

# Essays on behavioral determinants of earnings quality

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*To my parents,  
Anastasio and Zoi*



## ABSTRACT

The neoclassical economic view of the firm – upon which most of the empirical financial accounting research is based – assumes that managers are rational wealth optimizers. Therefore, managers are considered homogeneous and selfless inputs into the production process, and this implies that different managers are perfect substitutes for one another. Although managers might have differences regarding their preferences, risk profiles, and skills, neoclassical economic theory assumes that none of these individual characteristics reflects upon actual corporate policies; the implication here is that individual managers are not able to influence corporate decisions through managerial discretion. On the other hand, upper echelons theory suggests that individual managers *do* matter when it comes to corporate decisions and outputs, and that top executives' experiences, values, and personality influence their subjective interpretations of the situations they face, and thus affect their decisions.

Based on the assumptions inherent in upper echelons theory, this Ph.D. dissertation investigates the potential effect of top executives' personal characteristics on financial reporting decision-making; in particular, it focuses on those of chief executive officers (CEOs) and chief financial officers (CFOs). The underlying objective of the dissertation is to determine whether the individual-level characteristics of CEOs and CFOs explain earnings quality in firms. Additionally, this dissertation also considers the economic characteristics of users of financial information as determinants of earnings quality.

The empirical findings of the studies carried out within the scope of this dissertation show that managerial characteristics indeed explain earnings quality. Specifically, CEO marital status and the gender of a CEO's first-born child are found to significantly determine accruals quality – and by implication, earnings quality – among firms. Likewise, CEO personality traits such as hubris are also significant determinants of accruals (i.e., loan loss provisions) quality in banks. Meanwhile, CFO gender has been found to influence earnings quality in terms of the usefulness to investors of earnings information. Finally, the results indicate that the economic characteristics of users of financial information also determine the usefulness of earnings.

**Keywords:** Managerial characteristics, CEOs, CFOs, earnings quality, accruals quality, loan loss provisions, bond markets, equity markets, earnings announcement, risk



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A sunny day in October on the train to Stockholm!



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# INTRODUCTION



# CHAPTER 1

## OVERVIEW

### 1.1 GENERAL OVERVIEW

Going back to 2010 when I completed my bachelor-level studies in accounting, I was feeling ready and confident to enter the accounting profession. I was about to start my career as an accountant; my plans changed, however, I moved to Gothenburg and in 2011 I started a master's degree in accounting. I remember my surprise when I realized that financial accounting is not just about bookkeeping (i.e., mere debits and credits), and that there is a considerable volume of academic research related to financial accounting. After all, this is what I was taught in my undergraduate studies: the scope of financial accounting is restricted to bookkeeping. My first reaction was to ask myself, "Why do people undertake research in financial accounting?" and ultimately, "What is the purpose of doing research in financial accounting?"

To answer such questions, one must approach financial accounting research from a broader perspective. As a discipline within the spectrum of social sciences (Ahmed, 1996; Beattie, 2005; Ryan, Scapens, and Theobald, 2002), financial accounting research should have some practical application (Harvey and Keer, 1978), and ultimately (at least in theory) help people improve their lives. However, what is (or should be) the definition of "improve," in the context of financial accounting? Arguably, some of the major goals of research in business and economics (and by implication, within financial accounting) involve economic growth, equality in the distribution of income, and ways of dealing with sustainability issues, such as environmentally friendly and society-focused growth (Runesson, 2015).

In modern market-based economies, the efficient allocation of income through capital markets (both equity and debt markets) is an issue of major importance. At any point in time, those actors involved in capital markets (e.g., investors,

creditors, analysts, regulators, supervisory authorities, and the like) need information to evaluate the effects that various investment decisions will have on their wealth (Watts and Zimmerman, 1986). It is here that financial accounting fits into the “picture,” as it is the branch of the accounting discipline responsible for preparing financial information for stakeholders outside an entity, and for communicating it to them (Alexander and Nobes, 2010).<sup>1</sup> The fundamental role of financial accounting in the efficient function of capital markets has long been acknowledged by accounting researchers (Bhattacharya, Desai, and Venkataraman, 2013; Watts and Zimmerman, 1986).<sup>2</sup>

A question naturally follows: “What role does financial accounting research play (or *should* it play) in modern economies?” One way financial accounting research can contribute is by explaining *why*, and predicting *how*, individuals (e.g., managers, investors, regulators, etc.) should behave, given certain objectives (Watts and Zimmerman, 1986). Following this premise, accounting researchers have focused – among other things – on the characteristics and behavior of preparers (e.g., firms, managers, etc.) and users (e.g., investors, creditors, analysts, regulators, supervisory authorities, etc.) of financial information. The ultimate objective of this literature stream is to identify the factors that determine the quantity and quality of accounting information provided by preparers, and to evaluate the usefulness of this information from the perspectives of various users (Runesson, 2015).<sup>3</sup>

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<sup>1</sup>Over time, accounting has moved far from its traditional “procedural base” character of bookkeeping, budgeting, and account preparation, to become a more social-oriented discipline. As a consequence, the definition of “financial accounting” has evolved to become very broad, and to include not only information that is financial in nature, but also other non-financial information, such as corporate social responsibility (CSR) reporting (Glautier and Underdown, 1994). In my research, however, I will focus exclusively on the financial aspects of the information identified, measured, recorded, and communicated by financial accounting practitioners.

<sup>2</sup>Arguably, the aforementioned objective of financial accounting (i.e., to facilitate the efficient function of capital markets) labels those involved in capital markets as the main users of financial information. Apparently, there are other stakeholders who also make use of financial reporting, such as tax authorities, employees, and suppliers. Yet, capital market actors (e.g., investors, creditors, analysts, regulators, supervisory authorities, and the like) have received most of the attention of financial accounting researchers (Runesson, 2015).

<sup>3</sup>According to the International Accounting Standards Board’s (IASB’s) conceptual framework, the accounting information must incorporate four principal qualitative characteristics: understandability, relevance, reliability, and comparability. These four qualitative features make accounting information *useful* in terms of the decision-making needs of financial information users (e.g., investors). Among these four qualitative characteristics, *relevance* and *reliability* as determinants of the *usefulness* of accounting information have drawn the most research attention (Barth, Beaver, and Landsman, 2001; Dechow and Skinner, 2000; Holthausen and Watts, 2001). Concerning relevance, accounting information is perceived as relevant when it serves the decision-making needs of users. In this respect, accounting information integrates the qualitative feature of relevance when it influences the economic decisions of users, by supporting them in assessing past, present, and future events as well as confirming and/or correcting past assessments. Meanwhile, accounting information incorporates the qualitative characteristic of reliability when it is free from bias and material error, and is perceived by investors as a faithful representation of that which it either purports to represent or could reasonably be expected to represent (i.e., the economic performance/condition of a firm) (Alexander, Britton, and Jorissen, 2011). Addressing the relevance and reliability of earnings

In the relevant literature, it appears that accounting scholars are particularly interested in the *quality* of financial information (e.g., Ecker, Francis, Kim, Olsson, and Schipper, 2006; Francis, LaFond, Olsson, and Schipper, 2005; Lambert, Leuz, and Verrecchia, 2007; Lang and Lundholm, 1996; Yee, 2006) and in the *usefulness* of financial information to equity investors.<sup>4</sup> High-quality financial information enables capital providers to better evaluate firms and, by implication, to optimize their decision-making processes. In the course of assessing firm value and performance, investors place special emphasis on *earnings quality* (Gaio and Raposo, 2011), not least due to the fact that the “concept of earnings quality is fundamental in accounting and financial economics” (Dechow et al., 2010, p. 2). Reported earnings, along with their various attributes, are taken into thorough consideration whenever contracting and investment decisions are made (Beaver, 1998; Schipper and Vincent, 2003). Concerning the former, low-quality earnings might result in the unintentional transfer of wealth. With regard to the latter, poor earnings quality can prompt an inefficient distribution of capital, which can in turn substantially affect economic growth (Schipper and Vincent, 2003).<sup>5</sup> In this respect, there is evidence in the literature that earnings quality strongly correlates with the cost of capital (Leuz and Verrecchia, 2000), the efficient allocation of capital (Bushman, Piotroski, and Smith, 2011), and the mobility of capital across national borders (Young and Guenther, 2003). Given the significant economic consequences of the quality of reported earnings, both the academic community and policymakers have dedicated considerable effort to investigating the determinants and the consequences of earnings quality (Dechow et al., 2010; Soderstrom and Sun, 2007).

When examining the characteristics (and behavior) of the preparers of financial information, accounting researchers have traditionally focused on country-level factors (e.g., the legal system within a country, the level of enforcement and of investor protection within that country, accounting standards, etc.) and firm-level factors (e.g., firm size, profitability, leverage, etc.) that determine the quality of the disclosed financial information, in general, and earnings quality, in particular (Ge, Matsumoto, and Zhang, 2011). Research within this literature hinges upon the assumptions of neoclassical economic and agency theories, and

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is far beyond the scope of this dissertation; however, as the two major accounting standard principles under which all financial statements should be prepared, reliability and relevance of financial information, in general, and earnings, in particular, remain on the sidelines of the four essays comprising my dissertation.

<sup>4</sup>This focus in the literature is not surprising, given the implied emphasis in the conceptual frameworks of both the IASB and the Financial Accounting Standards Board (FASB) that International Financial Reporting Standards (IFRS) and the US generally accepted accounting principles (US GAAP) are primarily meant to fulfill the decision-making needs of equity investors (Beatty and Liao, 2014; Dechow, Ge, and Schrand, 2010).

<sup>5</sup>As Schipper and Vincent (2003) further claim, in addition to the use of earnings quality as a financial reporting quality proxy for contracting and investment decision-making purposes, regulators also consider earnings quality an indirect indicator of the quality of accounting standards. High-quality earnings imply a more faithful representation of the underlying firm – and, in turn, accounting standards of better quality.

implies that under the same economic conditions, different managers will make the same *rational* choices. Indeed, in this “neoclassical view of the firm [...] top managers are homogeneous and selfless inputs into the production process [...] and different managers are regarded as perfect substitutes for one another” (Bertrand and Schoar, 2003, p. 1173). Following this premise, research has most commonly focused on “representative” agents, because individual managers are expected to make similar accounting decisions under appropriate monitoring and contractual schemes. In this respect, both neoclassical economic and agency theories disregard the potential effects of managers’ idiosyncratic characteristics on financial reporting outputs (Bamber, Jiang, and Wang, 2010).

In contrast to this neoclassical view of managers (and firms), research in judgment and decision-making that follows the premises of bounded rationality has acknowledged the fact that, to a certain extent, managers’ individual characteristics *do* influence decision outputs (Bonner, 2008). Yet, only after the development of upper echelons theory (Hambrick, 2007; Hambrick and Mason, 1984) was the likelihood of these personal characteristics impinging upon firm-level decision outputs widely recognized. Influenced by theorists of the Carnegie School – who argue that complex decisions are to a great extent the outcome of behavioral factors and not a mechanical quest for economic optimization (see, Cyert and March, 1963) – upper echelons theory claims that the more complex an organizational task is, the more the output will be influenced by managers’ personal experiences and values. That is, managers’ individual characteristics (i.e., experiences, values, and personality) significantly affect how they interpret their situations, and therefore influence their decision-making.

The essays that comprise this Ph.D. dissertation are based on the aforementioned premises. They belong to a research stream where questions of interest exclusively concern the concept of *earnings quality* – that is, what characterizes earnings quality, and what are its *determinants* and *consequences*? Many aspects of the different factors that determine earnings quality and its consequences have been studied in the literature (e.g., micro- and macroeconomic determinants of earnings quality, and the consequences (i.e., usefulness) of earnings quality to equity investors). I home in on the earnings quality literature by identifying managerial characteristics that affect managers’ propensity to report higher/lower quality earnings; by investigating whether managers’ individual characteristics influence the usefulness of earnings to investors; and also by examining whether the usefulness of earnings is determined by the distinct characteristics that different users of financial information have. All constitute, to a greater or lesser extent, relatively unexplored areas within the financial accounting literature. In examining whether and how managers’ individual characteristics affect the quality and usefulness of reported earnings, factors pertaining to the family environment of a chief executive officer (CEO) (i.e., CEO marital status, and CEO children gender and age), as well as the innate



characteristics of CEOs and chief financial officers (CFOs) (i.e., CEO personality traits and CFO gender) are taken into consideration. Regarding whether or not the usefulness of earnings is affected by the characteristics of the users of financial information, emphasis is specifically placed on the distinct information needs of debt investors, relative to those of equity investors.<sup>6</sup>

## 1.2 THE ESSAYS

To benefit from the four essays that constitute the bulk of this dissertation, the reader will find value in reviewing the main issues discussed and studied herein. Therefore, a short summary of each of these essays is provided below.

### **Essay 1: The relative importance of conditional conservatism for bond and equity investors.**

In this essay, we study the various components of banks' income statements and ascertain their relative effects on bond and equity markets. More specifically, we divide the operating part of the income statement into loan loss provisions (LLP) and all other operating income. Our hypothesis is that LLP – which relates to default probability in banks – has a stronger effect on bond markets. Meanwhile, the other parts of operating income – which provide a general measure of performance – have a stronger effect on equity markets. Although many studies have examined the relevance of bank income statements, the majority of them focus on the relevance for equity investors, and ignore to a certain extent the information needs of other users (e.g., debt investors). In any case, the focus on equity markets is not surprising: it likely reflects the FASB's and IASB's implied focus on providing financial information that is decision-useful to (equity) investors, rather than to creditors. At the same time, however, most bank financing comes from debt, which makes creditors a very important stakeholder group for banks. Given the significant growth of debt markets over the last decade, this study is timely, in the sense that it emphasizes the information needs of debt investors and thus suggests a rebalancing of the users on which research focuses.

### **Essay 2: What determines bank loan loss provisions quality? A study of CEO hubris.**

This essay investigates, within the context of banking, whether top executives' personality traits – in particular, CEO hubris – affect their propensity to report more or less reliable earnings. This is achieved by examining the relative effect of CEO hubris on the quality of bank LLP (i.e., credit losses). Although a

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<sup>6</sup>While I acknowledge the fact that factors such as corporate governance and other internal control mechanisms are also significant determinants of earnings quality, in the essays that comprise this dissertation, these factors remain in the periphery.

substantial body of literature on bank LLP quality exists, it rather tends to focus on microeconomic (e.g., bank size, performance, etc.) and macroeconomic (e.g., enforcement of accounting standards, legal system, etc.) factors that determine credit loss quality (and by implication, earnings quality) among banks. This research stream, which originates in neoclassical economic and agency theories, assumes that all managers are homogeneous, and ignores the potential effect of executives' personal attributes on accounting reporting choices. Building upon the assumptions inherent in upper echelons theory, however, research in management and organization (and, more recently, in accounting) acknowledges that choices that are complex and/or of major significance to the firm are heavily influenced by behavioral factors (i.e., top executives' biases and dispositions). By examining the relative effect of CEO hubris on LLP quality in banks, this study broadens the spectrum of factors that determine banks' earnings quality (and, in a broader sense, bank accounting quality) to include top executives' personality characteristics.

**Essay 3: Accruals quality: Does CEO marital status really matter?**

In this essay, I examine whether factors comprising the broader family environment of married CEOs – namely, CEO children's gender and age – explain a CEO's tendency to undertake or avoid risky financial reporting actions. Recent evidence within the literature shows that married CEOs are less likely to engage in risky financial reporting practices. In particular, married CEOs have been found to manage earnings through discretionary accruals significantly less than nonmarried CEOs. An assumption underlying this literature is that married CEOs are more risk-averse, mainly because they have relatively more responsibilities associated with having children. The implication here is that, to a certain extent, CEO personality – and by implication, their risk profiles – are influenced by their children. In this respect, previous research shows that the CEO children's gender significantly affects CEO accounting reporting behavior, especially with respect to nonregulated accounting reporting. However, whether factors associated with CEO children – like CEO children's gender or age – have any effect on CEO behavior with respect to regulated financial reporting has not been explicitly studied to date. Using a unique dataset containing detailed information with respect to CEO marital status and CEO children's gender and age, I examine the potential effects of the gender and age of married CEOs' children, including those on the CEO tendency to report higher/lower quality accruals (i.e., more/less reliable earnings). This study contributes to an emerging and rapidly expanding body of literature that is interested in determining how a manager's family environment affects his or her financial reporting preferences.

#### **Essay 4: Trust beyond numbers: CFO gender as a moderator of investors' information risk.**

In Essay 4, I study the effect of CFO gender on the relevance (i.e., usefulness) of earnings to investors. Given that the number of female executives belonging to top-management teams has significantly increased over the last decade, researchers have started to investigate the effect of female executives on corporate accounting decision-making. The findings in this research stream converge, in that they assert that the accounting decisions made by female executives significantly differ from those made by male executives. For instance, female CFOs have been found to manipulate earnings less and be more conservative – that is, female CFOs report higher-quality earnings relative to male CFOs, thus implying a significant reduction in investors' information risk. However, the level of investors' information risk is determined not only by the quality of the disclosed financial information *per se*, but also by investors' perceptions concerning the underlying credibility of the information. As a reflection of the probability individuals assign to the likelihood of being cheated, trust can potentially influence investors' perceptions regarding the credibility of the disclosed financial information, and thus influence the ways in which investors will interpret and react to that information. In this study, I use CFO gender as a proxy for trust, and I examine whether the usefulness (and, by implication, the information risk) of earnings to investors can be determined by the gender of CFOs. This study builds upon and extends the literature on the relevance of earnings by considering top executive gender – in particular, CFO gender – as a potential determinant of earnings usefulness to investors' decision-making needs.

What these essays have in common is that they address issues that relate to whether and how earnings quality – in particular, *accruals quality* – is determined by the characteristics of those who prepare (i.e., top executives) and use (i.e., investors) financial information.<sup>7</sup> In essence, earnings quality constitutes a very broad concept comprising several attributes, each of which captures a different aspect of earnings quality. Dechow et al. (2010) classify these different attributes into three major categories: 1) properties of earnings, 2) investor responsiveness to earnings, and 3) external indicators of earnings misstatements. The studies in this dissertation capture aspects of earnings quality that fall within the first two of these categories.

In decomposing the *properties of earnings* further, one can see that it consists of five distinct earnings attributes – namely, earnings persistence, (abnormal) accruals, earnings smoothing, target beating, and timely loss recognition; each captures earnings reliability from a different perspective. Among these, (*ab-*

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<sup>7</sup>Preparers and users of financial information determine accruals and earnings quality from different perspectives. Specifically, preparers of financial statements determine the *reliability* of accruals and earnings as a qualitative characteristic; meanwhile, users of financial statements determine the *relevance* (i.e., usefulness) of accruals and earnings as a qualitative characteristic.

*normal*) *accruals*, the most commonly used proxy for accruals quality in the literature, is a core earnings quality attribute in this dissertation. Either directly or indirectly, the four essays in this dissertation examine whether and how the characteristics of financial information preparers (i.e., managers) and users (i.e., investors) determine the quality of accruals and, by implication, of earnings. Specifically, Essays 2 and 3 examine whether CEOs' personal characteristics determine the quality of accruals and thus of earnings. Meanwhile, Essay 1 examines whether the usefulness of earnings (accruals) is determined by the characteristics of the users of financial information (in this particular case, the decision-making characteristics of bond and equity investors), while Essay 4 investigates whether the usefulness of earnings to investors is influenced by CFO gender. Overall, the characteristics of both preparers and users are posited as major determinants of earnings quality in the essays that comprise the present dissertation. Table 1 summarizes the research questions and earnings quality issues addressed in each study.

