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# QUALITY OF FINANCIAL REPORTING UNDER IFRS AND CORPORATE GOVERNANCE INFLUENCE: EVIDENCE FROM THE GREEK BANKING SECTOR DURING CRISIS

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## Abstract

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The financial system consists, without doubt, one of the most important determinants of the world national economies, which undergoes numerous changes and challenges with major impact on the economic growth prospects of a country. A healthy financial system is the steam engine of the economy, a major source for economic growth through which capitals are attracted for investments; hence, it is regarded as a trustee of financial stability. Given the difference in structure and function of the financial sector in various countries, we investigate the extent to which the implementation of International Financial Reporting Standards (IFRS) accompanied by Corporate Governance practices affected the quality of financial and narrative reporting offered within published statements of Greek banks for the period from 2008 to 2011. The originality of the work lies at the fact that it focuses on Greek financial institutions for a period that incorporates both the burst of global financial crisis and the beginning of the Greek sovereign debt crisis making inferences on quality of reporting as a result of IFRS and Corporate Governance practices adoption. Our analysis revealed the positive contribution of both of the above categories of variables to the accuracy and quality of the information offered to stakeholders.

**Keywords:** International Financial Reporting Standards, Corporate Governance, Reporting Quality, Banking, Global Financial Crisis

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## 1. INTRODUCTION

The purpose of the study is to examine the extent to which the adoption of International Financial Reporting Standards (IFRS) as well as Corporate Governance practices influenced the financial and narrative reporting of the banks and financial

institutions in Greece. First of all, listed companies in the European Union should prepare their consolidated financial statements in accordance with IFRS as from 1st January 2005 (EU regulation no. 1606/2002). The rationale is that the development of global financial markets demands harmonization and standardization of accounting standards

(Jermakowicz, 2004); namely, a common language for financial reporting. Besides, one of the objectives for the International Accounting Standards Committee (IASC) after the implementation of generally accepted accounting standards was the improvement of accounting quality (IASB, 1989). The debate on the requirement to adopt generally accepted principles in reporting has its roots in the importance of the characteristics of individual markets and institutional frameworks to determine accounting standards (Chen et al., 2010). However, advanced quality standards do not necessarily provide high-quality reporting and it is the existence of incentives and institutional influences that positively contribute to it (Ball et al., 2003). This study explores the impact of the IFRS mandatory adoption in a typical code-law country of the European Union (Greece) focusing exactly on the period that the global financial crisis began. The focus on banks is justified due to the significant role they play to the economy and development and the major impact of IAS39 on their financial reporting. Also, global financial crisis has increased the need for additional measures for quality reporting for the protection of institutions, financial markets and stakeholders. Such measures are grouped into Corporate Governance best practices; thus, we investigate their implications to quality reporting together with IFRS.

The research is separated into two elements. Firstly, it explores the impact of IFRS on the quality of the information provided by financial statements of banks and financial institutions in Greece. Recent research of Paglietti (2009) mentioned that, after the implementation of IFRS, Return on Assets (ROA), which depicts the effective use of operating assets by an entity was increased as observed from financial reports. The purpose of the examination of ROA is to observe if there is an impact on the Greek banking sector prior and after the IFRS implementation. Moreover, we include Corporate Governance variables into our analysis. Specifically, we test board independency (number of independent board members), board diversity (male-female members), the performance of audits by an external auditor, the audit committee independence, and the audit committee expertise relative to their impact on quality of reporting and the value as perceived by investors.

In the second section of our analysis, we evaluate and contrast the quantity over the quality of narrative information disclosed in Management Commentary Reports for the period 2008-2011. To analyze these reports, we used a question checklist proposed by the International Accounting Standards Board in 2005. The question checklist (Management Commentary Scoring Sheet) includes 5 categories of analysis: Category 1 - the nature of the business; Category 2 - objective and strategy; Category 3 - key resources, risks and relationships; Category 4 - results and prospects; Category 5 - performance measures and indicators.

Research results regarding corporate governance variables are consistent with the expectations. We found that Board Diversity measured, as the number of female and foreign culture representatives to the board was positively associated with the quality of reporting indicating, that banks with mixed boards of directors had a

propensity to produce reports with increased amount of details regarding their performance. The data also revealed the positive contribution of Audit Committee Expertise (measured with the existence of at least 4 financial experts of SOX) and Audit Committee Independence (measured as the % of independent audit committee members) with the decision to include information on performance significantly improving the quality of reporting. Moreover, our analysis indicates a positive relationship between the quality of reporting and the performance of External Audits by an experienced auditor in the field of CSR/Health and Safety/Sustainability. Contrary to the above, we found that Independent Board Members variable was negatively related to the quality of reporting in the sense that as the percentage of non-executive board members was increased, the number of narratives in reporting was decreased deteriorating the overall reporting quality. On the same grounds, our results indicated an inverse relationship between profitability (measured in terms of ROA) and quality reporting. Specifically, we found that an increase in the profitability of a bank through the years from 2008 to 2011 was negatively related to the quality of reporting produced.

