



UNIVERSITY OF GOTHENBURG
SCHOOL OF BUSINESS, ECONOMICS AND LAW

DETERMINANTS OF ACCOUNTING CHOICE REGARDING LOCATION OF VOLATILITY: THE FVOCI OPTION

Early indications from the adoption of IFRS 9

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Supervisor:	Emmeli Runesson
Examiner:	Jan Marton
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Abstract

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Keywords:	IFRS 9, accounting choice, equity investments not held for trade, FVOCI option, irrevocable, recycling, changes in fair value, salient volatility, leverage, job security, materiality, cash compensation.

Purpose: With the introduction of IFRS 9, entities can elect to report changes in fair value of equity investments not held for trade in other comprehensive income or in profit and loss. The purpose of this paper is to present descriptive data on entities which made this choice. The purpose is also to find determinants of the choice made.

Theory: This study has a framework consisting of positive accounting theory. Since the choice does not affect total equity, contracting incentives cannot explain the choice. Instead, the hypothesis development is based on assumptions related to empirical evidence of salient volatility avoidance, how the market values different performance statements and CEO job security.

Method: Descriptive data is presented in tables and in text. Six hypotheses are tested using proxies in regression models.

Result: Of the 115 entities which disclosed the choice, 73 percent elected to make use of the FVOCI option. 110 entities did not disclose the choice as of the fourth quarterly report of 2017. Higher level of materiality of equity investments not held for trade increases the probability that entities disclose the choice. One out of the six hypotheses was not be rejected; a higher share of independent board members in relation to inside board members on the board of directors increase the probability that entities will make use of the FVOCI option. Leverage was significant in the opposite direction to what was hypothesized; higher leverage increased the probability that entities choose FVPL. We found that materiality, CEO board membership, CEO incentives and higher perceived risk of the entity could not predict which choice was made.

Foreword

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1. Introduction

A financial instrument is defined as “*a contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity*” (IAS 32). IFRS 9, a new standard for financial instruments, replaced the former standard IAS 39 on January 1st 2018. One type of financial instrument is called equity instruments. This is a type of investment which provides the owner with the right to residual interest in assets of an entity, but only if there is any residual after deducting all liabilities. Identically to IAS 39, IFRS 9 requires changes in fair value of equity investments held for trade to be presented in Profit & Loss (P/L).

Certain equity investments are made for purposes other than realizing changes in fair value or receiving dividends. According to IFRS 9 they need to be classified as “equity investments not held for trade”. This classification of equity investments existed in IAS 39 as well, and IAS 39 required fair value changes in these investments to be presented in Other Comprehensive Income (OCI). In IFRS 9 by contrast, fair value changes of equity investments not held for trade should be presented in P/L. However, an entity can make an irrevocable choice to present changes in fair value of these types of equity investments in OCI instead, with no possibility to recycle fair value changes, impairments or compensation for selling the investment back to P/L (IFRS 9). The accounting choice that now exists prompts post-implementation research to uncover the underlying determinants of the choice, which can give regulators valuable information on the practical implementation of one of their most recent standards.

This paper focuses on equity investments not held for trade for which this irrevocable FVOCI (Fair Value through Other Comprehensive Income) option is available. More specifically, we present descriptive data of entities which had the instruments in their balance sheets at the end of the fiscal year of 2016, whether they disclosed a choice or not before March 15th 2018 and whether materiality can predict the disclosure of a choice. We also try to identify determinants of the accounting choice by constructing six hypotheses.

This study consists of two parts. In the first part we examine whether the FVOCI option is disclosed by the entities as of the fourth quarter of 2017. We will also add to the robustness of the study by exploring if materiality is an underlying determinant for the entities to disclose the choice. According to paragraph 30 in IAS 8 “*accounting policies, changes in accounting estimates and errors*”, entities must disclose information relevant to assessing possible impacts of upcoming changes in accounting policies. However, this does not apply in cases where the changes are immaterial (IAS 8, §16). We therefore expect that compared to entities which have made the irrevocable choice, entities that do not disclose a choice hold lower amounts of equity instruments not held for trade in relation to their total assets. In the first part of this paper we also examine whether origin of law and size can predict whether the choice is disclosed within our time frame.