**Table 1:** *Summary of essays, research questions, and earnings quality issues*

Essay	Research question	Earnings quality issue
1	Is there any difference in the relevance of different bank earnings components to different investor groups?	Are bank LLP more relevant to bond investors than to equity investors? Is bank operating income adjusted for LLP more relevant to equity investors than to bond investors?
2	What factors determine LLP quality in banks?	To what extent is the quality of LLP in banks determined by CEO personality characteristics?
3	What factors determine accruals quality?	Does a married CEO's family environment affect his or her behavior towards reporting higher/lower quality accruals? Which particular factors of the married CEO's family environment have the most influence on CEO choice to report higher/lower quality accruals?
4	Is investors' information risk affected by CFO gender?	Do earnings announcements made by female CFOs convey more reliable information to equity investors? Do investors perceive earnings information provided by female CFOs as being more relevant?

Essays 2 and 3 examine whether CEO characteristics can explain accruals and earnings quality. In particular, Essay 2 assumes that earnings quality in banks is determined by CEOs' innate characteristics, while in Essay 3 the underlying assumption is that the broader family CEO environment influences married CEO propensity to report higher/lower quality earnings. Essays 1 and 4 investigate the usefulness of earnings to investors, albeit from different perspectives. Specifically, Essay 1 assumes that the usefulness of earnings is determined by the distinct decision-making characteristics of users of financial information, while Essay 4 assumes that, to a certain extent, it is determined by the characteristics of the preparers of financial information.

In conclusion, it is within the earnings quality context that I hope to contribute to the literature, via the four essays in this dissertation. In doing so, I place substantial emphasis on factors related to preparers' and users' distinct characteristics, and whether and how these characteristics affect the quality of accruals – and, ultimately, the quality of reported earnings. What I do in the chapters leading up to the four essays is introduce the relevant literature, in an effort to exposit the theoretical framework on which these essays are based. I start the literature review by presenting the theoretical framework on which my dissertation is grounded (Chapter 2). Subsequently, I introduce the reader to the earnings quality concept and the principles of accrual accounting under which the earnings numbers are produced (Chapter 3). I then present the effect of managerial characteristics on accounting choice, and ultimately on accruals and earnings quality (Chapter 4), followed by a discussion of whether and how managerial characteristics shape the usefulness of earnings to the users of financial information (Chapter 5). This literature review is followed by an overview of the four essays, where I discuss the work in and findings of each essay, as well as their contributions; thereafter, I offer suggestions for future research (Chapter 6).



## CHAPTER 2

# THEORETICAL FRAMEWORK

The most commonly applied theories in empirical financial accounting research – namely, agency and positive accounting theories – are heavily influenced by the assumptions of neoclassical economic theory (Jensen and Meckling, 1976; Watts and Zimmerman, 1986). In the neoclassical economic view of the firm, individuals (i.e., managers) are assumed to be rational wealth optimizers; as such, managers are considered *homogeneous* and *selfless* inputs into the production process, and the implication is that different managers are perfect substitutes for one another. At its extreme, neoclassical economic theory assumes that, with respect to what is happening in a firm, the top executive *does not matter*. Although top managers might demonstrate differences with respect to their preferences, risk profiles, or skills, none of these attributes reflects on actual firm policies if a manager cannot affect these policies (Bertrand and Schoar, 2003). In this respect, there is no “room” for individual managers to influence corporate decisions through managerial discretion (Bamber et al., 2010; Bertrand and Schoar, 2003; Weintraub, 2002). Meanwhile, standard models that derive from agency theory acknowledge that individual executives may exert discretion within their firm, and that they can use this discretion to influence corporate decisions and advance their personal objectives. Nonetheless, these models do not assume that corporate outputs will be affected by individual managers, since they typically overlook the cross-sectional variation across managers that comes from idiosyncratic managerial differences. Rather, under these agency models, differences in corporate outputs are attributed to variation in corporate governance mechanisms (e.g., monitoring and contracting mechanisms), rather than to idiosyncratic differences across managers (Bamber et al., 2010; Bertrand and Schoar, 2003).<sup>8</sup>

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<sup>8</sup>The underlying assumption in these studies is that under appropriate monitoring and contractual mechanisms, individual managers can be induced to make identical choices (Bamber et al., 2010).

In contrast, upper echelons theory (Hambrick, 2007; Hambrick and Mason, 1984) acknowledges that individual managers *do* matter when it comes to corporate decisions and outputs. The core assumption inherent in upper echelons theory is that top executives' experiences, values, and personality influence their subjective interpretations of the situations they face and, in turn, help determine their decisions. Built upon the premises of behavioral theory of the firm (Cyert and March, 1963), upper echelons theory postulates that strategic choices made by managers – which in turn affect firm performance and outputs – are influenced by behavioral factors such as bounded rationality, multiple and conflicting goals, and various aspiration levels (Nielsen, 2010). In this view of the firm, “informationally complex, uncertain situations are not objectively ‘knowable’ but, rather, are merely interpretable” (Hambrick, 2007, p. 334). That is, the more complex an organizational task is, the more likely the output is influenced by a manager's personal experiences, values, and personality. Thus, in an attempt to understand *why* and predict *how* firms make strategic choices, one must take into consideration the idiosyncratic characteristics of top executives (Plöckinger, Aschauer, Hiebl, and Rohatschek, 2016).

In a refinement of the original Hambrick and Mason (1984) theory paper, Hambrick (2007) suggests two major moderators of the relationship between managerial characteristics and corporate decisions and outputs: 1) *managerial discretion* and 2) *executive job demands*. “Managerial discretion” refers to the extent to which managers can influence decisions and outputs within their respective organizations. The implications of managerial discretion for upper echelons theory are straightforward: the more discretion a manager can exert over corporate decisions and outputs, the more his or her personal characteristics will reflect on these decisions and outputs. Concerning executive job demands, Hambrick (2007) claims that the greater a manager's job demands are, the more likely his or her corporate choices and outputs will be influenced by his or her experiences, values, and personality.

According to Hambrick and Mason (1984), research grounded in the premises of upper echelons theory offers three major benefits. First, academics benefit from the fact that upper echelons theory offers substantially greater power to predict corporate decisions and outputs, relative to other theories that ignore the potential effect of top executives' personal characteristics on them. Second, those individuals responsible for selecting and developing managers – such as boards of directors – may also benefit. For instance, by being made aware of the implications that managerial characteristics have on corporate decisions and outputs, a board of directors can better choose those managers who “fit” well with their organization's operations and objectives. Finally, benefits may accrue to top executives who try to predict how a competing corporation will act. For example, when a firm recruits a new CEO from another industry, it is likely that the new CEO will “steer” the firm into new business, causing the



core business of the firm to be “vulnerable” in the short term.

Departing from the premises of upper echelons theory, numerous studies examine the potential effects of top executives’ individual characteristics on corporate-level decisions and outputs (Ge et al., 2011). For instance, research provides evidence of a relationship between firm performance and CEO house size (Liu and Yermack, 2012), firm performance and “superstar” CEO status (Malmendier and Tate, 2009), as well as CEO overconfidence and corporate investment (Malmendier and Tate, 2005). In the particular context of financial accounting research, the empirical findings show an association between top executives’ characteristics and their financial reporting choices. In particular, CEOs’ and CFOs’ unobservable characteristics (e.g., ability, cognitive bias, etc.) have been found to affect the propensity of firms to manipulate earnings (e.g., Dejong and Ling, 2013; Ge et al., 2011), as well as the quality of disclosures (e.g., Bamber et al., 2010). In addition to unobservable managerial characteristics, the literature has also examined the effect of CEOs’ and CFOs’ observable characteristics on financial reporting choices. For instance, earnings management in firms has been found to be associated with top executives’ tenure (e.g., Ali and Zhang, 2015; Hazarika, Karpoff, and Nahata, 2012), age (e.g., Davidson III, Xie, Xu, and Ning, 2007), and gender (e.g., Barua, Davidson, Rama, and Thiruvadi, 2010; Srinidhi, Gul, and Tsui, 2011). The gender of top executives has also been found to determine the level of accounting conservatism (e.g., Francis, Hasan, Park, and Wu, 2015; Ho, Li, Tam, and Zhang, 2015). Besides top executives’ observable and unobservable characteristics, previous studies provide evidence of a relationship between earnings management and accounting conservatism, and CEO and CFO personality traits (e.g., narcissism and overconfidence) (e.g., Ham, Lang, Seybert, and Wang, 2017; Hsieh, Bedard, and Johnstone, 2014; Olsen, Dworkis, and Young, 2014).

Nonetheless, upper echelons theory does have its caveats, especially when it comes to its practical application. Clearly, one major problem relates to measuring top executives’ *unobservable* psychological constructs, such as experiences, values, and personality (Hiebl, 2014; Nielsen, 2010). Hambrick and Mason (1984) acknowledge this problem and propose the use of executives’ observable demographic characteristics (e.g., age, tenure, education, etc.) as proxies for managers’ more complex psychological dimensions of their personality – dimensions that shape managers’ interpretations of the situations they face, and which thus influence their decision-making (Carpenter, Geletkanycz, and Sanders, 2004; Nielsen, 2010). Demographic characteristics, however, can be more “noisy” relative to purer psychological constructs. For instance, one might argue that individual-level educational background is an opaque proxy for certain of top executives’ underlying characteristics (e.g., motivation, cognitive style, risk tolerance, etc.). In spite of this given limitation, however, if managers’ demographic characteristics yield significant results, “then the upper

echelons theory will have been put to a relatively stringent test” (Hambrick and Mason, 1984, p. 196).

Three of the essays in this dissertation are based on the aforementioned premises of upper echelons theory. Financial reporting choices constitute fundamental corporate outputs, especially in relation to corporate assessments by investors and other stakeholder groups. This claim is supported by the numerous studies that empirically show that accounting numbers convey relevant information to a wide range of users. Therefore, one can assume that there is substantial interest in financial reporting decisions made by top executives. In this respect, upper echelons theory constitutes a suitable framework by which to examine whether and how managers and managerial characteristics influence financial reporting decisions and outputs (Plöckinger et al., 2016). Following this reasoning, in investigating which factors affect the quality of reported earnings, I place particular emphasis on top executives’ personal characteristics. Specifically, in Essay 2, I examine whether accruals quality (i.e., LLP quality) – and, by implication, earnings quality – in banks is determined by CEO hubris (i.e., a personality trait similar to narcissism and overconfidence). What I generally investigate in Essay 3 is whether factors related to the broader CEO family environment – including CEO marital status, and CEO children age and gender – can predict CEOs’ tendency to report higher/lower quality earnings. Meanwhile, in Essay 4, I examine whether managerial characteristics – in this particular case, the gender of firm CFOs – influence the value relevance (i.e., quality) of earnings to equity investors. Finally, Essay 1 investigates whether bank accruals (i.e., LLP) have different value relevance for bond and equity investors. This study differs from the other three, in two ways. First, it considers the characteristics of the users (i.e., bond and equity investors) of financial information, rather than those of the preparers (i.e., managers). Second, and most importantly, it focuses on the economic characteristics of bond and equity investors, especially in relation to their distinct decision-making needs, rather than behavior (as Essays 2, 3 and 4 do).

Arguably, upper echelons theory can be a very suitable theoretical framework for examining whether and how top executives’ characteristics relate to financial reporting outputs. This argument is further justified by the increasing volume of empirical studies that scrutinize the association between managers’ idiosyncratic characteristics and financial accounting outputs (Plöckinger et al., 2016). What makes upper echelons theory a very relevant and suitable framework for conducting research within the financial reporting context lies in the fact that financial reporting requires high levels of managerial discretion. As Hambrick (2007) argues, *managerial discretion* is a major moderator of the relationship between top executives’ characteristics and corporate decisions and outputs. That is, the higher the level of managerial discretion is with regard to corporate decisions and outputs, the more managers’ personal characteristics will

manifest in these decisions and outputs.

One financial reporting area that involves a considerable amount of managerial discretion is the estimation of (accruals-based) earnings (Fraser and Ormiston, 2004). In brief, financial statements are prepared on an “accruals” rather than “cash” basis of accounting, meaning that revenues are recognized when earned, and expenses are recognized when incurred, regardless of whether cash flows occur simultaneously (Dechow, 1994; Penman, 2003). In accrual accounting, the separation of revenue and expense recognition from cash flows is achieved through *accrual adjustments*, which adjust inflows and outflows of cash to yield revenues and expenses, and ultimately earnings (Subramanyam and Wild, 2009). These adjustments involve a considerable amount of managerial discretion and estimation, and these substantially affect the information presented in financial statements – in particular, earnings (Fraser and Ormiston, 2004).<sup>9</sup> The main benefit of allowing managers to exert professional judgment over accruals is that accruals-based earnings are more *relevant* to the decision-making needs of financial information users, compared to cash-based earnings. However, high levels of managerial discretion and estimation have been harshly criticized by the accrual accounting detractors: they argue that allowing high levels of discretion over the estimation of accruals enables top executives to *opportunistically* manipulate information within the income statement, and thus deteriorate the quality of accruals – and, by implication, the quality of reported earnings (Subramanyam and Wild, 2009). Given that, for investors, earnings is the most important performance summary measure of firms (Dechow, 1994; Francis, Schipper, and Vincent, 2003; Liu, Nissim, and Thomas, 2002; Penman, 2003), whether or not managers use accruals opportunistically to manipulate earnings is a major concern, for both accounting regulators and users of financial information (Dechow, 1994). The upper echelons theoretical framework can be particularly relevant and beneficial to addressing this empirical question. By adding behavioral aspects to established economic models, upper echelons theory provides significantly greater power to predict corporate decisions and outputs compared to other theories – such as neoclassical economic and agency theories – that disregard the potential influence of managers’ personal characteristics on firm-level decisions and outputs (Hambrick and Mason, 1984). In line with this reasoning, the essays comprising this dissertation are based on the premises discussed above. By investigating whether managers’ personal characteristics – including CEO hubris, CEO marital status, CEO children’s age and gender, and CFO gender – explain their tendency to provide higher/lower quality earnings, my aim is to extend the current literature to consider these top executives’ characteristics as potential determinants of earnings quality in firms, and increase the power to predict inappropriate (and sometimes deceitful)

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<sup>9</sup>A detailed discussion of the accrual basis of accounting under which earnings are estimated follows, in subsection 3.4.

financial reporting behavior among top executives.<sup>10</sup>

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<sup>10</sup>The effect of CEO marital status and CFO gender on earnings quality has already been examined in the literature; in this dissertation, I examine these issues from a relatively different perspective.

# CHAPTER 3

## EARNINGS QUALITY: CONCEPT AND ATTRIBUTES

### 3.1 OVERVIEW

Over the past two decades, the body of empirical research regarding earnings quality has grown considerably, especially in the area of earnings management. As claimed by DeFond (2010, p. 402), this tremendous increase in earnings quality literature is driven by “several factors that have both encouraged and facilitated this line of research.” More precisely, the SEC’s claims during the 1990s that earnings management is a widespread practice among US public entities have drawn the attention of researchers. The substantial role of earnings quality has been highlighted by the occurrence of several financial scandals in both the United States and Europe (Gaio and Raposo, 2011), which have contributed considerably to the growth in research associated with earnings management (DeFond, 2010). The collapse of “giants” such as Enron, Kmart, and Parmalat has raised concerns regarding the reliability of disclosed financial information; one consequence has been a dramatic drop in investor confidence (Jain and Rezaee, 2006). The fact that the failure of these “sound” businesses was strongly linked to inappropriate and, in some cases, deceitful accounting practices, undermined investors’ trust in corporations, especially in the United States (Chang, Chen, Liao, and Mishra, 2006). To reverse the negative sentiment and strengthen corporate accountability and professional responsibility, US Congress passed the SOX in 2002 – which, among other things, sought to improve financial reporting quality (Jain and Rezaee, 2006).<sup>11</sup>

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<sup>11</sup>In addition to earnings management concerns, several other factors have encouraged and facilitated academic research on earnings quality. The new era of internationally accepted accounting standards (i.e., IFRS) is another factor that has pushed scholars to dedicate their efforts to the examination of issues associated with earnings quality. Standard-setters’ intentions to develop new, high-quality accounting standards and promote the worldwide adoption

## 3.2 THE CONCEPT OF EARNINGS QUALITY

The concept of “earnings quality” has been variously interpreted in the accounting literature. For instance, high-quality earnings are identified as those accruing to persistence, stability, predictability, conservatism, and accuracy in reflecting the economic condition of a firm, and are thought to relate strongly to past, current, and future cash flows. The fact that these perceptions of earnings quality are distinct – and also carry different implications – renders the development of one definition of “earnings quality” problematic (Melumad and Nissim, 2008). Arguably, the scope of earnings quality would require a very broad definition, if it is to accurately express the fundamental characteristics inherent in the concept. Such a definition is provided by Dechow et al. (2010), and in line with those authors, I define “earnings quality” as follows:

*Higher-quality earnings provide more information about the features of a firm’s financial performance that is relevant to a specific decision made by a specific decision maker.*

The earnings quality definition of Dechow et al. (2010) is based on the *usefulness* aspect of earnings, relative to the diverse decision-making needs that the various users of such accounting information might have.<sup>12</sup> The concept of the *usefulness* of published financial data is at the core of the conceptual frameworks of both the IASB and the FASB. In the context of the current research, the *specific decision* and *specific decision maker* as per the definition of Dechow et al. (2010) specifically refer to *investment decisions* and *investors*, respectively. Furthermore, this definition of earnings quality incorporates three important features. First, earnings quality is contingent on the *decision relevance* of the information embedded in it; in this sense, earnings quality *per se* is meaningless and can be defined only in a specific decision-making context. Second, earnings quality is determined by the ability of disclosed earnings figures to convey *reliable* information about a firm’s financial performance – especially concerning unobservable aspects. Third, earnings quality is defined in terms of both the *relevance* of the underlying financial performance to a specific decision and the ability of the accounting system to capture that performance.

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of these standards have worked to develop an interesting and unexplored research field. In addition to the motives that arose from practical issues – as discussed previously – methodological as well as theoretical advances over the last two decades have substantially facilitated a sharp increase in the amount of earnings quality literature. The abnormal accruals model introduced by Jones (1991) provided the field with a standardized measure of abnormal accruals; it, along with several theory papers that helped academics formulate their empirical analyses, has enabled researchers to share a common ground in testing existing theories. Last but not least, progress in IT has allowed researchers to access large datasets via several databases, and this development has mitigated the time and money costs otherwise associated with the manual collection of large samples (DeFond, 2010).

<sup>12</sup>The decision-usefulness perspective of earnings is also central to other definitions of earnings quality (e.g., Dechow and Skinner, 2000; Fields, Lys, and Vincent, 2001; Healy and Wahlen, 1999; Imhoff Jr., 2003; Lo, 2008; McNichols, 2000; Penman, 2003; Schipper and Vincent, 2003).