The remaining study is structured as follows: Section 2 discusses findings in the area of IFRS and reporting quality. Section 3 provides details on the banking system relative to reporting quality. Section 4 presents the methodology followed and the findings, and Section 5 where we summarize our concluding remarks.

## 2. LITERATURE REVIEW

In current years, the financial markets were under close monitoring and rigorous control practices imposed by governmental bodies with the support of their stakeholders. Control mechanisms such as exogenous determination of interest rates and restriction on credit were directed to scrutinize operations and were imposed to safeguard the assets and wealth owned as well as managed by financial institutions. Based on the early work of Campbell and Kracaw (1980), the quality of information offered to stakeholders of the banking sector is pivotal to prevent moral hazards. Supporting the fundamental relevance of the quality of information offered to interested parties, they investigated the relationship between efficiency of information and value creation concluding to the notion of asymmetric information as a determinant of organizational performance and viability. Their findings assert that the illustrative demonstration of critical details on performance and future prospects of a financial institution positively relate to increased likelihood for future liquidity and profitability measures.

The introduction of IFRS in 2005 by the International Accounting Standards Board (IASB) was a step forward to switch from domestic accounting principles applied to European countries. The transition to IFRS was mainly imposed on companies established and operating in the EU with an aim to contribute to the integration of capital markets (Armstrong et al., 2008). Further to the above, IFRS facilitates comparisons among institutions around the EU, decreases cost of transactions and

encourages investments (Iatridis, 2010). In addition, common standards support investors' financial decision-making when evaluating institutions through the assessment of their prospects regarding financial performance as a result of using reliable accounting data and transparent methodologies. Thus, the adoption of IFRS could act as an obstacle to eliminate earnings manipulation from the side of an institution increasing its stock market efficiency, which would positively drive stock returns and other stock-related financial performance metrics.

Such critical amendment in the quality offered in corporate reporting worldwide will be attained through deeper and analytical narrative data recorded in annual reports and regulators' focus on the management discussion and analysis statements included in these reports (referred to as the MD&A in the US or MC in most countries and the Operating and Financial Review (OFR) or Business Review in the UK). For example, in some jurisdictions regulators are extending and revising the guidelines, whereas in others they are compulsory to apply. In the US, post-Enron, MD&A regulations are being strengthened (e.g. SEC, 2003). In Canada, the Canadian Institute of Chartered Accountants (CICA) published meticulous MD&A guidelines and disclosure principles that capture information on strategic decisions, performance measurement indicators, institutional capabilities, results and risks (CICA, 2002). The Accounting Standards Board in the UK released revised OFR guidance, which is based on the Jenkins framework (ASB, 2003). The importance of the topic was evident by the fact that considerations on MD&A statements were in the IASB agenda back in 2002.

After the realization of the importance of quality of the information offered in annual reports, research was directed to the analysis of narrative reports with the use of disclosure indices being widely utilized (Marston & Shrides, 1991). One of the most widely used indexes has been proposed by Botosan (1997), which measures the voluntary disclosure level in 122 businesses in the machinery industry. The main framework of Botosan's study consisted of information disclosed in the annual reports because they positively associated with the amount of disclosure provided via other media and its importance to corporate information was commonly accepted. Jenkins Report (AICPA, 1994) set, principally, the guidelines for the selection of items included in the study, whereas the study of the annual reports was made by the CICA (1991). What is important to point though is that there were five categories of information identified; namely, background information; summary of historical results, key non-financial statistics, projected information and management discussion and analysis. The study incorporated 35 major elements spread across these categories.

According to Ball (2006), the adoption of IFRS is responsible for numerous positive implications to the richness and quality of financial reporting through the shift from various accounting standards followed in different jurisdictions improving investors' understanding and processing of information provided in financial statements. Hence, a risk to the investor already owning or planning to own shares to a company is reduced making the investment to stock markets more attractive. Daske et al. (2008) suggest that the adoption of common

reporting standards facilitates comparison among competing companies in various stock markets helping investors distinguish between over- and under-performing organizations, which leads to informed decisions. Their analysis verified a link between the adoption of IFRS and the improvements to market liquidity as well as the decrease in cost of capital. Hence, what we infer from the above is that the universal implementation of IFRS contributes to the attractiveness of financial markets.