In the second part of this study, we test six different hypotheses in order to find evidence for determinants of the choice made by the entities. One consequence of the new accounting choice introduced results in entities being able to reduce salient volatility, i.e. utilizing the FVOCI option (PwC, 2017). We hypothesize that higher level of materiality of equity investments not held for trade can predict which choice entities make (H1) and that management with higher percentage of variable compensation to total compensation can predict which choice entities make (H4). We also hypothesize that entities in which the CEO has less job security in the form of board composition (H2) and CEO board membership (H3) are more likely to use the FVOCI option based on our assumption that this is the less salient option. These hypotheses connected to job security are based on empirical studies indicating that CEO incentives and job security increases the tendency of entities to report volatility in less salient locations (Bamber, Jiang, Petroni & Wang, 2010).

Empirical evidence indicates further that accounting standards which lead to increased volatility in earnings is disfavored by entities with high financial leverage since it may put the firm into technical default on its loan agreements (Dhaliwal, 1980). Building on this notion as well as empirical evidence on the inherent difference between OCI and net income (Khan & Bradbury, 2016; Dhaliwal, Subramanyam & Trezevant, 1999), we hypothesize that entities with higher debt/equity ratios are more likely to choose FVOCI (H5). Our sixth hypothesis is based on empirical evidence that investors desire smoothness and predictability of net income (Francis, LaFond, Olsson & Schipper, 2004). Clear patterns of increased income are found to be rewarded with higher multiples by the market (Barth, Elliott, & Finn, 1999). We therefore hypothesize that high perceived risk of an entity can predict the use of the FVOCI option (H6).

In part one, we identified 225 entities in the European Economic Area (the EEA) which had equity investments not held for trade in their balance sheet December 31st 2016. The data show that out of the total population of 225, 110 entities did not disclose information about the accounting choice before March 15th 2018. We found evidence to support the notion that materiality is a predictor for disclosing the irrevocable choice since the entities which did not disclose a choice had significantly lower amounts of equity investments not held for trade in relation to total assets in their balance sheet compared to the entities which did disclose a choice. This finding was expected since material changes must be disclosed according to IAS 8. Among the 115 entities that did disclose their choice, 84 have chosen to apply FVOCI and 31 entities have chosen to not apply this option. The results also indicate that larger entities and entities located in countries which have English origin of law are more likely to disclose a choice in the annual reports than smaller entities or entities located in countries with a different origin of law.

From the tests conducted relating to part two of this paper, materiality could not predict a certain choice to be made by an entity. We could however conclude that a higher share of independent board members increases the probability that FVOCI option will be elected. CEO board membership and CEO compensation structure, similarly to materiality, had no significant association with the FVOCI option. Neither could we confirm our hypotheses that leverage and

perceived risk can predict which choice will be made. We suspect the reason for this could be that changes in fair value of equity investments not held for trade has a relatively small effect for entities, to the degree that it does not affect decision-making. It is also worth noting that the sample size for entities disclosing the choice is limited to no more than 115 observations.

This study contributes to research on accounting choice and can help regulatory standard-setters see practical implications of the irrevocable FVOCI option in the implementation phase. The accounting choice investigated in this paper is timely not only because IFRS 9 has been implemented recently, but also because the choices have been made recently as well. The accounting choice is relevant because of The International Accounting Standards Board's (IASB's) choice to implement it and because previously no such choice existed in the IFRS framework. Moreover, the choice made comes with no possibility of recycling, making eventual disposal of the investments impossible to recycle through P/L when the investment has been designated to FVOCI. The choice therefore has other future consequences as well, making an early evidence study such as this paper relevant for future researchers. The European Financial Reporting Advisory Group (the EFRAG) in 2017 urged researchers to provide empirical data on the possible effects of IFRS 9, including descriptive data about entities' holdings in equity investments not held for trade as well as frequencies data regarding entity application of the FVOCI option. We expect to, in part, provide EFRAG with the requested data. We furthermore provide the IASB with a basis for assessing the practical implications of having the FVOCI option introduced and we also give insights into potential determinants which theoretically could influence the choice. Our empirical data may also benefit researchers that intend to investigate economic effects of the FVOCI option or other topics related to accounting choice.

