Managerial Incentives and Earnings Management: 
An Empirical Examination of the Income Smoothing in the Nordic Banking Industry

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ABSTRACT

Prior empirical research, mainly conducted in US under the US GAAP, has indicated that managers in listed banks use loan loss provisions as a primary tool for income smoothing activities. Since 2005 the accounting environment in the European Union (EU) changed, as all listed companies are required to comply with International Financial Reporting Standards (IFRS). Some arguments envisage that IFRS is a set of high quality standards that plug some inconsistencies relative to national General Accepted Accounting Principles (GAAP). The overall objective of the present study is to examine earnings management and in particular income smoothing through the use of loan loss provisions (LLP) to manage earnings under IFRS and national GAAPs. The sample consists of twenty large commercial banks listed in the Nordic countries (Denmark, Finland, Norway and Sweden) for the years 2004-2012 (including early adopters) and sixteen banks for the years 1996-2003 under each country’s national reporting regime. Furthermore we present the body of earning management literature in conjunction with agency theory in order to grasp managers’ opportunistic behavior. Finally we assess the institutional role of financial reporting standards and the arguments of how IFRS could restrict earnings management activities as proposed by some authors. Overall, our results indicate some degree of income smoothing activities through loan loss provisions by bank managers both under national GAAPs and IFRS. The study contributes to the broad literature body on earnings management, while testing income-smoothing activities on a single industry compared to previous studies where the samples comprises a variety of firms in different industries.

Keywords • Earnings Management • Income Smoothing • Financial reporting standards • Loan Loss Provisions • Managerial Incentives • Agency theory.

The Master thesis is dedicated first of all to our families for their encouragement, support and motivation all these years but also to members and friends that are not among us.

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I. INTRODUCTION

"But how will you look for something when you don’t in the least know what it is? To rephrase, even if you come right up against it how will you know that what you have found is the thing you didn’t know?” (Plato).

The scope of earnings management\(^2\) has been cast into negative light as high profile corporate scandals shattered the public opinion causing a general crisis of confidence on the aspect of corporate accountability, the role of auditors as well investors and regulators (Eilifsen, 2010). In this context, corporate giants like WorldCom and Enron represent two extreme earnings management cases that resulted in two of the largest bankruptcies in U.S history (Schilit, 2010). Unarguably in the light of akin corporate accounting scandals the public perception might view the scope of earnings management as a criminal act where “fraudster managers” engage in improper accounting activities for their own benefits (Jiraporn et al., 2008). Previous studies have documented a variety of accounting activities that manager’s use whenever they engage in activities to smooth income. For instance, inappropriate write-offs, capitalization of ordinary Research and Development (R&D) costs, under provisioning for debt costs and also income smoothing through loan loss provision accounts, are just to mention few, linked to the broader scope earnings management (Roychowdhury, 2006).

However, the opinions diverge on whether earnings management reflects proper or improver activities. Therefore this topic has been divided into three different categories, the “white” category summarizes earnings management as “taking advantage of the flexibility in the choice of accounting treatment to signal managers’ private information on future cash flows”. The “Gray” category as “choosing an accounting treatment that is either opportunistic (maximizing the utility of management only) or economically efficient. And the “Black” category refers to earnings management as “the practice of using tricks to misrepresent or reduce transparency of the financial reports” (Ronen & Varda, 2008, p.25).

In the current earnings management debate, the principal opinion accepted by standard setters, practitioners and regulators, is that such activities can be detriment to the firm. For instance, NASDAQ, one of the leading stock exchanges in the world have issued guidelines demanding from listed firms to hire “financially literate” audit

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\(^2\) Earnings management refers to situations where “managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reporting accounting numbers” (Healy & Wahlen, 1999, p.368).
Managerial Incentives & Earning Management

committees members; while the Sarbane-Oxley Act (SOX) requires certain board members to acquire “financial sophistication” (Jiraporn et al., 2008, p.623). In short, the prevalent perception seems to support the view of earnings management and all the activities it surrounds as being opportunistic in nature. Thus, regulators and standard setters have considered the extensiveness of earnings management to be a major concern for the reliability of published financial statements (Jiraporn et al., 2008).

In summary, the mainstream opinion in the field argue in favor of managers’ opportunistic behavior and the use of earnings management to gain beneficial contractual outcomes i.e. “the black” category (Arya et al., 2003; Ronen & Varda, 2008). The arguments here involve also the deviation between shareholders’ and managers’ interests. This interest deviation between the two parties could encourage managers to use a certain degree of flexibility provided by accounting standards i.e. national, Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS) to manage earnings opportunistically, creating distortions in the earning figures reported in the financial statements (Jiraporn et al., 2008).

II. BACKGROUND

Investors’ reliance on the financial information provided by corporate executives is based on the widespread notion that accounting information is used by investors to assist in valuing stocks (Healy & Wahlen, 1999). However this notion has been illustrated by previous studies as a framework that can provide corporate managers with incentives to manipulate earnings in their attempt to influence short-term share price performance; or minimize earnings fluctuations in order to show better or more stable financial results (Trueman & Titman, 1988; Dye, 1998; Healy & Wahlen, 1999).

While most corporate executives respect investors and shareowners and report in accordance with the standards, there is always the risk that some executives might misrepresent financial data for achieving contractual outcomes (Kellogg, 1991). This risk of financial accounting misrepresentation can be partly explained by the structure of ownership. Where owners (principals) and managers (agents) are separated and the financial reporting function symbolizes a control mechanism that can be influenced by the contractual relationship between these two parties, as described by the agency concept (Eilifsen, 2010).
The agency concept stresses the complexities that can arise under conditions of asymmetric and incomplete information, between the principal and the agent. As it can result in agency concerns, which are namely issues that occur when these two parties, have different interests. In this context, agents may have incentives to undertake actions and make decisions that are not in line with owners’ interests, when preparing the financial information (Fama, 1980; Fama & Jensen, 1983). Callao and Jarne (2010) argue that accounting standards can restrain managers’ ability to misrepresent accounting numbers. Where inflexible and rigid accounting rules that offer limited accounting options can restrict the scope for subjective judgments, which can in turn constrain managers’ ability to behave opportunistically.

On the contrary, it has been debated that more flexible rules can provide greater scope of choices to managers and a certain degree of implicit subjectivity in the implementation and application of accounting standards criteria. As such managers can be allowed to exercise their discretion (Burgstahler & Dichev, 1997). So, the more flexible accounting rules tend to be, the higher gets the probability that managers can engage in earnings management activities (illustrated as the accounting practices undertaken by management with the intention of manipulating the reported figures to their advantage) (Jeanjean & Stolowy, 2008; Callao & Jarne, 2010).

Through the prism of flexible versus inflexible rules, a variety of studies have stressed the issue of some accounting principles that might permit discretion to managers. In this regard Fields et al. (2001) and Iatridis (2010) argue that agency theory makes a number of assumptions, regarding the behavior of managers in conjunction with financial reporting. They suggest that by implementing IFRS, firms would act optimally while promoting higher financial reporting quality. In 2005 the introduction of IFRS in the European Unions (EU) stock markets, created a new financial reporting environment for corporate managers in the member states.

Some arguments support the IFRS contribution and its enhancements in financial reporting based on the premise that these standards can plug some gaps in national accounting reporting regulations; by offering measurement and recognition principles to certain aspects that had not addressed previously in some countries (Ball et al., 2003; Dao, 2005; Ball, 2006; Daske et al., 2008). Moreover due to the extensive information on disclosure requirements that IFRS stipulates in comparison to national GAAPs, it
has been also expected to decrease information asymmetries between users inside the firm and outside (Healy & Palepu, 2001; Iatridis, 2010).

However, other aspects of IFRS have been proposed to negatively impact the quality of financial statements and have been underlined by the research literature in contemporary years (e.g. Ormrod & Taylor, 2004). These aspects include, greater flexibility in terms of principles by IFRS in comparison to some national accounting standards (rule-based accounting) in EU. Also other changes induced, involve the criteria of fair value accounting as well as the reduction of requirements regarding the presentation of financial statements (Truseel & Rose, 2009). These changes have been argued to provide some openings for opportunistic behavior followed by discretionary accounting. Other arguments (Arnold, 2009; Pozen, 2009) stresses also the possibility that discretionary accounting levels would increase in the early years of IFRS implementation in comparison to the situations under national GAAPs, assumed the uniqueness of the potential difficulties with the accounting standards interpretations (Laux & Leuz, 2009).

III. PROBLEM STATEMENT

This study is essentially related to the literature of earnings management and corporate governance in the context of financial reporting and from the perspective of an industry that has received limited attention to date in this particular research field. This is the banking industry, where previous studies have not sufficiently emphasized on (Peasnell et al., 2000). The banking industry is of interest, since it has been argued that banks together with insurance companies are more prone to earnings manipulation and more precisely through income smoothing techniques; due to the subjective judgments managers must undertake concerning expected reserves for losses.

In the context of income smoothing within the banking industry, the analysis of loan loss provisions as an expense flow and its corresponding entries in the balance sheet are vital, as the former impacts on the timing and amount of reported earnings. While the later mirrors bank managers’ judgments and expectations on future loan losses (Greenwalt & Sinkey, 1988). In addition, managers’ judgments over accounting

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3 Discretionary accounting policies are used by managers to improve the firm’s results (Christie & Zimmerman, 1994; Bushue, 2001). The timing of losses or revenue recognition is important as managers can choose to organize the accounting policies in order to transfer earnings from successful accounting years to less successful years (Iatridis, 2010). Managers can also use discretionary accounting policies to enhance their compensation (Healy & Wahlen, 1999).
estimates for loan losses meet certain criteria as described by Copeland (1968) (see literature review) and therefore this account presents an interesting case for examining income smoothing in the banking industry.

Furthermore some claims predict that IFRS has reinforced the trends for banks to decrease or increase loan loss provisions during downturns in the economy (Clark, 2010). When losses arise and hit the regulatory capital in recessionary periods, the managerial actions taken as a response, is by providing more for loan losses while reducing lending (El Sood, 2012). It is within this setting that some studies found loan loss provisions to be used for income smoothing purposes (Collins et al., 1995; Cornett et al., 2006). However, the field of income smoothing in the banking industry presents also an interesting case due to banks’ position as major financial intermediaries in society.