Daske and Gebhardt (2006) performed an investigation on the quality of financial reporting in Austrian, German and Swiss firms that adopted - mandatory or voluntarily - IFRS and found that disclosure quality in the eyes of experts who rate the annual reports was improved. Chua et al. (2012) in their empirical evidence of IFRS adoption on accounting quality inferred that adopting companies in Australia proceeded to reduced earnings management practices and timely loss recognition; hence, the quality of information was improved. Using again a sample of Australian companies, Goodwin et al. (2008) found that the adoption of IFRS led to an increase in their liabilities and leverage, whereas reported earnings were decreased. Another study on 21 countries that had adopted IAS inferred that companies that had adopted the common standards presented higher accounting quality compared to the ones that had not (Barth et al., 2008). Iatridis and Rouvolis (2010) used a sample of Greek listed companies and studied the effects on quality of reporting the period of IFRS adoption and contrasted findings with the subsequent period. What they found was that at the year of adoption companies were inclined to proceed to earnings management practices possibly in order to eliminate unfavorable effects on their performance. However, such practices were significantly reduced the subsequent period providing another indication regarding the positive effect of new reporting standards to quality of reporting. An implication of IFRS to decrease earnings management practices and increase timely loss recognition was a major finding in the German market too (Christensen et al., 2015). In a study with a sample of companies worldwide, Horton et al. (2013) inferred that the quality of information provided to financial statements was improved for companies that were mandatory to adopt IFRS, a finding which was justified by Hogue et al. (2012) too pointing at the importance of the existence of a strong protection regime for investors for the above relationship to be strong. Focusing on French listed mandatory IFRS adopters, Zéghal et al. (2011) reached a conclusion that these new accounting standards reduced earnings management and financial reports provide a more accurate view of the company. Focusing on a sample of unlisted companies based in Ireland, Poland and the UK, Haapamäki (2018) concluded that the adoption of IFRS led to lower earnings management and, consequently, improved reporting quality.

Bassemir and Novotny-Farkas (2015) in their study on the determinants of financial reporting quality, insisted on the determining role of incentives rather than accounting standards per se to affect the quality of earnings concluding that improved earnings quality is shown by private firms seeking access to financial markets. Building on the importance of incentives over standards,

Christensen et al. (2015) focused on the German market with a sample of companies that could voluntarily adopt IFRS and concluded that the adoption of standards was associated with reduced earnings management. However, their analysis did not provide significant evidence of companies that were mandatory to adopt IFRS implying that reporting quality in the latter case would not necessarily improve with IFRS.

Contrary to what has been discussed above, not all studies have concluded to the justification of favorable implications of IFRS adoption. Jeanjean and Stolowy (2008), using a sample from companies in Australia, France and UK, found that earnings management practices were not eliminated after the introduction of IFRS, but were increased in France asserting that accounting standards alone are not enough to improve quality of reporting; rather, it is management incentives and national institutional factors important. Paananen and Lin (2009) captured a period before the official implementation of IFRS in the EU and using a sample of German companies found that accounting quality was lessened after the adoption of IFRS negatively impacting on the quality of information offered to stakeholders. Outa (2011) focused on companies from Kenya and concluded again that the adoption of IFRS did not have a significant impact on the quality of reporting. On the same grounds lies the study performed by Ahmed et al. (2012), who contrasted the effects of IFRS on accounting quality contrasting a sample of companies from countries that adopted the new standards in 2005 with a sample from countries that did not conclude that the adoption of standards reduced accounting quality. Focusing on the UK and Italian markets, Campa and Donnelly (2016) found that earnings quality deteriorates in the UK, but remains unchanged to Italian companies as a result of IFRS adoption. In a recent study on Turkish market, Suadiye (2017) found a negative relationship between the implementation of IFRS and the quality of reporting, even though there was indication that the quantity of information provided to stakeholders was increased.

It is worth mentioning though that another stream of research supported that findings on the relationship between IFRS adoption and reporting quality are inconclusive and controversial. In the early days of IFRS implementation, Tendeloo and Vanstraelen (2005) focused on the German market but their results did not justify a different policy relative to earnings management compared to German accounting standards already in place. However, they found a negative propensity of an IFRS adopter to engage in earnings manipulation in case it is being audited by a Big 4 auditor (at that time). Guenther et al. (2009), exploring financial reports of German firms that had adopted - either voluntarily or mandatory - IFRS, reached again to mixed results on earnings management between the samples of adopters. Utilizing a sample of 15 member states of the EU, Chen et al. (2010) explored the performance of public listed companies before and after the implementation of IFRS concluding that part of accounting quality indicators were improved (earnings management, higher accruals quality), whereas others were not (earnings smoothing, recognition of losses in a timely manner). Byard et al. (2010) examined the impact of

mandatory adoption on EU countries without concluding to a decided statement suggesting that the quality of reporting is improved only when the changes dictated by IFRS were substantial and rigorously enforced. Capkun et al. (2012) reminded that the standards had not remained unchanged throughout the years since their initial implementation back to 2005 and highlighted the flexibility of common accounting standards, which influenced the decision to proceed with earnings management practices and provided data to support both views regarding the impact of IFRS on quality of reporting for various types of adopters (i.e. early, late and mandatory). The vagueness regarding the positive contribution of IFRS per se to the improvement of quality of reporting has been highlighted by Pascu (2012) too, who found blurring results regarding the relationship between quantity and quality of information provided in reports after the adoption of IFRS by German companies.

In the specific study, our focus is on the financial sector of the economy, which is fundamental in each economy acting as a trigger and driver to economic development. Financial institutions, as mediators, facilitate the movement of funds targeting liquidity to stakeholders, who are in search of funds to finance their investment plans or cover their debts (Provopoulos & Kapopoulos, 2001, p. 17).

In recent years, frantic competition, global developments and integration of financial markets aided by technological advancements and the establishment of contemporary financial instruments has changed financial management. As a result of the above changes, the world within banks and other financial institutions operate has changed and financial soundness and viability of operations is a challenge. On the other side of the equation, governments follow policies to safeguard the going-concern of financial institutions, which will defend monetary stability in the economy.

