,736	27,142	1,853	14,335	5,177	15,292	**	***	***	***		***
STOCKT	7,483	14,100	3,115	2,366	7,489	11,057	2,791	2,690	***		***	***	***	***
DEBT	9,389	12,472	4,684	2,622	3,328	3,850	3,544	1,712	***	***	***	***	***	**
ETL	6,212	13,342	1,238	1,941	2,044	8,863	1,044	1,466	***	***	***	***	***	***
TLSFU	0,815	2,358	1,468	4,533	1,250	1,889	1,262	3,859	***	***	***			
CGEAR	0,660	4,262	0,802	2,814	0,618	0,534	1,035	2,279			***	**	***	***
CLSFU	0,533	2,769	0,801	3,627	0,809	1,552	0,684	2,251	***	***	**			*
INTCOV	0,949	17,332	5,078	24,923	2,946	10,684	3,956	8,292	***	***	***	***	*	***
IGEAR	0,108	1,665	0,139	2,197	0,423	4,256	0,170	1,274		***		***		**

DEBTE	0,309	1,049	1,052	4,424	1,001	8,893	0,755	2,480	***	***	***		**	
DSFU	0,294	1,114	0,632	3,324	0,684	8,807	0,595	1,721	***	**	***			

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% level respectively.

Table 3: H1 Results

Panel A: Test 1 - Multinomial Logistic Regression																	
1. Australia		Reference year 2004				Cases: 2.555			Missing Cases: 181			Total: 2.736			Accuracy Rate: 43,4%		
2005				2006			2007			2008			2009				
Var.	Coef.	Sig.	Exp(B)	Coef.	Sig.	Exp(B)	Coef.	Sig.	Exp(B)	Coef.	Sig.	Exp(B)	Coef.	Sig.	Exp(B)		
FFS	-0,57	**	0,56	-0,41	*	0,661	0,759	***	2,137	0,497	**	1,644	0,415	*	1,514		
	-0,24			-0,25			-0,24			-0,22			-0,23				
2. Germany		Reference year 2004				Cases: 2.222			Missing Cases: 202			Total: 2.424			Accuracy Rate: 47,8%		
2005				2006			2007			2008			2009				
Var.	Coef.	Sig.	Exp(B)	Coef.	Sig.	Exp(B)	Coef.	Sig.	Exp(B)	Coef.	Sig.	Exp(B)	Coef.	Sig.	Exp(B)		
FFS	-0,90	*	0,404	-0,8	*	0,451	0,887	**	2,429	0,819	**	2,269	0,838	**	2,311		
	-0,46			-0,49			-0,35			-0,34			0,334				
3. Greece		Reference year 2004				Cases: 1.222			Missing Cases: 8			Total: 1.230			Accuracy Rate: 48,9%		
2005				2006			2007			2008			2009				
Var.	Coef.	Sig.	Exp(B)	Coef.	Sig.	Exp(B)	Coef.	Sig.	Exp(B)	Coef.	Sig.	Exp(B)	Coef.	Sig.	Exp(B)		
FFS	-0,51	*	0,596	-0,63	**	0,53	-1,38	***	0,253	-1,44	***	0,238	-1,17	***	0,309		
	-0,28			-0,29			-0,33			-0,33			-0,3				
4. UK		Reference year 2004				Cases: 1.572			Missing Cases: 210			Total: 1.782			Accuracy Rate: 42,4%		
2005				2006			2007			2008			2009				
Var.	Coef.	Sig.	Exp(B)	Coef.	Sig.	Exp(B)	Coef.	Sig.	Exp(B)	Coef.	Sig.	Exp(B)	Coef.	Sig.	Exp(B)		
FFS	0,947	*	2,579	1,399	***	4,049	1,271	**	3,563	1,734	***	5,655	2,923	***	18,598		
	-0,5			-0,49			-0,49			-0,46			-0,45				

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.

Panel B: Test 2 - Logistic Regression											
1. Australia											
2004				2005				2006			
Dependent variable			FFS	Dependent variable			FFS	Dependent variable			FFS
Cases			437	Cases			405	Cases			443
Missing Cases			19	Missing Cases			51	Missing Cases			13
Total			456	Total			456	Total			456
Accuracy Rate			83,10%	Accuracy Rate			87,20%	Accuracy Rate			85,60%
Var.	Coef.	Sig.	Exp(B)	Var.	Coef.	Sig.	Exp(B)	Var.	Coef.	Sig.	Exp(B)
SALESHA	-1,34 (0,39)	***	0,26	SALESHA	-1,132 (0,351)	***	0,323	SALESHA	-1,271 (0,481)	***	0,281
NAVSH	-0,71 (0,22)	***	0,48	SALETAS	-0,337 (0,150)	**	0,714	LNMV	-1,060 (0,156)	***	0,347
LNMV	-0,77 (0,13)	***	0,46	LNMV	-0,846 (0,133)	***	0,429	ROSC	-0,281 (0,114)	**	0,755
HOLTA	2,12 (0,72)	***	8,35	DIVCOV	-0,186 (0,090)	**	0,831	EPS	-1,107 (0,510)	**	0,331
OPM	-0,12 (0,04)	**	0,88	OPM	-0,053 (0,018)	***	0,948	CFM	-0,017 (0,009)	*	0,983
EPS	-3,24 (0,83)	***	0,03	EPS	-0,948 (0,304)	***	0,388	CGEAR	0,333 (0,102)	***	1,395
ROCE	-0,74	**	0,47	QUI	-0,188	***	0,829	CLSFU	1,051	*	2,861

	(0,29)				(0,069)				(0,596)		
CUR	-0,13 (0,05)	**	0,87	WCR	-0,008 (0,004)	**	0,992	Constant	0,782 (0,402)	*	2,185
CFSH	-3,73 (1,19)	***	0,02	CGEAR	1,039 (0,328)	***	2,827				
WCR	-0,03 (0,01)	***	0,97	CLSFU	0,359 (0,147)	**	1,432				
CLSFU	0,87 (0,46)	*	2,39	Constant	-0,048 (0,396)		0,954				
DEBTE	0,84 (0,35)	**	2,31								
Constant	-0,84 (0,41)	**	0,42								