The sample has been constructed using Compustat in the WRDS database. By filtering for listed entities located in the EEA and removing entities which did not have investment securities on their balance sheet in their annual report for 2016, we could proceed to manually restrict the number of entities to those which only have equity investments not held for trade in their balance sheet. The resulting sample size is 225 entities in the EEA. The data for the first part of this paper which is the disclosure of the choice is collected through annual and quarterly reports. Due to time restrictions in the data collection process, March 15th 2017 is the cut-off date for finding disclosed choices. Data for the second part, containing determinants of the choice made by the entities, was gathered from annual reports for the fiscal year of 2016. There are some limitations to this study. The information regarding the irrevocable FVOCI option was in some entities open for interpretation. Out of the initial sample, 110 entities did not disclose any choice. The reason for this could be that the preparers do not consider the choice to be material or that they sold or reclassified the equity investments they had in their balance sheet in 2016. Language barriers and other factors caused 55 observations to be removed from the sample. We still estimate that in the final sample, we have a substantial part of the target population, which are entities with equity investments not held for trade in the balance sheet at the end of the fiscal year of 2016.

This paper is structured in the following way. Section two includes hypothesis development as well as stating the six hypotheses of this paper. In section three we lay out the research design in the form of sample selection, data collection, methods used, descriptions of the variables, the logit model and proxies for the dependent variables. In section four, the results of the analysis are presented and in section five we conclude this paper with a discussion.

2. Hypothesis development

2.1 Regulatory background

The IASB defines equity instruments as “*any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities*” (IAS 32). When entities followed IAS 39, equity instruments could be classified as either held for trade or available for sale depending on the intention behind the investment (IAS 39). If the intent was to either sell the instrument near term or if recent patterns of holding such instruments was short-term profit taking, the classification of the instrument needed to be held for trade (IAS 39). In these cases changes in fair value were reported through profit and loss. If the instrument was not held for trading, it was classified as available for sale and changes in fair value were presented in OCI (IAS 39). The measurement prescribed in both cases was fair value (IAS 39).

The IASB inherited the previous standard IAS 39 for financial instruments from the International Accounting Standard Committee (IASC) (IASB, 2009). Users and other constituents have claimed that because of its complexity, IAS 39 was difficult to apply and interpret. The difficulty was in part a product of the fact that financial instruments are inherently complex and consists of multiple versions of debt and equity instruments. A mix of alternative ways to measure and classify financial instruments adds additional layers of complexity (IASB, 2008). During the financial crisis of 2008, the IASB clarified the need to undertake a fundamental new approach for the regulation of financial instruments in order to regain investor confidence in financial markets. The G20 together with the Financial Crisis Advisory Group (FCAG) highlighted areas that are in need of consideration, which were the complexity of multiple impairment models, expected credit losses and own credit (FCAG, 2009).

This paper focuses on the area of classification and measurement in the new standard for financial instruments in the IFRS framework; IFRS 9. The previous standard for financial instruments, IAS 39, was criticized by constituents for being too complicated (IASB, 2014). Unlike the more rule based IAS 39, IFRS 9 is based on principles for measuring and classifying financial instruments. The multiple impairment models have converged into one model and reclassification is wholly based on the business model of the entity which makes the standard more consistent with the way entities conduct their business and manage risk (IASB, 2014). Unlike IAS 39, the concept of the standard is that financial assets are measured and classified at fair value and changes in fair value are recognized in profit and loss (FVPL). One of the reasons for the IASB’s new focus on measuring financial instruments at fair value is to improve and simplify financial reporting regarding financial instruments (IASB, 2014).

The process of developing IFRS 9 started with a discussion paper issued by The IASB in 2008 and an exposure draft in 2009 (IASB, 2014). EFRAG, EBA, EIOPA and ESMA participated in the IASB’s process of developing the standard (Bischof & Daske, 2016). Replacing IAS 39 with IFRS 9 took place in phases which was divided into impairment, general hedge accounting

as well as classification and measurement. The other parts of IAS 39 are adapted into IFRS 9 with minor modifications. The standard was finally issued in 2014 and has been mandatory since January 1, 2018 except for entities using the overlay approach (IASB, 2014). The market reaction to the majority of the standard announcements has been net positive (Onali & Ginesti, 2014).