### 3.3 EARNINGS QUALITY ATTRIBUTES

The empirical studies in this stream of research use several measures (i.e., earnings attributes) as proxies to capture the theoretical construct of earnings quality (DeFond, 2010). In their review paper, Dechow et al. (2010) classify these metrics into three main categories – namely, *properties of earnings*, *investor responsiveness to earnings*, and *external indicators of earnings misstatements*. The four essays in this dissertation touch upon earnings quality issues that relate to the properties of earnings and investor responsiveness to earnings. Intuitively, the earnings quality attributes within properties of earnings address issues that are associated with the *reliability* of earnings numbers, while the attributes that belong to investor responsiveness to earnings address those issues that relate to the *relevance* of earnings figures to investors.

The properties of earnings constitute the broadest category of earnings quality attributes, comprising earnings persistence (i.e., the reported earnings are consistent year over year), (abnormal) accruals (i.e., unexpected accruals – for instance, unexpected earnings or losses), earnings smoothing (i.e., earnings do not fluctuate significantly year over year), loss recognition timeliness (i.e., losses are reported on time and without delay), and target beating (i.e., instead of reporting losses, firms manage their earnings to report profits). Among these, (*abnormal*) *accruals* is the specific earnings quality attribute that this dissertation explicitly or implicitly considers. In accounting research, (abnormal) accruals are a widely used measure of accruals quality (Dechow et al., 2010), and they represent an issue of major importance for academics, practitioners, and regulators alike (Kothari, Leone, and Wasley, 2005).

### 3.4 ACCRUAL ACCOUNTING AND EARNINGS QUALITY

Financial statements are primarily prepared on an “accrual” rather than “cash” basis of accounting (Fraser and Ormiston, 2004; Subramanyam and Wild, 2009). One of the main accounting principles underlying the preparation of financial statements is the *matching principle* – that is, in determining net income (i.e., earnings) for an accounting period, expenses are matched with the generation of revenue (Dechow, 1994; Fraser and Ormiston, 2004). As mentioned, under accrual accounting, revenues are recognized when *earned* and expenses are recognized when *incurred*, regardless of whether cash flows occur simultaneously. Therefore, accrual accounting is assumed to mitigate *timing* and *matching* problems inherent in cash flows. Conceptually, accrual accounting is superior to cash flow accounting, because accrual-based financial statements (in particular, the income statement) provide more *relevant* information for measuring current and future firm performance (i.e., a firm’s capacity to generate cash flows) (Dechow,

1994; Penman, 2003; Subramanyam and Wild, 2009).<sup>13</sup>

In accrual accounting, the separation of revenue and expense recognition from cash flows is achieved through *accrual adjustments*, which adjust inflows and outflows of cash to yield revenues and expenses, and ultimately earnings (Subramanyam and Wild, 2009). These adjustments involve considerable amounts of managerial judgment and estimation that can significantly affect the information in financial statements (Fraser and Ormiston, 2004). It is the high levels of managerial judgment and estimation that receive most of the critique from accrual accounting detractors. They claim that allowing extensive judgment over the estimation of accruals enables managers to manipulate income statement information, and thus compromise the quality of accruals and by implication the quality (i.e., reliability) of reported earnings. In contrast, accrual accounting supporters assert that the higher relevance of the accrual-based earnings compensates for lower earnings reliability stemming from managerial judgment. They further claim that institutional mechanisms (e.g., accounting standard setting boards, auditors, etc.) ensure a minimum level of income statement (i.e., earnings) information reliability (Subramanyam and Wild, 2009).

Arguably, accrual accounting is a continuous quest to balance the relevance and reliability of earnings figures (Dechow, 1994; Healy and Wahlen, 1999; Watts and Zimmerman, 1986). As stated previously, managers are allowed to use their professional judgment to adjust inflows and outflows of cash to yield earnings. However, the ways in which managers exercise this judgment are controversial. On one hand, managerial judgment over the recognition of accruals can signal proprietary information to stakeholders (e.g., capital providers) outside the firm. Given that managers have more information about firms' cash-generating capacity (Dechow, 1994; Easley and O'Hara, 2004; Healy and Palepu, 2001; Leuz and Verrecchia, 2005; Watts and Zimmerman, 1986), *signaling* is expected to improve the ability of earnings to measure firm performance more accurately. In this respect, a credible signal will mitigate information asymmetry, resulting in more efficient valuation (and contracting) of the underlying firm by increasing the relevance of earnings. In contrast, it is possible that managers will use their information advantage *opportunistically* to manipulate earnings through accruals. In this scenario, managerial discretion over accruals will generate earnings that constitute a less reliable measure of firm performance (Dechow, 1994; Healy and Wahlen, 1999).

Whether the net effect of accrual accounting is the improved or impaired ability of earnings to accurately measure firm performance is an empirical question (Dechow, 1994). While managerial discretion over accruals to *signal* proprietary information is assumed to be positive and beneficial for financial statement users,

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<sup>13</sup>As the FASB states in its conceptual framework (see, Statement of Accounting Concepts No. 1, FASB 1978, para. 44), earnings based on accrual accounting "generally [provide] a better indication of an enterprise's present and continuing ability to generate favorable cash flows than information limited to the financial effects of cash receipts and payments."



the *opportunistic* use of accruals to manage earnings is a major concern for both accounting regulators and users of financial information. In an attempt to mitigate the negative consequences of the opportunistic use of managerial discretion over accruals, regulators strive to develop accounting standards that restrict managers' "flexibility" to manipulate earnings. In the hypothetical scenario of an absence of information asymmetry, such standards would be insufficient, since they constrain the ability of earnings to reflect firm performance in a way relevant to investors' decision-making needs. However, given that information asymmetry exists and earnings management is not always traceable (e.g., due to auditing imperfections), financial information users (e.g., capital providers) desire performance measures (e.g., earnings) that are reliable, even to the detriment of relevance.



# CHAPTER 4

## MANAGERIAL CHARACTERISTICS, ACCOUNTING CHOICE, AND EARNINGS QUALITY

### 4.1 ACCOUNTING CHOICE AND MANAGERIAL REPORTING INCENTIVES

Research on accounting choice has long recognized the pivotal role of management's reporting incentives in determining the quality of financial disclosures. Most studies in this literature stream (see, Fields et al., 2001, for a review) are based on the assumption that managers make accounting choices in an attempt to influence certain valuation and contracting outcomes that are beneficial either to the firm or to themselves. Regardless of the outcome (i.e., valuation or contracting) that managers intend to influence, information asymmetry, the management's belief that accounting choice can affect users' perceptions of the firm, and managerial judgment are core aspects (Healy and Wahlen, 1999). Intuitively, given that information asymmetry exists between preparers (i.e., managers) and users (e.g., investors) of accounting information, and by exerting discretion over the accounting numbers, managers can influence users' perceptions concerning the financial position of the firm (Fields et al., 2001).

In their review paper, Fields et al. (2001) classify managerial incentives to exert professional judgment on accounting choices into three categories: 1) incentives to reduce capital market transaction costs, 2) incentives to reduce agency costs, and 3) incentives to reduce political and litigation costs. The first group of incentives assumes that accounting choices are determined by managers' desire to reduce the adverse selection costs that arise from information asymmetry between firms and capital providers (i.e., cost of capital). However, it is likely

that *self-interested* managers might have incentives to opportunistically manipulate earnings in an effort to increase stock prices, which would in turn enhance their own compensation or reputation. The second group focuses on management's incentives to influence a firm's contractual arrangements – including executive compensation agreements and debt covenants – in order to alleviate agency costs, by better aligning the interests of contracting parties. Depending on how these contracts are structured, however, managers might have incentives to make accounting choices so as to deliberately increase their compensation or avoid covenant violation. Finally, the third group of managerial incentives suggests that managers make accounting choices in an effort to influence the decisions made by external parties other than actual and potential firm shareholders (e.g., to reduce or defer taxes and to avoid costs imposed by specific regulations).

## 4.2 MANAGERIAL REPORTING INCENTIVES, DISCRETION, AND EARNINGS QUALITY

Accounting standards very often require that managers exercise their professional judgment when preparing financial statements. The implied benefit is that allowing managers to use their discretion increases the flow of (proprietary) information to outsiders, especially in contexts featuring information asymmetry, thus increasing the *communicative* value of accounting (Healy and Wahlen, 1999). This is self-evident in situations where managers are objective and do not prioritize their own interests, to the detriment of users. Nonetheless, managerial discretion has its downside. Relatively *unconstrained* accounting choice is likely to impose costs on the users of financial information, due to the incentives that firm managers might have to disseminate *self-serving* information that does not accurately reflect a firm's underlying economic condition. For instance, self-interested managers may have incentives to make accounting choices so as to sharply increase stock price just prior to the expiration of stock options they hold, increase their own compensation and job security, avoid violating debt covenants, or reduce (increase) regulatory costs (benefits) (Fields et al., 2001; Healy and Wahlen, 1999).

A substantial body of the accounting choice literature focuses on the relationship between managerial incentives and earnings management.<sup>14</sup> This research stream assumes earnings management to be a valid proxy for earnings quality – that is, highly managed earnings indicate low-quality earnings, and vice

<sup>14</sup>According to Healy and Wahlen (1999, p. 368), earnings management is defined as managers' propensity to "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 reported accounting numbers."

versa (Dechow et al., 2010; Lo, 2008).<sup>15</sup> This research focus is not surprising, given that earnings are perceived by investors as the most important performance summary measure (Dechow, 1994; Francis et al., 2003; Liu et al., 2002; Penman, 2003), and that managers view earnings as the performance measure central to investors' and analysts' assessment of the firm (Dichev, Graham, Harvey, and Rajgopal, 2013; Graham, Harvey, and Rajgopal, 2005).<sup>16</sup> Therefore, the quality of reported earnings should play a prime role in firm valuation (Kang and Starica, 2016; Penman, 2003).<sup>17</sup>

Earnings constitute the summary measure of firm performance produced under the principles of accrual accounting (Dechow, 1994). Given that accrual accounting assumes the extensive application of managerial discretion, a voluminous body of empirical research in financial accounting is dedicated to examining whether managers use discretionary accruals to manipulate earnings (Dechow et al., 2010).<sup>18</sup> The studies in this literature vein are grounded on the assumption that managerial incentives to achieve certain outcomes lead to earnings manipulation. In general, the empirical findings are consistent, in that managerial incentives to influence market valuations significantly affect top executives' accounting choices, especially in relation to accruals. In particular, there is evidence that firms use discretionary accruals to manage earnings upwards when raising equity (e.g., Lang, Raedy, and Yetman, 2003; Morsfield and Tan, 2006; Ndubizu, 2007) and debt (e.g., Dietrich, Harris, and Muller, 2001) capital. Moreover, a number of studies show that managers use discretionary accruals to manage earnings, in an attempt to meet or beat earnings-based targets (e.g., Das and Zhang, 2003; Kasznik, 1999) or preclude the violation of debt covenants (e.g., DeFond and Jiambalvo, 1994; Franz, Hassabelnaby, and Lobo, 2014; Peasnell, Pope, and Young, 2000).

### 4.3 MANAGERIAL CHARACTERISTICS AND EARNINGS QUALITY

Given that the role of managerial incentives to manipulate earnings through discretionary accruals has been extensively studied, a relatively recent stream

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<sup>15</sup>Although earnings management is broadly accepted as a reflection of earnings quality, the lack of earnings management cannot suffice to guarantee high-quality earnings. The reason is that there are other factors unrelated to earnings management that contribute to the earnings quality (Lo, 2008).

<sup>16</sup>Apparently, capital providers (both debt and equity) are not the only outside users of financial information who see earnings as the key summary measure of firm performance. Earnings, as a summary measure of firm performance, is also relevant for contracting purposes (e.g., executive compensation plans and debt covenants) or for taxation purposes. In this dissertation, however, I consider only investors as users of financial information.

<sup>17</sup>The pivotal role of earnings in firm valuation is further justified by accounting-based valuation models (e.g., the residual income valuation model (Ohlson, 1995) and the Ohlson and Juettner-Nauroth (2005) model), which produce valuations based on forecasting earnings that are equivalent to pricing expected dividends.

<sup>18</sup>Almost one-third of the studies reviewed by Dechow et al. (2010) use abnormal (i.e., discretionary) accruals as a measure of earnings quality.

of empirical accounting research has shown interest in whether manager-specific factors (e.g., age, gender, education, etc.) can explain their tendency to manage earnings by exerting discretion over accruals.

The large volume of accounting choice studies that examine managers' tendency to manage earnings through discretionary accruals hinge on the assumptions inherent in neoclassical economic and agency theories, which treat managers as homogeneous and perfect substitutes. A core assumption underlying these studies is that under the same economic circumstances – including economic incentives – different managers would make exactly the same rational choices (Bamber et al., 2010; Ge et al., 2011). These studies largely focus on firm-level factors (e.g., firm size, profitability, corporate governance, etc.) and economy-level factors (e.g., enforcement of accounting standards, legal system, investor protection, etc.) as determinants of managers' tendency to manipulate earnings through discretionary accruals. Concerning firm characteristics, the literature provides evidence of a positive association of firm performance (e.g., Doyle, Ge, and McVay, 2007; Gong, Louis, and Sun, 2008) and firm leverage (e.g., DeFond and Jiambalvo, 1994; Franz et al., 2014; Kim, Lee, and Lie, 2017) with earnings management through discretionary accruals. Meanwhile, firm size (e.g., Ashbaugh-Skaife, Collins, and Kinney, 2007; Doyle et al., 2007; Ge and McVay, 2005), and audit committee and board of directors characteristics (e.g., independence) (e.g., Badolato, Donelson, and Ege, 2014; Doyle et al., 2007; Hazarika et al., 2012; Klein, 2002) have been found to correlate negatively with accruals-based earnings management. With respect to economy-wide factors that influence firm-level behavior with respect to managing earnings through discretionary accruals, the research results indicate that investor protection regimes (e.g., Francis and Wang, 2008; Leuz, Nanda, and Wysocki, 2003) and the legal enforcement of accounting standards (e.g., Burgstahler, Hail, and Leuz, 2006; Leuz et al., 2003) are negatively associated with accruals-based earnings management.

Following the development of upper echelons theory (Hambrick, 2007; Hambrick and Mason, 1984), the possibility that managers' individual characteristics might influence firm-level decision outputs has become widely recognized. Influenced by the Carnegie School – which argues that complex decisions largely derive from behavioral factors and they are not a mechanical quest for economic optimization (see, Cyert and March, 1963) – upper echelons theory suggests that managers' individual attributes (i.e., experiences, values, and personality) significantly affect how they interpret their situations and influence their decisions. Departing from the premises of upper echelons theory, research on judgment and decision-making has investigated the potential effect of managers' personal characteristics on corporate decisions and outputs. Some examples are the association between CEO house size and firm performance (e.g., Liu and Yermack, 2012), CEO overconfidence and corporate investment (e.g., Malmendier and

Tate, 2005), CEO “superstar” status and firm performance (e.g., Malmendier and Tate, 2009), and CFO gender and bank loan contracting (e.g., Francis, Hasan, and Wu, 2013). Besides top executives’ observable characteristics, the literature shows that manager-specific unobserved factors (e.g., cognitive ability, managerial skills, expertise, etc.) captured through manager fixed effects also influence corporate-level decisions and outputs (e.g., Bertrand and Schoar, 2003).

In the specific context of financial accounting research, an increasingly growing body of empirical research has been particularly interested in whether financial reporting is influenced by manager-specific characteristics (both observable and unobservable). In this respect, manager-specific fixed effects that capture top executives’ unobservable innate characteristics – such as managerial skills and expertise – have been found to influence firms’ voluntary financial disclosure (Bamber et al., 2010) and tax avoidance (Dyreng, Hanlon, and Maydew, 2010) choices that cannot be explained by firm characteristics (e.g., size, profitability, leverage, etc.). Moreover, the literature also documents an effect of managers’ fixed effects on accounting choice related to discretionary accruals: specifically, Ge et al. (2011) and Dejong and Ling (2013) show that CEO and CFO fixed effects significantly determine accruals-related accounting choices in firms. As Dejong and Ling (2013) further claim, CEOs are more likely to affect accruals through firm-level policy decisions, while CFOs are more likely to affect accruals through accounting choices.

In addition to manager-specific unobserved factors, earlier studies investigated the effect of executives’ observable characteristics (e.g., gender, age, education, reputation, marital status, etc.) on accounting choice, especially in relation to choices that affect accruals quality and, by implication, earnings quality. Among these observable managerial characteristics, the effect of managers’ gender on accounting choice has drawn the attention of most researchers. As the empirical evidence indicates, top executives’ gender (in particular, CFO gender) has a significant effect on accounting conservatism (Francis et al., 2015) and accruals quality (Barua et al., 2010), with female managers being significantly more conservative and reporting higher-quality accruals (and earnings) compared to their male counterparts. Regarding age and education, the literature provides weak evidence of an effect on earnings quality (Ge et al., 2011), while executive reputation has been found to correlate negatively with the quality of accruals and earnings (Francis, Huang, Rajgopal, and Zang, 2008). A core assumption underlying the studies in this literature stream is that top managers’ observable and unobservable personal characteristics affect their risk preferences. It is the risk preference of each manager that significantly influences the accounting choices, which in turn affect financial reporting quality in general, and earnings quality in particular.

A relatively recent and fast-growing body of literature focuses on the poten-

tial effect of top executives' marital status on various corporate and accounting choices. For example, Roussanov and Savor (2014) show that firms managed by married CEOs tend to be involved in less aggressive investment policies and demonstrate less stock return volatility. Considering the effect of managers' marital status on accounting choice, Hilary, Huang, and Xu (2017) found that married CEOs tend to manage earnings through discretionary accruals significantly less, relative to nonmarried CEOs. Studies that examine whether accounting (and corporate) choices are influenced by executives' marital status derive from the premise that the family environment of an individual is a significant determinant of his or her risk preference. Specifically, in examining the effect of executives' marital status on accounting (and corporate) choices, it is assumed that married managers are generally less risk-tolerant than their non-married counterparts. The most apparent explanation for this phenomenon is that married people have relatively more responsibilities (especially when children are involved) and face greater social risks when involved in risky financial (reporting) actions (Roszkowski, Snelbecker, and Leimberg, 1993). The above concerns are particularly germane to Essay 3, in which I examine whether factors from the broader family environment of married CEOs – including the gender and age of the children of married CEOs – affect their tendency to manage earnings through discretionary accruals (i.e., provide higher/lower accruals quality). To date, the focus of accounting research has been exclusively on the association between executives' marital status and accounting (i.e., accruals) choice (e.g., Hilary et al., 2017). However, evidence within the literature indicates that top executives' accounting reporting behavior is greatly influenced by their family environment, and especially by the gender of their children (see, Cronqvist and Yu, 2017). Essay 3 examines the potential effect of the gender and age of CEO children on top executives' behavior in managing earnings through discretionary accruals; as such, it extends the existing literature to include factors from the broader family environment of managers, citing them as potential determinants of accounting choice that affect accruals and, ultimately, earnings quality.

#### 4.4 LOAN LOSS PROVISIONS AND EARNINGS QUALITY IN BANKS

LLP constitute the dominant operating accrual in the banking industry (Beatty and Liao, 2014; Fonseca and González, 2008; Gebhardt and Novotny-Farkas, 2011; Kanagaretnam, Lobo, and Yang, 2004; Lobo and Yang, 2001). Due to their relatively large proportion in bank accruals, LLP significantly affect the reported earnings in banks (Ahmed, Takeda, and Thomas, 1999). Therefore, a large volume of empirical studies have examined whether or not bank managers use LLP opportunistically (e.g., Ahmed et al., 1999; Anandarajan, Hasan, and McCarthy, 2007; Hess, Grimes, and Holmes, 2009; Kanagaretnam et al., 2004; Laeven and Majnoni, 2003; Liu and Ryan, 2006; Lobo and Yang, 2001; Perez,



Salas-Fumas, and Saurina, 2008; Rivard, Bland, and Hatfield Morris, 2003).