2007				2008				2009			
Dependent variable			FFS	Dependent variable			FFS	Dependent variable			FFS
Cases Included in Analysis			456	Cases Included in Analysis			437	Cases Included in Analysis			435
Missing Cases			0	Missing Cases			19	Missing Cases			21
Total			456	Total			456	Total			456
Accuracy Rate			82,00%	Accuracy Rate			74,60%	Accuracy Rate			81,60%
Var.	Coef.	Sig.	Exp(B)	Var.	Coef.	Sig.	Exp(B)	Var.	Coef.	Sig.	Exp(B)
SALESHA	-2,681 (0,667)	***	0,069	SALESHA	-1,471 (0,323)	***	0,230	SALESHA	-2,875 (0,630)	***	0,056
NAVSH	-1,395 (0,450)	***	0,248	NAVSH	-0,839 (0,191)	***	0,432	LNMV	-0,860 (0,123)	***	0,423
LNMV	-1,038 (0,155)	***	0,354	LNMV	-1,024 (0,146)	***	0,359	HOLTA	-3,212 (1,726)	*	0,040
ROSC	-0,851 (0,342)	**	0,427	ROSC	-0,494 (0,163)	***	0,610	ROSC	-0,364 (0,130)	***	0,695
EPS	-3,442 (0,995)	***	0,032	EPS	-3,782 (0,772)	***	0,023	EPS	-0,079 (0,030)	***	0,924
CFM	-0,048 (0,018)	***	0,954	CUR	-0,014 (0,009)	*	0,987	CFSH	-4,903 (1,269)	***	0,007
ETL	-0,087 (0,030)	***	0,917	ETL	-0,102 (0,028)	***	0,903	CGEAR	0,151 (0,069)	**	1,163
TLSFU	-3,104 (1,064)	***	0,045	CLSFU	-1,769 (0,556)	***	0,171	CLSFU	0,745 (0,253)	***	2,107
Constant	1,816 (0,446)	***	6,150	DEBTE	-1,919 (0,531)	***	0,147	Constant	0,391 (0,319)		1,478
				Constant	2,199 (0,423)	***	9,016				

2. Germany

2004				2005				2006			
Dependent variable			FFS	Dependent variable			FFS	Dependent variable			FFS
Cases Included in Analysis			372	Cases Included in Analysis			364	Cases Included in Analysis			387
Missing Cases			32	Missing Cases			40	Missing Cases			17
Total			404	Total			404	Total			404
Accuracy Rate			93,50%	Accuracy Rate			98,10%	Accuracy Rate			98,20%
Var.	Coef.	Sig.	Exp(B)	Var.	Coef.	Sig.	Exp(B)	Var.	Coef.	Sig.	Exp(B)
SALESHA	-0,296 (0,114)	***	0,744	DIVCOV	-0,252 (0,172)	*	0,777	SALESHA	-0,101 (0,054)	*	0,904
NAVSH	-0,149 (0,054)	***	0,861	PLOWB	0,130 (0,059)	**	1,139	RESTAS	-1,662 (0,791)	**	0,190
SALETAS	-1,331	**	0,264	ROSC	1,873	***	6,510	PLOWB	0,565	***	1,759

	(0,545)				(0,432)				(0,174)		
OPM	-4,030	***	0,018	CUR	-0,923	**	0,397	CUR	-3,159	**	0,042
	(1,362)				(0,435)				(1,242)		
CASH	-0,702	**	0,496	ETL	0,735	***	2,085	INTCOV	-0,022	*	0,978
	(0,327)				(0,226)				(0,012)		
ETL	-0,623	**	0,536	Constant	-4,986	***	0,007	Constant	-1,369	**	0,254
	(0,263)				(0,975)				(0,686)		
CLSFU	-1,045	***	0,352								
	(0,285)										
Constant	-2,097	**	0,123								
	(1,037)										

2007				2008				2009			
Dependent variable			FFS	Dependent variable			FFS	Dependent variable			FFS
Cases Included in Analysis			378	Cases Included in Analysis			374	Cases Included in Analysis			383
Missing Cases			26	Missing Cases			30	Missing Cases			21
Total			404	Total			404	Total			404
Accuracy Rate			91,30%	Accuracy Rate			89,60%	Accuracy Rate			89,60%
Var.	Coef.	Sig.	Exp(B)	Var.	Coef.	Sig.	Exp(B)	Var.	Coef.	Sig.	Exp(B)
LNMV	-0,821	***	0,440	SALESHA	0,292	**	1,339	SALETAS	0,871	**	2,390
	(0,305)				(0,143)				(0,442)		
OPM	-3,503	**	0,030	RESTAS	2,593	***	13,365	RESTAS	0,528	**	1,695
	(1,757)				(0,914)				(0,239)		
CASH	1,029	**	2,799	DIVSH	0,556	**	1,744	RESSFU	1,663	**	5,274
	(0,414)				(0,257)				(0,697)		
QUI	2,059	**	7,834	NPM	-3,898	*	0,020	DIVCOV	-0,085	*	0,918
	(0,871)				(1,996)				(0,045)		
STOCKT	0,412	**	1,510	CUR	-0,645	**	0,525	PLOWB	-0,029	**	0,972
	(0,184)				(0,277)				(0,011)		
ETL	0,785	**	2,193	CFSH	-0,278	*	0,757	NPM	-5,815	***	0,003
	(0,336)				(0,148)				(2,168)		
CGEAR	0,630	**	1,878	DEBT	-0,415	**	0,660	EPS	-0,150	*	0,861
	(0,310)				(0,172)				(0,084)		
CLSFU	0,437	**	1,548	TLSFU	-0,376	***	0,687	ROCE	-3,046	**	0,048
	(0,179)				(0,130)				(1,279)		
Constant	-1,513		0,220	INTCOV	-0,040	***	0,961	TLSFU	-0,849	***	0,428
	(1,215)				(0,014)				(0,230)		
				Constant	-1,348		0,260	CGEAR	-0,430	**	0,650
					(1,154)				(0,217)		
								Constant	-4,464	***	0,012
									(0,720)		

3. Greece

2004				2005				2006			
Dependent variable			FFS	Dependent variable			FFS	Dependent variable			FFS
Cases Included in Analysis			196	Cases Included in Analysis			198	Cases Included in Analysis			201
Missing Cases			6	Missing Cases			7	Missing Cases			4
Total			205	Total			205	Total			205
Accuracy Rate			74,00%	Accuracy Rate			82,80%	Accuracy Rate			83,10%
Var.	Coef.	Sig.	Exp(B)	Var.	Coef.	Sig.	Exp(B)	Var.	Coef.	Sig.	Exp(B)
SALETAS	-1,604	**	0,201	NAVSH	-0,359	**	0,698	LNMV	-0,583	**	0,558
	(0,669)				(0,181)				(0,272)		
LNMV	-0,455	**	0,634	SALETAS	-1,147	*	0,318	DIVCOV	0,060	**	1,061

	(0,211)				(0,652)				(0,026)		
NPM	-7,532	***	0,001	PE	-0,019	**	0,982	MVBV	-0,231	*	0,794
	(2,450)				(0,009)				(0,119)		
QUI	-0,748	*	0,473	MVBV	-0,375	***	0,687	CUR	-2,653	***	0,070
	(0,445)				(0,119)				(0,920)		
CFSH	-1,238	**	0,290	CUR	-1,960	**	0,141	CFSH	-6,037	***	0,002
	(0,577)				(0,884)				(1,759)		
ETL	-0,234	**	0,791	CASH	-8,065	**	0,000	TLSFU	0,667	**	1,949
	(0,107)				(3,484)				(0,277)		
CGEAR	-3,212	***	0,040	WCR	-0,037	**	0,963	Constant	0,827		2,288
	(1,200)				(0,017)				(1,170)		
Constant	2,330	**	10,282	IGEAR	-0,223	**	0,800				
	(1,036)				(0,105)						
				DSFU	-2,005	**	0,135				
					(1,025)						
				Constant	1,014		2,756				
					(0,925)						