All changes in fair value of equity investments should according to IFRS 9 be presented in P/L. There is one explicit exception to this rule. Changes in fair value of equity investments not held for trade was under IAS 39 required to be presented in OCI. An irrevocable option to present changes in fair value of these types of equity investments was proposed by the IASB during the creation of IFRS 9 (IASB, 2009). The option was proposed to be implemented in order to assist users of financial statements in assessing implications of the investments and to help users identify the investments separately if entities opted to utilize the option (IASB, 2009). This irrevocable FVOCI option is practically a binary accounting choice between having volatility in OCI or P/L for each equity instrument (PwC, 2017). The FVOCI option comes with no possibility of recycling, making eventual disposal of the investments impossible to recycle through P/L when the investment has been designated to FVOCI (IFRS 9). The fact that the choice is irrevocable and that no recycling back to P/L is possible was argued for by the IASB due to the fear of entities engaging in cherry-picking of fair value changes (IASB, 2014). EFRAG (2009) argue that the different roles of the two performance statements will be of significant importance for the outcome of the choice. This will not be the first study on managerial decision-making capable of affecting the output of the accounting system and the possible motives (see; Fields, Lys & Vincent, 2001).

2.2 Accounting choice

The positive literature on accounting has helped produce the contemporary foundation for research within accounting choice (see: Bowen, Noreen & Lacey, 1981; Zmijewski & Hagerman, 1981; Ball & Foster, 1982; Healy, 1985; Duke & Hunt, 1990; Press & Weintrop, 1990; Watts & Zimmerman, 1990). The underlying factors for firms' accounting choices have been investigated by Watts and Zimmerman (1978, 1979, 1990) and are considered by academics to have contributed to a broader understanding of what influences accounting choices. Other important contributions come from Holthausen (1990) and Fields et al. (2001). Agency costs, information asymmetry and managerial opportunism in particular is suggested as underlying determinants of accounting choices (Holthausen, 1990). Fields et al. (2001) analyze accounting choice literature using the following definition of the term; "*An accounting choice is any decision whose primary purpose is to influence (either in form or substance) the output of the accounting system in a particular way, including not only financial statements published in accordance with GAAP, but also tax returns and regulatory filings*". By applying this definition, the decision-maker is the manager of an entity and the intent of an accounting choice is central (Fields et al., 2001).

There is a comprehensive set of previous studies that have concluded specific determinants of accounting choices that affect reported accounting numbers. Contracting incentives have been used for explaining accounting choices and accounting choices influence on income (see; Healy, 1985; Watts & Zimmerman, 1990; Holthausen, Larcker & Sloan, 1995). However, contracting incentives cannot explain accounting choices which are merely based on location of accounting numbers in different performance statements (Bamber et al., 2010). The choice that is being investigated in this case has no influence on total equity. Instead, the location of the accounting numbers is the difference. Similar to Bamber et al. (2010) research on reporting location, we cannot use traditional contracting determinants to explain the irrevocable FVOCI option in IFRS 9. Instead, the framework of this paper focuses substantially on salient reporting, incentives and the potential consequences of volatility.

2.3 Volatility

The location and format of reported changes in values should not matter in a perfectly efficient market as all public information should be incorporated into the stock price (Fama, 1970). However, research in behavioral economics and survey-based studies indicates that the location of accounting numbers influence users' perception of the entity. Hirschleifer and Teoh (2003) explain that this is a consequence of investors' limited attention-span. Their empirical research suggests that managers believe that the location of volatility matters if one location leads to volatility being more prominently disclosed than the other. Other studies have also shown that prominent information about volatility increases users perception of inherent risk which ultimately leads to decreased multiples and overall negative performance assessments (Barth et al., 1999; Francis et al., 2004; Graham, Harvey & Rajgopal, 2005). Empirical evidence suggests entities with high leverage tend to prefer accounting standards which reduces volatility since this decreases the risk of debt covenant violations (Dhaliwal, 1980). However, a potential issue for entities with high leverage is that CEOs' risk preference can significantly affect policies related to risk-taking (Chava & Purnanandam, 2010). Another potential issue, which has been shown to happen in highly leveraged banks, is that low interest rate environments can increase risk taking of the entity (Dell'Ariccia, Laeven & Marquez, 2014).