These financial institutions are the principal source of loanable funds for other industries as well as individuals. In recent years banks are also among the leading buyers of governments notes and bonds to finance public facilities. Therefore the possible inconsistencies in how banks conduct their activities might have severe consequences for every financial system, as we witnessed with the collapse of Lehman Brothers in 2008 (Rose & Hudgins, 2013). Thus the motivation for this study is to extend our understanding of earnings management and more specifically income smoothing activities in conjunction with the accounting regimes i.e. national GAAPs and IFRS, by focusing our attention on the use of loan loss provision accounts. So, we pose the following research question: Have income smoothing increased or decreased under IFRS, compared to the national GAAPs?

In order to be able to answer the research question from the scope of income smoothing through loan loss provisions, the sample consists of major listed commercial banks in Nordic countries (Denmark, Finland, Norway and Sweden). We intentionally exclude Iceland due to the severe problems of their financial system and the collapse of some banks during the financial crisis. Moreover the financing and legal traditions in these countries are embedded in code-law principles and bank-oriented structures. Finland and Sweden present a case, which is primary influenced by the legal tradition of German. Where the tax system has a key role in financial reporting of firms for selecting certain types of accounting methods and policies. While, managers might
concentrate their efforts in tax planning to smooth the income and attempt to minimize the tax effects over time (Ronen and Varda 2008). On the other hand, Denmark and Norway are more closely to the Anglo-Saxon model (Elling, 1993).

Although with regard to accounting reporting standards, all four countries have had some tradition of combined accounting-and tax rules. While the national accounting standards in these countries were defined in broad terms by the Companies Acts in each nation (Elling, 1993). In addition, the accounting environment changed progressively towards international harmonization and unarguably the final switch towards IFRS in 2005 meant a substantial change in the Nordic countries financial reporting (Piot et al., 2010).

Moreover we construct two hypotheses in order to examine income smoothing between the two accounting regimes. Although the hypotheses development will be discussed in the research design section, we present them in brief here. The first hypothesis examines banks’ loan loss provisions, and earnings before taxes and provisions in an ex ante IFRS era, where the sample of banks operated under their respective national GAAPs. In this regard previous studies have shown that bank managers used loan loss provision accounts to smooth and manage earnings. While some arguments claimed that national GAAPs did not require sufficient disclosure information and therefore, managers could choose not to provide adequate information about the loan loss provisions amounts and estimates (e.g. Lapointe et al., 2005; Pérez et al., 2006).

The second hypothesis will reflect the assumptions that earnings management can be reduced with the adoption of IFRS due to certain qualities of the new accounting standards. For instance some authors (e.g. Nenova, 2003; Barth et al., 2008; Renders & Gaeremynck, 2007) have expected that higher requirements on detailed disclosures that IFRS enforces will reduce income smoothing and consequently earnings management. While other arguments suggests that IFRS induces certain accounting changes that can reinforce earnings management (Jeanjean & Stolowy, 2008).
PAPER STRUCTURE

The study is organized as followed; the next section (III) surveys the empirical research field on earnings management by breaking it down into different segments. We provide the definition of earnings management and also the definition of income smoothing. Secondly we present the research literature on the specific industry of interest in order to develop the hypotheses and be able to answer the research question. Finally the literature section includes the presentation of the agency concept, since it is vital to view earnings management through the traditional relationship between agents and principals and understand how managerial incentives emanate through the traditional ownership structure. The section ends with the presentation of IFRS in conjunction with earnings management, agency and the features it introduces to the banking industry. The fifth (V) section discusses the preferred research design and the model applied in this study. This section provides a discussion of the model development and the sample. The sixth (VI) section presents the empirical results in form of descriptive statistics while the seventh (VII) section presents the analysis and conclusions.

IV. LITERATURE SURVEY

This study examines earnings management through the prism of three major components; the first is the aspect of income smoothing as a technique available to managers to engage in earnings management activities. The second component views the income smoothing incentives from the perspective of the agency relationship between agent (managers) and principals (owners) in order to understand why agents behave in certain ways. Finally the third component takes into consideration corporate governance in terms of financial reporting standards as a possible remedy to restrict managers opportunistically behavior by accounting rules. Although corporate governance may very well include other monitoring and assurance mechanisms for agents’ performance, we implicitly focus on the accounting principles between two regimes. However the use of the aggregate national GAAPs in the Nordic region will serve the arguments, which reflect IFRS as an improved version of older national accounting standards in order to allow for comparisons between ex ante and ex post IFRS periods. All three components are comprised together in the banking industry.
I. WHAT IS EARNINGS MANAGEMENT?

The term earnings management has been given an initial definition provided by Schipper (1989, p.92) as a “purposeful intervention in the external financial reporting process with the intent of obtaining some private gain”. In 1999, Healy and Wahlen (1999, p.368) supplemented Schipper (1989) with a definition that refers to earnings management occurrence as “when managers use judgment in financial reporting and in structuring transaction to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reporting accounting numbers”. Given the vast majority of the empirical literature that views earnings management as a self-interest act, this definition has suited for the purposes of capturing the essence of earnings management.

Due to the extensive application of this definition, we believe it merits a short discussion in order to clarify the central points. The first point refers to the aspect of judgment, since managers can exercise their judgment in a variety of ways in financial reports. In this sense, the judgment employed, requires to estimate future economic proceedings such as long-term assets, pension obligations, loan loss provisions but also whenever managers must select to defer or make expenditures like research & development, advertising etc. The second point of this definition frames the purposes of earnings management as activities, which are defined, as misleading investors and stakeholders about the real economic position of the firm.

It is therefore vital to understand, when accounting standards permit managers to exercise judgment and when managers might take advantage of the standards due to a certain degree of flexibility in these (Anandarajan et al., 2007; Ronen & Varda, 2008). As such this definition captures the contracting metaphor of agency theory whereby managers uses accounting figures to influence contractual outcomes and therefore it also reflects the connotation of opportunistic behavior. Whereas previous studies carried out in the field of earnings management extensively indicate that managers exercise extensive discretion in financial reports and manipulate earnings by applying a variety of methods stretching from special transactions (real earnings management) to manipulating accruals through accounting numbers (Markarian et al., 2008).
However there are two weaknesses with the definition, firstly it does not set clear limitations between normal activities and earnings management where the output is earnings. In this regard Dharan (2003, p.1) expresses the following opinion “Analysts investors and corporate executives must distinguish between earnings manipulation that ultimately proves to be fraudulent and the day-to-day struggles for managers to keep costs within budgets or to get revenues to meet desired sales targets”. The other weakness is that this definition does not capture earnings management extensiveness, where not all earnings management activities can be misleading as such actions can convey private information. The next parts will present the most common methods of earnings management and their underlying purposes.

II. THE SCOPE OF EARNINGS MANAGEMENT ACTIVITIES - REAL ACTIVITIES

The scope of real activities manipulation refers to activities that indicate a deviation from a firm’ normal operational activities or practices. These activities are primary motivated by managers' aspiration to misled some investors or analysts into deeming that financial reporting goals are met during the normal course of operations (Roychowdhury, 2006). The majority of empirical evidence concerning real activities manipulations emphasize on managers’ opportunistic reduction of research and development (R&D) expenditures in order to allocate the reported expenses from the income statement to the balance sheet as capitalized costs. Baber et al. (1991) and Bushee (1998) find evidence to these assumptions, by concluding that managers tend to reduce R&D expenditures and instead capitalize the costs in order to encounter earning benchmarks. Schilit (2010) stresses the issue of R&D accounting treatments to be a very common abuse technique, whereby management improperly report costs on the Balance Sheet’s asset side.

A variety of empirical studies have discussed the possibility of managerial intervention in the financial reporting process by arguing that such intervention can arise via accounting methods, estimates as well as operational decisions. Fudenberg and Tirole (1995), Healy and Wahlen (1999) and Dechow and Skinner (2000) discussed principally the acceleration of sales, and maintenance expenditures as methods available to managers for engaging in earnings management. In short, earnings management incentives can emanate through accounting methods and divergence in normal
operations; although such actions can also reflect the urgent ambitions to convene stock exchange, financial analysts and investors’ expectations (Healy & Wahlen, 1999). Graham et al. (2005) find that financial managers and executives attach extremely importance to meeting earnings targets and analysts forecast. Therefore he argued that executives are more willing to manipulate earnings in order to meet these targets. Even though such actions can reduce the enterprise value due to the fact that earning management activities taken in the current period may improve earnings, but will have a negative effect on cash flows in future periods.

III. EARNINGS MANAGEMENT THROUGH OTHER ACTIVITIES

Except real earnings activities, earnings management can be present through other techniques and events. In this study the emphasis is on income smoothing through loan loss provisions as it serves to restrain variability in income during the years and shift earnings from the good periods to less successful phases (Funderberg & Tirorle, 1995). This process lowers the peaks while making earnings more stable (Tucker & Zarowin, 2006). The aspect of income smoothing considers being a two-side coin, whereby it has been argued to serve as a positive strategy (Beidleman, 1973; Chaney & Lewis, 1995) but also as a manipulative act, driven mainly by opportunistic intentions (Gordon, 1964; Imhoff, 1977; Kamin & Ronen, 1978).

Authors have posited several explanations for income smoothing and some of these explanations are closely related to capital markets incentives. These explanations are based on the principle of earnings being used by investors in their valuation models as preferable predictors for future earnings. Therefore managers have incentives to smooth income, as this approach is treated as a signaling technique to deliver private information to market actors (i.e. positive strategy) (Chaney & Lewis, 1995; Hunt et al., 1996). Other authors argue that income smoothing primary occurs in order to reduce the interpreted risk by market actors, where earnings erraticism is perceived as a material risk measure of a firm and hence has an effect on investors’ capitalization rates (Wang & Williams, 1994; Barth et. al, 1995; Gebhardt, et al., 2001). Additional explanations offered, considers income smoothing to be associated with the existence of contracts linked to accounting numbers, and such practices tend to reduce debt holders’ perceptions of the risk for bankruptcy. Thereby interpreted as lower cost of capital for the firm (Wong, 1988; Cahan, 1992; Godfrey & Jones, 1999). The majority
of the studies typically test the statistical association between incentives for income smoothing and aggregate accruals (Healy, 1985; De Angelo, 1986; Jones, 1991; Dechow et al., 1995).