A vigorous banking sector contributes to the economic growth of a market, whereas financial instability is the root cause of deficits and underperformance of the whole economy.

In an effort to explore the differentiating factors among financial institutions, performance is examined on the basis of financial sustainability that determines their effectiveness and efficiency (Spathis et al., 2002). Taking into consideration the obstacles posed to new entrants in the banking sector as well as the rivalry among existing competitors, banks should focus on securing their earnings and on the quality of the information provided in published reports.

The ultimate and outmost objective of banks and financial institutions is profitability supported by growth in shareholders' value resulting from their sound performance through the offering of financial instruments to retail and corporate customers. Earnings and profitability go at the very heart of their existence, as they cover numerous liabilities such as payments of dividends, increases of equity or even finance of investing activities to name a few, which strengthen the profile and enforce the brand name of the bank in the market.

In recent years, there is an increased necessity for financial institutions to cater for their performance. The underlying reason for the above is

the importance of credit rating process that banks undergo, which is influenced by the credit-granting policy they follow. Banking and finance literature suggests that three are the main fundamentals which banks should strictly follow: 1) the principle of liquidity: the financial institutions should ensure that the obligations engendered from customers should be collected on time in order to guarantee the continuous inflow of capital, 2) the principle of assurance: banks should have the ability to manage their assets and liabilities effectively and 3) the principle of efficiency: banks should balance the profits and the number of funds directed to loans.

The importance and the strong relationship between the effectiveness of the banking sector and the performance of the economy in which it is established have been identified by Kosmidou and Zopounidis (2008). Nevertheless, the evaluation of efficiency and competitiveness of this sector faces obstacles as a result of the intangibility of services offered as well as the variety of performance measures employed. Back in 1980, Revell (1980) suggested the appropriateness of interest margin (the difference between interest income and expenses divided by total assets) to assess the performance of commercial banks in the United States. On the other hand, Arshadi and Lawrence (1987) adopted a different approach by approximating bank performance via correlation analysis incorporating measures of profitability, loan market shares and pricing policy. Further to the above, research conducted by Miller and Noulas (1997), emphasized on the banks' size as an alternative influential factor to the efficiency of banks and financial institutions. Finally, Miller and Noulas (1996) investigated the technical efficiency of large banks asserting that there is a positive relationship between size and technical efficiency while they operate under a reduced amount of returns.

In addition to the above, financial statements analysis consists of an imperative instrument for depicting the financial position of financial institutions. Their interpretation and evaluation are pivotal due to the mixture of groups of stakeholders (investors, public authorities, shareholders), who have an interest not only for the recorded financial results but also for the managerial comments about the future prospects on vision and growth. It is important to mention that each one of these stakeholders desires a different focus on the evaluation of performance and interprets financial analysis based on its unique aims and objectives. Thus, the emphasis should be on diverse aspects of performance, which is depicted in published statements. Financial institutions are inclined to risks to affect their liquidity resulting from monetary instability, unexpected fluctuations in interest rates posing obstacles to their going-concern. It is worth noting that even if risks were reflected in published reports and statements, it is the management commentary reports that complement operational performance with risk mitigation strategies.

Performing an analysis of 12 European countries, Gebhardt and Novotny-Farkas (2011) focused on the recognition and measurement of loan loss provision as a result of IFRS adoption and concluded that these new standards reduced income

smoothing (negative relationship with earnings management). They also found that banks recognized loan losses on a less timely basis, which deteriorates the quality of information offered to stakeholders through financial statements. Clarifying the distinction between financial reporting and bank regulation, Barth and Landsman (2010) contend that fair value accounting in the banking sector did not amplify the negative consequences of the financial crisis. Leventis et al. (2011) investigated loan loss provisions to a sample of 91 EU listed commercial banks to reach the conclusion that the implementation of IFRS reduced earnings management practices for both risk-loving and risk-averse banks providing a more accurate view of their earnings. Nulla (2014) performed an analysis on the quality of reporting produced by large financial institutions in Canada and reached to the conclusion that earnings quality has increased (elimination of income smoothing), whereas accruals and timeliness loss of recognition have been decreased. In a study on Nigerian financial institutions for two periods; from 2004 to 2008 and after the adoption of IFRS (2009 to 2013), Yahaya et al. (2015) found an inverse relationship between the adoption of IFRS and earnings management since for the particular country the new standards imposed tighter accounting rules compared to the past. Manganaris et al. (2015) utilized a dataset from 15 European banks to explore the relationship between IFRS adoption and value relevance of accounting information offered in financial reports and inferred that informativeness of earnings was increased after the adoption of new reporting standards. In line with the above, Palea and Scagnelli (2017) contended that for a sample of banks from France, Germany, Italy, and Spain earnings are reported more accurately under IFRS and they could accurately predict future cash flows.