Volatility can be either derived from different sources. The use of a single measurement such as fair value can help reduce artificial volatility or increase artificial stability in the income statement caused by having different measurements (IASB, 2008). One intention behind the introduction of IAS 39 was to reduce volatility in the income statement (Couch, Thibodeau & Wu, 2017). An identical intent, as well as convergence between IFRS and US GAAP, was behind the introduction of SFAS 159 in 2008 (Couch et al., 2017). While IAS 39 successfully reduced earnings volatility, evidence from Couch et al. (2017) suggests that adoption of SFAS 159 did not. The reason for this is suggested to be increased latitude for preparers. The authors find that adopters of SFAS 159 have increased earnings volatility (i.e. artificial volatility) if they elect to report fair value assets but not fair value liabilities. The volatility discussion in the basis for conclusions of IFRS 9 similarly indicates that increased volatility is not a desired outcome, whether artificial or not (IASB 2014).

Comprehensive income is more volatile than net income since it contains transitory items and unrealized gains and losses which is the product of volatile market forces (Barth et al., 1999). An important outcome of using fair values instead of historical costs, as is the case in both IFRS 9 and IAS 39, is that prices set in the underlying market used to measure fair value is volatile. This volatility is then reflected in the financial statement (Deegan & Unerman, 2011). Managers generally dislike volatility in net income, so they tend to have as few financial assets as they can in the trading category (Nobes & Parker, 2010). Traditionally, available for sale has been the preferred designation (Nobes & Parker, 2010). The IASB recognizes that volatility in earnings caused by market forces when using fair values can be difficult to manage and that preparers of financial statements generally consider volatility in earnings to be a negative factor (IASB, 2008). Previous research has also shown that managers are more likely to choose income smoothing alternatives such as cost measurements instead of FVPL in order to reduce volatility caused by market forces (Barth et al., 1999; Heflin, Kwon & Wild, 2002; Graham et al., 2005).

Salient reporting of volatility makes users attend more to it and conclude a higher overall volatility of the entity's performance (Hirschleifer and Teoh, 2003). Salient volatility translates into decreasing stock prices and P/E multiples since stakeholders perceive volatile performance as an indication of higher inherent firm risk and uncertainty about expected returns and ultimately they will seek compensation for it (Barth et al., 1999; Francis et al., 2004; Graham et al., 2005). According to Graham et al. (2005) this notion have made management come to the conviction that the presentation of volatility will directly influence the investors' perception of the entity's risk which can negatively impact management if its placed in a prominent location. Khan and Bradbury (2016) analyze the relatively larger volatility of OCI in relation to net income. For the majority of firms, OCI displays higher volatility relative to net income even after excluding asset revaluations, which is usually the most volatile item in OCI. The incrementally higher volatility is not found to be associated with higher market risk when excluding asset revaluations. Only incremental asset revaluation volatility is found to be priced by the market (Khan & Bradbury, 2016).

2.4 OCI and P/L

The FVOCI option was proposed in part because it was considered easier for users to identify these types of investments and to consider their effect on performance (IASB, 2009). The European Financial Reporting Advisory Group (EFRAG) welcomes the introduction of the FVOCI option in IFRS 9 but also underlines that the role of OCI in relation to P/L will become an important factor for entities making this choice (EFRAG, 2009). Investors have historically advocated comprehensive income definitions which include all value-relevant items and distinctions between transitory and non-transitory effects (Biddle, 2006). Managers instead have argued in favor of income measures which are less inclusive of events and effects over which they have no control (Holthausen & Watts, 2001; Lambert, 2001).

The accounting choice that is being investigated in this paper will influence in which statement the changes in fair value will be reported, which will be either net income or total comprehensive income. Net income can be defined in different ways and each definition can provide decision usefulness in different applications (Biddle, 2006). Net income is the most important source of firm-specific information and is considered to be the most relied on performance measure by investors (Francis et al., 2003; Biddle, Seow & Seigel, 1995). This notion is also found to be understood by managers (Graham et al., 2005). A pattern of increased net income is associated with increased valuation multiples such as the P/E ratio (Barth et al., 1999). Accounting-based attributes such as smoothness and predictability of net income are considered to be desirable by investors (Francis et al., 2004). Biddle (2006) investigated 16 different definitions of income in three different applications; information content, predictive ability and compensation contracting. The author suggest net income is more decision relevant than comprehensive income for compensation contracting, which is also what surveys of managers views on the matter indicate.