**IV. INCOME SMOOTHING & THE BANKING INDUSTRY**

In some industries, like the insurance and banking, the income smoothing approach, have gained extensive ground; as some arguments suggest that these two industries are more prone to engage in income smoothing. This is due to the subjective decisions that for instance bank managers must make in respect of reserves for losses (e.g. nonperforming and defaulted loans) (Copeland, 1968). Within the bank industry, loan loss provisions analysis, as an expense flow and its corresponding balance sheet entries, as well as the loan losses allowance are important for two reasons. The first reason is that loan loss provisions affect the amount and the timing of reported income and secondly loan losses allowance mirrors managers’ judgment on future loan losses. Income smooth activities mirror managers’ activities to minimize fluctuations in reported earnings through accounting decisions and they accomplish that by shifting a variety of income and expense items so that earnings during the years become less variable (Greenwalt & Sinkey, 1988).

Copeland (1968, p.102) stated that a perfect smoothing device must meet certain characteristics, “(A) It must not commit the firm to any particular future action, (B) it must not require a “real” transaction with second parties but only a reclassification of internal account balance, (C) it must lead to material shifts relative to year-to-year differences in income”. Thereby he argues that loan loss provisions accounting estimates, for banks meet the above-mentioned criteria, and therefore loan loss provisions present a stimulating case of examining the income smoothing (Copeland 1968; Greenwalt & Sinkey, 1988;).

Furthermore, the nature of loan loss provisions as a smoothing device can be explained through bank managers’ judgment as the foundation for determining the allowance (or reserve) for loan losses; which is the estimate of the current loans amount that will not be collected. Hence, loan loss provisions signify the charge against operating costs required to maintain an adequate loan loans allowance. However, the estimation of uncollectible loan amounts is a process of allocation within the bank; and also the succeeding uncollectible loans write-offs can be depicted as a reclassification of internal
account balances. Thus, the discretionary nature of estimating loan loss provisions can provide bank managers with the opportunity to engage in income smoothing. This behavior might be revealed, by charging further amounts as loan loss costs in good earnings years while reducing loan loss provisions or delaying write-offs recognitions when earnings are decreased (Kilic & Lobo, 2013).

The empirical literature on income smoothing in banking industry has consequently mainly emphasized on loan loss provisions. Where this account as a relatively large accrual for banks can have a significant effect on earning before taxes and provisions. This is also the reason why it has been argued that bank managers uses these accounting numbers to reduce earnings fluctuations (Collins et al., 1995). The foundation of this technique in simpler terms is that such provisions adjust bank’s loan loss reserves in order to imitate expected future losses on loan portfolios (El Sood, 2012). Consistent with other earnings management studies described in the previous part, Anandarajan (2007) suggest that such managerial actions might serve as a way to communicate private information to investors about future scenarios. It is vital therefore to open a parenthesis here and remind that this study focuses on loan loss provisions as technique available to managers for engaging in income smoothing by changing accounting accruals. Hence, this paper will not focus on loan loss provisions as a vehicle for signaling private information.

Previous studies have attributed earnings before taxes and provisions a positive relationship with loan loss provisions, to bank managers’ discretion, used in judging and determining the timing and magnitude of such provisions (Shriives & Dahl, 2003). Earlier studies have also provided a positive association of income smoothing, for instance, Ma (1988) concludes that financial institutions use loan loss provisions as long-term vehicles to smooth out earnings. Although Ma (1988) showed that loan loss provisions are not significantly correlated with the quality of loan portfolios but rather used frequently by management to raise loan loss provisions in economic periods of high operating earnings.

Bhat (1996) draw the same conclusions as Ma (1988), while he found a significant relationship between loan loss provisions and earnings, in a sample of U.S banks. More specifically Bhat (1996) argued that in banks with certain characteristics like low growth, high loans-to-deposit ratios, low return on assets etc. managers have incentives
to smooth earnings in order to show better financial performance. In addition Bhat (1996) stated in his analysis that the financial market seemed to be aware of the income smoothing behavior that bank managers’ engaged in; a subject that has been mentioned in the previous part and is inherent to the debate of whether earnings management can be perceived as signaling strategy of private information to capital markets. Furthermore, Greenwalt and Sinkey (1988) examined income smoothing in a sample of 106 large commercial U.S banks between 1976-1984. They find evidence that under the period studied, banks had used loan loss provisions to smooth income, while they argue that regional bank firms had engaged more in income smoothing than money-center banks that usually borrow and lend to government, or other public authorities.

In 1995 Collins et al. used loan loss provisions as tool for earnings management in a sample of 160 U.S banks and find that two-thirds of the banks under examination used the accounts of loan loss provisions to smooth income as an effort to stabilize the financial performance. In the same line Hasan and Hunter (1999) studied bank managers’ efficiency of loan loss provision decisions. In this way they explored the possible underlying relationship between factors that could explain inefficiency, where they find that there is inefficiency in loan loss decision-making by managers. Similar to Greenwalt and Sinkey (1988) they argued that banks managers used loan loss provisions to smooth income however the decisions on estimating such provisions were inefficient.

Contemporary research continues to reveal that discretionary accounting on loan loss provisions are related to income smoothing. Cornett et al. (2006) find in a sample of U.S banks that loan loss provisions are statistically associated with asset size and capital ratios, and also the usage of loan loss provisions for income smoothing is positively related to the portion of shares owned by banks’ directors and CEO. El Sood (2012) studied earnings management in the banking sector, in a sample of U.S banks and the inherent problematic aspects of SFAS No. 5 and SFAS No. 14, which covers the recognition and measurement of loan loss provisions. He argued that these two standards permit a certain degree of discretion available to managers, while he tested the relationship between loan loss provisions and earnings before taxes and provisions whereby he documented that the later are considerably affected by income smoothing.
Managerial Incentives & Earning Management

incentives. Thus, he offered two possible explanations for these incentives; the first regards such provisions as augmented when banks reach the minimum regulatory targets. The second explanation regards managers’ engagement in income smoothing in banks’ most profitable periods.

While, Wall and Koch (2000) discussed primary the methodological issues of such empirical findings, and argued that the variation in published results is due to sample variations and different periods of examination. They suggest that the existing literature reinforces the aspect of managers having incentives to use certain accounting estimations for loan loss provisions to smooth income.

On the other hand a variety of existing studies suggest that managers do not use loan loss provisions as an income-smoothing tool. Wetmore and Brick (1994) found that when estimating loan loss provisions, bank managers consider a variety of quantitative models and variables such as previous loan risk, foreign risk and the prevalent economic circumstances but managers don’t consider changes in loan composition. However the authors note that their sample might have been affected in testing income smoothing results, as they argue that during the study the prevalent economic circumstances i.e. debt crisis, might have affected the results since loan provisions are inherently high due to the downturns in the economy. Ahmed et al. (1999) conclude that loan loss provisions is not an important factor for smoothing earnings figures, rather than they reflect adequate variations in banks’ expected quality of loan portfolios. While Moyer (1990) and Beatty et al. (1995) following previous studies did not find any support for income smoothing at least at a significant level.

In summary, this part has provided the main results of income smoothing in the context of the banking industry whereas it is prevalent that the empirical results and opinions are mixed. The majority of the studies mentioned have mainly focused on U.S while it has been argued that other factors can intervene in the results, such as downturns in the economy.

V. THE AGENCY FIELD

The agency theory has been extensively applied in the field of accounting, finance and economics. During the 1960s-70s, mainstream economists explored risk sharing among groups or individuals (Eisenhardt, 1988). This risk-sharing approach was broadened by
as it included the agency problem that occurs when collaborating parties have different goals. More specifically the concept is viewed through the angle of a ubiquitous agency relationship, when one party (the principal) delegates work to another party (the agent), who usually performs that work. Hence, the theory attempts to describe the relationship between the principal and the agent using the contract metaphor. This approach emphasizes in resolving two major problems that can occur within this particular relationship, (a) the agency problem and the (b) problem of risk sharing. In brief, the agency problem is concerned with the issues that arise when the goals and desires of the principal conflicts with the ones of the agent and also the inability of the principal to assess and verify the agents actual performance (Eisenhardt, 1988).

Moreover agency theory emphasizes on determining the efficient contract governing between the principal and the agent given the assumptions of certain individual, organizational and information characteristics e.g., goal conflict among members and information as commodity (Jensen & Meckling, 1976). The economic literature has stressed the importance of corporate decisions being affected by the type of corporate ownership (Kim & Sorensen, 1986). Previous studies have documented a high correlation between the assigned interest of an individual and a firm’s performance (Oswald & Jahera, 1991). Adopting the agency theory, this would suggest that the role of managers as agents, presents tendencies to pursue certain activities and strategies to accomplish other interests and goals, rather those of the principal (Jirnaporn et al.,

Anandarajan et al. (2007) argue that banks are subjects to extensive monitoring mechanisms by national and international regulators, and the assumption is that bank managers acting as agents for the banks owners are constantly under pressure to provide high returns. As such owners are willing to provide certain incentives to bank managers grounded on the average performance of a short period of time. This type of contractual performance measure is usual in listed firms, including commercial banks (Jensen and Murphy 1990).

Furthermore executive and senior management has an important function and leadership role in generating as well reporting earning figures in the financial statements (Wasserman et al., 2001). Although boards of directors has to approve certain important managerial decisions; unarguably managers make key operating, financing-and investment decisions e.g. the design and executions of business strategies,
Managerial Incentives & Earning Management

budgeting, capital investment etc. Through the process of making akin decisions, management procures superior information of the true financial position of the firm (Ronen & Varda, 2008).

In the business research, this acquired information from managers is referred as information asymmetry. The expectation is that if both parties seek to maximize their own self-interest, the agent will not always act in the best interest of the absentee owner (Eisenhardt, 1988). In this regard, the aspect of income smoothing as a technique utilized by accounting numbers, allows managers through accounting interference to show better results for bad years (Copeland, 1968). This aspect can be depicted as a relationship between smoothing and governance; essentiality related to the principal-agent context. Where owners must designate a compensation contract as a mechanism in order to induce managers to make “right decisions”. In this context, Fudenberg and Tirole (1995) proved that managers that are worried of loosing their jobs tend to smooth income.

As Ronen and Verda (2008, p.16) notes “if the information is bad news, inflating the report ensures continues employment”. However managers can also engage in income smoothing in order to keep the share price stable or high and gain contractual outcomes in terms of vast bonuses (Ronen & Varda, 2008). It is within this aspect that the income smoothing behavior (viewed through the agency theory) is closely related to the contractual arrangements, e.g. compensation schemes, information asymmetry and political costs (Han & Wang, 1998; Francis 2001; Lambert, 2001). This view suggest that managers can engage in income smoothing strategies, if for example the banks compensation scheme is associated with the growth of the income.