2007

2008

2009

2007				2008				2009			
Dependent variable			FFS	Dependent variable			FFS	Dependent variable			FFS
Cases Included in Analysis			202	Cases Included in Analysis			204	Cases Included in Analysis			203
Missing Cases			3	Missing Cases			4	Missing Cases			2
Total			205	Total			205	Total			205
Accuracy Rate			89,60%	Accuracy Rate			86,10%	Accuracy Rate			82,30%
Var.	Coef.	Sig.	Exp(B)	Var.	Coef.	Sig.	Exp(B)	Var.	Coef.	Sig.	Exp(B)
CUR	-1,593	***	0,203	NAVSH	-0,584	**	0,558	SALETAS	-4,577	***	0,010
	(0,466)				(0,251)				(1,605)		
CFSH	-6,985	***	0,001	DIVCOV	0,052	**	1,053	OPM	-3,020	***	0,049
	(1,777)				(0,020)				(0,863)		
CGEAR	1,374	**	3,951	MVBV	-1,345	***	0,261	EPS	-3,456	***	0,032
	(0,583)				(0,460)				(1,065)		
Constant	-1,899	**	0,150	NPM	-3,973	***	0,019	CFM	-0,604	**	0,547
	(0,808)				(1,444)				(0,235)		
				CUR	-0,813	**	0,444	CGEAR	-1,046	**	0,352
					(0,361)				(0,521)		
				CFSH	-4,198	***	0,015	Constant	-0,599		0,550
					(1,236)				(0,934)		
				CGEAR	-2,545	***	0,078				
					(0,881)						
				CLSFU	-3,183	***	0,041				
					(1,049)						
				Constant	2,218	*	9,186				
					(1,138)						

4.UK

2004				2005				2006			
Dependent variable			FFS	Dependent variable			FFS	Dependent variable			FFS
Cases Included in Analysis			288	Cases Included in Analysis			288	Cases Included in Analysis			270
Missing Cases			9	Missing Cases			9	Missing Cases			27
Total			297	Total			297	Total			297
Accuracy Rate			95,50%	Accuracy Rate			94,80%	Accuracy Rate			93,00%
Var.	Coef.	Sig.	Exp(B)	Var.	Coef.	Sig.	Exp(B)	Var.	Coef.	Sig.	Exp(B)
SALETAS	-3,063	**	0,047	SALESHA	0,156	***	1,169	NAVSH	-0,561	*	0,571

	(1,429)				(0,060)				(0,301)		
ROCE	-12,571	***	0,000	NPM	-9,383	**	0,000	SALETAS	-1,331	*	0,264
	(4,194)				(4,100)				(0,745)		
ETL	-0,464	***	0,628	EPS	-2,824	*	0,059	LNMV	-0,535	***	0,586
	(0,167)				(1,524)				(0,185)		
Constant	-3,300	***	0,037	QUI	1,106	***	3,023	MVBV	0,217	**	1,242
	(1,104)				(0,307)				(0,106)		
				DEBT	-1,628	***	0,196	ROSC	-2,962	***	0,052
					(0,492)				(1,087)		
				ETL	-1,271	**	0,281	DEBT	-0,763	***	0,466
					(0,524)				(0,253)		
				Constant	-1,826	*	0,161	IGEAR	-1,421	**	0,242
					(1,000)				(0,679)		
								Constant	3,173	***	23,876
									(1,001)		
2007				2008				2009			
Dependent variable			FFS	Dependent variable			FFS	Dependent variable			FFS
Cases Included in Analysis			286	Cases Included in Analysis			253	Cases Included in Analysis			271
Missing Cases			11	Missing Cases			44	Missing Cases			26
Total			297	Total			297	Total			297
Accuracy Rate			93,00%	Accuracy Rate			88,10%	Accuracy Rate			78,60%
Var.	Coef.	Sig.	Exp(B)	Var.	Coef.	Sig.	Exp(B)	Var.	Coef.	Sig.	Exp(B)
NAVSH	-0,714	**	0,490	NAVSH	-0,305	**	0,737	RESSFU	-1,090	***	0,336
	(0,356)				(0,148)				(0,407)		
SALETAS	-4,462	***	0,012	RESSFU	-0,468	**	0,626	LNMV	-0,189	*	0,828
	(1,380)				(0,207)				(0,099)		
RESSFU	-3,257	**	0,039	LNMV	-0,208	*	0,812	DIVSH	-1,828	*	0,161
	(1,565)				(0,119)				(1,005)		
LNMV	-1,415	***	0,243	OPM	-2,870	***	0,057	DIVYI	-1,496	*	0,224
	(0,418)				(0,970)				(0,788)		
NPM	-7,298	***	0,001	CUR	-1,480	***	0,228	HOLTA	-9,799	*	0,000
	(2,615)				(0,506)				(5,664)		
CUR	-2,048	*	0,129	DEBT	-0,361	**	0,697	OPM	-3,667	**	0,026
	(1,183)				(0,183)				(1,532)		
ETL	-1,200	***	0,301	Constant	1,955	*	7,064	CASH	-2,643	***	0,071
	(0,447)				(1,032)				(0,782)		
TLSFU	-0,516	**	0,597					STOCKT	-0,132	*	0,876
	(0,262)								(0,073)		
Constant	6,359	**	5,774					ETL	-0,256	*	0,774
	(2,486)								(0,135)		
								Constant	1,516	**	4,553
									(0,595)		
(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.											

Table 4 : Jones Model (H2)

Level-2 Longitudinal analysis								
Model Dimension		Levels		Covariance		Parameters		
Fixed Effects	Intercept	1						1
	FFS	2						1
	Time	1						1
	FFS * Time	2						1
Random Effects	Intercept + Time	2		Unstructured				3
Repeated Effects	Time	6		First-Order Autoregressive				2
Total		14						9
	<u>Australia</u>	<u>Germany</u>		<u>Greece</u>				<u>UK</u>
Number of Subjects	455	404		205				297
Information criteria								
Log. Likelihood	3.503,57	876,83		2.110,03				2.578,07
Akaike's Information Criterion (AIC)	3.513,57	870,83		2.104,03				2.584,07
Hurvich and Tsai's Criterion (AICC)	3.513,59	870,82		2.104,01				2.584,09
Bozdogan's Criterion (CAIC)	3.548,07	850,46		2.085,71				2.603,52
Schwarz's Bayesian Criterion (BIC)	3.543,07	853,46		2.088,71				2.600,52
Panel A: Estimates of fixed effects¹								
Parameter	Estimate	Sig.	Estimate	Sig.	Estimate	Sig.	Estimate	Sig.
Time	0,05 (-0,013)	***	-0,038 (-0,01)	***	-0,01 (-0,004)	**	-0,076 (-0,025)	***
[FFS=0]	-0,069 (-0,042)	*	-0,049 (-0,03)		-0,008 (-0,015)		-0,344 (-0,1)	
[FFS=1]	0 (0)		0 (0)		0 (0)		0 (0)	
[FFS=0] * Time	-0,065 (-0,014)	***	0,042 (-0,01)	***	0,003 (-0,005)		0,082 (-0,026)	***
[FFS=1] * Time	0 (0)		0 (0)		0 (0)		0 (0)	
Intercept	0,108 (-0,039)	***	0,046 (-0,03)		0,007 (-0,013)		0,324 (-0,097)	***
¹ Dependent Variable: Accruals								
Panel B: Pairwise Comparisons²								
(I) FFS - (J) FFS	Mean Difference (I-J)	Sig.	Mean Difference (I-J)	Sig.	Mean Difference (I-J)	Sig.	Mean Difference (I-J)	Sig.
FFS(1) - FFS (0)	0,232 (-0,026)	***	-0,056 (-0,019)	***	-0,004 (-0,01)		0,139 (-0,051)	***
² Dependent Variable: Accruals								
(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.								