By contrast, comprehensive income is according to Dhaliwal et al. (1999) found to be less associated with market value of equity and to be a worse predictor of future operating cash flows and operating income than net income. Another study by O'Hanlon and Pope (1999) similarly conclude that ordinary profit is value-relevant and that there are few indications that other measurements are value-relevant at all. This does not necessarily mean that comprehensive income is inferior in different contexts. Comprehensive income has more information content than net income but is rarely the base for bonus plans (Biddle, 2006). A prevailing debate that has been going in the US is where to disclose comprehensive income, either in single continuous statement of income, separate statement of comprehensive income or a statement of changes in stockholders equity. Statement of changes in stockholders equity is considered a non-performance-based option and has been the prevailing option (Shi, Wang and Zhou, 2011). FASB has continuously pushed for reporting comprehensive income in a income-statement-like format instead of statement of changes in stockholders equity since it supposedly provides transparency and clarity for users (FASB, 1996).

Empirical research by Maines and McDaniel (2000) suggests non-professional investors judgment of management performance do not reflect volatility of CI if it is presented in a statement of stockholders equity. Their explanation for this phenomenon is based on a framework of cognitive psychological research. Included in the area of cognitive psychology is the effect of information weighting of decision-makers depending on the format in which information is presented. A more disaggregated format of information increases decision-makers cognitive costs, which can be described as the process of filtering out irrelevant information. The same cognitive costs can occur for an investor when analyzing a financial report since some information is related to the core business and some is not (Maines & McDaniel, 2000). Assuming an item is used for performance evaluation, the cognitive costs of both professional and non-professional investors should increase if a company chooses to put

the item in CI rather than P/L since an investor would then need to filter out the other items not needed for performance evaluation in CI.

Dhaliwal et al. (1999) found that the only item of SFAS 130 which had an impact on valuation was marketable securities adjustments. The association was limited to financial firms where presumably the core business is managing assets, which is closely related to the marketable securities adjustments. Mitra and Hossain (2009) observed a negative association between pension transition adjustments and market valuation. However, the association only existed in large corporations and when the transition amount was substantial. The association was only observable after the introduction of SFAS 158, which made it mandatory for entities to show adjustments in the financial statements instead of footnotes. This finding is consistent with the theory that cognitive costs can influence investors' information-weighting (Russo, 1977; Maines & McDaniel, 2000). Cognitive costs increase in any situation where the user has to sort through more information than previously in order to extract the desired information (Mitra & Hossain, 2009). For example, the cognitive costs are higher when two performance statements such as P/L and OCI needs to be scrutinized, rather than one.

2.5 Board and management

Fama (1980) and Fama and Jensen (1983) predicted that the composition of the board of directors regarding independence of the members has an effect on the task of monitoring management. Beasley (1996) later build on this theory by finding an association between a lower number of independent board members and increased financial statement fraud. Bamber et al. (2010) studied preferred location of volatility in financial statements. In order to measure this, the authors used two determinants related to the board of directors; whether the CEO is a member of the board and the percentage of independent board members. The primary reason for having these determinants is to measure the job security of the CEO. The empirical evidence suggests that lower CEO job security is associated with avoiding performance reporting and choosing less salient reporting options for volatility (Bamber et al., 2010).

The incentive of managers seems to be one of the key to understanding accounting choice although the ultimate goal of an accounting choice may be found beneath multiple layers of goals (Fields et al., 2001). Incentive plans are supposed to align the interest of principals and agents, but they can have the opposite effect (Fields et al., 2001). A CEO can opportunistically decrease earnings when there is a change in management to show growth the following period (Pourciau, 1993; Francis et al, 1996). They can also choose to decrease R&D development in order to increase variable pay (Dechow & Sloan, 1991). Bamber et al. (2010) find empirical evidence supporting the hypotheses that those managers who have powerful equity incentives and less job security are more sensitive to poor performance evaluation. These managers are less likely to report comprehensive income (e.g. volatility) in a performance-based statement since it is more prominent. This finding suggests that managers believe reporting location matters (Bamber et al., 2010). Khosravi Samani, (2015) found that performance based compensation was used among family controlled firms with divergence between voting rights

and cash-flow rights in order to mitigate agency costs with the CEO. In contrast to Bamber et al. (2010), Khosravi Samani, (2015) measured CEO incentives in part by measuring the percentage of variable compensation to total compensation rather than equity incentives.