Hence, the assumption based in most income smoothing studies is that listed firms such as commercial banks might have greater incentives to show better financial results that might not necessary reflect the true financial position of the firm (Anandarajan et al., 2007). Watts and Zimmerman (1978), Ronen and Sadan (1981) documented that income is associated with compensation that in turn induces smoothing behavior. In the same line as the previous authors, some studies conclude that earnings management is induced by bonus considerations whenever bonus as a compensation scheme is the control variable. Reitenga et al. (2002) and Gao and Shrives (2002) find
that low earnings is positively associated with bonuses and also that low earnings give rise to income smoothing tendencies for managers.

As it has been presented, managers can behave opportunistically; by manipulating the reported performance or inflating the firm’s share price for the purpose of gaining higher amounts of bonuses. Thus, the two parties (the owner and the agent) can agree upon some periodically financial reporting that can provide assurance to the absentee owner, that managers do not misuse the firm’s resources. However, there is the need for a framework of acceptable criteria in order to govern the content and form of managers’ reports. To rephrase, the financial reporting that contains information to the owners and investors must follow a set of agreed-upon accounting criteria and rules or principles (Eilifsen et al., 2010).

However, the preparation of financial statements often requires the exercise of managers’ judgment (Fama, 1980). In association with certain flexibility in financial reporting, this might not result in a reduction of the opportunistic situations arising for the management (Dye & Verrecchia, 1995; Weil et al., 2006). In this respect accounting standards have been anticipated to reduce opportunistic managerial behavior and cope with the aspect of information asymmetry. Therefore it has been argued that less subjectivity would potentially lead to fewer opportunities to manage and influence reported earnings and bonuses and/or mislead investors (Iatridis, 2010). The adoption of IFRS with its higher disclosure requirements and the quality on the financial reporting that follows (Leuz & Verrecchia, 2000) would tend to decrease the potentially for managerial discretion and consequently earnings management. Less subjectivity would in turn contribute to fewer opportunities to influence earnings and bonuses (Nenova, 2003; Dyck & Zingales, 2004; Renders & Gaeremynck, 2007).

In summary, this section has provided the scope of income smoothing and the managerial incentives through the prism of agency theory and the inherent agency problem between the agent and the principal. Accounting reporting regimes is depicted as a mechanism that provides reassurance to the owner for the firm’s financial performance. The next section will focus on the financial accounting standards in conjunction with earnings management and income smoothing.
VI. FINANCIAL REPORTING REGIMES AND EARNINGS MANAGEMENT

Before proceeding with the examination of earnings management from the perspective of financial accounting standards and in particular IFRS, it is important to discuss the relationship between reporting standards, corporate governance and earnings management. So far, agency theory has provided the grounds for discussing the prerequisites for accounting standards as a way of corporate governance (Eilifsen, 2010). Leuz et al. (2003) examined if earnings management differs between nations that have strong investors protection (in their sense strong corporate governance) and could limit managers’ ability to control internal information to their advantage. Their results, suggest a link between quality of earnings and corporate governance. Ewert and Wagenhofer (2005) proposed that rigid accounting standards could potentially reduce the scope of earnings management. Their conclusions were that tighter accounting regimes could improve earnings quality. On the other hand they noted that with tighter accounting standards the incentives for managers can be more persistent and as such the authors do not rule out the possibility for managers to attempt and consequently violate accounting standards leading to a fraudulent behavior.

Besides, the financial accounting reporting standards and corporate governance regimes, other factors might very well influence the level of earnings management between countries. For instance, the audit environment appears to have an influence in earning quality (Maijoor & Vanstraelen, 2006) while, another crucial factor that have been discussed in previous parts is the economic conditions. More precisely downturns in economy can signal attempts of earnings management, whenever managers try to smooth or boost earnings in an effort to show stable financial performance (Lin & Shih, 2002).

In short, corporate governance and financial reporting regimes can affect the scope and levels of earnings management, whereby some authors have argued that tighter accounting rules might restrict managers ability to control private information and

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4 Soderstrom and Sun (2007) argued that the improvement of accounting earnings quality is grounded on at least two aspects. The first aspect is, high quality accounting standards and the second is a country’s investor’s protection. As such it has been stated the adoption of a common framework of accounting standards like IFRS can improve earnings quality since managers is pressured to provide a true and fair view while engaging in fewer earnings management activities.
engage in earning management activities. However, other factors can also have an important role in managerial incentives such as the audit-or economic environment.

VII. IFRS AND EARNINGS MANAGEMENT

The International Accounting Standards Board (IASB), formerly known as International Accounting Standards Committee (IASC), issues IFRSs. The main objective of IASB is “to develop, in the public interest, a single set of high quality, understandable and enforceable global accounting standards that require high quality, transparent and comparable information in financial statements and other financial reporting to help participants in the world's capital markets and other users make economic decisions” (Epstein & Mirza, 2002, p. 11).

The main argument is that the adoption and implementation of IFRS will presumably reduce the information asymmetry between uniformed and informed investors (Bushman & Smith, 2001). This type of uncertainty-and information asymmetry reduction, would ease the communication between corporate managers, shareholders, investors as well as other related parties such as lenders, financial analysts etc. The overall result would be a reduction in agency costs that otherwise arise and also it would lead to an increase in stock returns (Healy & Palepu, 2001). The argument here is that lower information asymmetry levels will lower equity costs when issuing capital and debt (Glosten & Milgrom, 1985; Diamond & Verrecchia, 1991; Botosan & Plumlee, 2002). Furthermore, the long-term benefits of IFRS implementation include the argument of accounting practices harmonization across countries, resulting higher comparability, enhanced international investments and lower transaction costs (Iatridis, 2010).

Since 1st January 2005, all publicly traded companies in the European Union are required to prepare their consolidated financial statements in accordance with IFRS. The benefits of this mandatory adoption of the new accounting standards across Europe and in contemporary days across several other jurisdictions, constitutes an ongoing debate among practitioners and academics (Hail et al., 2010). In this debate arena, opinions diverge on whether the adoption of IFRS brings significant improvements in accounting quality as opposed by the European Union (Jeanjean & Stolowy, 2008). However, this kind of quality starts from the premise, that IFRS can increase transparency and also improve the aspect of comparability in financial
Managerial Incentives & Earning Management

reporting (European Union, 2002; Iatridis 2010). Following this reasoning we examine these arguments in conjunction with earnings management.

The comparability argument is mainly based on economic rationale whereas investors’ decreased cost of comparing firms across countries and markets is the main premise (Armstrong et al., 2007). This means that a common accepted framework of accounting standards could assist investors to separate between higher and lower quality firms, which in turn could reduce information asymmetries for investors (Covrig et al., 2007). In the same line of argument Barth et al. (1995) state that IFRS could presumably improve earnings quality because firms are being monitored by a large number of investors, whose costs of acquiring accounting expertise is reduced.

Arguments supporting the IFRS contribution in financial reporting also stated that these standards display higher disclosure qualities than previous national GAAPs (Danske & Gebhardt, 2006). Whereas the establishment of enhanced accounting disclosures can presumably decrease earnings management opportunities and improve stock market efficiency (Kasznik, 1999; Leuz, 2003). Overall the stock markets’ response to the adoption and implementation of IFRSs would be related with the new accounting standards contribution compared to national GAAPs. Furthermore, the stricter disclosure requirements that IFRS poses would lower managerial discretion, interpreted as less subjectivity and fewer opportunities to affect reported earnings and/or mislead investors (Leuz & Verrecchia, 2000; Ashbaugh, 2001).

Second, the argument of transparency is brought up as a measure for reducing reporting discretion, relative to national GAAPs. Ewert and Wagenhofer (2005) find that narrowing accounting standards among countries and firms can potentially reduce earning management levels and improve reporting quality. Although the main contra-argument to these findings impose that reducing the reporting discretion can in fact make it difficult for managers to convey correct and timely information through the firms financial statements (Watts and Zimmerman, 1986).

Conversely, opposing arguments depict another reasoning, which is particular critical to the aspects of comparability. Studies have shown a limited role of accounting standards in determining financial reporting quality, especially when considering the firms’ reporting incentives. Therefore it has been argued that IFRS might provide firms
and their managers with considerable discretion, though this discretion may depend on industry and firm specific characteristics (Ball et al., 2000, 2003; Leuz, 2003). Ormrod and Taylor (2004) assessed and evaluated the impact of IFRS on loan and debt agreements in the UK. Where they find that the changes IFRS induce, could cause significant greater earnings volatility than UK’s national GAAP. Which in turn could facilitate income smoothing for a number of reasons, involving fair value measurement, the lack of adequate enforcement mechanisms that would guarantee IFRS compliance and also the presence of flexibility in some reporting areas.

Van Tendeloo & Vanstraelen (2005) examined discretionary accruals for German firms after the conversion to IFRS, whereby their findings indicated, increased amounts of discretionary accruals under IFRS than under the German GAAP. Similarly, Paananen (2008) examined the quality of financial reporting in Sweden under national GAAP (for the years 2003-2004) and IFRS (for the years 2005-2006). Where the findings showed that the quality of financial reporting had in fact decreased after the implementation of IFRS (measured as the degree of earnings smoothing). In the same vein Ball (2006) analyzed the advantages and disadvantages of IFRS for investors. One drawback that Ball (2006) discussed was the opportunity for extensive manipulation that can take place under fair value accounting. Furthermore the accounting treatment of research and development (R&D) costs has been extensively debated under IFRS. Where for instance Markarian et al. (2008) documented that the criteria offered by IFRS allows managers to use R&D costs capitalization to smooth earnings.