Table 5 : H3 Results.

Panel A: Australia									
2005 Individual Standards	Count	Mean	St. Dev.	One sample t-test for mean	Partial Index ≤ -0,10	Partial Index between -0,099 - -0,05	Partial Index between -0,049 - +0,049	Partial Index between 0,05 - 0,099	Partial Index ≥ 0.10
<i>IAS 7</i>	433(94,96%)	0,161	1,991	*	150	21	100	17	145
<i>IAS 12</i>	400(87,72%)	-0,294	1,147	***	265	21	51	8	55
<i>IAS 16</i>	439(96,27%)	-0,182	2,771	*	168	29	88	16	155
<i>IAS 18</i>	436(95,61%)	0,282	3,380	*	133	19	154	16	114
<i>IAS 23</i>	329(72,15%)	0,052	0,517	*	62	21	142	30	74
<i>IAS 32, IAS 39</i>	443(97,15%)	0,535	6,182	*	167	10	33	12	221
<i>IAS 33</i>	434(95,18%)	0,452	6,331	*	171	7	69	21	166
<i>IAS 36</i>	439(96,27%)	-0,168	2,111	*	110	43	187	26	73
<i>IAS 38</i>	333(73,03%)	0,179	1,706	*	70	24	150	16	73
2006 Individual Standards									
<i>IAS 7</i>	436(95,61%)	-0,254	3,071	*	157	17	97	27	138
<i>IAS 12</i>	335(73,46%)	-0,133	2,040		90	21	119	23	82
<i>IAS 16</i>	442(96,63%)	0,190	2,548	*	128	23	118	22	165
<i>IAS 18</i>	449(98,46%)	-0,310	3,260	**	142	21	187	18	81
<i>IAS 23</i>	200(43,86%)	-0,025	0,250	*	26	8	131	20	15
<i>IAS 32, IAS 39</i>	432(94,74%)	0,515	5,156	**	192	10	30	10	190
<i>IAS 33</i>	439(96,27%)	0,389	5,717	*	127	12	74	30	196
<i>IAS 36</i>	454(99,56%)	0,289	2,140	***	97	35	135	36	151
<i>IAS 38</i>	335(73,46%)	-0,229	1,728	**	92	20	145	15	63
2007 Individual Standards									
<i>IAS 7</i>	436(95,61%)	-0,232	2,874	*	167	19	95	19	136
<i>IAS 12</i>	352(77,19%)	-0,339	3,675	*	109	19	126	20	78
<i>IAS 16</i>	442(96,93%)	0,219	3,006	*	130	19	137	16	154
<i>IAS 18</i>	441(96,71%)	0,280	3,366	*	94	25	195	16	111
<i>IAS 23</i>	214(46,93%)	0,043	0,350	*	28	7	129	18	32
<i>IAS 32, IAS 39</i>	438(96,05%)	0,592	6,548	*	196	10	18	7	207
<i>IAS 33</i>	435(95,39%)	0,456	5,170	*	147	15	77	17	179
<i>IAS 36</i>	451(98,90%)	0,334	2,667	***	72	30	178	30	141
<i>IAS 38</i>	336(73,68%)	0,215	2,422	*	87	14	135	8	92
2008 Individual Standards									
<i>IAS 7</i>	437(95,83%)	0,201	1,957	**	126	32	112	20	147
<i>IAS 12</i>	348(76,32%)	0,162	2,272	*	106	17	109	12	116
<i>IAS 16</i>	439(96,27%)	0,236	2,691	*	127	29	110	18	155
<i>IAS 18</i>	443(97,15%)	0,259	2,868	*	122	16	206	18	81
<i>IAS 23</i>	214(46,93%)	0,063	0,437	**	37	18	106	18	35
<i>IAS 32, IAS 39</i>	430(94,30%)	-0,362	5,733	0,192	195	9	23	6	197
<i>IAS 33</i>	417(91,45%)	0,800	5,621	***	129	13	57	16	202
<i>IAS 36</i>	455(99,78%)	0,128	1,368	**	89	21	159	45	141
<i>IAS 38</i>	336(73,68%)	0,299	2,561	**	65	19	145	23	84
2009 Individual Standards									
<i>IAS 7</i>	438(96,05%)	-0,105	1,307	*	106	29	164	37	102
<i>IAS 12</i>	341(74,78%)	-0,160	1,462	**	121	22	94	20	84
<i>IAS 16</i>	439(96,27%)	0,243	2,635	**	133	23	120	16	164
<i>IAS 18</i>	454(99,56%)	0,370	3,233	**	76	22	204	13	139
<i>IAS 23</i>	215(47,15%)	-0,050	0,349	**	32	25	127	14	17