2.6 Hypotheses

For all six hypotheses, we argue entities should be more willing to add volatility in OCI rather than in P/L. If the FVOCI option is chosen, the volatility will most likely not be priced by the market (Khan and Bradbury, 2016). We also argue that the FVOCI option will be used as this option will maximize cognitive costs for users (Mitra & Hossain, 2009; Maines & McDaniel, 2000). Presumably, making use of the FVOCI option can also minimize the risk of decreasing multiples in the future (Barth et al., 1999; Francis et al., 2004; Graham et al., 2005). The hypotheses are also based on managers preference for having equity investments classified as available for sale when applying IAS 39 (Nobes & Parker, 2010) and that they are inclined to show items which they have no control over in less inclusive performance statements (Holthausen & Watts, 2001; Lambert, 2001).

First, we hypothesize that a higher level of materiality is associated with using the FVOCI option as this is the less salient option for disclosing the volatility (Hirschleifer and Teoh, 2003; Bamber et al., 2010). Higher materiality ought to increase the probability that managers will choose FVOCI since volatility will be higher as well.

H1: Higher materiality level of equity investments not held for trade entails higher probability that entities make use of the FVOCI option.

We expect that CEOs with higher variable cash compensation and less job security will use the FVOCI option as this is the less salient performance statement (Bamber et al., 2010, Khosravi Samani, 2015). Job security can be measured through looking at the share of inside directors on the board of directors as well as through CEO board membership (Bamber et al., 2010). Higher volatility in OCI compared to net income is not priced by the market except for asset revaluations (Khan and Bradbury, 2016), making FVOCI the preferred choice for CEO's with low job security. When users need to sort through more information in order to extract desired information, it increases their cognitive costs (Mitra & Hossain, 2009; Maines & McDaniel, 2000). We therefore argue that CEO's with low job security and high variable cash compensation compared to total cash compensation are more likely to use the FVOCI option as this likely will increase users cognitive costs. Comprehensive income is rarely the base for bonus plans (Biddle et al., 2006), which also indicates FVOCI will also be preferred for CEO's with variable cash compensation.

H2: Higher share of independent board members entails higher probability that entities make use of the FVOCI option.

H3: If the CEO is not a member of the board of directors, it entails higher probability that entities make use of the FVOCI option.

H4: Higher CEO variable cash compensation in relation to total cash compensation entails higher probability that entities make use of the FVOCI option.

Volatility of reported earnings may put firms into technical default because of debt covenant violations. This is why firms with higher financial leverage are expected to be opposed to accounting standards that increase volatility (Dhaliwal, 1980). The higher the financial leverage is, the more a company is against standards that increase volatility (Dhaliwal, 1980). We seek to contribute to this notion by also arguing that the specific location of volatility is also a factor. Empirical evidence from Graham et al. (2005) also indicates that high leverage is associated with managers being concerned about having too volatile earnings. This also indicates that the FVOCI option will be used to a higher degree in highly leveraged firms.

H5: Higher financial leverage among entities entails higher probability that entities make use of the FVOCI option.

When volatility is salient, it causes the entity to be perceived as more volatile, which in turn negatively affects P/E multiples (Barth et al., 1999; Francis et al., 2004; Graham et al., 2005). Less volatility in P/L for entities perceived to be risky by investors is therefore more desirable than for entities perceived to be less risky. Furthermore, managers are aware that net income is more important to investors when valuing companies (Graham et al., 2005). We therefore hypothesize that a higher perceived risk of an entity predicts the use of the FVOCI option.

H6: Higher perceived risk of an entity entails higher probability that entities make use of the FVOCI option.

3. Research design

3.1 Sample selection

The target population for this study is listed entities within the EEA with equity instruments not held for trade in their balance sheet at the end of the fiscal year of 2016. Table 3.1 describes the sample selection used. The database Compustat provided us with an initial sample consisting of listed IFRS entities active in the EEA and whose balance sheets contain investment securities (other). We could not extract entities from Compustat solely based on whether they had equity investments not held for trade in their balance sheet. The closest variable was investment securities (other) which contain the total sum of equity securities not held for trade, fixed income securities and sundry securities.