LLP illustrate, within bank financial statements, the management's anticipated credit losses. The estimation of credit losses in banks is an accounting choice that involves high managerial discretion, given the high measurement uncertainty underlying LLP (Ahmed et al., 1999; Anandarajan et al., 2007; Hess et al., 2009; Kanagaretnam et al., 2004; Liu, Ryan, and Wahlen, 1997; Lobo and Yang, 2001). As mentioned, an implied benefit of permitting professional judgment in the production of financial statements is that it allows management to convey proprietary information. At the same time, however, the allowance for exerting discretion enables managers to be self-interested in using their discretion, and thus bias the financial statements for their own benefit. Hence, there are two contradictory effects at work in the application of professional judgment; the extent to which – as well as under what conditions – each dominates is yet an ongoing issue (Barth and Clinch, 1998).

Banks are the foundation upon which the global financial system is based, rendering the stability of the banking sector an issue of major economic importance. Potential instability in the banking sector can pose problems to the global economic system as a whole (Hess et al., 2009). This became apparent during the 2007–2008 financial crisis, which led to the collapse of several commercial and investment banks. One consequence of the crisis was a near-systemic collapse of the banking industry upon which all commercial lending activity is based (Barth and Landsman, 2010), highlighting once again the significance of financial reporting in the banking industry (Gebhardt and Novotny-Farkas, 2011).

Asset quality problems in general, and credit losses in particular, are frequently considered the main drivers of bank failure (Hess et al., 2009). Given that credit loss accounting assumes that bank managers exert their discretion over LLP, a voluminous body of accounting research has examined whether bank managers use LLP to opportunistically manipulate earnings and/or regulatory capital (Perez et al., 2008).<sup>19</sup> <sup>20</sup> The empirical results are consistent, in that bank managers indeed use their judgment over LLP accounting to manipulate (i.e., smooth) earnings (e.g., Anandarajan et al., 2007; Hess et al., 2009; Kanagaretnam et al., 2004; Liu and Ryan, 2006; Lobo and Yang, 2001; Perez et al., 2008; Rivard et al., 2003) and regulatory capital (e.g., Ahmed et al., 1999; Anandarajan et al., 2007; Lobo and Yang, 2001).<sup>21</sup> What drives earnings management

<sup>19</sup>The term “regulatory capital” refers to banks’ obligation to maintain a minimum level of capital as a default shield. That minimum level of regulatory capital is determined by legislation and by regulators (e.g., the Basel Accords), and it relates to the amount of bank assets.

<sup>20</sup>The valuation role of accounting information implies that earnings management is of greater concern to capital providers, compared to regulatory capital management. However, the accounting literature on banking frequently considers more than one reporting choice, and has typically examined both capital and earnings motives in a single model, mainly because LLP can be used by bank managers to manipulate both earnings and capital ratios (Beatty and Liao, 2014).

<sup>21</sup>Whether *smoothness* of earnings is good or bad is debatable. According to Dechow et al.

through LLP in banks is the desire of bank managers to either increase their remuneration (i.e., the *private control benefits* hypothesis) or manipulate market perceptions regarding the riskiness of their business (i.e., the *risk management* hypothesis) (Beaver and Engel, 1996; Fonseca and González, 2008; Rivard et al., 2003). Meanwhile, bank managers have an incentive to manipulate regulatory capital through LLP: they want to be seen by regulators as less risky and more capital-adequate (i.e., *capital management* hypothesis) (Beaver and Engel, 1996; Hess et al., 2009; Lobo and Yang, 2001). In addition to earnings and regulatory capital management, accounting researchers have also examined whether bank managers use their discretion over LLP to signal proprietary information to those stakeholders outside the firm. However, the results regarding the *signaling* use of LLP are mixed (see, Ahmed et al., 1999; Anandarajan et al., 2007; Beaver, Eger, Ryan, and Wolfson, 1989; Elliott, Hanna, and Shaw, 1991; Kanagaretnam et al., 2004; Lobo and Yang, 2001; Nichols, Wahlen, and Wieland, 2009).

Taken together, the findings within the literature indicate that earnings (and regulatory capital) management is a major incentive for bank management when choosing the accounting treatment of LLP. The information signaling incentive, on the other hand, is still an open issue among banks. As stated previously, whether the net effect of accrual accounting is an improvement to or impairment of the ability of earnings to accurately measure firm performance is an empirical question (Dechow, 1994). On one hand, the application of managerial judgment over accruals to signal proprietary information is assumed to be positive and beneficial for financial statement users. On the other hand, the *opportunistic* use of accruals to manage earnings is a major concern for both accounting and bank regulators, and the users of financial information, since it deteriorates the quality (i.e., reliability) of earnings as a firm performance measure. In this respect, the fact that earnings and regulatory capital management through LLP constitute major incentives for bank managers compared to

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(2010, p. 361), a core “tenet of an accrual-based earnings system is that earnings *smooth* random fluctuations in the timing of cash payments and receipts, making earnings more informative about performance than cash flows” (emphasis added). Even so, smoothness of earnings should not be considered an ultimate goal of the accruals-based accounting system, but rather as an *outcome* of the accrual accounting system that is assumed to improve the decision-usefulness (i.e., relevance) of earnings. However, earnings smoothness should not be considered a *de facto* indicator of greater decision-usefulness or higher earnings quality. Even in the absence of accounting choice by firms with respect to accounting methods, estimates, or real activities, accruals that lead to smoothness can hide or delay the measurement of changes in fundamental performance, which would presumably be decision-useful (i.e., relevant) if revealed. However, as stated previously, accrual accounting involves accounting choice that requires high managerial discretion. Managers can use their discretion either to increase or distort the decision-usefulness of earnings. These ambiguous managerial motives result in empirical findings that provide unclear support as to whether earnings smoothing serve as a good or bad proxy for earnings quality. In the particular context of banking research, however, earnings smoothing is considered detrimental to earnings quality. Under the *private control benefits* hypothesis (Fonseca and González, 2008), bank managers are assumed to subjectively manage (i.e., smooth) earnings to satisfy their own needs.

the signaling of proprietary information clearly indicates that in the banking sector, the *opportunistic* use of managerial discretion over accrual accounting dominates the *signaling*.

#### 4.5 MANAGERIAL CHARACTERISTICS, LOAN LOSS PROVISIONS, AND EARNINGS QUALITY IN BANKS

As previously discussed, the accounting research has quite recently turned its focus from those micro- and macroeconomic factors that determine the quality of reported earnings, to consider also the effect of managers' personal characteristics. Yet, the empirical accounting literature in banking almost exclusively focuses on micro- and macroeconomic factors that determine bank managers' (accounting) decision to opportunistically use LLP to manage either earnings or regulatory capital, thus ignoring the potential influence of manager-specific factors on these issues.<sup>22</sup>

The main focus of the mainstream banking research in accounting is on the potential effect of bank-specific regulation – in particular, the Basel Accords – on bank managers' tendency to use their discretion over LLP to manipulate earnings and/or regulatory capital (Beatty and Liao, 2014). The empirical evidence consistently shows that in the pre-Basel period, bank managers used their discretion over LLP to manage their bank's regulatory capital. Concerning earnings management, though, the results are mixed (e.g., Beatty, Chamberlain, and Magliolo, 1995; Collins, Shackelford, and Wahlen, 1995; Moyer, 1990). However, the empirical findings indicate that in the years since the first Basel Accord, managers' tendency to use discretionary LLP to manipulate capital ratios has been significantly damped by the new regulation (e.g., Ahmed et al., 1999; Kim and Kross, 1998). Meanwhile, earnings management through managerial discretion over LLP has increased in the years since the Basel Accords were initiated (e.g., Anandarajan et al., 2007; Beatty, Ramesh, and Weber, 2002; Shrieves and Dahl, 2003). In addition to the Basel Accords, accounting researchers have examined the effect of other macroeconomic factors – including investor protection and legal enforcement, disclosure requirements, bank supervision, and financial structure and development within a country – on the *opportunistic* use of LLP by banks (Fonseca and González, 2008).

In the aftermath of the 2007–2008 financial crisis, researchers became interested in whether managerial characteristics affect the quality of banks' financial

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<sup>22</sup>A potential explanation for this phenomenon could be traced to the fact that the banking industry is extremely homogeneous. This distinct characteristic of the banking industry could imply that bank managers are also homogeneous, and this would eliminate variation among managers with respect to their personal characteristics (e.g., age, education, family environment, tenure, etc.). When there is very low manager-specific variation, researchers are not able to identify any effect arising from managerial characteristics, through neither manager fixed effects nor observable manager attributes.

reporting. This change in the literature focus was primarily stimulated by speculation in newspaper reports that bank managers' personality traits might have contributed to the crisis. Among managerial characteristics, particular emphasis has been placed on *hubris* (i.e., a personality trait), since as it has been argued the banking crisis was caused at least in part by CEO hubris (e.g., Plumb and Wilchins, 2008), and that some leading international bankers displayed marked signs of hubris (Owen and Davidson, 2009). Yet, there is little research evidence to support this conjecture (Brennan and Conroy, 2013).

The research interest in hubris and how it influences managers' decision-making dates back to Roll (1986). Since then, many researchers – especially those in management and finance – have examined the potential effect of hubris on various corporate decisions and outputs. Hubris is considered a personality disorder defined by presumption, exaggerated pride, or excessive self-confidence, and which can potentially lead to retribution (Owen, 2006). It reflects a state of extreme confidence triggered by both external stimuli (e.g., recent firm performance) and internal disposition (e.g., sense of self-importance) (Hayward and Hambrick, 1997), manifesting itself in high-judgment (Hayward and Hambrick, 1997; Hayward, Shepherd, and Griffin, 2006; Hiller and Hambrick, 2005) and high-uncertainty (Tversky and Kahneman, 1975) contexts. This is particularly germane to Essay 2, in which I examine whether CEO hubris affects the quality of LLP in banks. As mentioned, the accounting for credit losses (i.e., LLP) in banks is characterized by high levels of both judgment and uncertainty. These two distinct features of credit loss accounting render banks in general, and LLP in particular, a suitable context for examining whether managerial (i.e., CEO) hubris affects accounting choice.

A core assumption underlying hubris is that managers (e.g., CEOs) act in what they believe is the best of interest of the shareholders (Hietala, Kaplan, and Robinson, 2003) – that is, managers do not necessarily behave opportunistically to prioritize their self-interests, to the detriment of shareholders. Thus, financial misreporting might simply be the result of a misjudgment of true firm performance, rather than due to managers' wish to deliberately manipulate earnings for self-benefit (Chen, 2010). In contrast to intentional opportunism that aims to deliberately mislead investors, managerial hubris could result in unintentional and nonopportunistic biased financial reporting (Brennan and Conroy, 2013).

The empirical findings in the literature are consistent, in that bank managers use LLP opportunistically to manage earnings (e.g., earnings smoothing), either to increase their remuneration or to bias investor perceptions about the riskiness of their business (Beaver and Engel, 1996; Fonseca and González, 2008; Rivard et al., 2003). Assuming that most of a CEO's compensation is linked to earnings and stock performance, it is reasonable to conclude that bank CEOs have strong incentives to exert opportunistic discretion over LLP. This premise, however, runs counter to the core hubris assumption – namely, that hubristic

CEOs do not necessarily act opportunistically to favor their own interests, but rather in what they believe is the best for the shareholders (Chen, 2010; Hietala et al., 2003). Yet, given the strong incentives that bank CEOs have to manipulate earnings (e.g., CEO compensation incentives), the likelihood that hubristic CEOs might act opportunistically cannot be entirely ruled out. The above concerns have been taken into account, especially when choosing the research design for Essay 2. Provided that the strong incentives that bank CEOs have to opportunistically manage earnings run counter to the core hubris assumption (i.e., financial misreporting might simply be the result of misjudgment of true firm performance), the methodology of the research presented in Essay 2 is designed so as to test both the opportunistic and nonopportunistic use of discretionary LLP by hubristic bank CEOs. In Essay 2, the term “opportunistic” refers to the use of LLP by hubristic bank CEOs to deliberately manage (i.e., smooth) earnings, while the term “nonopportunistic” refers to the inability of hubristic bank CEOs to use their discretion over LLP to anticipate future deteriorations in their banks’ loan portfolio performance.



# CHAPTER 5

## MANAGERIAL CHARACTERISTICS AND THE USEFULNESS OF EARNINGS TO INVESTORS

### 5.1 ROLE OF ACCOUNTING INFORMATION IN CAPITAL MARKETS

A major challenge in a market-based economy is the optimal allocation of savings to investment opportunities. In this process, accounting information provided through regulated financial reports (i.e., the balance sheet, income statement, statement of owner's equity, cash flow statement, and supplementary notes) and nonregulated voluntary disclosures (e.g., CSR reports) is vital to the "functioning of an efficient capital market" (Healy and Palepu, 2001, p. 406).

At any point in time, capital providers face an "information problem" that arises from information asymmetry and conflicting incentives between firms that seek capital and investors. In its extreme form, this situation could lead to the "lemons" problem (see, Akerlof, 1970). Consider a scenario where half the securities in a capital market are "good" and the other half are "bad," and that both investors and firms (firm managers in particular) are "rational" and value securities based on the information they have. Should investors not be able to distinguish the two types of securities, the managers of firms with "bad" securities will try to exaggerate the value of their securities, so that they appear to be as valuable as the "good" ones. Recognizing this possibility, capital providers will value both good and bad securities at an average level – that is, they will "undervalue" good securities and "overvalue" bad ones (Beyer, Cohen, Lys, and Walther, 2010; Healy and Palepu, 2001). In light of this situation, firms with good securities are reluctant to trade, since they know their securities

are undervalued; meanwhile, bad securities can overwhelm the market. This *adverse selection* issue (i.e., bad securities dominate the market due to a lack of information) deteriorates market efficiency and can potentially lead to a collapse in the capital market. How does accounting information fit into the picture? As has been long recognized, in the presence of no or insufficient information, capital providers face an information risk associated with buying and holding a security. To bear this risk, investors require compensation in the form of higher returns, which increases for firm the cost of capital. The *adverse selection* issue can be mitigated through the provision of more and/or better-quality accounting information, and this leads to a reduction in the cost of capital for firms (Easley and O'Hara, 2004; Kothari, Xu, and Short, 2009; Lambert et al., 2007; Leuz and Verrecchia, 2005).

Assume now that the “lemons problem” is overcome, and that a transaction in the capital market is carried out. Once an investor buys a security, he or she may face additional “agency problems” that arise from the separation of ownership and control (Beyer et al., 2010; Healy and Palepu, 2001). Given that investors (i.e., owners) delegate decision-making rights to firm managers (i.e., agents) and that investors and managers have divergent interests, it is expected that “rational” managers will prioritize their own interests to the detriment of capital providers. In this scenario, information asymmetry between investors and managers gives rise to a *moral hazard* problem (see, Jensen and Meckling, 1976). Accounting information is also said to be able to mitigate information asymmetry that can lead to *moral hazard*. Optimal contracts that aim to align the interests of managers and with those of capital providers are often written based on accounting information. Such contracts require that managers provide relevant information that enables capital providers to monitor managers' compliance with contractual agreements, and to confirm that managerial actions are in line with investors' interests (Healy and Palepu, 2001).

The above discussion highlights two important roles of accounting information in market-based economies – namely, the valuation role and the contracting role of accounting information (Beyer et al., 2010; Watts and Zimmerman, 1986). Given the *usefulness* of accounting information to the investment decision-making needs of capital providers, it is the valuation role of accounting information that is of interest in this dissertation.

The valuation role of accounting information implies that capital markets are *imperfect* and that transaction costs do exist. With *complete* and *perfect* capital markets, there is no substantive role for accounting disclosures. Yet, in a world of incomplete and imperfect markets, accounting information is an efficient way of dealing with market imperfections (Fields et al., 2001). Departing from this premise, the literature identifies several market effects of accounting information. For instance, accounting information has been found to relate positively to the accuracy of analyst forecasts (e.g., Hope, 2003), improve liq-



uidity (e.g., Bushee and Leuz, 2005; Leuz and Verrecchia, 2000), reduce bid–ask spreads (e.g., Coller and Yohn, 1997; Leuz and Verrecchia, 2000), and lower the cost of debt (e.g., Sengupta, 1998) and equity (e.g., Botosan, 1997; Botosan and Plumlee, 2002; Kothari et al., 2009; Lambert et al., 2007) capital. Among these capital market effects, the most prominent are those related to liquidity and cost of capital. Specifically, in the presence of information asymmetry, relatively uninformed investors will be less willing to trade, since they cannot be sure whether trading is being carried out at a “fair price.” Given that accounting disclosures mitigate information asymmetry between firms and capital providers (Beyer et al., 2010; Healy and Palepu, 2001), it is expected that when information asymmetry is reduced, investors will become more active and market liquidity will increase (Diamond and Verrecchia, 1991; Kim and Verrecchia, 1994). Concerning the effect of accounting information on the cost of capital, the idea is that in the absence of adequate information, investors face an information risk. To bear this risk, as mentioned, “rational” investors require compensation in the form of returns, which in turn increases the cost of capital for firms. Therefore, an increase in the quantity and quality of accounting information is expected to reduce firms’ cost of capital (Easley and O’Hara, 2004; Kothari et al., 2009; Lambert et al., 2007; Leuz and Verrecchia, 2005).

## 5.2 THE ROLE OF EARNINGS QUALITY IN CAPITAL MARKETS

One of the fundamental roles of accounting information in market-based economies is to help capital providers better and more accurately evaluate the performance of firms (Holthausen and Watts, 2001). In examining whether accounting information fulfills its *valuation* role, research has focused on how investors respond to different line items (e.g., net income, common equity, etc.) (Runesson, 2015). Among these items, earnings is the performance measure that has drawn most researchers’ attention, not least due to investors’ acceptance of earnings as the most important performance summary measure (Dechow, 1994; Francis et al., 2003; Liu et al., 2002; Penman, 2003), as well as managers’ belief that earnings are considered by investors and analysts to be the key firm performance measure by which to value firms (Dichev et al., 2013; Graham et al., 2005).

According to Penman (2003), when investors buy a stock, what they actually buy is “earnings”; therefore, the quality of reported earnings should play a fundamental role in firm valuation (Kang and Starica, 2016; Penman, 2003). Apparently, investors do not buy current earnings, but rather future earnings discounted by using the appropriate cost of capital (Holthausen and Watts, 2001). Thus, reported (i.e., current) earnings are assumed to be of good quality if they provide a good indicator of future earnings (Penman, 2003).

In examining the quality of accounting numbers in general and earnings in

particular researchers primarily focus on the covariation between earnings and stock returns (Barth et al., 2001). The underlying logic is that earnings reflect changes in the *book* value of firms' equity, while stock returns reflect changes in the *market* value of firm equity. Therefore, changes in the market value of equity should correlate with changes in the book value of equity. A high correlation between market values and the book values of equity is interpreted by researchers as a sign of the high "value relevance" of earnings, which in turn implies that earnings are useful in terms of investors' decision-making needs (Holthausen and Watts, 2001). In the literature, high value relevance is thought to be an indicator of high earnings quality in terms of usefulness (Dechow et al., 2010). The reasoning behind this is that earnings are value-relevant (i.e., demonstrate a predicted and significant correlation with stock returns) only if they reflect information that is relevant to investors in valuing firms, and are measured reliably enough to be reflected in stock returns. In this respect, value relevance tests constitute joint tests of relevance and reliability of earnings (Barth et al., 2001).