<i>IAS 32,IAS 39</i>	432(94,74%)	0,313	3,307	**	163	9	29	15	216
<i>IAS 33</i>	433(94,96%)	0,805	6,540	**	142	17	68	15	191
<i>IAS 36</i>	454(99,56%)	-0,043	0,500	*	86	39	268	22	39
<i>IAS 38</i>	336(73,68%)	0,212	1,754	**	71	18	153	12	82
Panel B: Germany									
<u>2005 Individual Standards</u>	Count	Mean	St. Dev.	One sample t-test for mean	Partial Index ≤ -0,10	Partial Index between -0,099 - -0,05	Partial Index between -0,049- +0,049	Partial Index between 0,05 - 0,099	Partial Index ≥ 0,10
<i>IAS 7</i>	381(94,31%)	-0,511	5,721	*	173	9	32	11	156
<i>IAS 12</i>	397(98,27%)	-0,203	2,647	*	170	25	79	17	106
<i>IAS 16</i>	397(98,27%)	-0,523	5,058	**	172	11	51	17	146
<i>IAS 18</i>	399(89,76%)	0,116	1,409	*	86	22	218	19	54
<i>IAS 23</i>	353(87,38%)	-0,177	1,964	*	103	21	101	23	105
<i>IAS 32,IAS 39</i>	389(96,29%)	0,281	2,385	**	95	33	111	21	129
<i>IAS 33</i>	393(87,28%)	-0,198	2,240	*	93	26	174	26	74
<i>IAS 36</i>	399(98,76%)	0,285	3,303	*	139	17	60	14	169
<i>IAS 38</i>	390(96,53%)	-0,289	3,573	*	125	23	104	16	122
<u>2006 Individual Standards</u>									
<i>IAS 7</i>	324(80,20%)	-0,463	4,693	*	149	8	30	10	127
<i>IAS 12</i>	400(99,01%)	-0,288	3,188	*	171	17	60	22	130
<i>IAS 16</i>	394(97,52%)	-0,325	4,407	*	143	13	64	9	165
<i>IAS 18</i>	401(99,26%)	0,201	2,709	*	50	17	251	16	67
<i>IAS 23</i>	274(67,82%)	-0,105	1,077	*	55	14	128	20	57
<i>IAS 32,IAS 39</i>	401(99,26%)	0,319	3,758	*	157	24	73	22	125
<i>IAS 33</i>	391(96,78%)	-0,282	3,241	*	101	20	144	18	108
<i>IAS 36</i>	400(99,01%)	-0,180	1,602	**	96	15	165	27	97
<i>IAS 38</i>	386(95,54%)	-0,357	4,221	*	124	16	80	16	150
<u>2007 Individual Standards</u>									
<i>IAS 7</i>	330(81,68%)	0,401	3,832	*	138	7	29	15	141
<i>IAS 12</i>	402(99,50%)	-0,427	4,270	**	171	14	65	9	143
<i>IAS 16</i>	403(99,75%)	-0,448	4,822	*	172	15	54	12	150
<i>IAS 18</i>	403(99,75%)	-0,078	0,908	*	64	20	265	14	40
<i>IAS 23</i>	287(74,04%)	0,145	1,235	**	46	28	143	17	53
<i>IAS 32,IAS 39</i>	403(99,75%)	0,166	2,112	*	110	34	123	25	111
<i>IAS 33</i>	392(97,03%)	-0,215	2,350	*	94	25	145	26	102
<i>IAS 36</i>	403(99,75%)	0,153	1,868	*	90	14	183	21	95
<i>IAS 38</i>	389(96,29%)	0,666	5,582	**	126	25	71	18	149
<u>2008 Individual Standards</u>									
<i>IAS 7</i>	328(81,19%)	0,327	3,541	*	134	10	39	3	142
<i>IAS 12</i>	400(99,01%)	-0,199	2,401	*	191	15	77	17	100
<i>IAS 16</i>	400(99,01%)	-0,240	3,266	*	145	15	57	6	177
<i>IAS 18</i>	401(99,26%)	0,054	0,711	*	60	23	252	14	52
<i>IAS 23</i>	291(72,03%)	0,041	0,211	***	33	18	151	26	63
<i>IAS 32,IAS 39</i>	400(99,01%)	0,063	0,757	*	90	38	150	28	94
<i>IAS 33</i>	397(98,27%)	-0,142	1,481	*	81	28	208	21	59
<i>IAS 36</i>	402(99,50%)	0,097	0,836	**	60	18	289	17	18
<i>IAS 38</i>	392(97,03%)	0,248	2,752	*	127	19	94	16	136
<u>2009 Individual Standards</u>									
<i>IAS 7</i>	328(81,19%)	0,436	3,325	**	94	11	48	12	163
<i>IAS 12</i>	401(99,26%)	-0,206	2,489	*	162	30	106	17	86
<i>IAS 16</i>	395(97,77%)	-0,209	2,705	*	115	19	92	17	152

IAS 18	403(99,75%)	-0,029	0,290	**	50	22	264	22	45
IAS 23	292(72,28%)	0,082	0,826	*	85	16	106	16	69
IAS 32,IAS 39	402(99,50%)	-0,123	1,391	*	77	27	163	50	85
IAS 33	394(97,52%)	-0,064	0,804	*	79	33	207	19	56
IAS 36	402(99,50%)	0,099	1,166	*	90	9	143	23	137
IAS 38	391(96,78%)	-0,205	2,960	*	121	16	90	19	145

Panel C: Greece

2005 Individual Standards	Count	Mean	St. Dev.	One sample t-test for mean	Partial Index ≤ -0,10	Partial Index between -0.099 - - 0,05	Partial Index between -0.049 - +0,049	Partial Index between +0.05 - 0.099	Partial Index ≥ 0.10
IAS 7	202(98,54%)	0,607	4,387	*	84	6	20	2	90
IAS 12	200(97,56%)	0,315	2,248	**	79	8	40	7	66
IAS 16	202(98,54%)	-0,462	3,431	*	73	8	27	9	85
IAS 18	202(98,54%)	0,235	1,650	**	43	9	72	18	60
IAS 23	199(97,07%)	0,218	1,669	*	77	6	24	9	83
IAS 32,IAS 39	200(97,56%)	0,345	2,029	**	88	5	13	6	88
IAS 33	202(98,54%)	-0,256	1,669	**	52	10	93	10	37
IAS 36	198(96,59%)	0,345	2,614	*	67	6	8	2	115
IAS 38	168(81,95%)	0,552	3,654	*	58	6	35	8	61

2006 Individual Standards

IAS 7	166(80,98%)	-0,174	1,280	*	32	7	80	9	38
IAS 12	199(97,07%)	-0,051	0,451	*	46	18	82	16	37
IAS 16	204(99,51%)	-0,074	0,615	*	35	15	83	25	46
IAS 18	203(99,02%)	-0,098	0,721	*	35	16	129	6	17
IAS 23	140(68,29%)	0,430	2,181	**	36	6	41	4	53
IAS 32,IAS 39	205 (100%)	0,182	1,256	**	44	6	44	15	96
IAS 33	203(99,02%)	0,038	0,339	*	30	12	116	10	35
IAS 36	160(78,05%)	0,058	0,433	*	30	14	64	11	41
IAS 38	171(83,41%)	-0,073	0,435	**	25	8	103	12	23

2007 Individual Standards

IAS 7	164 (80,00%)	-0,357	2,237	**	85	16	20	3	40
IAS 12	198(96,59%)	-0,098	0,757	*	49	11	75	21	42
IAS 16	202(98,54%)	-0,172	1,503	*	75	12	29	11	75
IAS 18	202(98,54%)	0,215	1,743	*	57	14	81	12	38
IAS 23	141(68,78%)	0,118	0,881	*	32	16	53	10	30
IAS 32,IAS 39	202(98,54%)	0,374	2,181	**	46	7	13	8	128
IAS 33	204(99,51%)	-0,023	0,177	*	19	7	157	7	14
IAS 36	160(78,05%)	0,095	0,497	**	26	8	52	24	50
IAS 38	177(86,34%)	-0,118	0,778	**	41	11	93	6	26