Jeanjean and Stolowy (2008) studied earnings management before and after the IFRS conversion in France, UK and Australia. Their results indicated that the level of earnings management had not declined after switching to IFRS, in fact earnings management had increased in for instance France after the transition. They conclude that the application of IFRS, involves considerable managerial discretion and the use of private information provide managers with substantial subjective judgment. Iatridis and Joseph (2005) had also observed this flexibility in financial reporting, and argued that it may exaggerate the scope of income smoothing. Overall, the implementation of IFRS in many European countries has entailed a considerable change in the philosophy of accounting. In some cases there has been a shift from a rules-based system to a principles-based system (Shortridge & Smith, 2009). Some authors
(Schipper, 2003; Hail et al., 2010) agree that IFRS consisting by a single volume of 40 and more standards with its 25 interpretation requires significantly more judgment than for example the U.S GAAP or other national GAAPs with their body of rules (this debate is inherently known as principle-versus rule-based accounting). Hence, the increased reliance on managers’ judgment have been claimed to be a potential vein for introducing opportunities for earnings management, which can consequently lower the reporting quality (Benston et al., 2006; Wüstemann & Kierzek, 2005).

In summary, what is apparent is the existence of two conflicting views regarding the potential contribution of IFRS on financial reporting. As noted above, the empirical research has provided a set of mixed results on whether IFRS promote higher reporting quality by restricting earnings management. Barth et al. (2008) used a sample of 21 countries and concluded that firms, which adopted IFRS, demonstrated significantly less earnings management relative to national GAAPs. Contrary as it has been presented in the preceding paragraphs IFRS adoption has induced increased flexibility that managers can take advantage of, by applying their subjective judgments. However both sides of the debate have not focused upon a specific industry, as their conclusions are based on a variety of firms by using heterogenous data. This study will instead contribute to the literature by using a homogenous data, as the sample comprises only listed commercial banks. Thus the expectation is that the results will be more meaningful and contribute to the debate of earnings management, when the emphasis is on one specific industry.

**VIII. IFRS, THE BANKING INDUSTRY & LOAN LOSS PROVISIONS**

Listed commercial banks in the European Union adopted IFRS, although some large commercial banks had already started reporting in accordance with IFRS since 2004 (early adopters). The implementation of IFRS introduced certain changes relative to loan loss provisions (Grier, 2005). For instance, some assets were required to be categorized under IFRS as investments without loan loss provisions. No general provisions were allowed, as previously under national GAAPs, managers could decide upon a more “general” provision to loan loss reserves without recognizing default customers. These inducements were initially expected to reduce bank managers’ ability to interfere and presumably manipulate loan loss provisions (Grier, 2005).
Before the obligatory implementation of IFRSs, most European financial institutions had very general EU directions on the accounts of loan loss provisions (Laurin & Majnomi, 2003). Thus, banks relied heavily on national specific accounting regulations as well as supervisory guidance in judging provisional levels. Factors, such as tax deductibility on loan losses could provide strong incentives for many European banks to adjust provisions relative to tax acceptable levels. Thus benefit from tax deduction while retaining capital adequacy; or to just set aside loan loss provisions (Hasan & Wall, 2004). Though banks operating under IFRS need to decide upon specific and general loan loss allowances, but the general allowances parts are very limited (Epstein & Jermakowicz, 2007).

Furthermore the implementation of IFRS has influenced disclosure and measurement practices in various aspects by presenting a more strict definition of equity. For example, commercial banks in EU must classify comparable financial instruments into similar categories and disclose the relevant information attached to their significance, risks and nature. IFRS also requires specific hybrid instruments and preferred shares to be classified as liabilities instead of equity. Overall due to specific regulations that IFRS poses with regard to the banking industry, the expectation is a reduction of discretionary management (Epstein & Jermakowicz, 2007).

Furthermore in the IAS No 30.43, banks are obligated to provide detailed accounts of loan losses. This kind of disclosures will inform users on the approach of which loan loss provisions on impaired and uncollectible loans are based and determined on, for example, write-offs of uncollectible loans, accumulated collection on write-offs etc. To rephrase IAS No. 30.43 demands specific and detailed information on loan losses with respect to the individual classes of loans and not only of aggregate amounts (Alexander et al., 2011). Based on this context Pérez et al. (2006) argued that loan loss provisions would assume to be a less effective technique for managers to engage in income smoothing.

The authors tested this assumption in the Spanish context, in an ex ante IFRS environment under the national GAAP, which involved at that time rigid rules on loan loss provisions. Despite the inflexible rules they found that managers had used loan loss provisions accounts for income smoothing. Therefore, Pérez et al. (2006) concluded that IFRS would be a better step in the direction of more detailed disclosures, and
perhaps the best case for standard setters to cope with earnings management and the usage of loan loss provisions by managers to smooth income.

To date the empirical literature on this area is very limited and whether IFRS have restricted earnings management levels; or if it has enabled more income smoothing is currently answered at least in the banking industry. However, the existing anticipation around IFRS is that its disclosure requirements are expected to reduce earnings management. Particularly Lobo and Zhou (2001) examined the relationship between disclosures quality and other published information in a sample of U.S companies. Their results showed a negative association between earnings management and corporate disclosures. They argued that the amount and quality of disclosures tend to decrease income smoothing and vice versa. The conclusions drawn were that accounting standards that allow flexibility in disclosure requirements could be used in order to exercise discretion over earnings.

In 2005 Lapointe et al. repeated the same study within the Swiss context using data from the national GAAP. Their sample included a variety of firms, and the results showed that earnings management through income smoothing was occurring under a low information disclosure regime. When they instead examined Swiss firms that had adopted IFRS or U.S GAAP, earnings management was significant less frequent than under the national GAAP.

V. RESEARCH DESIGN

I. HYPOTHESES DEVELOPMENT

The empirical research literature has provided the necessary grounds in order to use a model and examine the aspect of income smoothing in the banking industry. Loan loss provisions have been depicted by previous studies as a technique available to managers for smoothing income. As it has been presented, these provisions can have a significant impact on the reported earnings because loan loss provisions are classified as large accruals for banks. Furthermore the purpose of these provisions is to amend banks’ loan loss reserves in order to reflect future expected losses on credits and banks’ loan portfolios.

In addition the available empirical material reflects the issue of earnings volatility, whereby reduced volatility is translated into lower risk. To rephrase, reduce volatility
means decreased risk, which predicts stable stock prices (Healy & Wahlen, 1999). Thus managers might attempt to engage in income smoothing as a remedy for stabilizing the share price performance (Funderberg & Tirole, 1995; Beidlerman, 1973; Chaney & Lewis, 1995). Furthermore, the aspect of financial reporting regimes has also provided the arguments necessary to formulate the first hypothesis. These arguments depict earnings management in an ex ante IFRS period, under national GAAPs. Where IFRS has been depicted on many aspects as an improvement to national GAAPs.

The first hypothesis will therefore test the income smoothing aspect using loan loss provisions as a method available to managers to smooth income under national GAAPs for the sample. In the same line as the previous literature we expect to find a positive association between loan loss provisions and earnings before taxes, where this indication should reveal a degree of earnings management existence (Kanagaretnam, 2004; Anandararjan et al., 2007).

**H1:** Loan loss provisions are positively and significant associated with earnings before taxes and provisions in pre-IFRS periods.

In the literature survey we elaborated on the IFRS regime, its qualities and whether it can reduce the scope of earnings management. A goal of IASB is to develop an acceptable set of high quality financial reporting standards; while introducing a principal-based approach and removing alternate accounting treatments (IASB, 2008). Barth et al. (2008) argued that companies that adopted IFRS had reduced the scope of earnings management. Although, the opinions in this mater are opposing each other, the material examining the aspect of accounting quality are less evidential at least in the banking industry. The general conclusion, that IFRS requirements on detailed disclosures of loan loss provisions would presumably reduce earnings management is not challenged by previous studies. To date in the banking industry there has not been any empirical disenchantment on income smoothing under IFRS to support this. Therefore we hypothesize:

**H2:** Loan loss provisions are significant negatively associated with earnings before taxes and provisions under IFRS periods.
For the period under the IFRS regime, the expectation is to find a decrease in income smoothing as explained in the literature survey section due to certain IFRS qualities. The empirical foundation is based upon that market participants, shareholders and owners, would be able to detect income smoothing practices effortlessly when banks are required to provide more adequate and high quality information on loan loss disclosures (Lobo & Zhou, 2001; Lapointe et al., 2005). Based on these observations and arguments we expect to find a negative statistical association between loan loss provisions and earnings before taxes and provisions.

II. MODEL SPECIFICATION

When applying multiple regressions, the premise is the construction of a model that will explain the variability in the dependent variable (Y) and in the case of this paper Y equals to loan loss provisions. The basics of this study’s particular model selection emanate therefore from the essentialities of a linear regression equation e.g., \( Y = \beta_0 + \beta_1 \). This simple regression model tells us that the variable Y is the endogenous variable or the so-called, dependent variable. \( \beta_0 \), is the intercept of the dependent variable and \( \beta_1 \) designates the variation in Y for every change in X (Newbold et al., 2010).

Thus, the regression model application aims to determine an adequate linear relationship between the dependent variable and independent variables (\( X_1, X_2, X_3 \) etc.) for a particular assumption or hypothesis. In this paper the claim is that loan loss provisions can be used for income smoothing purposes. Therefore the variations in loan loss provisions will be by computing certain values for the coefficients \( \beta_0, \beta_1 \) etc. under each financial reporting regime (Newbold et al., 2010).

Furthermore the analysis of income smoothing starts with the understanding of the literature which provides the context of the model applied. Therefore after surveying the literature and formulating the hypothesis the next step is to extract the information suitable to be implemented into the model. In turn the model specification will include this information in terms of dependent and independent variables. Since the emphasis of the study is the income smoothing in the banking industry, the model specification must relate bank income to loan loss provisions (Greenawalt & Sinkey, 1988).

Having said that, we must note here that in line with previous studies the figure of income is being expressed by the variable of earnings before taxes and provisions.
Since, we are interested in examining a specific aspect of earnings management i.e. income smoothing, as a technique or practice that aims at altering net profit over time (Ronen & Varda, 2008). To rephrase in order to stabilize net profit, bank managers will seek to increase or decrease loan loss provisions whenever earnings (earnings expressed as earnings before taxes and provisions) are high respectively low. Hence, the flexible functional form of the model to be applied (Greenwalt & Sinkey, 1988) can in simple terms be expressed as:

\[(A) \text{ Loan loss provisions} = f(\text{income, control proxies})\]

In addition, the selected model must be based on accruals in which bank managers have discretion on i.e. accruals that has been argued in the literature to be used from managers to smooth earnings. However, in previous articles some regression models take into consideration the part of accruals that managers do not have discretion over. Therefore, some studies use a two-stage analysis for the use of loan loss provisions, by separating the nondiscretionary part of accruals from the discretionary part in the first stage. So, in the first stage, such models takes into consideration the nondiscretionary part of loan loss provisions and the residual outcome is the discretionary part; which is used as the dependent variable in the second stage of the model. However this approach has been criticized to have the essential disadvantage of underestimating systematically the value of regression coefficients (Kanagaretnam et al., 2004).