The Greek banking sector constitutes a basic mechanism of exercising economic policy to the Greek, bank-based economy. Banks have the power to vary the supply and demand of funding opportunities in the Greek economy, to manipulate buyers' purchasing power as well as to integrate the production processes. Greek banks offer a wide range of services extending from portfolio management and suitable saving opportunities to exceptional funding prospects not only to individuals/retail customers but also to enterprises leading to modernization and growth alternatives. The first Greek Bank has its roots back to 1834, with the establishment of the National Bank of Greece. The Greek banking sector passed through several stages during the phase of its revolution until its current structure. From the era of drachma (local currency) and its devaluation risks, the Greek economy transited to the economic and monetary union with the introduction of euro currency, with major implications for the increasing amount of customers' lending and the fierce competition from the side of banks and financial institutions. The contraction of the European currencies caused by the third phase of the European Monetary Union development had as a result profit reduction. All financial institutions were obliged to harmonize their operations according to the European Union rules. This harmonization concerned mainly the accounting rules and standards, the risk

management and internal control systems, the data and communication systems and, ultimately, the payment and settlement systems. Banks in operation have undergone a number of mergers, acquisitions and resolutions and are reduced in number from 69 to 39. Also, systemic banks and Attica bank cumulatively account for more than 95% in terms of assets of the Greek Banking System (HBA, 2017, p.2).

The Greek financial sector is characterized by dynamic and rapid growth during the last decade with higher growth rates compared to other sectors. The growth rate of the Greek economy was steadily above the European average. At the same time, the significant decline of the interest rates together with the increased number of privatizations in the Greek financial sector deranged market conditions reviving competitiveness among key players. This situation generated opportunities for stakeholders and positive conditions for prosperity in the economy.

Greek financial institutions, acknowledging the need to take advantage of the opportunities both in the period before and during the global financial crisis, made strategic decisions that involved cooperation in the form of mergers and acquisitions in an effort to strengthen their market position increasing their market shares too. Needless to say, all the above lead to the development of large financial corporations. The resultant of the latter is the strengthening of capital structure, expanded networks and the offering of a variety of banking products and instruments (increased product lines with excess depth).

The performance and profitability of Greek banks were of great importance and various scholars have focused on this topic through the years. In 1995, Alexakis et al. (1995) conducted a research referring to the period from 1989 to 1991 and investigated the liberalization and performance of the Greek banking sector, concluding that the lead indicators of profitability were quite different from other countries because of the intense regulation in Greece. In addition, Zopounidis et al. (1995) performed a multi-criteria analysis capturing the period of 1989-1992 in order to estimate the performance of Greek commercial banks using ratios analysis techniques concluding to a rank of them based on a utility model. In a study on competitiveness and effectiveness of the Greek financial institutions, Hardy and Simigiannis (1998) stressed that in the '90s mostly the medium-sized financial institutions succeed in the consistency of their profitability levels. Finally, Noulas (1999) and Staikouras and Steliaros (1999), examined the profitability and efficiency of the Greek banking sector using ROA financial ratio in assessing performance.

Dimitras et al. (2018) utilized a sample of commercial banks from the EU among which they included Greek too and found that the transition to IFRS significantly impacted bank efficiency estimates. However, the challenge for the Greek banking sector relative to IFRS is the adoption of IFRS 9 in effect from 2018 replacing the incurred loss model with the expected loss model, leading to higher provisions with whatever negative impact this might have on banks' capital adequacy (HBA, 2017, p. 33). Hence, there is an increasing need for additional research on the topic of IFRS and its

impact on the quality of reporting, particularly in the banking sector in Greece.

Together with the implementation of IFRS in the banking sector, corporate governance could be seen as a 'byproduct' of the new standards. In a way, IFRS promotes the implementation of corporate governance best practices in an effort to the effective implementation of new standards as well as the preparation of quality reports to stakeholders. In a study of the banking sector in Malaysia for the years 2009-2013, James and Joseph (2015) found that corporate governance in the form of ownership and internal controls (board independence and size) did not significantly contribute to the improvement of their performance. Ebrahim and Fattah (2015) explored the link between IFRS and Corporate Governance in the emerging economy of Egypt inferring that there is a positive relationship between Corporate Governance variables and compliance with IFRS. Interestingly enough, Mollah et al. (2015) proposed that when IFRS and Corporate Governance practices are interwoven in an organization, the possibility of preparing quality reports is increased.

On the same grounds, Georgantopoulos and Filos (2017a) found that board size and the proportion of independent board members increased the efficiency of Greek banks, not only during the global economic crisis but also during the Greek debt crisis and specifically during the years 2008-2014. The same scholars in a second study (2017b) included additional corporate governance variables to test for their contribution to bank performance concluding to the positive influence of the increased size of the board and the proportion of independent directors (up to a maximum point though). On the other side, they did not find supportive data to the contribution of a director's gender and country of origin to the performance of Greek banks. Contrary to these findings, Kaur and Vij (2017) found a positive relationship between Indian banks with small boards, comprised of female members, which organized occasional meetings with the performance of the institution. Uwuigbe et al. (2018) found that board size and independence, and foreign executives on the board were mediating factors to the timeliness of financial reports, which is imposed by IFRS. However, the size of the board was negatively related to the timeliness of reporting since larger boards made the decision-making process more cumbersome. Bajra and Cadez (2018) examined the impact of corporate governance practices on earnings management, which is an indication accepted by scholars that relates to quality of reporting and inferred that internal audit and board of directors' quality eliminate earnings management practices. Interestingly enough, they inferred that when these two corporate governance practices interacted, the favorable effect of each individual one was reduced. Focusing specifically on the internal audit function, Abbott et al. (2016) emphasized the complementary relationship between competence and independence in order the particular function perform quality audits, which substantiates high quality of financial reporting.