2008 Individual Standards

IAS 7	165(80,49%)	-0,201	1,547	*	63	9	33	9	51
IAS 12	199(97,07%)	-0,307	2,296	*	77	9	36	5	72
IAS 16	202(98,54%)	0,244	1,766	*	64	13	68	9	48
IAS 18	201(98,05%)	0,251	1,119	***	29	7	89	23	53
IAS 23	140(68,29%)	0,259	1,654	*	51	11	36	2	40
IAS 32,IAS 39	204(99,51%)	-0,076	0,665	*	42	11	90	10	51
IAS 33	205(100,00%)	0,041	0,220	***	8	10	159	11	17
IAS 36	161(78,54%)	0,172	1,246	*	44	15	42	15	45
IAS 38	180(87,80%)	0,259	2,069	*	42	10	79	12	37

2009 Individual Standards

IAS 7	162(79,02%)	0,552	3,722	*	67	5	19	3	68
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IAS 12	198(96,59%)	-0,220	1,765	*	95	11	22	6	64
IAS 16	198(96,59%)	-0,238	1,811	*	71	8	39	8	72
IAS 18	203(99,02%)	0,110	0,878	*	59	10	69	10	55
IAS 23	138(67,32%)	-0,163	1,079	*	45	3	35	8	47
IAS 32,IAS 39	199(97,07%)	-0,825	5,695	**	85	7	5	2	100
IAS 33	203(99,02%)	-0,097	0,623	**	28	8	129	13	25
IAS 36	157(76,59%)	-0,190	1,289	*	56	9	39	10	43
IAS 38	179(87,32%)	-0,348	2,607	*	49	6	78	8	38

Panel D: UK

2005 Individual Standards	Count	Mean	St. Dev.	One sample t-test for mean	Partial Index ≤ -0,10	Partial Index between -0,099 - -0,05	Partial Index between -0,049 - +0,049	Partial Index between +0,05 - 0,099	Partial Index ≥ 0.10
IAS 7	280 (94,28%)	-0,592	4,605	**	162	12	23	7	76
IAS 12	294(98,99%)	-0,303	2,896	*	187	12	32	39	24
IAS 16	295(99,33%)	0,608	4,818	**	77	6	34	15	163
IAS 18	296(99,66%)	-0,087	0,899	*	30	12	229	5	20
IAS 23	292(98,32%)	-0,361	3,311	*	120	11	62	9	90
IAS 32,IAS 39	282(94,95%)	0,077	0,666	*	84	24	60	21	93
IAS 33	285(95,96%)	0,233	2,252	*	66	19	122	21	57
IAS 36	292(98,32%)	-0,260	1,884	**	144	18	48	12	70
IAS 38	294 (98,99%)	-0,530	3,374	***	132	12	72	9	69

2006 Individual Standards

IAS 7	294(98,99%)	0,349	2,998	**	103	2	68	7	114
IAS 12	293(98,65%)	-0,265	2,746	*	103	14	69	11	96
IAS 16	295(99,33%)	-0,229	2,312	*	59	16	94	25	101
IAS 18	297(100,00%)	0,007	0,065	*	6	6	270	5	10
IAS 23	293(98,65%)	-0,137	1,337	*	70	15	126	12	70
IAS 32,IAS 39	294(98,99%)	0,057	0,609	*	66	26	124	25	53
IAS 33	289(97,31%)	-0,174	1,278	**	59	14	153	13	50
IAS 36	295(99,33%)	0,035	0,345	*	46	21	145	26	57
IAS 38	295(99,33%)	-0,186	1,533	**	105	18	92	13	67

2007 Individual Standards

IAS 7	290(97,64%)	-0,325	2,971	*	103	11	70	10	96
IAS 12	293(98,65%)	-0,303	2,092	**	123	13	63	11	83
IAS 16	294(98,99%)	0,330	2,274	**	75	13	78	16	112
IAS 18	297(100,00%)	0,049	0,465	*	15	2	251	9	20
IAS 23	295(99,33%)	0,247	2,271	*	64	19	121	12	79
IAS 32,IAS 39	294(98,99%)	0,236	2,220	*	80	27	103	18	66
IAS 33	289(97,31%)	-0,086	0,675	**	51	19	173	12	34
IAS 36	294(98,99%)	0,152	1,150	**	62	19	134	22	57
IAS 38	290(97,64%)	0,319	2,898	*	89	19	83	4	95

2008 Individual Standards

IAS 7	287(96,63%)	0,521	4,860	*	108	9	63	7	100
IAS 12	294(98,99%)	0,178	1,784	*	120	11	77	7	79
IAS 16	290(97,64%)	-0,600	5,800	*	119	10	48	5	108
IAS 18	296(99,66%)	0,054	0,562	*	10	13	251	7	15
IAS 23	294(98,99%)	0,253	2,465	*	67	10	130	22	65
IAS 32,IAS 39	292(98,32%)	0,249	2,500	*	77	24	73	21	97
IAS 33	291(97,98%)	0,408	2,797	**	33	16	174	19	49
IAS 36	294(98,99%)	-0,142	1,342	*	67	20	125	19	63
IAS 38	293(98,65%)	0,271	2,591	*	91	13	87	14	88

2009 Individual Standards

IAS 7	296(99,66%)	0,334	3,360	*	92	9	73	11	111
IAS 12	296(99,66%)	-0,117	1,075	*	112	22	81	18	63
IAS 16	296(99,66%)	-0,331	3,321	*	74	14	122	11	75
IAS 18	296(99,66%)	-0,029	0,300	*	16	10	248	9	13
IAS 23	297(100,00%)	-0,162	1,587	*	72	27	124	12	62
IAS 32,IAS 39	294(98,99%)	-0,158	1,626	*	62	25	101	35	71
IAS 33	292(98,32%)	0,053	0,504	*	30	12	219	5	26
IAS 36	297(100,00%)	-0,244	2,270	*	70	7	98	25	97
IAS 38	297(100,00%)	0,158	1,516	*	49	11	165	12	60

(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.

Table 6 : Auditors’ size and rotation.