In order to cope with this issue the present study adopts a single stage multivariate analysis, and since income smoothing is not possible to observe, we follow previous research and apply a variety of proxies to capture the smoothing of income (e.g. Wahlen, 1994; Beaver & Engel 1996; Liu & Ryan, 2006; Kanagaretnam et al., 2004; Kanagaretnam et al., 2010a, Kanagaretnam et al., 2010b). We therefore use three proxies to control for the nondiscretionary component of loan loss provisions, these are (1) loan loss allowance, (2) loan charge offs during the year, and (3) the change in nonperforming loans. The model estimated is as follows:

\[(B) \text{ LLP}_{it} = \beta_0 + \beta_1 \Delta \text{NPL}_{it} + \beta_2 \text{LCO}_{it} + \beta_3 \text{LLA}_{it-1} + \beta_4 \text{EBTP}_{it}\]

Where:

\[\text{LLP}_{it}\] Loan Loss Provisions
\[ \Delta NPL_{it} \quad \text{Changes in nonperforming loans} \]
\[ LCO_{it} \quad \text{Net loan charge offs} \]
\[ LLA_{it-1} \quad \text{Loan loss reserves (or allowance) at the end of year } t-1 \]
\[ EBTP_t \quad \text{Earnings before taxes and provisions} \]

Loan loss provisions are made up by two components; the first part is the discretionary (even called unexpected) and is under bank managers’ control. The second component is called nondiscretionary (even called expected) and is primary related to the variations in default risk due to the operational growth of the loan portfolio. To identify whether bank managers use their discretion to smooth income, we need to separate these two components that constitute loan loss provisions, i.e. the separation between the discretionary from the nondiscretionary component (Hasan & Wall, 2004).

Previous studies have approached the nondiscretionary component through certain variables that represent the dynamics of losses and current levels of loan portfolios. As explained in the preceding paragraphs, the model in this study, approaches the nondiscretionary component (which is also the emphasis of the study) through three proxies, such as net loan charge offs designated as \( LCO_{it} \), changes in nonperforming loans designated as \( \Delta NPL_{it} \) and loan loss reserves (or allowance designated as \( LLA_{it-1} \)) to account for the nondiscretionary component of loan loss provisions. In short these proxies aim to reflect the detection of loan losses and represent managers subjective expectations on loan losses (Hasan & Wall, 2004; Kanagaretnam et al., 2004, Kanagaretnam et al., 2010b).

These variables have been used in previous studies on financial institutions, where the research has argued that \( LCO_{it} \) (net loan charge offs) and \( \Delta NPL_{it} \) (changes in nonperforming loans) will be positively associated to \( LLP \) (loan loss provisions).

The \( \Delta NPL_{it} \), proxy is the natural logarithm for the changes in nonperforming loans that arise for the bank \( i \) at the time \( t \) with respect to time \( t-1 \), calculated as Nonperforming loans for bank \( i \) at the time \( t \) less Nonperforming loans for bank \( i \) at the time \( t-1 \) i.e. \( NPL_{it} - NPL_{it-1} \). In this respect nonperforming loans can be considered as an adequate proxy for the specific component, as this variable can also reflect the prevalent economic conditions where for instance Lobo and Yang (2001) recorded an
increase in the case of economic downturns. Hence, loan loss provisions are expected to be positively associated to changes in nonperforming loans. Whereas net loan charge-offs (LCO) is related to loan loss provisions by structure; as Beaver and Engel (1996) stated that net loan charge-offs can signal information about future loan losses and thus are expected to be significant and positively correlated with loan loss provisions.

Furthermore higher levels of nonperforming loans can signify problems in banks’ loan portfolio, which will require increased provisions, as such $\Delta NPL_{it}$ will also be positively related to loan loss provisions. The loan loss reserves (or allowance) $LLA_{it-1}$ will have a negative effect on loan loss provisions ($LLP$) since higher initial loan loss reserves require reduced provisions in the current period and vice versa. Thus the expectations are that the coefficients for $\beta_1 (\Delta NPL_{it})$ and $\beta_2 (LCO_{it})$ will be positive related to loan loss provisions ($LLP$); since the more inadequate loans and charge-offs amounts, the higher the probability for loan loss provisions. While the expectation for the coefficient $\beta_3 (LLA_{it-1})$ is to be negative (Hasan & Wall, 2004; Kanagaretnam et al., 2004).

Finally the variable earnings before taxes and provisions (EBTP), is aimed to capture the income smoothing relation. Therefore the expectation for the parameter $\beta_4$ is to be positive and also significant, as this will indicate a relationship between loan loss provisions and earnings before taxes (Lobo & Yang, 2001; Liu & Ryan, 2006; Kanagaretnam et al., 2004). Conversely, for the second hypothesis, the expectation is to find the coefficient on parameter $\beta_4$ to be negative, as this will not indicate income smoothing by banks under the IFRS periods.

**III. DATA & SAMPLE SELECTION**

The dataset used in this study is limited to Nordic listed commercial banks for eight years for the pre IFRS period, (1996-2003) and nine years (2004-2012) (including early adopters of IFRS) for the post IFRS period. During the specific time periods the banks were subject to either national GAAPs or IFRS. The data was extracted from Bankscope database (Bureau van Dijk) and was reviewed for any data inconsistencies while all the amounts obtained were in million Euros, in order to allow comparability in the reported amounts.

The sample consists therefore of commercial banks for which data could be obtained for all the years needed and for all the variables. Having said that, and although the
sample can be interpreted as small, it can be argued to be homogenous; as incomplete data from cooperative-banks, governmental banks etc. were excluded from the sample, while data could be obtained for all the variables and during all the years. This procedure resulted a final sample of twenty listed commercial banks in the Nordic region (Denmark, Finland, Norway and Sweden). The IFRS period comprises the whole sample, meaning all twenty banks. However for the years under national GAAPs the sample consists of sixteen banks out of the twenty due to the fact that four banks did not have sufficient information for some years under their national GAAPs.

The aggregate amount of observations under both national GAAPs and IFRS is 1.540. In previous research articles, it has been suggested that bank managers can engage in income smoothing as a technique to keep stable the share price. Thus, the sample in the present study consists only of listed banks in line with previous research. The accounts for each bank that has been used in order to collect data from the database are the following; LLA (142170), EBTP (142105), LLP (142095), NPL (142170) while the $\Delta NPL$ is obtain by calculating $NPL_t$ less $NPL_{t-1}$ and LCO (142170).

![Table 1. Observations per country local GAAP](image)

<table>
<thead>
<tr>
<th>Country Name</th>
<th>Country Code</th>
<th>Number of banks</th>
<th>Number of Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>DK</td>
<td>6</td>
<td>240</td>
</tr>
<tr>
<td>Finland</td>
<td>FI</td>
<td>2</td>
<td>80</td>
</tr>
<tr>
<td>Norway</td>
<td>NO</td>
<td>5</td>
<td>200</td>
</tr>
<tr>
<td>Sweden</td>
<td>SE</td>
<td>3</td>
<td>120</td>
</tr>
</tbody>
</table>

![Table 2. Observations per country Post IFRS](image)

<table>
<thead>
<tr>
<th>Country Name</th>
<th>Country Code</th>
<th>Number of banks</th>
<th>Number of Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>DK</td>
<td>6</td>
<td>270</td>
</tr>
<tr>
<td>Finland</td>
<td>FI</td>
<td>2</td>
<td>90</td>
</tr>
<tr>
<td>Norway</td>
<td>NO</td>
<td>6</td>
<td>270</td>
</tr>
<tr>
<td>Sweden</td>
<td>SE</td>
<td>6</td>
<td>270</td>
</tr>
</tbody>
</table>

Furthermore we must notice, that the choice of running a multiple regression can be obscured by the problematic aspect of multicollinearity. This means that one or more of the independent variables in the regression is correlated with one or more of the other independent variables. For example if a change in $X_1$ occurs at the same time as a change in $X_3$, we cannot tell with certainty which of these two variables is actually
related to the changes in the dependent variable (Newbold et al., 2010). To cope with this issue we perform a so-called, variance inflation factors (VIF) test for all the independent variables, through the statistics program SPSS. The VIF results indicate low VIF statistics compared to the rule of thumb i.e. VIF > 10, which means that if any VIF value is greater than 10, there can be multicollinearity problem (Newbold et al., 2010; Bryman & Bell, 2011) as none of the independent variables in any combination obtained higher VIF values than 1.176.

VI. EMPIRICAL RESULTS

In the previous section we developed the hypotheses in accordance with the literature on earnings management, while we also selected a model for testing the two hypotheses we derived. In this section we present the relevant statistics summary and the corresponding results after running the regression model for the samples. Furthermore the empirical analysis aim to detect whether the banks in the sample have used loan loss provisions for income smoothing purposes.