Departing from the seminal works of Ball and Brown (1968) and Beaver (1968), numerous studies have since examined earnings quality from a market-based perspective.<sup>23</sup> Starting from the late 1980s and throughout the 1990s, the relation between earnings and stock returns received considerable researcher attention. During this period, so-called value relevance studies became very popular among financial accounting researchers (Runesson, 2015). According to Holthausen and Watts (2001), value relevance studies can be classified into three main categories – namely, *relative association* studies, *incremental association* studies, and *marginal information content* studies. Relative association studies compare the association between stock returns (or changes in returns) and earnings, with high model fit in terms of the  $R^2$  of the regressions indicating the high value relevance of earnings. Incremental association studies investigate whether earnings explain market values or returns (over long time windows) while controlling for the potential effect of other specified variables. Earnings are considered value-relevant if the estimated regression coefficient is significantly different from zero. Finally, marginal information content studies

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<sup>23</sup>A significant portion of the empirical financial accounting literature is dedicated to investigating the interactions between capital markets and accounting information. The academic community refers to this literature as *market-based accounting research* (Lev and Ohlson, 1982) or *capital markets research* (Kothari, 2001). The development of *capital markets research* in accounting was greatly influenced and facilitated by the positive economics theory (Friedman, 1953), the *efficient market hypothesis* (Fama, 1970, 1991), the capital asset pricing model (CAPM) (Lintner, 1969; Sharpe, 1964), and the event study methodology (Fama, Fisher, Jensen, and Roll, 1969). What establishes *capital markets research* as one of the most popular and voluminous accounting literature streams is the high demand for it, especially in the areas of fundamental analysis and valuation, tests of the efficient market hypothesis, the role of accounting in contracting and in the political process, and disclosure regulation (Kothari, 2001). The large proportion of published papers that scrutinize the interactions between the market and reported earnings has rendered earnings – and, by implication, earnings quality – a type of accounting information of great significance (see, Healy and Palepu, 2001; Holthausen and Watts, 2001; Kothari, 2001; Lev and Ohlson, 1982, for reviews).

examine whether the release of earnings is associated with changes in stock returns. Studies of this type investigate the earnings–returns association in short time windows around an accounting event, typically the date of earnings announcement. A market reaction to new earnings information is considered an indicator of value relevance, and therefore of high earnings quality. Overall, in the relevant literature, the usefulness of reported earnings is inferred from high value relevance (Barth et al., 2001).<sup>24</sup> The value relevance literature – especially that comprising marginal information content studies – is particularly relevant to Essays 1 and 4, both of which employ an event study methodology to evaluate the quality (i.e., usefulness) of accruals-based earnings.

### 5.3 MANAGERIAL CHARACTERISTICS AND THE USEFULNESS OF EARNINGS

The pivotal role of financial information in the efficient functioning of capital markets has been long recognized in the accounting literature. What determines the demand for financial information in a capital market context is information asymmetry and agency conflicts between firms and capital providers (i.e., investors) (Healy and Palepu, 2001). Both information asymmetry and agency conflicts create a form of systematic information risk for investors (Easley and O’Hara, 2004). To assume this risk, “rational” investors require compensation (i.e., higher rates of return), leading to an increase in the cost of capital for firms (Easley and O’Hara, 2004; Leuz and Verrecchia, 2005). In an attempt to mitigate the negative consequences of information asymmetry and agency conflicts (i.e., higher cost of capital due to higher information risk for investors), firm managers provide either more or better-quality financial information to investors (Bushee and Leuz, 2005; Easley and O’Hara, 2004; Lambert et al., 2007; Leuz and Verrecchia, 2000, 2005), with accounting researchers assigning greater importance to the association between the quality of the disclosed financial information and investors’ information risk (Ecker et al., 2006; Francis et al., 2005; Lambert et al., 2007; Lang and Lundholm, 1996; Yee, 2006).

In examining the effect of financial information quality on firms’ cost of capital – and, by implication, on investors’ information risk – researchers have placed particular emphasis on accruals quality. For instance, Francis, LaFond, Olsson, and Schipper (2004) test the ability of several accounting-based (i.e.,

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<sup>24</sup>It is important to note that the value relevance of earnings (and book values) has decreased over time (Brown, Lo, and Lys, 1999). According to Runesson (2015, p. 15), the most apparent explanation for this phenomenon “lies in shifting business models and [the] increased prevalence of intangible assets. Intangible assets are less likely to meet the definition of an asset according to the standard, and they especially fail to meet the recognition criteria; in fact, some types of assets are believed to never meet the criteria, such that IFRS prohibits their recognition *ex ante*. Hence, book values of equity and, as a consequence, GAAP earnings, are less reflective of intrinsic values or firm performance as measured by the equity market.”

accruals quality, persistence, predictability, and smoothness) and market-based (i.e., value relevance, timeliness and conservatism) earnings quality attributes to predict variations in firms' cost of capital. Their findings are consistent: firms with the least-favorable earnings quality measures (i.e., high information risk) demonstrate a higher cost of capital. They also claim that the largest effect on the cost of capital derives from accruals quality. Using accruals quality as a proxy for information risk (i.e., low-quality accruals indicate high information risk), Francis et al. (2005) show that information risk is a priced risk factor, with quality of accruals negatively correlating with a firm's cost of capital. In a similar vein, Aboody, Hughes, and Liu (2005) also found evidence of a negative correlation between accruals quality and the cost of capital. As they further show, inside traders earn greater profits when information risk is high, implying that inside traders' exploit of private information determine the ways in which they should change their portfolio preferences. Chen, Shevlin, and Tong (2007) provide further evidence of accruals quality pricing by the markets. Specifically, they hypothesize and test that investors perceive the precision of accounting information (i.e., accruals' ability to predict future dividends) as a priced risk factor. Likewise, Kravet and Shevlin (2010) show that the precision and reliability of financial statement information, as proxied through restatements, determines firms' cost of capital.

Besides the quality of financial information *per se*, the level of investors' information risk is also influenced by investors' perceptions about information credibility. By being a reflection of "the subjective probability individuals attribute to the possibility of being cheated" (Guiso, Sapienza, and Zingales, 2008, p. 2557), trust has the potential to influence investors' perceptions of the credibility (i.e., information risk) of financial information, and therefore influence the ways in which investors will interpret and react to that information (Pevzner, Xie, and Xin, 2015).

Trust has drawn research interest in many disciplines, including management, sociology, ethics, psychology, and economics (Baldvinsdottir, Hagberg, Johansson, Jonäll, and Marton, 2011; Colquitt, Scott, and LePine, 2007). Consistent with the notion that trust underlies virtually all economic transactions (Pevzner et al., 2015; Williamson, 1993), previous research shows that trust can facilitate economic growth (e.g., North, 1990; Zak and Knack, 2001), international investment and trade (e.g., Guiso, Sapienza, and Zingales, 2009), corporate financing and merger and acquisition (M&A) transactions (e.g., Ahern, Daminelli, and Fracassi, 2015; Bottazzi, Da Rin, and Hellmann, 2016; Duarte, Siegel, and Young, 2012), and financial development (e.g., Guiso, Sapienza, and Zingales, 2004; Guiso et al., 2008). Yet, whether trust influences the effectiveness of information transmission (and, by implication, information risk) from inside executives to outside investors is a relatively unexplored issue. This is surprising, given that many of the recent corporate governance reforms and regulations –

such as the SOX of 2002 – primarily sought to restore investor trust in corporate financial reporting and disclosure (Pevzner et al., 2015).

As economic theory suggests, trust can play a pivotal role in the interaction between managers and capital markets, given incomplete contracting and the likelihood for moral hazard (Carlin, Dorobantu, and Viswanathan, 2009; Guiso et al., 2008; Williamson, 1993). Self-interested managers have incentives to bias financial reporting in an effort to manipulate investors' perceptions regarding the true performance of their firm (Leuz et al., 2003). Yet, rational investors recognize such managerial incentives, and thus interpret and react to corporate financial information with a certain level of caution (Pevzner et al., 2015).

A key determinant of the capital market's reaction to the release of financial information is investors' perceptions concerning the credibility of that information. In line with this reasoning, findings in the literature indicate a positive association between the perceived credibility of reported earnings and investors' reaction to earnings announcements (e.g., Balsam, Krishnan, and Yang, 2003; Rogers and Stocken, 2005; Teoh and Wong, 1993). What can be expected is that at higher levels of trust, investors assign lower probability of opportunistic managerial behavior resulting in biased financial reporting. Thus, investors perceive the disclosed financial information as being more credible (i.e., less information risk), and therefore react more “vigorously” to information released through earnings announcements (Pevzner et al., 2015). In line with this expectation, Pevzner et al. (2015) show that in countries with high levels of societal trust, investors react to earnings announcements more relative to countries that demonstrate low levels of societal trust.

The notion of “trust” is central to Essay 4. There, trust is assumed to be a substantial investment risk attribute that affects investors' (perceived) information risk and mitigates transaction costs by reducing *suspicion* and *animosity*, leading to more cooperative behavior and rapid adaption to *uncertainty* (Olsen, 2012). That is, trust functions, among other things, as a moderator of investors' (perceived) information risk (Ryan and Buchholtz, 2001), especially when the information asymmetry between the transaction parties is large (Koller, 1988). However, trust has its downside, and it stems from the cost associated with the moral hazard of trusting untrustworthy people. Both the high-tech bubble of the 1990's and the 2007–2008 financial crisis were partly caused by increasing levels of trust, in which otherwise overvalued assets were thought to be reasonable and safe (Olsen, 2012).

Research findings in experimental and behavioral economics indicate that women are, on average, more trustworthy than men (e.g., Buchan, Croson, and Solnick, 2008; Chaudhuri, Paichayontvijit, and Shen, 2013; Croson and Buchan, 1999; Dollar, Fisman, and Gatti, 2001; Wrightsman and Wuescher, 1974), and both men and women trust women more, relative to men (Garbarino and Slonim,

2009). In the particular context of empirical accounting and auditing research, Shaub (1996) found that a common belief among auditors is that female clients are more trustworthy, relative to male ones. A core assumption underlying these studies is that human actions and cognitive patterns cannot be understood as natural states of being; rather, they are socially constructed and any observed similarities or dissimilarities among individuals are rooted in historically inherited differences with respect to social conditions, norms and beliefs, rules, and customs (Scott, 2014). As evidence in psychology indicates, there is a tendency among individuals to categorize people based on their identification with a particular reference group. This cognitive process is performed automatically and without further reflection (Jones and McGillis, 1976). As Dobbin and Jung (2011) claim, a person's race, age, and gender comprise what are called *master statuses* – that is, social positions that serve as an individual's primary identification attributes. Thus, in a social context, gender should signal something about an individual's expected behavior (Scharlemann, Eckel, Kacelnik, and Wilson, 2001), thus creating or otherwise supporting stereotypes regarding expectations about women's nature and how they should behave (Heilman, 2001).

Following this reasoning, Essay 4 assumes that the earnings numbers provided by female CFOs reduce investors' information risk by influencing investors' perceptions about the credibility of earnings through trust. Thus, the expectation in Essay 4 is that, *ceteris paribus*, there will be a greater market reaction to earnings announcements made by female CFOs, relative to their male counterparts. In Essay 4, the gender of firm CFOs is used as a proxy for trust, to study the effect of trust on investors' information risk; for that reason, I identify the socially constructed stereotypes about women's expected behavior, as potential determinants of investors' perceptions about the level of information risk (i.e., credibility) inherent to the earnings information provided by female CFOs.

Important to the empirical analysis in Essay 4, however, is the control for investors' information risk that is associated with earnings quality *per se*. As research findings show, female CFOs tend to be more conservative (e.g., Francis et al., 2015) and report higher-quality accruals (e.g., Barua et al., 2010), relative to their male counterparts. The implication here is that the financial information provided by female CFOs substantially reduces investors' information risk. Given that accruals quality has been used as a proxy for investors' information risk related to earnings quality *per se* (e.g., Ecker et al., 2006; Francis et al., 2005), it is essential to include an accruals quality measure in the regression analysis, in an attempt to isolate the effect of CFO gender on investors' information risk – specifically, risk assigned to investors' perceptions about the credibility of the disclosed earnings.

## 5.4 INVESTORS' CHARACTERISTICS AND THE USEFULNESS OF LOAN LOSS PROVISIONS

In an effort to mitigate the negative consequences of information asymmetry, better-informed bank managers might have incentives to convey private information through LLP to less-informed investors (or regulators) (Beatty and Liao, 2014). For instance, Nichols et al. (2009) show that due to the higher levels of information asymmetry they face, public banks provide more timely LLP relative to private banks, in an active effort to address that information asymmetry. However, bank managers may also have incentives to exploit their information advantage to opportunistically manipulate earnings and/or regulatory capital. In assessing the “information content” (i.e., usefulness) of LLP, several studies have examined the association between stock returns and LLP (Beatty and Liao, 2014).

Researcher interest in how investors value bank LLP dates back to Beaver et al. (1989). In their seminal study, Beaver et al. (1989) found that LLP positively associates with banks' market value. As the authors claim, the positive effect of LLP on market value suggests that investors consider LLP a signal that bank earnings are adequately “strong” to bear an increased LLP “hit” to earnings. Likewise, Elliott et al. (1991) and Griffin and Wallach (1991) document a positive equity market reaction to LLP, and interpret this result as a signal that banks will be proactive in dealing with problem loans in the future. Moving the analysis further, Beaver and Engel (1996) partitioned LLP into discretionary and nondiscretionary types, and they found that only discretionary LLP is evaluated positively by capital markets. As the authors claim, managerial discretion on credit loss estimates is perceived by capital markets as conveying internal information about a bank's future earnings robustness.

Nonetheless, equity markets do not always react positively to LLP. Liu et al. (1997) scrutinized the equity market's reaction to LLP across different fiscal quarters and across banks with diverse levels of loan default risk. They found that management's discretion resulting in increased LLP is positively assessed by investors, but only for those banks that seem to be at risk of loan default and only in the fourth quarter. With respect to “good” banks and other fiscal quarters, any increase in LLP is perceived by equity investors as conveying bad news regarding the bank's loan default threat, and so equity markets react negatively when LLP increase. Moreover, Liu and Ryan (1995) found that the positive effect of LLP on stock returns is conditional on loan type. Specifically, equity markets are found to react positively only to the LLP of banks that have in their portfolios a high proportion of large and frequently renegotiated loans. Meanwhile, for banks with loan portfolios dominated by small and less-frequently renegotiated loans, the association between LLP and stock returns is negative. Ahmed et al. (1999) also document a negative association between

LLP and stock returns. In their interpretation of the results, equity investors perceive LLP as an expense rather than as an indicator of future profitability.

Apparently, the majority of studies in this literature stream examine the information content of bank LLP in relation to equity investors. This focus within the literature is not surprising, given the implied emphasis that FASB places on providing “decision-useful information to investors” rather than creditors (Beatty and Liao, 2014, p. 354). Arguably, the focus on equity investors by both the FASB and the IASB has made financial statements created in accordance with US GAAP and IFRS less useful for debt (e.g., bond) investors (Ball, 2016; Watts, 2003). Meanwhile, most bank financing is done through debt rather than equity; this renders creditors an important stakeholder group for banks.

Debt and equity markets exhibit fundamental economic differences that relate to the different pay-off structures of the underlying securities. The nonlinear pay-off structure of debt securities (e.g., bonds) limits debtholders’ (e.g., bond investors’) upside potential to the contractual principal and interest payments. At the same time, however, they do have a downside potential amounting to a full loss of principal and interest. This makes debtholders more interested in default probability than in future firm performance (Merton, 1974). In contrast, equity investors have unlimited upside potential; they also have an available liquidation option that debtholders do not. This makes equity investors more interested in the full spectrum of future firm performance, rather than a sole focus on default risk *per se* (Campbell and Taksler, 2003; Plummer and Tse, 1999). As a consequence, the information needs of debt (e.g., bond) and equity investors can be expected to differ (Dechow et al., 2010).

There is empirical evidence supporting this expectation. Debt investors’ interest in the default probability of firms makes timely loss recognition of great importance to them. This also relates to the fact that many debt covenants are based on financial statement information (Smith and Warner, 1979). In line with expectations, Ball, Robin, and Sadka (2008) found that the timely recognition of both gains and losses is by far more important to debt than to equity investors. Yet, as Watts (2003) claims, the nonlinear pay-off structure of debt securities renders the timely recognition of losses relative to gains – that is, conditional conservatism – more important for debtholders. In this respect, Easton, Monahan, and Vasvari (2009) and Defond and Zhang (2014) show that bond markets react more strongly to negative rather than to positive earnings surprises.

As has been argued in previous research, bank asset quality problems in general and credit losses (i.e., LLP) in particular are major drivers of bank failure (Ahmed et al., 1999; Gebhardt and Novotny-Farkas, 2011; Hess et al., 2009). This claim became apparent during the 2007–2008 financial crisis, when sev-



eral commercial and investment banks collapsed. Given that the reported LLP should provide sound information concerning the default risk of the underlying bank (see, Liu et al., 1997), it is rather surprising that the literature focuses almost exclusively on equity investors when examining the information content (i.e., usefulness) of bank credit losses. This concern is particularly relevant to Essay 1, in which we examine whether the usefulness of bank LLP differs between bond and equity investors. Specifically, we split the bank operating income into two parts – namely, LLP and everything but LLP – and test whether bond and equity investors evaluate these two income statement components differently, based on their different decision-making needs. It is important to note that Essay 1 differs from the other three essays in this dissertation, in two respects. First, Essay 1 examines whether the characteristics of the users of financial information – rather than those of its preparers – determine the quality (i.e., usefulness) of accruals-based earnings. Second, unlike Essays 2, 3, and 4, Essay 1 does not examine the effect of users’ personal characteristics on the usefulness of earnings. Rather, it focuses on the economic characteristics of the users of financial information. In particular, the focus in Essay 1 is on the distinct information and decision-making needs that characterize the different investor groups under consideration – namely, bond and equity investors.



# CHAPTER 6

## THE ESSAYS

### 6.1 ESSAY 1

Essay 1 examines the relative usefulness for bond and equity investors of two separate components of banks' income statements – that is, LLP and operating income adjusted for LLP. Although a voluminous body of literature on banks' income statement exists, it tends to focus on equity markets, and on the LLP component (e.g., Beaver and Engel, 1996; Fonseca and González, 2008; Gebhardt and Novotny-Farkas, 2011; Kanagaretnam et al., 2004; Laeven and Majnoni, 2003; Wahlen, 1994). This focus in the literature is not surprising, given the implied emphasis in both the IASB's and FASB's conceptual frameworks that the IFRS and US GAAP are primarily intended for the decision-making needs of equity investors. Meanwhile, most banks rely on debt rather than equity to finance their operations, making creditors an important stakeholder group.<sup>25</sup> Furthermore, these studies focus on the LLP component, or alternative measures of loan losses (e.g., nonperforming loans). There are few recent studies that focus on other components of banks' income statements; thus, the body of knowledge regarding the usefulness of such components for investors is relatively limited. The research focus on LLP is also not surprising, given the great importance of LLP to financial stability. As Ahmed et al. (1999), Gebhardt and Novotny-Farkas (2011), and Hess et al. (2009) claim, credit losses (i.e., LLP) are perceived as the primary reason for bank failure; nonetheless, we argue that other components of banks' income statements could still be useful, particularly to equity investors.