Test 1:OLS Regression of Accruals - Panel A (DV=1 for Big-4 Auditors, DV=0 otherwise)								
1. Australia								
2004 (Sample 443)			2005 (Sample 445)			2006 (Sample 441)		
Var.	Coef.	Sig.	Var.	Coef.	Sig.	Var.	Coef.	Sig.
DV	-0,071 (0,018)	***	DV	0,059 (0,026)	**	DV	-0,102 (0,029)	***
SALETAS	0,032 (0,010)	***	SALETAS	0,040 (0,012)	***	SALETAS	0,039 (0,015)	**
OPM	0,045 (0,003)	***	OPM	0,007 (0,001)	***	EPS	0,041 (0,020)	**
DEBTE	-0,252 (0,043)	***	DEBTE	0,003 (0,002)	*	DSFU	-0,212 (0,044)	***
Constant	-0,005 (0,006)		Constant	0,002 (0,008)		Constant	0,001 (0,009)	
R ² adj.	0,966		R ² adj.	0,994		R ² adj.	0,991	
2007 (Sample 455)			2008 (Sample 452)			2009 (Sample 443)		
Var.	Coef.	Sig.	Var.	Coef.	Sig.	Var.	Coef.	Sig.
DV	0,065 (0,016)	***	DV	0,085 (0,027)	***	DV	0,045 (0,061)	
SALETAS	0,038 (0,007)	***	LNMV	-0,009 (0,004)	**	LNMV	-0,039 (0,009)	***
OPM	0,001 (0,000)	***	EPS	0,012 (0,007)	*	EPS	0,335 (0,048)	***
DEBTE	-0,037 (0,014)	***	DEBTE	-0,067 (0,035)	*	DEBTE	-0,534 (0,085)	***
Constant	-0,007 (0,005)		Constant	0,001 (0,009)		Constant	0,024 (0,017)	
R ² adj.	0,614		R ² adj.	0,734		R ² adj.	0,828	
2. Germany								
2004 (Sample 369)			2005 (Sample378)			2006 (Sample 371)		
Var.	Coef.	Sig.	Var.	Coef.	Sig.	Var.	Coef.	Sig.
DV	0,066 (0,040)	*	DV	-0,034 (0,011)	***	DV	0,038 (0,021)	*
RESSFU	-0,069 (0,039)	*	SALETAS	0,012 (0,005)	***	SALETAS	0,036 (0,010)	***
NPM	0,200 (0,105)	*	NPM	-0,069 (0,006)	***	NPM	-0,383 (0,054)	***
DEBTE	0,018 (0,006)	***	DSFU	0,012 (0,003)	***	DSFU	0,018 (0,004)	***
Constant	0,009 (0,007)		Constant	0,002 (0,003)		Constant	0,007 (0,005)	
R ² adj.	0,528		R ² adj.	0,917		R ² adj.	0,918	
2007 (Sample 368)			2008 (Sample 370)			2009 (Sample 370)		
Var.	Coef.	Sig.	Var.	Coef.	Sig.	Var.	Coef.	Sig.
DV	-0,045 (0,025)	*	DV	0,016 (0,008)	**	DV	-0,079 (0,020)	***
LNMV	0,008 (0,004)	**	SALETAS	0,012 (0,004)	***	SALETAS	0,045 (0,006)	***
NPM	-0,330 (0,069)	***	OPM	0,037 (0,008)	***	EPS	0,004 (0,002)	**
DEBT	0,006 (0,002)	***	IGEAR	0,001 (0,001)	*	IGEAR	0,004 (0,002)	*
Constant	0,012 (0,005)		Constant	0,008 (0,002)		Constant	0,008 (0,006)	
R ² adj.	0,59		R ² adj.	0,863		R ² adj.	0,619	
3. Greece								
2004 (Sample 205)			2005 (Sample 203)			2006 (Sample 204)		

Var.	Coef.	Sig.	Var.	Coef.	Sig.	Var.	Coef.	Sig.
DV	-0,025 (0,009)	***	DV	-0,042 (0,029)	*	DV	-0,109 (0,051)	**
RESSFU	-0,252 (0,052)	***	SALETAS	0,019 (0,010)	*	SALETAS	0,049 (0,010)	***
EPS	0,012 (0,003)	***	EPS	0,098 (0,021)	***	NPM	-0,043 (0,007)	***
IGEAR	0,002 (0,000)	***	DEBTE	-0,027 (0,012)	**	IGEAR	0,010 (0,004)	***
Constant	0,001 (0,000)		Constant	0,001 (0,002)		Constant	0,001 (0,002)	
R ² adj.	0,795		R ² adj.	0,784		R ² adj.	0,691	
2007 (Sample 204)			2008 (Sample 203)			2009 (Sample 201)		
Var.	Coef.	Sig.	Var.	Coef.	Sig.	Var.	Coef.	Sig.
DV	-0,415 (0,073)	***	DV	0,176 (0,061)	***	DV	0,147 (0,039)	***
SALETAS	0,050 (0,020)	**	SALETAS	0,033 (0,014)	**	SALETAS	-0,138 (0,016)	***
NPM	-0,137 (0,075)	*	OPM	0,161 (0,063)	**	NPM	-0,089 (0,014)	***
DEBTE	-0,049 (0,015)	***	DEBT	0,007 (0,003)	**	IGEAR	0,008 (0,002)	***
Constant	0,003 (0,002)		Constant	0,003 (0,002)		Constant	0,002 (0,001)	
R ² adj.	0,642		R ² adj.	0,695		R ² adj.	0,964	
4.UK								
2004 (Sample 279)			2005 (Sample 276)			2006 (Sample 275)		
Var.	Coef.	Sig.	Var.	Coef.	Sig.	Var.	Coef.	Sig.
DV	-0,183 (0,029)	***	DV	-0,245 (0,048)	***	DV	-0,071 (0,044)	*
LNMV	0,027 (0,003)	***	LNMV	0,033 (0,007)	***	LNMV	0,011 (0,006)	**
NPM	-0,157 (0,020)	***	NPM	-0,343 (0,060)	***	NPM	-0,043 (0,007)	***
CLSFU	-0,015 (0,006)	**	CLSFU	-0,022 (0,007)	***	CLSFU	0,012 (0,006)	**
Constant	0,023 (0,011)		Constant	0,023 (0,020)		Constant	0,018 (0,017)	
R ² adj.	0,745		R ² adj.	0,582		R ² adj.	0,705	
2007 (Sample 274)			2008 (Sample 268)			2009 (Sample 260)		
Var.	Coef.	Sig.	Var.	Coef.	Sig.	Var.	Coef.	Sig.
DV	-0,177 (0,039)	***	DV	-0,054 (0,034)	*	DV	0,044 (0,017)	**
SALETAS	0,020 (0,006)	***	LNMV	0,010 (0,004)	**	LNMV	-0,005 (0,002)	**
NPM	-0,068 (0,020)	***	NPM	-0,092 (0,027)	***	EPS	0,027 (0,011)	**
CLSFU	-0,013 (0,006)	**	ETL	0,007 (0,004)	*	IGEAR	-0,002 (0,002)	*
Constant	0,011 (0,016)		Constant	0,024 (0,016)		Constant	0,003 (0,007)	
R ² adj.	0,604		R ² adj.	0,730		R ² adj.	0,670	
<i>(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.</i>								
Test 2 :OLS Regression of Accruals - Panel B (DV=1 for Auditors Change, DV=0 otherwise)								
1. Australia								
2004 (Sample 455)			2005 (Sample 455)			2006 (Sample 456)		
Var.	Coef.	Sig.	Var.	Coef.	Sig.	Var.	Coef.	Sig.
DV	-0,175 (0,040)	***	DV	0,350 (0,019)	***	DV	-0,055 (0,023)	**
LNMV	0,023 (0,006)	***	LNMV	-0,012 (0,004)	***	LNMV	-0,016 (0,003)	***
NPM	-0,104 (0,004)	***	NPM	-0,257 (0,016)	***	NPM	-0,006 (0,001)	***
DEBT	-0,007 (0,001)	***	DEBTE	0,095 (0,016)	***	DEBT	0,001 (0,000)	**
Constant	0,006 (0,001)		Constant	0,003 (0,001)		Constant	0,004 (0,002)	
R ² adj.	0,882		R ² adj.	0,870		R ² adj.	0,900	
2007 (Sample 454)			2008 (Sample 456)			2009 (Sample 455)		
Var.	Coef.	Sig.	Var.	Coef.	Sig.	Var.	Coef.	Sig.
DV	0,143 (0,030)	***	DV	0,183 (0,072)	**	DV	-0,048 (0,018)	***
LNMV	0,034 (0,005)	***	LNMV	0,031 (0,012)	**	LNMV	-0,024 (0,003)	***
NPM	-0,027 (0,001)	***	NPM	0,003 (0,001)	***	NPM	-0,005 (0,001)	***
DEBT	-0,027 (0,003)	***	DEBT	0,012 (0,002)	***	DEBT	0,004 (0,001)	***
Constant	0,001 (0,002)		Constant	0,002 (0,004)		Constant	0,002 (0,001)	
R ² adj.	0,900		R ² adj.	0,972		R ² adj.	0,981	
2. Germany								
2004 (Sample 402)			2005 (Sample 402)			2006 (Sample 402)		
Var.	Coef.	Sig.	Var.	Coef.	Sig.	Var.	Coef.	Sig.