I. RESULTS OF SAMPLE, PRE IFRS

Table 3.
Statistics summary for the sample under national GAAP periods

<table>
<thead>
<tr>
<th>Panel A. Descriptive Statistics</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLP</td>
<td>128</td>
<td>-37</td>
<td>6061</td>
<td>90,27</td>
<td>535,36</td>
</tr>
<tr>
<td>ΔNPL</td>
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<td>-1182</td>
<td>1033</td>
<td>-34,67</td>
<td>185,84</td>
</tr>
<tr>
<td>LCO</td>
<td>128</td>
<td>-3</td>
<td>606</td>
<td>25,61</td>
<td>75,19</td>
</tr>
<tr>
<td>LLA</td>
<td>128</td>
<td>0</td>
<td>943</td>
<td>181,12</td>
<td>202,38</td>
</tr>
<tr>
<td>EBTP</td>
<td>128</td>
<td>-56</td>
<td>1732</td>
<td>300,70</td>
<td>408,374</td>
</tr>
</tbody>
</table>

Descriptive statistics for the sample are presented in panel A for the respective sample and the two financial reporting regimes. The mean value for loan loss provisions (LLP) under national GAAPs is 90,27 while for the IFRS (Table 4, panel A) periods is 208,89. These variation between pre and post IFRS can also be due to the difference in the sample i.e. sixteen large commercial banks in the pre IFRS and twenty in the post IFRS periods.
Panel B. Pearson r correlations

<table>
<thead>
<tr>
<th></th>
<th>LLP</th>
<th>ΔNPL</th>
<th>LCO</th>
<th>LLA</th>
<th>EBTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLP</td>
<td>1</td>
<td>0,050</td>
<td>0,003</td>
<td>-0,36</td>
<td>0,170</td>
</tr>
<tr>
<td>ΔNPL</td>
<td>1</td>
<td>-0,070</td>
<td>-0,299**</td>
<td>-0,113</td>
<td></td>
</tr>
<tr>
<td>LCO</td>
<td></td>
<td>1</td>
<td>-0,010</td>
<td>-0,61</td>
<td></td>
</tr>
<tr>
<td>LLA</td>
<td></td>
<td></td>
<td>1</td>
<td>0,498**</td>
<td></td>
</tr>
<tr>
<td>EBTP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

**Correlation is significant at 1 % level

Panel B provides the Pearson correlation coefficients of the sample variables, which tells us the extent- and how two variables are linearly related. Pearson is generally a useful measure, since it provides both the strength and direction of the relationship between the variables. The correlation coefficient ranges from -1 to +1 and the general accepted rule of thumb is that the closer r is to +1 the stronger a positive linear relationship and vice versa (Newbold et al., 2010). The sample results indicate that the variable of loan loss provisions (LLP) is positively related to earnings before taxes and provisions (EBTP). However, Pearson correlation coefficient does not support a significant relationship between loan loss provisions and earnings before taxes and provisions for the sample under national GAAP regimes.

Panel C. Coefficients

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>Std. Error</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>64,13</td>
<td>67,73</td>
<td>0,947</td>
<td>0,346</td>
</tr>
<tr>
<td>ΔNPL</td>
<td>0,172</td>
<td>0,321</td>
<td>0,536</td>
<td>0,593</td>
</tr>
<tr>
<td>LCO</td>
<td>0,096</td>
<td>0,631</td>
<td>0,152</td>
<td>0,880</td>
</tr>
<tr>
<td>LLA</td>
<td>-0,379</td>
<td>0,283</td>
<td>-1,338</td>
<td>0,183</td>
</tr>
<tr>
<td>EBTP</td>
<td>0,332</td>
<td>0,134</td>
<td>2,39</td>
<td>0,018</td>
</tr>
</tbody>
</table>

a. Dependent Variable: LLP (coefficients)

Panel C, shows the results of the regression coefficients and as expected, the coefficients of changes in nonperforming loans (ΔNPL) and net loan charge offs (LCO) are positive related with loan loss provisions (LLP). However this positive correlation is not of statistical significance, contrary to the denoted hypothesis (H1). In accordance with previous studies, loan loss allowance (LLA) is negatively correlated with loan loss provisions, however even here no significant level has been obtained. Furthermore earnings before taxes and provisions (EBTP) shows a positive coefficient with loan loss provisions (LLP) but not significant, which can presumably indicate some income
smoothing by using loan loss provisions during the years under national GAAPs; although unarguably the statistical evidence do not support a strong and significant association.

II. RESULTS OF SAMPLE, POST-IFRS

Table 4.
Statistics summary for the sample under IFRS periods

<table>
<thead>
<tr>
<th>Panel A. Descriptive statistics</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Minimum</td>
<td>Maximum</td>
<td>Mean</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>LLP</td>
<td>180</td>
<td>-257</td>
<td>2005</td>
<td>208.89</td>
<td>469.31</td>
</tr>
<tr>
<td>ΔNPL</td>
<td>180</td>
<td>-1093</td>
<td>5836</td>
<td>147.98</td>
<td>896.905</td>
</tr>
<tr>
<td>LCO</td>
<td>180</td>
<td>-32</td>
<td>1024</td>
<td>62.32</td>
<td>150.079</td>
</tr>
<tr>
<td>LLA</td>
<td>180</td>
<td>0</td>
<td>6404</td>
<td>527.59</td>
<td>973.955</td>
</tr>
<tr>
<td>EBTP</td>
<td>180</td>
<td>-923</td>
<td>3883</td>
<td>577.39</td>
<td>896.905</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B. Pearson r correlation</th>
<th>LLP</th>
<th>ΔNPL</th>
<th>LCO</th>
<th>LLA</th>
<th>EBTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLP</td>
<td>1</td>
<td>0.328**</td>
<td>0.574**</td>
<td>0.485**</td>
<td>0.269**</td>
</tr>
<tr>
<td>ΔNPL</td>
<td>1</td>
<td>0.385**</td>
<td>0.191*</td>
<td>0.018</td>
<td></td>
</tr>
<tr>
<td>LCO</td>
<td>1</td>
<td>0.525**</td>
<td>0.204**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LLA</td>
<td>1</td>
<td>0.358**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EBTP</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Correlation is significant at 1 % level
* Correlation is significant at 5 % level

For the periods under IFRS, the sample of banks shows a positive correlation between loan loss provisions (LLP) and earnings before taxes and provisions (EBTP) 0.269 that is also significant at 1 % level compared to the pre IFRS periods where the obtained value was 0.170. In addition, changes in nonperforming loans (ΔNPL) and net loan charge offs (LCO) are positively correlated with loan loss provisions (LLP), 0.328 and respectively 0.574 and are also significant at 1 % level. Compared to the values for nonperforming loans (ΔNPL) and net loan charge offs (LCO) for the pre IFRS periods, 0.050 respectively 0.003. From the Pearson correlations table we can indicate that the results show a stronger statistical relationship between loan loss provisions and earnings before taxes than under the pre IFRS period.
The coefficients of net loan charge offs (LCO) and changes in nonperforming loans (ΔNPL) are in line with the model expectation, since both net loan charge offs (LCO) and changes in nonperforming loans (ΔNPL) are positively related with loan loss provisions (LLP). As stated in the model specification section, changes in nonperforming loans (ΔNPL) can signify problems in banks loans portfolio. In comparison, with the pre IFRS period, loan loss provisions (LLP) for the years after IFRS adoption indicate a higher mean of 208.89 (Table 4, Panel A) than 90.27 for the years under national GAAPs (Table 3, Panel A). Followed by higher values for changes in nonperforming loans (ΔNPL) for the years under IFRS 147.98 (Table 4, Panel A) than -34.67 under national GAAPs (Table 3, Panel A).

Additionally, net loan charge offs (LCO) signify information about future loan losses, which in the case of our results, the mean of the variable under IFRS periods is 62.32 (Table 4, Panel A) compared to 25.61 under national GAAPs (Table 3, Panel A). These observations could perhaps explain the stronger and significant relationship between loan loss provisions (LLP) and earnings before taxes and provisions (EBTP) under IFRS than under national GAAPs, as both increasing nonperforming loans and net loan charge offs lead to higher provisions.

The only decline from the model is LLA_{t-1} where the expectation was to find a negative sign on the coefficient instead of a positive as it is presented in our results, however the coefficient for this variable is not significant. In contrast to the hypothesis (H2), earnings before taxes and provisions (EBTP) have a positive coefficient sign, which could predict income-smoothing incentives by commercial bank managers under the IFRS periods, and therefore the second hypothesis is not supported.
VII. ANALYSIS AND CONCLUSIONS

The present study have examined earnings management from the scope of income smoothing for commercial banks choices on loan loss provisions, in the light of national GAAPs and the IFRS regime. Overall the empirical results on income smoothing under national GAAPs (i.e. other accounting regimes than IFRS) have been mainly focused on U.S banks. In this study we examined banks located in the Nordic region both under their national GAAPs periods and IFRS. However we did not find strong statistical significance for the two hypotheses derived.

Earnings management and income smoothing through loan loss provisions under national GAAPs

In the previous sections, it has been articulated that if bank managers use loan loss provision to smooth earnings, the regression expectation is a positive relation between loan loss provisions and earnings before taxes and provisions. Therefore we formulated the following hypothesis “Loan loss provisions are positively and significant associated with earnings before taxes in pre-IFRS periods” anticipating that the estimated coefficient for earnings before taxes and provisions under national GAAP (i.e. pre IFRS periods) should be positive and also significant. Although the results show a positive coefficient and positive correlation, they are nevertheless not statistically significant and we do not find support for our first hypothesis.

The results for the accounting regimes under national GAAPs can be interpreted to be consistent with previous studies that have been mainly conducted in the US under the US GAAP. For instance, Ahmed et al. (1999) did not obtain a strong relationship between loan loss provisions and earnings before taxes and provisions. In particular and as the authors argued loan loss provision might reflect meaningful variations in the quality of banks loan portfolios but the account of loan loss provisions alone cannot provide evidence of income smoothing behavior by bank managers.

Our results are also consistent with Beatty et al. (1995) where they also obtained a weak statistical relationship between loan loss provisions and earnings before taxes and provisions. While they suggested that in comparison to other studies on income smoothing, their results might signal different purposes of managing loan loss provisions. For instance the authors argued that bank managers might use loan loss provisions accounts, but not to exclusively affect earnings but instead in order to meet
capital requirements i.e. for capital management purposes (Beatty et al., 1995). In the same vein of empirical results, Wetmore and Brick (1985) did not find any statistical significant association for loan loss provisions and earnings. They argued that bank managers might consider the amounts of provisions in close conjunction with economic conditions. As such whenever the economy slows the provisions will be naturally high in order to secure the bank from future losses in loan portfolios. In this way managers tend to consider other factors when estimating the level of loan loss provisions such as foreign loan risk exposure, loan portfolios quality etc., and consequently not how to reduce earnings variability in order to show improved financial results.

**Earnings management and income smoothing through loan loss provisions under IFRS**

The obligatory adoption of IFRS in Europe enthused research on the consequences and effects on a number of significant issues. In this study we emphasized on examining the influence of IFRS and its possible implications on earnings management with focus on income smoothing. We hypothesized that IFRS new requirements relative to loan loss provisions, such as no general allowance for loan loss reserves, and most important the increased disclosure requirements would reduce managers’ ability to use loan loss provisions accounts opportunistically, and manipulate earnings. In other words, bank managers would be less prone to engage in income smoothing due to the requirements that IFRS imposed. Hence the hypothesis was the following “Loan loss provisions are significant negatively associated with earnings before taxes and provisions under IFRS periods”.