The accounting literature suggests that there is diversity in the information

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<sup>25</sup>Based on data obtained from Datastream for the 2005–2014 period, for all listed banks worldwide that apply US GAAP or IFRS, the average debt load is 2.5-fold larger than equity. Regarding the sample of banks included in our own study, the ratio of debt load to equity over this period is, on average, 4.6.

needs of the different users of financial information; the implication here is that one set of financial statements is not necessarily optimal for all users (Dechow et al., 2010). For instance, the interest of FASB and IASB in the decision-making needs of equity investors has arguably made financial statements produced under US GAAP and IFRS less useful for bond investors (Ball, 2016; Watts, 2003).

Bond and equity markets exhibit fundamental economic differences that relate to the different pay-off structures of the underlying securities. Specifically, bonds have a nonlinear pay-off structure that limits bond investors' upside potential to the contractual principal and interest payments. Meanwhile, bonds have a downside potential amounting to a full loss of both principal and interest. These two bond characteristics make bond investors more interested in default probability than in future firm performance (Merton, 1974). In contrast, the upside potential for equity investors is unlimited; additionally, as mentioned, they have an available liquidation option that bond investors do not have. Thus, equity investors are more interested in the full spectrum of future firm performance, rather than solely in the probability of default *per se* (Campbell and Taksler, 2003; Plummer and Tse, 1999). Consequently, the information needs of bond and equity investors are expected to differ (Dechow et al., 2010).

The empirical evidence supports this expectation. Given that bond investors are more interested in the default probability of a firm, the timely recognition of losses would clearly be more important to them. As claimed by Watts (2003), the nonlinear pay-off structure of debt securities (e.g., bonds) renders conditional conservatism – that is, the timely recognition of losses relative to gains – more important. In this respect, Defond and Zhang (2014) and Easton et al. (2009) show that bond markets react significantly more strongly to negative earnings surprises than to positive ones. Meanwhile, research findings show that equity investors are more sensitive to good news, mainly on account of the liquidation option (Hayn, 1995). In line with this reasoning, Basu (1997) shows that positive, and *not* negative, earnings surprises are associated with abnormal stock performance. Likewise, Defond and Zhang (2014) found that equity investors react relatively more to positive earnings surprises than to negative earnings surprises.

The setting we select in Essay 1 – banks' financial statements – makes feasible the distinction of operating income in the income statements into subcomponents that capture different aspects of timely loss and gain recognition. Specifically, we divide operating income into LLP and operating income adjusted for LLP. The former component relates to negative earnings surprises, and the latter to both positive and negative earnings surprises. The assumption we make is that LLP closely relate to default risk, and are thus of greater interest to bond investors. Meanwhile, operating income adjusted for LLP is more important to equity investors, as it captures overall firm performance. To test these expect-

tations empirically, we employ an event study methodology by which we test the relative reaction of bond and equity markets to the two income statements components. In line with our expectations, we found that bond markets react more strongly to the LLP component, while equity markets react more strongly to the operating income component that is adjusted for LLP.

## 6.2 ESSAY 2

In Essay 2, I examine whether CEO hubris (i.e., a CEO personality trait) determines the quality of LLP, and by implication of earnings, in banks.<sup>26</sup> The empirical literature regarding LLP in banks is voluminous; nonetheless, it tends to focus on microeconomic (e.g., Ahmed et al., 1999; Altamuro and Beatty, 2010; Kanagaretnam et al., 2004; Liu and Ryan, 2006) and macroeconomic (e.g., Beaver and Engel, 1996; Bushman and Williams, 2012; Liu et al., 1997; Marton and Runesson, 2017) factors that affect the quality of bank LLP. This literature stream overlooks the potential effect that top executives' personal characteristics have on the quality of credit losses in the banking industry. Therefore, by examining whether CEO hubris affects the quality of LLP, Essay 2 aims to broaden the spectrum of factors that determine LLP quality in banks.

Researcher interest in managerial hubris and how it affects top executives' decision-making dates back to Roll (1986). The *hubris hypothesis* developed in that seminal study is based on the premise that CEOs characterized by hubris are likely to misjudge a situation, and therefore make incorrect decisions; this can, in turn, impose some type of loss for the shareholders. A central assumption in the *hubris hypothesis* is that top executives (e.g., CEOs) act in ways they believe are the best for the shareholders (Hietala et al., 2003), implying that CEOs do not necessarily act opportunistically to serve their own interests. In this respect, financial misreporting could be simply caused by misjudgment of the true performance of the firm, rather than by CEOs' desire to deliberately manipulate earnings for their own benefit (Chen, 2010). That is, unlike intentional opportunism that aims to deliberately mislead investors, CEO hubris might result in unintentional and nonopportunistic financial misreporting (Brennan and Conroy, 2013).

As a concept, hubris is defined in terms of presumption, exaggerated pride, or excessive self-confidence, and how it can potentially lead to retribution (Owen, 2006). As a reflection of exaggerated self-confidence, hubris refers to the excessive belief an individual has in his or her own judgment (Hayward and Hambrick, 1997; Hayward et al., 2006; Hiller and Hambrick, 2005); as one type of cognitive bias, hubris influences decisions made at the individual level, particularly

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<sup>26</sup>In Essay 2, high/low LLP quality is determined by either the use of LLP by hubristic bank CEOs to deliberately manipulate earnings, or by the ability of hubristic CEOs to use their discretion over LLP to better/worse anticipate future deteriorations in their loan portfolios.

in contexts characterized by high levels of uncertainty (Tversky and Kahneman, 1975). All in all, the arguments in the relevant literature suggest that hubris is evident in contexts featuring high levels of *judgment* and *uncertainty*.

LLP accounting is a financial reporting area that is characterized by high levels of both judgment and uncertainty. Specifically, due to the high measurement uncertainty underlying LLP, the estimation of credit losses (i.e., LLP) in banks requires the extensive application of managerial judgment (Anandarajan et al., 2007; Fonseca and González, 2008; Lobo and Yang, 2001; Marton and Runesson, 2017; Perez et al., 2008). By being the largest banking operating accrual, LLP significantly affects earnings (Ahmed et al., 1999); the implication here is that bank managers have incentives to use LLP, either to increase their own remuneration or bias investors' perceptions about the riskiness of their bank's business (Beaver and Engel, 1996; Rivard et al., 2003). Assuming that a large proportion of CEO compensation is directly linked to earnings and stock performance, it is reasonable to expect that bank CEOs have strong incentives to use LLP to opportunistically manipulate earnings. However, this premise contradicts the main assumption inherent in the hubris hypothesis – namely, that hubristic CEOs act in ways they believe are best for the shareholders, rather than opportunistically for their own benefit (Chen, 2010; Hietala et al., 2003). In any case, the possibility that hubristic bank CEOs might use LLP opportunistically cannot be entirely ruled out. This discussion is particularly relevant with respect to choosing the research design of Essay 2. In examining whether CEO hubris affects the quality of bank LLP, I use econometric models that test both the opportunistic and nonopportunistic use of LLP by hubristic bank CEOs. In the performed tests, the term “opportunistic” refers to the use of discretionary LLP by hubristic CEOs to deliberately manipulate earnings, and the term “nonopportunistic” refers to the inability of hubristic CEOs to sufficiently use their discretion over LLP to anticipate future deteriorations in the performance of their loan portfolios. In line with the expectations, the empirical results show that highly hubristic bank CEOs perform significantly worse in using discretionary LLP to anticipate future deteriorations in their loan portfolio performance. Meanwhile, bank CEOs with low levels of hubris are significantly less likely to use discretionary LLP opportunistically to manipulate earnings.

### 6.3 ESSAY 3

Essay 3 focuses on the potential effect that factors from the broader family environment of married CEOs might have on CEOs' tendency to undertake more/less risky financial reporting practices. Recent evidence shows that married CEOs take, on average, less risk – that is, they adopt less aggressive investment policies (Roussanov and Savor, 2014) and they manage earnings significantly less actively (Hilary et al., 2017) than do their nonmarried counterparts.

The aim of Essay 3 is to contribute to this emerging line of literature by examining whether factors from CEOs' broader family environment – including CEO marriage, married CEOs' dependent children, and the gender of married CEOs' children – can explain risky financial reporting behavior on the part of CEOs. In particular, in Essay 3, I examine the effect that CEO marriage, married CEOs' dependent children, and the gender of married CEOs' children have on accruals quality.

The question of whether managers' individual characteristics can explain firm-level financial reporting choices has been an important research issue, especially over the last decade. The empirical findings in this literature stream largely converge, in that top executives' observable and unobservable characteristics have been found to affect their financial reporting choices. Specifically, Bamber et al. (2010), Ge et al. (2011), and Dejong and Ling (2013) show that CEOs' and CFOs' innate characteristics (e.g., managerial skills and expertise) are associated with financial reporting outputs. Furthermore, the results in previous studies reveal a significant CFO gender effect on accruals quality (Barua et al., 2010) and on accounting conservatism (Francis et al., 2015). A core assumption underlying these studies is that CEOs' and CFOs' observable and unobservable individual characteristics affect their risk preferences. In turn, these risk preferences significantly influence financial reporting choices, and by implication financial reporting quality (e.g., accruals quality).

Evidence in the literature shows that the risk preferences of individuals are significantly affected by their family environment. In the context of financial accounting research, most of the attention has been placed on marital status as a determinant of the risk profile of managers in general and CEOs in particular (e.g., Hilary et al., 2017; Roussanov and Savor, 2014). Yet, other factors from the broader family environment of married CEOs might also be significant in explaining CEOs' tolerance towards risk-taking in financial reporting. As Roszkowski et al. (1993) argue, the main explanation regarding why married individuals are more risk-averse is that they have more responsibilities, especially in relation to children, relative to their nonmarried counterparts. In this respect, findings in previous studies show that individuals who have dependent children bear fewer financial risks (e.g., Faff, Hallahan, and McKenzie, 2011; Hallahan, Faff, and McKenzie, 2004), and parenting daughters shifts the preferences of men so that they more closely align with those of female counterparts (Dahl, Dezsó, and Ross, 2012; Glynn and Sen, 2015; Warner, 1991). With respect to the effect of daughters on their fathers' risk preferences, Cronqvist and Yu (2017) show that male CEOs who have a first-born daughter adopt financial reporting preferences that are closely approximate those of their female counterparts (e.g., less aggressive and more conservative financial reporting preferences).

The findings in Essay 3 support the view that factors from the CEO family

environment are significant determinants of a CEO's propensity to become involved in more/less risky financial reporting practices. Specifically, I found that firms that are headed by married CEOs have higher accruals quality, relative to firms with nonmarried CEOs. Most interesting, though, the results in Essay 3 show that the gender of a married CEO's first-born child is a more significant determinant of accruals quality than marital status *per se*. Meanwhile, neither having nor not having dependent children affects the quality of married CEOs' accruals.

## 6.4 ESSAY 4

In Essay 4, I investigate whether investors' information risk is determined in part by the gender of the firm CFO – a proxy I use for trust. Over the past decade, the participation of female executives in top management teams has increased substantially. In response to this increase in female participation in the upper echelons of firms, researchers have started to investigate the potential effect of executive gender on accounting choices (e.g., Barua et al., 2010; Francis et al., 2015; Ge et al., 2011). The vast majority of findings in this literature stream converge to assert that female executives (i.e., CEOs and CFOs) provide higher-quality financial information relative to their male counterparts, implying also a significant decrease in investors' information risk.<sup>27</sup> However, investors' information risk is affected not only by financial information quality *per se*, but also by investors' perceptions regarding the underlying credibility of that information. Reflecting “the subjective probability individuals attribute to the possibility of being cheated” (Guiso et al., 2008, p. 2557), trust has the potential to influence investors' perceptions about the credibility of the disclosed financial information (i.e., investors' information risk), and thus to influence investors' interpretation and reaction to the information that is released through corporate accounting events such as earnings announcements (Pevzner et al., 2015). In this respect, the aim of this essay is to examine the equity market's reaction to earnings announcements made by female CFOs, relative to those made by their male counterparts.

The concept of trust has been under scrutiny in many disciplines, such as psychology, ethics, sociology, management, and economics (Baldvinsdottir et al., 2011; Colquitt et al., 2007). Consistent with the conception that all economic transactions are virtually underlined by trust, it has been shown in the literature that a higher level of trust is associated with economic growth (e.g., North, 1990; Zak and Knack, 2001), international investment and trade (e.g., Guiso et al., 2009), corporate financing and M&A transactions (e.g., Ahern et al., 2015; Bottazzi et al., 2016; Duarte et al., 2012), and financial develop-

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<sup>27</sup>For discussions on the association between financial information quality and investors' information risk, see Easley and O'Hara (2004) and Leuz and Verrecchia (2000).



ment (e.g., Guiso et al., 2004, 2008). Meanwhile, whether trust influences the effectiveness of information transmission (and by implication, information risk) from top executives to outside investors is a relatively unexplored issue. This is quite surprising, given that a major objective of much of the corporate governance reforms and regulations (e.g., the SOX) was to restore investor trust in corporate financial reporting and disclosure (Pevzner et al., 2015).

Given incomplete contracting and the potential for moral hazard, economic theory suggests that trust can significantly influence interactions between managers and capital providers (Carlin et al., 2009; Guiso et al., 2008; Williamson, 1993). Self-interested managers have incentives to opportunistically manipulate financial reporting in their attempt to bias investors' perceptions regarding the true nature of firm performance (Leuz et al., 2003). Rational investors are aware of such managerial incentives, and therefore tend to interpret and react to the release of financial information with a certain level of reservation (Pevzner et al., 2015).

An important determinant of the equity market reaction to the disclosure of financial information is capital providers' perceptions about the credibility of information. Evidence in the literature shows that investors' reaction to earnings announcements is positively associated with the perceived credibility of earnings (Balsam et al., 2003; Rogers and Stocken, 2005; Teoh and Wong, 1993). It can thus be expected that at higher levels of trust, capital providers assign a lower probability of opportunistic behavior by managers towards financial reporting manipulation. Consequently, investors perceive the financial information conveyed in corporate financial reports as being more credible (i.e., less information risk), and therefore react more "vigorously" to the information that is disclosed through earnings announcements (Pevzner et al., 2015). Following this expectation, Pevzner et al. (2015) show that investors tend to react more to earnings announcements in countries with high levels of societal trust, relative to countries that are characterized by low levels of societal trust.

Previous studies in behavioral and experimental economics show that trust is significantly determined by gender. As most of the findings in these studies indicate, women are on average more trustworthy than men (e.g., Buchan et al., 2008; Chaudhuri et al., 2013; Croson and Buchan, 1999; Dollar et al., 2001; Wrightsman and Wuescher, 1974), and both men and women trust female individuals more than male ones (Garbarino and Slonim, 2009). Departing from the premise that women are more trustworthy than men, I test and find that investors react more to earnings announcements made by female CFOs. Specifically, to examine whether CFO gender affects the level of investors' information risk, I employ an event study methodology and compare the equity market's reaction to fourth-quarter earnings announcements between the pre- and post-transition periods for male-to-female CFO turnover firms, while controlling for investors' information risk that is associated with earnings quality *per se*.

## 6.5 CONCLUSIONS, CONTRIBUTIONS, AND SUGGESTIONS FOR FUTURE RESEARCH

The main focus of this dissertation is on behavioral aspects of earnings quality. Specifically, the primary aim is to draw conclusions concerning the potential effect of top executives' individual characteristics – in particular, those of CEOs and CFOs – on earnings quality. In fulfilling this objective, I ask the central question: “Is earnings quality determined by top executives' individual characteristics?” The rationale for this type of research can be derived from recent evidence in the empirical financial accounting literature that financial reporting choices made by top executives are, to a certain extent, influenced by their individual backgrounds. This line of examination responds to calls for more “behavioral”-oriented empirical accounting research, in an effort to expand the spectrum of factors that can explain the accounting choices made by firms – and which, by extension, affect financial reporting quality (e.g., Birnberg, 2011; Cronqvist and Yu, 2017). In addition to managerial characteristics, this dissertation also considers the economic characteristics of the users of financial information, as determinants of earnings quality. Below, I summarize the empirical evidence from the four essays that comprise this dissertation.

Essay 1, which focuses on the economic characteristics of users of financial information, shows that bond investors react more strongly to changes in bank LLP, while equity investors react more strongly to changes in bank operating income adjusted for LLP. These findings are explained by the diversity in information needs between bond and equity investors, which arise from the fundamental economic differences that bond and equity markets exhibit. Given its purpose, Essay 1 contributes to the relevant literature by providing evidence of how different financial information users react to different aspects of financial reports. These findings empirically support the idea of diversity in information needs among financial statements' users. Furthermore, in contrast to the banking literature that tests the predictive ability of LLP without making an implicit or explicit reference to users, we study the relevance of LLP in relation to different users of such information. Finally, our findings suggest that when assessing the relevance of LLP, debtholders (along with shareholders) as users should be considered.<sup>28</sup>

Essay 2 finds that in banks, CEO hubris, a CEO personality trait, is a determinant of LLP quality (i.e., a proxy for earnings quality). Specifically, the empirical findings show that those bank CEOs who demonstrate low levels of hubris tend, to a significantly lower degree, to manage earnings through dis-

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<sup>28</sup>Essay 1 differs from the other three essays in this dissertation in two important ways. First, it is the only study to focus on the users, and not the preparers, of financial information as determinants of earnings quality. Second, and most importantly, Essay 1 is the only among the four studies to examine the *economic* and not the *individual* characteristics of users that determine earnings quality (i.e., relevance).

cretionary LLP. Meanwhile, highly hubristic bank CEOs perform significantly worse in using their discretion over LLP to anticipate future deteriorations in their own bank's loan portfolio performance. In contrast to the majority of studies that focus on microeconomic and macroeconomic factors that determine LLP quality, Essay 2 contributes to the literature by showing that in the context of banks, behavioral factors such as CEO personality traits can also go far in explaining LLP quality – and, by implication, earnings quality. Further, Essay 2 contributes to the literature on CEO personal characteristics and corporate accounting decisions by showing that CEO hubris can predict bank CEOs' tendency to exert discretion over LLP. To the best of my knowledge, Essay 2 is unique in its provision of evidence of an association between CEO hubris and LLP quality in the banking context.

The empirical findings presented in Essay 3 show that factors from the broader CEO family environment are significant in explaining their tendency to provide higher/lower quality earnings. Specifically, firms with married CEOs demonstrate higher accruals quality relative to firms with nonmarried CEOs. However, the results further show that in the sample firms, factors from the broader family environment of married CEOs – in particular, the gender of married CEOs' first-born child – are more significant determinants of accruals quality than marital status *per se*. More precisely, the findings indicate that the effect of CEO marital status on accruals quality is moderated by the gender of the CEO's first-born child, and that firms with married CEOs who have a first-born daughter demonstrate higher accruals quality relative to firms with married CEOs who do not have a female first-born child. Given its objective, Essay 3 contributes to the literature on the association between top executives' personal characteristics and financial reporting practices, by showing that the broader CEO family environment affects their behavior towards providing higher/lower accruals quality. To the best of my knowledge, this is the first study to identify and quantify the effect of the broader family environment of married CEOs on accruals quality.