The above discussion highlights the necessity to explore more the role of corporate governance, its relationship with the adoption of IFRS and the implications for reporting quality in the Greek

banking sector. Besides, Leventis et al. (2011) suggested as an avenue for further research in the particular field the inclusion of some corporate governance variables such as board independence. Thus, the focus of this study on the relationship between IFRS adoption and reporting quality in the Greek banking sector is justified.

### 3. METHODOLOGY

The current project analyses the financial reports of fourteen Greek commercial banks for the period that ranges from 2008 to 2011. This period includes the burst of the global financial crisis as well as the beginning of the Greek sovereign debt crisis. The analysis includes the exploitation of the most important financial figures and the investigation of the quality improvement presented into published financial reports. In order to conduct the financial examination, we analyze the consolidated financial, profit and loss and cash flow statements. These statements were derived from the Datastream database. The selection criteria of the financial institutions are based on the consistency of its largest and most credible banks operating in the Greek economy, which account for 14 banks.

The Management Commentary Index (Ma.Co.I.) provides the capacity to assess the disclosure quality of the firm's Management Commentary and to produce a quantitative value for that quality that might then be utilized as a part of further empirical analysis (Garefalakis et al., 2016). Our technique is implemented in two stages as depicted below:

#### First stage

We propose a new checklist called the Ma.Co.I. that was developed for the detailed evaluation of financial reporting quality and was initially presented by the FASB and the IASB (for more details, see IASB, 2010; Garefalakis et al., 2016). The amount of narrative information revealed in an annual report is what determines a Management Commentary Report quality. The Ma.Co.I. consists of 37 constituent points, which are classified into five categories as follows:

- Category 1: The nature of the business
- Category 2: Objective and strategy
- Category 3: Key resources, risks and relationships
- Category 4: Results and prospects
- Category 5: Performance measures and indicators

#### Second stage

In the second stage, we derived the narrative information that was requested from the Final Management Commentary Framework (MCF) given in 2010. The Ma.Co.I. uses 70 KPIs for 37 points, taken by the MCF (IASB, 2010). This was the case because some points require more than one KPI to cover the information suggested by the MCF. Therefore, the maximum quality score of the index is reached when the annual financial statement includes 70 KPIs. The information on the number of appropriate KPIs is given by the Factor Analysis method.

The disclosure score of the Ma.Co.I. indicates the extent of disclosure compliance with the MCF. Based on this, a dichotomous scoring approach is applied by manually capturing each KPI's disclosure quality. If a required quality dimension is met, it is scored as one; otherwise, it is scored as zero. If a

quality dimension is not applicable to a specific KPI, it is scored as 'not applicable' (NA) (e.g. Cooke, 1992). Consequently, the Ma.Co.I. total disclosure score (denoted as T) is measured for each firm with the following formula:

$$T = \sum_{i=1}^m d_i \quad (1)$$

where:  $d_i$  is the score of each KPI ("1" if the item is mentioned and "0" otherwise), and  $m$  is the maximum number of KPIs (70 disclosure items in total) that is expected to be disclosed by firms in compliance with MCF. The value of  $T$  depends on the number of KPIs disclosed by the firms. In addition, the quality and quantity score of the Ma.Co.I. index for each bank lies between 0 and 100 or 0 and 70.

The following model is estimated (multivariate regression model):

$$\begin{aligned} Ma.Co.I. = & b_0 + b_1 IBM + b_2 BD + b_3 ACI + b_4 ACE \\ & + b_5 EA + b_6 ROA + \varepsilon \end{aligned}$$

In the regression model, the *Ma.Co.I.* is regressed on five corporate governance variables; namely, *IBM*, *BD*, *ACI*, *ACE*, *EA*, and one quantitative variable (*ROA*).

*Ma.Co.I.* = Management Commentary Index (narrative reporting quality (%))  
*IBM* = INDEPENDENT BOARD MEMBERS (% non-executive board members),  
*BD* = BOARD DIVERSITY (female or foreign culture representation on board),  
*ACI* = AUDIT COMMITTEE INDEPENDENCE (% of independent audit committee board members),  
*ACE* = AUDIT COMMITTEE EXPERTISE (the institution has 4 financial experts of SOX),  
*EA* = EXTERNAL AUDIT (the institution has an external auditor of Corporate Social Responsibility/Health and Safety/Sustainability).

#### Control Variables

*ROA* = RETURN ON ASSETS (ROA)

$\varepsilon$  = THE ERROR TERM

- F-test is for all coefficients simultaneously zero.
- Number of observations 6,646.
- $R^2 = 0,8445$ .
- Adjusted  $R^2 = 0.7963$ .
- Probability = 0.000.
- The adjusted coefficient of determination (Adjusted  $R^2$ ) is 0.796381 indicates that about 80 per cent of the variation in the dependent variable (about its mean) is explained by variation in the independent variables suggesting the explanatory power of the model is very satisfactory given the nature of the sample.
- Diagnostic tests indicate no modelling problems.
- We use White's test to reduce heteroskedasticity.