The regression expectation was to obtain a negative coefficient on earnings before taxes and provisions that would indicate a negative association with loan loss provisions under IFRS. However, contrary to the hypothesis the parameter on the variable of interest has a positive sign, which can be interpreted as income smoothing attempts through loan loss provisions for the periods under examination. The empirical material shows that listed commercial banks in the sample exhibited somewhat higher levels of income smoothing in comparison to national GAAPs after switching to IFRS (although the results are not statistically significant). However the debate of IFRS and earnings management includes two predominant and opposing views. The first suggests that IFRS could improve earnings quality (e.g. Barth et al., 2008) while the second enforces the view that some features of IFRS could decrease the financial reporting-and earnings quality (e.g. Leuz & Verrecchia, 2000; Jeanjean & Stolowy, 2008). Consistent
with our results, the evidence can be interpreted as being in the same line with the research, which suggest that IFRS has “encouraged” the increase of earnings management through intense discretionary accounting which induce opportunistic behavior and can consequently impact the financial reporting quality (Callao & Jarne, 2010).

Lapointe et al. (2005) and Pérez et al. (2006) argued that IFRS is an improved regime of accounting standards, than national Swiss GAAP and Spanish GAAP; hence it would be a better step forward for standards setter to cope with management using loan loss provisions to their discretion. However, the empirical evidence on whether IFRS improves earnings-and reporting quality by restricting reporting-inconsistencies in terms of income smoothing and overall earnings management is inclusive. The reasons behind the increase of earnings management can be traced to certain features of the IFRS reporting regime, which has been discussed in the literature survey. For instance, these matters often include the aspect of flexibility that is repeatedly stressed in the debate of IFRS versus national GAAPs, where arguments predict higher subjectivity than previous national standards due to principle based accounting (Jeanjean & Stolowy, 2008).

Nonetheless, it might be incorrect to think that accounting standards, which constitutes by a higher degree of principles than rules must inevitably produce more earnings manipulation as opposed by some studies. While managers might interpret more “general” rules in an inconsistent way, we must bear in mind that additional rules (more rules to increase accounting precision) can increase complexity, and not be adequately implemented, leading perhaps to the standards violation as argued by Ewert and Wagenhofer (2005). Although each type of accounting standards has different characteristics, both (rules-and principle accounting standards) might be incorrectly implemented in the interests of managers.

Therefore, we should analyze the aspects of earnings management, managerial incentives and accounting standards also from other perspectives. In our opinion, accounting standards might have a relevant role in the quality of financial reports and information. Although, we cannot neglect the fact that other factors such as investors’ protection, legal enforcement etc. can also influence the financial information quality and managers behavior. In this regard and in line with Ball et al. (2003) the reporting
quality can also be determined through political-and the prevalent economic factors that can influence managers’ incentives and not only the accounting standards per se.

This reasoning has been previous reflected by authors (e.g. Lin & Shih, 2002; Maijoor & Vanstraelen, 2006) where they have argued that during economic downturns, managers can be more prone to engage in earnings management in order to smooth and stabilize earnings. Having said that, market participants, owners and other related parties could benefit, if managers implement accounting standards in a consistent manner, by emphasizing, for example on professional ethics while limiting the insistence in financial reporting. Hence, the aspect of strong legal enforcement that would promote such incentives could provide more enhanced and transparent financial information.

We would also like to open a parenthesis here and reflect upon the empirical material under IFRS that have resulted in income smoothing incentives compared to the periods under national GAAPs and contrary to what was initially hypothesized between these two periods. Throughout this study explanations linked to economic downturns have been presented. As such economic conditions can affect the level of loan loss provisions and consequently income smoothing behavior (Lin & Shih, 2002; Maijoor & Vanstraelen, 2006). Therefore the prevalent economic conditions from 2008 might have affected the results. How far one can speculate upon this matter is another topic or perhaps a future research area.

Unarguably the instability during the years from 2008, due to the financial crisis or political factors and actions taken might have had some consequences on income smoothing by banks. Bad loan issues and losses on investments could potentially contribute to smoothing income through loan loss provisions in order to stabilize the volatility in earnings as this has been assumed to represent lower risk. However it is not unreasonable to argue that major losses on loans due to the financial instability would mean that presenting smooth income could be received with suspicion from the market participants. Although the model selected in this study lack the adequate structure and variables to test such assumptions.
Agency theory and earnings management

To date it is still not clear how compensation schemes, income smoothing and other predictions that agency theory makes, can impact earnings management or if other factors intervene; specific to a firm or an industry such as corporate culture elements etc. (Ronen & Varda, 2008). The research area on earnings management and in particular income smoothing is rather grounded on technicalities in terms of finding satisfactory variables that potentially can reflect managerial incentives. Previous studies in the income-smoothing field make a number of assumptions, which mirror managerial incentives, although the most predominant assumption is that the agency conflict always exists. Thus management have incentives to take actions that might be conflicting with the ones of the shareholders e.g. to manage earnings by providing a distorted financial performance in order to gain contractual outcomes such as bonuses. Hence, within the agency theory framework, managers capture the opportunity, which can be partly provided by accounting standards discretion to implement manipulation practices. In turn these accounting choices generate further agency costs as such choices are opportunistic in nature rather than optimal (Jensen & Meckling, 1976; Fama & Jensen, 1983), and all these despite the assumption that IFRS could lower agency costs (Bushman & Smith, 2001; Callao & Jarne, 2010).

However, assume the following example, if managers are allowed to employ extensive discretion in financial reporting through the IFRS standards, (i.e. managers choose to smooth income through accounting numbers for a bad year); can then argue that the objectives of “faithful representation” that for instance IASB poses are being fulfilled (IASB, 2010)? This query is also related to which purpose and users IFRS should serve and even to the arguments that view accounting standards as an acceptable framework that can decrease information asymmetries between the agent and the principal (Eilífsen, 2010).

Furthermore if income smoothing has taken place under national GAAPs and IFRS, this should not be interpreted only as income smoothing in order to provide beneficial contractual outcomes for bank managers. As explained in the early sections of this study, income smoothing can be a strategy to convey private information, in Ronen and Varda (2008) own words, the White and Gray categories of earnings management. In this study we attempted to investigate the “black” category, however the results
might well be comparable and transferable to the other two categories, meaning that the magnitude of income smoothing can be interpreted to serve the other two categories. Despite the definition on earnings management provided by Healy and Wahlen (1999) there seems to be a difficulty to actually define which practices might be harmful to shareowners or beneficial to managers or how such managerial practices are best used and interpreted.

In this study we posed the following research question: *Have income smoothing increased or decreased under IFRS, compared to the national GAAPs?* Based on the empirical evidence, we cannot find support for the hypotheses derived. The results show some level of income smoothing through loan loss provision accounts both under national GAAPs and the IFRS regime. Under IFRS the observations of income smoothing was more predominant but our results were not significant. However the empirical observations produced in the study have traces in previous articles whereas no significant level of income smoothing have been established under other accounting regimes except IFRS, for instance U.S. GAAP. In this context we can observe that income smoothing have increased at some extent after the transition towards IFRS. As it has been presented the increase of earnings management might depend on a variety of reasons.

We presented some earning management explanations in terms of flexibility in accounting standards under IFRS, factors such as economic-political conditions or because managers try to meet benchmark targets setout by investors, shareholders analysts and not necessary to gain private benefits (e.g. Bushee, 1998; Graham et al., 2005). For instance in the case of Enron and WorldCom the majority of earning management activities took place in order to satisfy analysts forecasts and capital markets (Schilit, 2010). Therefore, we conclude that how we perceive such practices depend on the prism through which earnings management is viewed. Whether earnings management might be beneficial or harmful to capital markets, shareholders, firm owner etc., it is a question of extent – meaning how extent, how severe are such activities. In the light of major corporate scandals that revealed earnings management practices, the analog interpretation of such activities will be viewed with suspicion from standard setters, regulators and the society.

Finally, our empirical results should be regarded in consideration with certain limitations. First of all, the analysis includes the transitional period from national
GAAPs to IFRS, whereby managers may have made the most to behave opportunistically; an issue that has been argued by some authors (e.g. Jeanjean & Stolowy, 2008; Callao & Jarne, 2010). However in the study we choose to include the transitional years to obtain more data, although this can also be a limitation. Second, the limitations in the present study are also related with the overall limitations concerning earnings management research. These limitations refer often to the empirical models that are used in order to examine managerial incentives and are also inherently statistical - and regression model issues. Firstly accrual models have repeatedly received criticism for stipulating biased estimates of discretion (Dechow et al., 1995; Kothari et al., 2005) as researchers have not reached a consensus on a specific model superiority that would contribute to higher reliability.

The behavior of discretionary accruals is difficult to observe and be estimated by regression models. As such we cannot exclude the possibility that other variables influencing discretionary accruals might be outside than those selected in this study. There is also a need to adequate distinguish between intentional income smoothing undertaken by managers and natural smoothing whereby processes that generate earnings might also produce smoothing streams (Mao, 1988). To date most studies examine earnings management through quantitative methods by introducing a variety of variables that are aimed to capture managers’ incentives to smooth income. The failure to establish significant statistical relationship for income smoothing can be due to the difficulty of examining simultaneously several smoothing variables.

**Future research**

We end this study by providing suggestions for future research. As we noted some limitations of the earnings management research lays in the regressions models applied. We believe that the explanatory power of the models could be improved if other variables are included in the analysis. For instance, if reporting quality as described by Soderstrom and Sun (2007) is a function of high quality standards (in their meaning IFRS) and a country’s investor’s protection, then future models should include variables such as board structure, independence and ownership variables in order to reflect a country’s investor’s protection. Furthermore it could be interesting to examine non-listed banks in comparison to listed banks, since it has been argued in previous articles that managers in non listed firms can have other incentives than managers in
listed firms (Anandarajan et al., 2007).

As explained above loan loss provision accounts might not necessary reflects managerial incentives to smooth earnings in contemporary years. Especially after the new requirements that BASEL II poses; therefore future research could examine income smoothing from the perspective of BASEL II and whether BASEL requirements complements IFRS. Finally we believe that a larger sample could benefit future studies and we recommend that future research implement the side of income smoothing as a singling technique. Perhaps in order to test some qualities of IFRS further variables could be implemented in the regression model such as dummy variables for disclosures (e.g. disclosure indexes) or other control mechanism that could provide additional information (e.g. legal indexes). This can be the case for future studies.

References


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