Finally, Essay 4 shows that earnings quality – in particular, the relevance of earnings to investors – is affected by the gender of a firm's CFO. As the empirical findings presented in Essay 4 indicate, equity investors react more to earnings announcements made by female CFOs. The underlying premise in Essay 4 is that CFO gender affects investors' information risk through trust, given differences in the expected behavior between male and female CFOs in terms of financial reporting practices. The evidence of behavioral and experimental economics studies indicate that female CFOs are expected to be more *trustworthy* than their male counterparts; therefore, Essay 4 assumes that investors will perceive the earnings numbers provided by female CFOs as being more *credible* (i.e., of higher quality), thus leading to a higher market reaction to the earnings information disclosed by female CFOs. Essay 4 contributes to the literature in several ways. For instance, by showing that CFO gender – a proxy I use for

trust – affects the equity market’s reaction to earnings announcements, Essay 4 extends the research on the association between trust and capital markets. Furthermore, Essay 4 contributes to the research on managerial characteristics – more specifically, on the CFO profile – by showing that CFO gender influences investors’ reactions to earnings announcements. Finally, the study adds to the body of literature that examines the role of gender on trust and trustworthiness.

*Suggestions for future research*

Arguably, the behavioral factors examined in this dissertation – including top executives’ family environment, gender, and personality traits – are significant determinants of earnings quality. Yet, the challenges associated with the measurement of managers’ *unobservable* psychological constructs (e.g., hubris) and with those “noisy” demographic characteristics (e.g., marital status, gender, and children) that are used as proxies for the more complex psychological dimensions of top executives’ personality, point to the need for more research in this field. As a personality trait, executive hubris very closely relates to narcissism and overconfidence; although the boundary between hubris and overconfidence is relatively clear, this is not the case for the boundary between hubris and narcissism. Thus, future research should look to develop measures of executive hubris that will clarify the distinction between hubris and narcissism. Likewise, future research should consider managerial attributes that can potentially confound the hubris effect, such as gender, age, and education. In examining the effect of top executives’ family environment on earnings quality, marital status appears to be a potentially endogenous variable. Thus, future research should work to identify those (instrumental) variables that would allow researchers to isolate the marriage effect on earnings quality, from other innate manager characteristics that might affect top executives’ willingness to get married. Additional information, both in terms of sample size and control variables, is also needed to better isolate the CFO gender effect on investors’ information risk – and, by implication, its effect on the quality (i.e., relevance) of earnings. The provision of a larger data sample would allow researchers to segment more clearly the firms into those that have male-to-female, male-to-male, female-to-male, and female-to-female CFO changes, or no change, and employ tests (e.g., difference-in-difference) that could more effectively isolate the CFO gender effect. Likewise, researchers will want to consider additional information – including CFO-specific and corporate governance specific information – that could potentially confound the CFO gender effect on earnings quality; such information would be beneficial in isolating this effect.

# BIBLIOGRAPHY

- Aboody, D., J. Hughes, and J. Liu (2005). Earnings quality, insider trading, and cost of capital. *Journal of Accounting Research* 43(5), 651–673.
- Ahern, K. R., D. Daminelli, and C. Fracassi (2015). Lost in translation? The effect of cultural values on mergers around the world. *Journal of Financial Economics* 117(1), 165–189.
- Ahmed, A. S., C. Takeda, and S. Thomas (1999). Bank loan loss provisions: A reexamination of capital management, earnings management and signaling effects. *Journal of Accounting and Economics* 28(1), 1–25.
- Ahmed, R.-B. (1996). *Accounting: A multiparadigmatic science* (1st ed.). Quorum Books.
- Akerlof, G. A. (1970). The market for ‘lemons’: Quality, uncertainty and the market mechanism. *Quarterly Journal of Economics* 84(3), 488–500.
- Alexander, D., A. Britton, and A. Jorissen (2011). *International Financial Reporting and Analysis* (5th ed.). Cengage Learning EMEA.
- Alexander, D. and C. Nobes (2010). *Financial Accounting: An International Introduction* (4th ed.). Harlow: Pearson Education Ltd.
- Ali, A. and W. Zhang (2015). CEO tenure and earnings management. *Journal of Accounting and Economics* 59(1), 60–79.
- Altamuro, J. and A. Beatty (2010). How does internal control regulation affect financial reporting? *Journal of Accounting and Economics* 49(1), 58–74.
- Anandarajan, A., I. Hasan, and C. McCarthy (2007). Use of loan loss provisions for capital, earnings management and signalling by Australian banks. *Accounting & Finance* 47(3), 357–379.
- Ashbaugh-Skaife, H., D. W. Collins, and W. R. Kinney (2007). The discovery and reporting of internal control deficiencies prior to SOX-mandated audits. *Journal of Accounting and Economics* 44(1), 166–192.
- Badolato, P. G., D. C. Donelson, and M. Ege (2014). Audit committee financial expertise and earnings management: The role of status. *Journal of Accounting and Economics* 58(2), 208–230.
- Baldvinsdottir, G., A. Hagberg, I.-L. Johansson, K. Jonäll, and J. Marton (2011). Accounting research and trust: A literature review. *Qualitative Research in Accounting and Management* 8, 382–424.
- Ball, R. (2016). IFRS – 10 years later. *Accounting and Business Research* 46(5), 545–571.
- Ball, R. and P. Brown (1968). An empirical evaluation of accounting income numbers. *Journal of Accounting Research* 6(2), 159–178.

- Ball, R., A. Robin, and G. Sadka (2008). Is financial reporting shaped by equity markets or by debt markets? An international study of timeliness and conservatism. *Review of Accounting Studies* 13(2-3), 168–205.
- Balsam, S., J. Krishnan, and J. S. Yang (2003). Auditor industry specialization and earnings quality. *Auditing: A Journal of Practice & Theory* 22(2), 71–97.
- Bamber, L. S., J. Jiang, and I. Y. Wang (2010). What’s my style? The influence of top managers on voluntary corporate financial disclosure. *The Accounting Review* 85(4), 1131–1162.
- Barth, M. E., W. H. Beaver, and W. R. Landsman (2001). The relevance of the value relevance literature for financial accounting standard setting: Another view. *Journal of Accounting and Economics* 31(1-3), 77–104.
- Barth, M. E. and G. Clinch (1998). Revalued financial, tangible, and intangible assets: Associations with share prices and non-market-based value estimates. *Journal of Accounting Research* 36(3), 199–233.
- Barth, M. E. and W. R. Landsman (2010). How did financial reporting contribute to the financial crisis?. *European Accounting Review* 19(3), 399–423.
- Barua, A., L. F. Davidson, D. V. Rama, and S. Thiruvadi (2010). CFO gender and accruals quality. *Accounting Horizons* 24(1), 25–39.
- Basu, S. (1997). The conservatism principle and the asymmetric timeliness of earnings. *Journal of Accounting and Economics* 24(1), 3–37.
- Beattie, V. (2005). Moving the financial accounting research front forward: The UK contribution. *The British Accounting Review* 37(1), 85–114.
- Beatty, A., S. L. Chamberlain, and J. Magliolo (1995). Managing financial reports of commercial banks: The influence of taxes, regulatory capital, and earnings. *Journal of Accounting Research* 33(2), 231–261.
- Beatty, A. and S. Liao (2014). Financial accounting in the banking industry: A review of the empirical literature. *Journal of Accounting and Economics* 58(2-3), 339–383.
- Beatty, A., K. Ramesh, and J. Weber (2002). The importance of accounting changes in debt contracts: The cost of flexibility in covenant calculations. *Journal of Accounting and Economics* 33(2), 205–227.
- Beaver, W., C. Eger, S. Ryan, and M. Wolfson (1989). Financial reporting, supplemental disclosures, and bank share prices. *Journal of Accounting Research* 2, 157–178.
- Beaver, W. H. (1968). The information content of annual earnings announcements. *Journal of Accounting Research* 6, 67–92.
- Beaver, W. H. (1998). *Financial reporting: an accounting revolution* (3rd ed.). Upper Saddle River, New Jersey: Prentice-Hall, Inc.
- Beaver, W. H. and E. E. Engel (1996). Discretionary behavior with respect to allowances for loan losses and the behavior of security prices. *Journal of Accounting and Economics* 22(1), 177–206.
- Bertrand, M. and A. Schoar (2003). Managing with style: The effect of managers on firm policies. *Quarterly Journal of Economics* 118(4), 1169–1208.
- Beyer, A., D. A. Cohen, T. Z. Lys, and B. R. Walther (2010). The financial reporting environment: Review of the recent literature. *Journal of Accounting and Economics* 50(2-3), 296–343.
- Bhattacharya, N., H. Desai, and K. Venkataraman (2013). Does earnings quality affect information asymmetry? Evidence from trading costs. *Contemporary*

- Accounting Research* 30(2), 482–516.
- Birnberg, J. G. (2011). A proposed framework for behavioral accounting research. *Behavioral Research in Accounting* 23(1), 1–43.
- Bonner, S. E. (2008). *Judgment and decision making in accounting*. Prentice Hall.
- Botosan, C. A. (1997). Disclosure level and the cost of equity capital. *The Accounting Review* 72(3), 323–349.
- Botosan, C. A. and M. A. Plumlee (2002, March). A re-examination of disclosure level and the expected cost of equity capital. *Journal of Accounting Research* 40(1), 21–40.
- Bottazzi, L., M. Da Rin, and T. Hellmann (2016). The importance of trust for investment: Evidence from venture capital. *The Review of Financial Studies* 29(9), 2283–2318.
- Brennan, N. M. and J. P. Conroy (2013). Executive hubris: The case of a bank CEO. *Accounting, Auditing & Accountability Journal* 26(2), 172–195.
- Brown, S., K. Lo, and T. Lys (1999). Use of  $R^2$  in accounting research: Measuring changes in value relevance over the last four decades. *Journal of Accounting and Economics* 28(2), 83–115.
- Buchan, N. R., R. T. Croson, and S. Solnick (2008). Trust and gender: An examination of behavior and beliefs in the investment game. *Journal of Economic Behavior & Organization* 68(3-4), 466–476.
- Burgstahler, D. C., L. Hail, and C. Leuz (2006). The importance of reporting incentives: Earnings management in European private and public firms. *The Accounting Review* 81(5), 983–1016.
- Bushee, B. J. and C. Leuz (2005). Economic consequences of SEC disclosure regulation: Evidence from the OTC bulletin board. *Journal of Accounting and Economics* 39(2), 233–264.
- Bushman, R. M., J. D. Piotroski, and A. J. Smith (2011). Capital allocation and timely accounting recognition of economic losses. *Journal of Business Finance & Accounting* 38(1-2), 1–33.
- Bushman, R. M. and C. D. Williams (2012). Accounting discretion, loan loss provisioning, and discipline of banks' risk-taking. *Journal of Accounting and Economics* 54(1), 1–18.
- Campbell, J. Y. and G. B. Taksler (2003). Equity volatility and corporate bond yields. *The Journal of Finance* 58(6), 2321–2349.
- Carlin, B. I., F. Dorobantu, and S. Viswanathan (2009). Public trust, the law, and financial investment. *Journal of Financial Economics* 92(3), 321–341.
- Carpenter, M. A., M. A. Geletkanycz, and W. G. Sanders (2004). Upper echelons research revisited: Antecedents, elements, and consequences of top management team composition. *Journal of Management* 30(6), 749–778.
- Chang, H., J. Chen, W. M. Liao, and B. K. Mishra (2006). CEOs'/CFOs' swearing by the numbers: Does it impact share price of the firm? *The Accounting Review* 81(1), 1–27.
- Chaudhuri, A., T. Paichayontvijit, and L. Shen (2013). Gender differences in trust and trustworthiness: Individuals, single sex and mixed sex groups. *Journal of Economic Psychology* 34, 181–194.
- Chen, S. (2010). Bolstering unethical leaders: The role of the media, financial analysts and shareholders. *Journal of Public Affairs* 10(3), 200–215.

- Chen, S., T. Shevlin, and Y. H. Tong (2007). Does the pricing of financial reporting quality change around dividend changes? *Journal of Accounting Research* 45(1), 1–40.
- Coller, M. and T. L. Yohn (1997). Management forecasts and information asymmetry: An examination of bid-ask spreads. *Journal of Accounting Research* 35(2), 181–191.
- Collins, J. H., D. A. Shackelford, and J. M. Wahlen (1995). Bank differences in the coordination of regulatory capital, earnings, and taxes. *Journal of Accounting Research* 33(2), 263–291.
- Colquitt, J. A., B. A. Scott, and J. A. LePine (2007). Trust, trustworthiness, and trust propensity: A meta-analytic test of their unique relationships with risk taking and job performance. *Journal of Applied Psychology* 92(4), 909–927.
- Cronqvist, H. and F. Yu (2017). Shaped by their daughters: Executives, female socialization, and corporate social responsibility. *Journal of Financial Economics* 126, 543–562.
- Croson, R. and N. Buchan (1999). Gender and culture: International experimental evidence from trust games. *The American Economic Review* 89(2), 386–391.
- Cyert, R. M. and J. G. March (1963). *A behavioral theory of the firm*. Prentice-Hall.
- Dahl, M. S., C. L. Dezsó, and D. G. Ross (2012). Fatherhood and managerial style: How a male CEO's children affect the wages of his employees. *Administrative Science Quarterly* 57(4), 669–693.
- Das, S. and H. Zhang (2003). Rounding-up in reported EPS, behavioral thresholds, and earnings management. *Journal of Accounting and Economics* 35(1), 31–50.
- Davidson III, W. N., B. Xie, W. Xu, and Y. Ning (2007). The influence of executive age, career horizon and incentives on pre-turnover earnings management. *Journal of Management & Governance* 11(1), 45–60.
- Dechow, P., W. Ge, and C. Schrand (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics* 50(2-3), 344–401.
- Dechow, P. M. (1994). Accounting earnings and cash flows as measures of firm performance: The role of accounting accruals. *Journal of Accounting and Economics* 18(1), 3–42.
- Dechow, P. M. and D. J. Skinner (2000). Earnings management: Reconciling the views of accounting academics, practitioners, and regulators. *Accounting Horizons* 14(2), 235–250.
- DeFond, M. L. (2010). Earnings quality research: Advances, challenges and future research. *Journal of Accounting and Economics* 50(2-3), 402–409.
- DeFond, M. L. and J. Jiambalvo (1994). Debt covenant violation and manipulation of accruals. *Journal of Accounting and Economics* 17(1), 145–176.
- Defond, M. L. and J. Zhang (2014). The timeliness of the bond market reaction to bad earnings news. *Contemporary Accounting Research* 31(3), 911–936.
- Dejong, D. and Z. Ling (2013). Managers: Their effects on accruals and firm policies. *Journal of Business Finance & Accounting* 40(1/2), 82–114.
- Diamond, D. W. and R. E. Verrecchia (1991). Disclosure, liquidity, and the cost



- of capital. *Journal of Finance* 46(4), 1325–1359.
- Dichev, I. D., J. R. Graham, C. R. Harvey, and S. Rajgopal (2013). Earnings quality: Evidence from the field. *Journal of Accounting and Economics* 56(2-3, Supplement 1), 1–33.
- Dietrich, J. R., M. S. Harris, and K. A. Muller (2001). The reliability of investment property fair value estimates. *Journal of Accounting and Economics* 30(2), 125–158.
- Dobbin, F. and J. Jung (2011). Corporate board gender diversity and stock performance: The competence gap or institutional investor bias? *North Carolina Law Review* 89, 809–838.
- Dollar, D., R. Fisman, and R. Gatti (2001). Are women really the “fairer” sex? Corruption and women in government. *Journal of Economic Behavior & Organization* 46(4), 423–429.
- Doyle, J. T., W. Ge, and S. McVay (2007). Accruals quality and internal control over financial reporting. *The Accounting Review* 82(5), 1141–1170.
- Duarte, J., S. Siegel, and L. Young (2012). Trust and credit: The role of appearance in peer-to-peer lending. *The Review of Financial Studies* 25(8), 2455–2484.
- Dyreng, S. D., M. Hanlon, and E. L. Maydew (2010). The effects of executives on corporate tax avoidance. *The Accounting Review* 85(4), 1163–1189.
- Easley, D. and M. O’Hara (2004). Information and the cost of capital. *Journal of Finance* 59(4), 1553–1583.
- Easton, P. D., S. J. Monahan, and F. P. Vasvari (2009). Initial evidence on the role of accounting earnings in the bond market. *Journal of Accounting Research* 47(3), 721–766.
- Ecker, F., J. Francis, I. Kim, P. M. Olsson, and K. Schipper (2006). A returns-based representation of earnings quality. *The Accounting Review* 81(4), 749–780.
- Elliott, J. A., J. D. Hanna, and W. H. Shaw (1991). The evaluation by the financial markets of changes in bank loan loss reserve levels. *The Accounting Review* 66(4), 847–861.
- Faff, R., T. Hallahan, and M. McKenzie (2011). Women and risk tolerance in an aging world. *International Journal of Accounting & Information Management* 19(2), 100–117.
- Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *Journal of Finance* 25(2), 383–417.
- Fama, E. F. (1991). Efficient capital markets: II. *The Journal of Finance* 46(5), 1575–1617.
- Fama, E. F., L. Fisher, M. C. Jensen, and R. Roll (1969). The adjustment of stock prices to new information. *International economic review* 10(1), 1–21.
- Fields, T. D., T. Z. Lys, and L. Vincent (2001). Empirical research on accounting choice. *Journal of Accounting and Economics* 31(1), 255–307.
- Fonseca, A. R. and F. González (2008). Cross-country determinants of bank income smoothing by managing loan-loss provisions. *Journal of Banking & Finance* 32(2), 217–228.
- Francis, B., I. Hasan, J. C. Park, and Q. Wu (2015). Gender differences in financial reporting decision making: Evidence from accounting conservatism. *Contemporary Accounting Research* 32(3), 1285–1318.