DV	0,246 (0,017)	***	DV	0,272 (0,015)	***	DV	-0,215 (0,033)	***
LNMV	-0,021 (0,002)	***	LNMV	-0,028 (0,002)	***	LNMV	0,049 (0,005)	***
NPM	-0,200 (0,052)	***	NPM	0,582 (0,052)	***	EPS	-0,027 (0,005)	***
TLSFU	-0,011 (0,007)	*	TLSFU	0,068 (0,019)	***	TLSFU	0,052 (0,023)	**
Constant	0,002 (0,001)		Constant	0,001 (0,000)		Constant	0,002 (0,001)	
R ² adj.	0,985		R ² adj.	0,996		R ² adj.	0,971	
2007 (Sample 404)			2008 (Sample 402)			2009 (Sample 403)		
Var.	Coef.	Sig.	Var.	Coef.	Sig.	Var.	Coef.	Sig.
DV	-0,176 (0,011)	***	DV	0,254 (0,021)	***	DV	-0,304 (0,044)	***
LNMV	0,015 (0,002)	***	SALETAS	-0,080 (0,017)	***	LNMV	0,025 (0,006)	***
NPM	-0,062 (0,012)	***	NPM	-0,255 (0,059)	***	NPM	0,006 (0,001)	***
TLSFU	0,137 (0,009)	***	DSFU	-0,108 (0,041)	***	TLSFU	0,129 (0,032)	***
Constant	0,002 (0,001)		Constant	0,002 (0,001)		Constant	0,003 (0,001)	
R ² adj.	0,974		R ² adj.	0,970		R ² adj.	0,880	
3. Greece								
2004 (Sample 204)			2005 (Sample 205)			2006 (Sample 204)		
Var.	Coef.	Sig.	Var.	Coef.	Sig.	Var.	Coef.	Sig.
DV	0,018 (0,005)	***	DV	0,307 (0,026)	***	DV	-0,380 (0,055)	
SALETAS	0,005 (0,002)	**	SALETAS	0,225 (0,018)	***	RESTAS	0,025 (0,036)	***
EPS	0,010 (0,004)	**	EPS	-0,492 (0,041)	***	PLOWB	-0,008 (0,002)	***
CLSUFU	-0,021 (0,003)	***	CLSUFU	-0,167 (0,014)	***	CLSUFU	0,057 (0,009)	***
Constant	0,001 (0,000)		Constant	0,002 (0,001)		Constant	0,002 (0,001)	
R ² adj.	0,920		R ² adj.	0,900		R ² adj.	0,904	
2007 (Sample 204)			2008 (Sample 205)			2009 (Sample 203)		
Var.	Coef.	Sig.	Var.	Coef.	Sig.	Var.	Coef.	Sig.
DV	-0,273 (0,040)		DV	0,093 (0,017)		DV	-0,034 (0,006)	
SALETAS	0,018 (0,002)	***	SALESHA	-0,003 (0,001)	***	SALETAS	-0,014 (0,002)	***
PLOWB	0,004 (0,001)	***	PLOWB	-0,001 (0,000)	***	PLOWB	0,002 (0,001)	***
CLSUFU	0,020 (0,004)	***	DSFU	0,065 (0,012)	***	DSFU	0,025 (0,004)	***
Constant	0,002 (0,001)		Constant	0,002 (0,001)		Constant	0,002 (0,001)	
R ² adj.	0,889		R ² adj.	0,793		R ² adj.	0,864	
4.UK								
2004 (Sample 297)			2005 (Sample 297)			2006 (Sample 297)		
Var.	Coef.	Sig.	Var.	Coef.	Sig.	Var.	Coef.	Sig.
DV	0,177 (0,016)	***	DV	0,124 (0,008)	***	DV	-0,089 (0,017)	***
LNMV	-0,012 (0,002)	***	SALETAS	-0,014 (0,004)	***	SALESHA	-0,012 (0,002)	***
OPM	0,202 (0,014)	***	OPM	-0,017 (0,007)	**	OPM	0,029 (0,003)	***
CLSUFU	-0,032 (0,008)	***	DEBT	-0,02 (0,002)	***	CLSUFU	0,075 (0,007)	***
Constant	0,002 (0,001)		Constant	0,002 (0,001)		Constant	0,002 (0,001)	
R ² adj.	0,892		R ² adj.	0,734		R ² adj.	0,893	
2007 (Sample 297)			2008 (Sample 297)			2009 (Sample 297)		
Var.	Coef.	Sig.	Var.	Coef.	Sig.	Var.	Coef.	Sig.
DV	-0,484 (0,026)	***	DV	-0,043 (0,014)	***	DV	-0,243 (0,011)	***
LNMV	0,040 (0,003)	***	LNMV	0,043 (0,002)	***	LNMV	0,014 (0,001)	***
OPM	0,081 (0,009)	***	OPM	-0,500 (0,039)	***	OPM	0,291 (0,021)	***
DEBT	-0,038 (0,005)	***	DEBT	-0,043 (0,003)	***	TLSFU	0,042 (0,006)	***
Constant	0,002 (0,001)		Constant	0,002 (0,001)		Constant	0,002 (0,001)	
R ² adj.	0,812		R ² adj.	0,902		R ² adj.	0,946	
(*), (**), (***) indicate statistically significant factors at 10%, 5% and 1% (two-tailed) level respectively.								