The control for profitability (RETURN ON ASSETS (ROA)) is significant (p-value 0.0305) - the coefficient (-0,001) at 5% level - suggesting that an increase in profitability reduces the proportion of NARRATIVE reporting. One could argue that as profitability of a financial institution increases through the years (2008-2011), well-established organizations may not be motivated to disclose excess NARRATIVE information. In case the board of



directors adopts a shortsighted perspective on strategy, they may decide that there is no point in providing additional information on performance in their published reports after a successful fiscal year with increased profitability. In such case, banks may assume that investors will continue supporting them with their decision to invest money without asking for additional amount of information. In other words, investors may feel that since banks returned into profits or increased their profits compared to previous years, any increase to the quantity and quality of reports will not add value to these reports per se. Thus, our data indicate that an increase in profits is not enough to force banks to improve the quality of their reports above a certain level; rather, banks may be willing to reduce the proportion of narratives. This result is in contrast to findings of several prior studies, although the results have been mixed.

Moreover, the findings designate that BOARD DIVERSITY (BD) had a strong positive relationship with NARRATIVE reporting at 1% level (p-value 0.0004). In our research, this diversity is not only measured as the proportion of female participation to the board, but it associates diversity with the representation of foreign cultures to it. The positive relationship dictates that banks' decision to promote sexual and cultural diversity to their boards, was positively associated with the quality of reports they prepared. This result is partly consistent with many previous studies that found that diversity of directors (mainly in the form of participation of females) has the potential to increase overall performance of a firm (Adams & Ferreira, 2004; Bonn, 2004; Carter et al., 2003; Huse & Solberg, 2006) and that the number of females on a board is positively associated with corporate disclosure (Ibrahim & Angelidis, 1994).

From the analysis of data, we found that the independent variable AUDIT COMMITTEE EXPERTISE (ACE) (p-value 0.0000) is highly important for quality reporting. It is worth noting that we value expertise with the presence of at least 4 financial experts of SOX to the audit committee. Hence, the improvement of the audit committee expertise through the inclusion of SOX experts leads to increased quality of reports produced.

In line with the above, the AUDIT COMMITTEE INDEPENDENCE (ACI) variable (p-value 0.0334) was significant at 5% level with a positive relationship to NARRATIVE reporting. Hence, the increase in the percentage of independent members of audit committee was associated with increased quantity of information provided into reports (positive relationship).

Another significantly important variable - (p-value 0,000) at 1% - was EXTERNAL AUDIT (EA), which had a positive impact. Even though external audit is not a new corporate governance variable in the quality of reporting research, we found that an external auditor with experience in the field of Corporate Social Responsibility/Health and Safety/Sustainability issues would entail additional information provided through reporting. On the other hand, in case the external auditor did not have expertise in the above mentioned fields, the pressure on the board of directors would be limited in order to provide in-depth information on bank's

performance through financial statements and management commentary reports.

Finally, INDEPENDENT BOARD MEMBERS (IBM) variable was statistically significant at the 5 per cent level (p-value 0.0110). This finding emphasizes the relationship between narrative reports and independence of board members measured as the percentage of non-executive board members. Our analysis contradicts with findings from many previous studies (Chen & Jaggi, 2000; Cheng & Courtenay, 2006; Donnelly & Mulcahy, 2008; Ho & Wong, 2001), which found a positive association between the existence of independent directors and quantity of disclosure. Our data dictated that when the number of independent board members increases, there is an inverse impact on the propensity to include many details regarding the performance and future prospects of a bank through the published statements and reports.

#### 4. CONCLUSION

The rationale for the study was to explore the mediating role of IFRS and Corporate Governance variables to the quality of the information provided to stakeholders of Greek banks. Regarding IFRS, we found that the adoption of new standards produced more accurate figures for profitability, indeed, for the sum of banks in the sample. Specifically, ROA proved to be a reliable estimator for the performance of a banking institution. Since the adoption of IFRS leads to a more credible figure for profits, stakeholders could feel more comfortable using ROA in their decision-making. Hence, knowing that a financial institution has adopted IFRS, could induce investors to use financial measures published into financial reports when performing an analysis of banks' performance. In this way, investors could eliminate their exposure to risk when taking positions in financial markets. This was particularly important during a crisis period both globally (global financial crisis) and locally (Greek sovereign debt crisis).

In conjunction with the above, our study indicated that Corporate Governance variables were relevant to the quality of reports prepared by a Greek financial institution. Specifically, the board diversity with the inclusion of a mixture of male and female members together with the members from different cultures had a positive impact on the decision to include additional information in the reports, improving the quantity and quality of information provided to stakeholders. The analysis of our data revealed a positive contribution of audit committee independence to the propensity to include valuable information to the reports and statements produced. The possibility of being audited by an external audit company with experience in Corporate Social Responsibility/Health and Safety/Sustainability positively influenced the decision to incorporate information to the reports improving the overall quality of reporting. Additionally, the data revealed a positive impact of the expertise of the audit committee (indicated with the presence of at least 4 financial experts of SOX) with the quality of reports produced and the amount of detail presented into them.