- Francis, B., I. Hasan, and Q. Wu (2013). The impact of CFO gender on bank loan contracting. *Journal of Accounting, Auditing & Finance* 28(1), 53–78.
- Francis, J., A. H. Huang, S. Rajgopal, and A. Y. Zang (2008). CEO reputation and earnings quality. *Contemporary Accounting Research* 25(1), 109–147.
- Francis, J., R. LaFond, P. M. Olsson, and K. Schipper (2004). Costs of equity and earnings attributes. *The Accounting Review* 79(4), 967–1010.
- Francis, J., R. LaFond, P. M. Olsson, and K. Schipper (2005). The market pricing of accruals quality. *Journal of Accounting and Economics* 39(2), 295–327.
- Francis, J., K. Schipper, and L. Vincent (2003). The relative and incremental explanatory power of earnings and alternative (to earnings) performance measures for returns. *Contemporary Accounting Research* 20(1), 121–164.
- Francis, J. R. and D. Wang (2008). The joint effect of investor protection and Big 4 audits on earnings quality around the world. *Contemporary Accounting Research* 25(1), 157–191.
- Franz, D. R., H. R. Hassabelnaby, and G. J. Lobo (2014). Impact of proximity to debt covenant violation on earnings management. *Review of Accounting Studies* 19(1), 473–505.
- Fraser, L. M. and A. Ormiston (2004). *Understanding Financial Statements* (7th ed.). Pearson Education.
- Friedman, M. (1953). *Essays in Positive Economics* (1st ed.). Number 3. The University of The University of Chicago Press.
- Gaio, C. and C. Raposo (2011). Earnings quality and firm valuation: International evidence. *Accounting and Finance* 51(2), 467–499.
- Garbarino, E. and R. Slonim (2009). The robustness of trust and reciprocity across a heterogeneous U.S. population. *Journal of Economic Behavior & Organization* 69(3), 226–240.
- Ge, W., D. Matsumoto, and J. L. Zhang (2011). Do CFOs have style? An empirical investigation of the effect of individual CFOs on accounting practices. *Contemporary Accounting Research* 28(4), 1141–1179.
- Ge, W. and S. McVay (2005). The disclosure of material weaknesses in internal control after the Sarbanes-Oxley Act. *Accounting Horizons* 19(3), 137–158.
- Gebhardt, G. and Z. Novotny-Farkas (2011). Mandatory IFRS adoption and accounting quality of European banks. *Journal of Business Finance & Accounting* 38(3-4), 289–333.
- Glautier, M. W. E. and B. Underdown (1994). *Accounting Theory and Practice* (5th ed.). London: Pitman Publishing.
- Glynn, A. N. and M. Sen (2015). Identifying judicial empathy: Does having daughters cause judges to rule for women’s issues? *American Journal of Political Science* 59(1), 37–54.
- Gong, G., H. Louis, and A. X. Sun (2008). Earnings management and firm performance following open-market repurchases. *The Journal of Finance* 63(2), 947–986.
- Graham, J. R., C. R. Harvey, and S. Rajgopal (2005). The economic implications of corporate financial reporting. *Journal of Accounting and Economics* 40, 3–73.
- Griffin, P. A. and S. J. R. Wallach (1991). Latin American lending by major U. S. banks: The effects of disclosures about nonaccrual loans and loan loss

- provisions. *The Accounting Review* 66(4), 830–846.
- Guiso, L., P. Sapienza, and L. Zingales (2004). The role of social capital in financial development. *American Economic Review* 94(3), 526–556.
- Guiso, L., P. Sapienza, and L. Zingales (2008). Trusting the stock market. *The Journal of Finance* 63(6), 2557–2600.
- Guiso, L., P. Sapienza, and L. Zingales (2009). Cultural biases in economic exchange? *The Quarterly Journal of Economics* 124(3), 1095–1131.
- Hallahan, T. A., R. W. Faff, and M. D. McKenzie (2004). An empirical investigation of personal financial risk tolerance. *Financial Services Review* 13(1), 57–78.
- Ham, C., M. Lang, N. Seybert, and S. Wang (2017). CFO narcissism and financial reporting quality. *Journal of Accounting Research* 55(5), 1089–1135.
- Hambrick, D. C. (2007). Upper echelons theory: An update. *Academy of Management Review* 32(2), 334–343.
- Hambrick, D. C. and P. A. Mason (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review* 9(2), 193–206.
- Harvey, M. and F. Keer (1978). *Financial Accounting Theory* (1st ed.). London: Prentice Hall International, Inc.
- Hayn, C. (1995). The information content of losses. *Journal of Accounting and Economics* 20(2), 125–153.
- Hayward, M. L. A. and D. C. Hambrick (1997). Explaining the premiums paid for large acquisitions: Evidence of CEO hubris. *Administrative Science Quarterly* 42(1), 103–127.
- Hayward, M. L. A., D. A. Shepherd, and D. Griffin (2006). A hubris theory of entrepreneurship. *Management Science* 52(2), 160–172.
- Hazarika, S., J. M. Karpoff, and R. Nahata (2012). Internal corporate governance, CEO turnover, and earnings management. *Journal of Financial Economics* 104(1), 44–69.
- Healy, P. M. and K. G. Palepu (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics* 31(1-3), 405–440.
- Healy, P. M. and J. M. Wahlen (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons* 13(4), 365–383.
- Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women’s ascent up the organizational ladder. *Journal of Social Issues* 57(4), 657–674.
- Hess, K., A. Grimes, and M. Holmes (2009). Credit losses in Australasian banking. *The Economic Record* 85(270), 331–343.
- Hiebl, M. R. W. (2014, Jan). Upper echelons theory in management accounting and control research. *Journal of Management Control* 24(3), 223–240.
- Hietala, P., S. N. Kaplan, and D. T. Robinson (2003). What is the price of hubris? Using takeover battles to infer overpayments and synergies. *Financial Management* 32(3), 5–31.
- Hilary, G., S. Huang, and Y. Xu (2017). Marital status and earnings management. *European Accounting Review* 26(1), 153–158.
- Hiller, N. J. and D. C. Hambrick (2005). Conceptualizing executive hubris: The

- role of (hyper-)core self-evaluations in strategic decision-making. *Strategic Management Journal* 26(4), 297–319.
- Ho, S. S. M., A. Y. Li, K. Tam, and F. Zhang (2015). CEO gender, ethical leadership, and accounting conservatism. *Journal of Business Ethics* 127(2), 351–370.
- Holthausen, R. W. and R. L. Watts (2001). The relevance of the value relevance literature for financial accounting standard setting. *Journal of Accounting and Economics* 31(1), 3–75.
- Hope, O.-K. (2003). Disclosure practices, enforcement of accounting standards, and analysts' forecast accuracy: An international study. *Journal of Accounting Research* 41(2), 235–272.
- Hsieh, T.-S., J. C. Bedard, and K. M. Johnstone (2014). CEO overconfidence and earnings management during shifting regulatory regimes. *Journal of Business Finance & Accounting* 41(9/10), 1243–1268.
- Imhoff Jr., E. A. (2003). Accounting quality, auditing, and corporate governance. *Accounting Horizons* 17, 117–128.
- Jain, P. K. and Z. Rezaee (2006). The Sarbanes-Oxley Act of 2002 and capital-market behavior: Early evidence. *Contemporary Accounting Research* 23(3), 629–654.
- Jensen, M. C. and W. H. Meckling (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics* 3(4), 305–360.
- Jones, E. E. and D. McGillis (1976). Correspondent inferences and the attribution cube: A comparative reappraisal. *New directions in attribution research* 1, 389–420.
- Jones, J. J. (1991). Earnings management during import relief investigations. *Journal of Accounting Research* 29(2), 193–228.
- Kanagaretnam, K., G. J. Lobo, and D.-H. Yang (2004). Joint tests of signaling and income smoothing through bank loan loss provisions. *Contemporary Accounting Research* 21(4), 843–884.
- Kang, J. and C. Starica (2016). What kind of earnings shape more market expectations? *Working Paper*.
- Kaszniak, R. (1999). On the association between voluntary disclosure and earnings management. *Journal of Accounting Research* 37(1), 57–81.
- Kim, J., K. H. Lee, and E. Lie (2017). Dividend stickiness, debt covenants, and earnings management. *Contemporary Accounting Research* 34(4), 2022–2050.
- Kim, M.-S. and W. Kross (1998). The impact of the 1989 change in bank capital standards on loan loss provisions and loan write-offs. *Journal of Accounting and Economics* 25(1), 69–99.
- Kim, O. and R. E. Verrecchia (1994). Market liquidity and volume around earnings announcements. *Journal of Accounting and Economics* 17(1/2), 41–67.
- Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics* 33(3), 375–400.
- Koller, M. (1988). Risk as a determinant of trust. *Basic & Applied Social Psychology* 9(4), 265–276.
- Kothari, S. (2001). Capital markets research in accounting. *Journal of Accounting and Economics* 31(1), 105–231.

- Kothari, S. P., A. J. Leone, and C. E. Wasley (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics* 39(1), 163–197.
- Kothari, S. P., L. Xu, and J. E. Short (2009). The effect of disclosures by management, analysts, and business press on cost of capital, return volatility, and analyst forecasts: A study using content analysis. *The Accounting Review* 84(5), 1639–1670.
- Kravet, T. and T. Shevlin (2010). Accounting restatements and information risk. *Review of Accounting Studies* 15(2), 264–294.
- Laeven, L. and G. Majnoni (2003). Loan loss provisioning and economic slowdowns: Too much, too late? *Journal of Financial Intermediation* 12(2), 178–197.
- Lambert, R., C. Leuz, and R. E. Verrecchia (2007). Accounting information, disclosure, and the cost of capital. *Journal of Accounting Research* 45(2), 385–420.
- Lang, M., J. S. Raedy, and M. H. Yetman (2003). How representative are firms that are cross-listed in the United States? An analysis of accounting quality. *Journal of Accounting Research* 41(2), 363–386.
- Lang, M. H. and R. J. Lundholm (1996). Corporate disclosure policy and analyst behavior. *The Accounting Review* 71(4), 467–492.
- Leuz, C., D. Nanda, and P. Wysocki (2003). Earnings management and investor protection: An international comparison. *Journal of Financial Economics* 69(3), 505–527.
- Leuz, C. and R. E. Verrecchia (2000). The economic consequences of increased disclosure. *Journal of Accounting Research* 38(Supplement: Studies on accounting information and the economics of the firm), 91–124.
- Leuz, C. and R. E. Verrecchia (2005). Firms' capital allocation choices, information quality, and the cost of capital. *Working Paper*.
- Lev, B. and J. A. Ohlson (1982). Market-based empirical research in accounting: A review, interpretation, and extension. *Journal of Accounting Research* 20, 249–322.
- Lintner, J. (1969). The valuation of risk assets and the selection of risky investments in stock portfolios and capital budgets: A reply. *The Review of Economics and Statistics* 51(2), 13–37.
- Liu, C. and D. Yermack (2012). *Where Are the Shareholders' Mansions? CEOs' Home Purchases, Stock Sales, and Subsequent Company Performance*, Chapter 1, pp. 3–28. Berlin, Heidelberg: Springer Berlin Heidelberg.
- Liu, C.-C. and S. G. Ryan (1995). The effect of bank loan portfolio composition on the market reaction to and anticipation of loan loss provisions. *Journal of Accounting Research* 33(1), 77–94.
- Liu, C.-C. and S. G. Ryan (2006). Income smoothing over the business cycle: Changes in banks' coordinated management of provisions for loan losses and loan charge-offs from the pre-1990 bust to the 1990s boom. *The Accounting Review* 81(2), 421–441.
- Liu, C.-C., S. G. Ryan, and J. M. Wahlen (1997). Differential valuation implication of loan loss provisions across banks and fiscal quarters. *The Accounting Review* 72(1), 133–146.
- Liu, J., D. Nissim, and J. Thomas (2002). Equity valuation using multiples.

- Journal of Accounting Research* 40(1), 135–172.
- Lo, K. (2008). Earnings management and earnings quality. *Journal of Accounting and Economics* 45(2), 350–357.
- Lobo, G. J. and D.-H. Yang (2001). Bank managers' heterogeneous decisions on discretionary loan loss provisions. *Review of Quantitative Finance and Accounting* 16, 223–250.
- Malmendier, U. and G. Tate (2005). CEO overconfidence and corporate investment. *Journal of Finance* 60(6), 2661–2700.
- Malmendier, U. and G. Tate (2009). Superstar CEOs. *Quarterly Journal of Economics* 124(4), 1593–1638.
- Marton, J. and E. Runesson (2017). The predictive ability of loan loss provisions in banks – Effects of accounting standards, enforcement and incentives. *The British Accounting Review* 49(2), 162–180.
- McNichols, M. F. (2000). Research design issues in earnings management studies. *Journal of Accounting and Public Policy* 19(4), 313–345.
- Melumad, N. D. and D. Nissim (2008). Line-item analysis of earnings quality. *Foundations and Trends in Accounting* 3(2-3), 87–221.
- Merton, R. C. (1974). On the pricing of corporate debt: The risk structure of interest rates. *The Journal of Finance* 29(2), 449–470.
- Morsfield, S. G. and C. E. Tan (2006). Do venture capitalists influence the decision to manage earnings in initial public offerings? *The Accounting Review* 81(5), 1119–1150.
- Moyer, S. E. (1990). Capital adequacy ratio regulations and accounting choices in commercial banks. *Journal of Accounting and Economics* 13(2), 123–154.
- Ndubizu, G. A. (2007). Do cross-border listing firms manage earnings or seize a window of opportunity? *The Accounting Review* 82(4), 1009–1030.
- Nichols, C., J. Wahlen, and M. Wieland (2009). Publicly traded versus privately held: Implications for conditional conservatism in bank accounting. *Review of Accounting Studies* 14(1), 88–122.
- Nielsen, S. (2010). Top management team diversity: A review of theories and methodologies. *International Journal of Management Reviews* 12(3), 301–316.
- North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*. Political Economy of Institutions and Decisions. Cambridge University Press.
- Ohlson, J. A. (1995). Earnings, book values, and dividends in equity valuation. *Contemporary Accounting Research* 11(2), 661–687.
- Ohlson, J. A. and B. E. Juettner-Nauroth (2005). Expected EPS and EPS growth as determinants of value. *Review of Accounting Studies* 10(2), 349–365.
- Olsen, K. J., K. K. Dworkis, and S. M. Young (2014). CEO narcissism and accounting: A picture of profits. *Journal of Management Accounting Research* 26(2), 243–267.
- Olsen, R. A. (2012). Trust: The underappreciated investment risk attribute. *Journal of Behavioral Finance* 13(4), 308–313.
- Owen, D. and J. Davidson (2009). Hubris syndrome: An acquired personality disorder? A study of US presidents and UK prime ministers over the last 100 years. *Brain* 132(5), 1396–1406.

- Owen, L. D. (2006). Hubris and nemesis in heads of government. *Journal of the Royal Society of Medicine* 99(11), 548–551.
- Peasnell, K. V., P. Pope, and S. Young (2000). Accrual management to meet earnings targets: UK evidence pre- and post-Cadbury. *British Accounting Review* 32(4), 415–445.
- Penman, S. H. (2003). The quality of financial statements: Perspectives from the recent stock market bubble. *Accounting Horizons* 17, 77–96.
- Perez, D., V. Salas-Fumas, and J. Saurina (2008). Earnings and capital management in alternative loan loss provision regulatory regimes. *European Accounting Review* 17(3), 423–445.
- Pevzner, M., F. Xie, and X. Xin (2015). When firms talk, do investors listen? The role of trust in stock market reactions to corporate earnings announcements. *Journal of Financial Economics* 117(1), 190–223.
- Plöckinger, M., E. Aschauer, M. R. Hiebl, and R. Rohatschek (2016). The influence of individual executives on corporate financial reporting: A review and outlook from the perspective of upper echelons theory. *Journal of Accounting Literature* 37, 55–75.
- Plumb, C. and D. Wilchins (2008). Lehman CEO fult's hubris contributed to meltdown.
- Plummer, C. E. and S. Y. Tse (1999). The effect of limited liability on the informativeness of earnings: Evidence from the stock and bond markets. *Contemporary Accounting Research* 16(3), 541–574.
- Rivard, R. J., E. Bland, and G. B. Hatfield Morris (2003). Income smoothing behavior of U.S. banks under revised international capital requirements. *International Advances in Economic Research* 9(4), 288–294.
- Rogers, J. L. and P. C. Stocken (2005). Credibility of management forecasts. *The Accounting Review* 80(4), 1233–1260.
- Roll, R. (1986). The hubris hypothesis of corporate takeovers. *Journal of Business* 59(2), 197–216.
- Roszkowski, M. J., G. E. Snelbecker, and S. Leimberg (1993). Risk tolerance and risk aversion. *The Tools and Techniques of Financial Planning* 4, 213–225.
- Roussanov, N. and P. Savor (2014). Marriage and managers' attitudes to risk. *Management Science* 60(10), 2496–2508.
- Runesson, E. (2015). *Disclosures and Judgment in Financial Reporting: Essays on Accounting Quality under International Financial Accounting Standards. PhD thesis at the University of Gothenburg.* Göteborg: BAS Publishing.
- Ryan, B., R. W. Scapens, and M. Theobald (2002). *Research Method and Methodology in Finance and Accounting.* London: Thomson.
- Ryan, L. V. and A. K. Buchholtz (2001). Trust, risk, and shareholder decision making: An investor perspective on corporate governance. *Business Ethics Quarterly* 11(1), 177–193.
- Scharlemann, J. P., C. C. Eckel, A. Kacelnik, and R. K. Wilson (2001). The value of a smile: Game theory with a human face. *Journal of Economic Psychology* 22(5), 617–640.
- Schipper, K. and L. Vincent (2003). Earnings quality. *Accounting Horizons* 17(Supplement), 97–110.
- Scott, J. (2014). *A Dictionary of Sociology* (4 ed.). Oxford University Press.
- Sengupta, P. (1998). Corporate disclosure quality and the cost of debt. *The*

- Accounting Review* 73(4), 459–474.
- Sharpe, W. F. (1964). Capital asset prices: A theory of market equilibrium under conditions of risk. *The Journal of Finance* 19(3), 425–442.
- Shaub, M. K. (1996). Trust and suspicion: The effects of situational and dispositional factors on auditors' trust of clients. *Behavioral Research in Accounting* 8, 154–174.
- Shrieves, R. E. and D. Dahl (2003). Discretionary accounting and the behavior of Japanese banks under financial duress. *Journal of Banking & Finance* 27(7), 1219–1243.
- Smith, C. W. and J. B. Warner (1979). On financial contracting: An analysis of bond covenants. *Journal of Financial Economics* 7(2), 117–161.
- Soderstrom, N. S. and K. J. Sun (2007). IFRS adoption and accounting quality: A review. *European Accounting Review* 16(4), 675–702.
- Srinidhi, B., F. A. Gul, and J. Tsui (2011). Female directors and earnings quality. *Contemporary Accounting Research* 28(5), 1610–1644.
- Subramanyam, K. R. and J. J. Wild (2009). *Financial Statement Analysis* (10th ed.). McGraw-Hill.
- Teoh, S. H. and T. Wong (1993). Perceived auditor quality and the earnings response coefficient. *The Accounting Review* 68(2), 346–366.
- Tversky, A. and D. Kahneman (1975). Judgment under uncertainty: Heuristics and biases. In *Utility, probability, and human decision making*, pp. 141–162. Springer.
- Wahlen, J. M. (1994). The nature of information in commercial bank loan loss disclosures. *The Accounting Review* 69(3), 455–478.
- Warner, R. L. (1991). Does the sex of your children matter? Support for feminism among women and men in the united states and canada. *Journal of Marriage and Family* 53(4), 1051–1056.
- Watts, R. L. (2003). Conservatism in accounting part I: Explanations and implications. *Accounting Horizons* 17(3), 207–221.
- Watts, R. L. and J. L. Zimmerman (1986). *Positive Accounting Theory* (1st ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Weintraub, R. E. (2002). *Neoclassical Economics*. Indianapolis, IN: Liberty Fund, Inc.
- Williamson, O. E. (1993). Calculativeness, trust, and economic organization. *Journal of Law & Economics* 36, 453–486.
- Wrightsmann, L. S. and M. L. Wuescher (1974). *Assumptions about human nature: A social-psychological approach*. Brooks/Cole Publishing Company.
- Yee, K. K. (2006). Earnings quality and the equity risk premium: A benchmark model. *Contemporary Accounting Research* 23(3), 833–877.
- Young, D. and D. A. Guenther (2003). Financial reporting environments and international capital mobility. *Journal of Accounting Research* 41(3), 553–579.
- Zak, P. J. and S. Knack (2001). Trust and growth. *The Economic Journal* 111(470), 295–321.