Our study and findings have managerial implications too. Top management of bank

institutions in Greece could consider them in their decision making. Banks should realize that it is to their benefit in the long run to prepare quality reports. Investors and various stakeholders positively value the adoption of IFRS as well as Corporate Governance practices. Even though the above entail additional costs, our analysis proved that they could lead to future benefits and profits. Hence, banks should struggle to hire competent members of staff for the accounting department, experienced members for the audit committee, and promote sexual and cultural diversity of their board of directors. Moreover, when choosing their external auditor, banks should consider that external auditors with experience in Corporate Social Responsibility/Health and Safety/Sustainability issues could contribute to the improvement of reporting quality.

An interesting implication of the analysis of our data refers to the possibly not deterministic role of IFRS to explain variability in quality of reporting. In other words, the sole adoption of IFRS may not be enough to improve reporting quality. Also, the adoption of corporate governance practices alone may not be adequate to safeguard high quality of information provided through financial statements. This is a very important matter though since financial reports should cultivate a sense of trust to various stakeholders regarding the performance and future prospects of a bank and financial institution. For the above reasons, additional research should be undertaken to identify factors that could effectively explain the variability in quality of reports. In achieving the above, it would be interesting to enrich the sample with data from banks and financial institutions from other countries. For comparison purposes, it would be challenging to compare the quality of reporting after the implementation of IFRS

and Corporate Governance practices by banks that operate in South Europe. Building on the above, a stream of research could be directed to countries of the European Union that suffered from severe (public and private) debt such as Portugal, Italy, Ireland, and Spain. If we perform a comparative study among such countries, we could make useful inferences regarding how IFRS and Corporate Governance practices affected reporting quality.

What is also interesting to test is the role of country regulations and policies. Byard et al. (2010) highlighted the importance of policy makers in the initiation of effective changes in areas such as reporting. Building on the above view, Landsman et al. (2012) found that countries with strong enforcement affected the decision to provide additional information to their reports compared to the companies in countries with weak enforcement. Besides, Soderstrom and Sun (2007) suggested that determinants of accounting quality is the legal and political system, which is filtered through accounting standards, financial markets, capital structure, ownership, and tax system.

Another potential avenue for further research could be the inclusion of other sectors of the economy (such as tourism industry, maritime or energy sector, companies that offer consumables and fast-moving products) and proceed to comparisons.

Finally, our study is not without limitations with the main being the selection of the sample, which included data for the 2008-2011 period only. We could extend this to capture the period from 2005 onwards to keep up with the European Union official year of IFRS adoption exploring changes before and after the particular milestone too.

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## APPENDIX

Table 1. Descriptive statistics

		<i>Descriptive Statistics</i>								
		<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Skewness</i>		<i>Kurtosis</i>	
		Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
	Y	9514	0,0888	0,9717	0,546042	0,322049	-0,113	0,025	-1,636	0,05
IBM	X3	9501	0	1	0,495	0,3473	-0,307	0,025	-1,398	0,05
BD	X5	9508	-1,2	0,6667	0,089491	0,102442	0,744	0,025	4,705	0,05
EA	X6	7020	0	1	0,25	0,432	1,164	0,029	-0,646	0,058
ACI	X7	9516	0	1	0,7	0,424	-0,892	0,025	-1,021	0,05
ACE	X9	9505	0	1	0,62	0,485	-0,506	0,025	-1,744	0,05
EB	X10	9516	0	0	0,06	0,045	0,689	0,025	1,591	0,05
NEB	X11	9516	0	1	0,65	0,337	-0,957	0,025	-0,537	0,05
	ROA	9462	-113,65	169,87	6,28	8,4815	1,009	0,025	36,399	0,05
	Valid N (listwise)	6646								

Table 2. Panel least squares

Method: Panel Least Squares					
Cross-sections included: 1558					
Total panel (unbalanced) observations: 6646					
White cross-section standard errors & covariance (d.f. corrected)					
Variable					
C		<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
INDEPENDENT BOARD MEMBERS (IBM)		-0.961771	0.315643	-3.047.022	0.0023 (**)
BOARD DIVERSITY (BD)		0.020154	0.007922	2.543.929	0.0110 (*)
EXTERNAL AUDIT (EA)		0.063156	0.017763	3.555.413	0.0004 (**)
AUDIT COMMITTEE INDEPENDENCE (ACI)		0.073835	0.008352	8.840.258	0.0000(**)
AUDIT COMMITTEE EXPERTISE (ACE)		0.043153	0.020276	2.128.238	0.0334(*)
RETURN ON ASSETS (ROA)		0.012625	0.015836	0.797229	0.4254
R-squared		-0.000717	0.000331	-2.163.685	0.0305(*)
Adjusted R-squared		0.844551			
Prob (F-statistic)		0.796381			
F-statistic		0.000000			