After manually gathering information about entity holdings, we dropped 55 observations because of language barriers that made it difficult to interpret their choice. Another 29 entities were dropped since we could not locate their financial reports and 8 entities did not apply IFRS. Lastly, 3 entities were subsequently dropped due to the overlay approach which is an option for issuers of insurance contracts which means that they may delay the implementation of IFRS 9 to a later date. The remaining observations in our final sample consist of 225 entities. The final sample consists to a substantial extent of entities within the banking industry; we therefore conclude no need for specifying entities by industry sector. 12 entities of the final sample are not listed at a stock exchange but they nevertheless apply IFRS. We do not expect this circumstance to limit the study in any way since they apply IFRS and have disclosed the choice which qualifies them to be included in the study.

Table 3.1: Sample selection

Entities with investments securities (other)	320
Language barrier	-55
Unable to locate financial report	-29
Do not apply IFRS	-8
Overlay approach	-3
Final sample	225
Choice disclosed	115
Choice not disclosed	110

49 percent (110) of the final sample did not disclose the choice at all, which means that one should use caution in interpreting our results since this could change in 2019 when the annual report of 2018 is published. However, if the reasons for not disclosing their choice are because the holdings in equity investments not held for trade are nonetheless immaterial, then our results gain robustness.

Unfortunately, when collecting the data, we discovered that 30 observations of the 115 observations did not provide information about the CEOs' compensation structure which will be used for our fourth hypothesis. This may entail issues with the study's validity; however, it will not have a material effect on the results since we already have a substantial sample of the target population to base our conclusions on. The cut-off date for finding disclosed choices in this study was the 15th of March 2018. Another potential problem with the validity of this study is that the choice also comes with no possibility to recycle once FVOCI is chosen. Since the recycling choice and the presentation of fair value changes choice cannot be separated, this potential validity concern cannot be addressed in this study.

3.2 Data collection

Information about the entities' total assets, long-term debt, current debt and total common equity were retrieved using Compustat. The values for the other variables were manually collected from the entities' financial reports which were retrieved from their websites. The data for the independent variables were gathered from the 2016 annual reports since the annual report data available from Compustat was limited to the financial year of 2016 at the time. The independent variables and the disclosure of the choice were retrieved from annual and quarterly reports in 2017, with the fourth quarter in 2017 as the cut-off date. Preferably the data input for the independent variables should be derived from the same financial period as the choice is disclosed. However, because quarterly reports tend not to reveal detailed information and that there is a substantial variety of released and yet to be released annual reports for the fiscal year of 2017, this was not possible. We recognize that the validity of the test could be negatively affected by the fact that the materiality is measured using the annual reports of 2016, while the latest report for disclosing a choice is in the fourth quarterly report in 2017. We still argue that the validity is high since equity investments not held for trade is, per definition, not an item that is frequently sold off.

Information about the FVOCI option was consistently located in the disclosures about future changes in accounting policies which made the data for this variable systematic and easily obtained. Most companies chose to have all or most equity investments in either P/L or OCI. In cases where there was more than one choice disclosed, the statement with the highest designated equity investment value was registered as the choice. A potential problem with the data collection is that entities with high financial leverage are more likely to have higher disclosure quality, entailing better timeliness, detail and clarity of disclosures (Sengupta, 1998). This could theoretically lead to a biased sample in this study, overrepresented by entities with high leverage. However, the amount of entities dropped due to low quality of disclosures is estimated to be low. When equity instruments not held for trade was observed in the balance sheet in 2016 without any apparent choice disclosed in the fourth quarter of 2017 or in the annual report of 2016, all quarterly reports during 2017 as available up until March 15th were examined in order not to miss any disclosed choice.

While gathering information about the choices in the annual reports, we quickly noticed that the disclosures sometimes varied in quality and in volume for which assumptions had to be made in order to gather the data. The assumption is that if entities had disclosed that the classification and measurement changes of IFRS 9 resulted in no changes for the entity, we assumed that they had applied the same option as under IAS 39, in which only FVOCI was available. This assumption was only made for entities which had equity investments available for sale in their balance sheet in 2016. Another assumption made is that if entities in the fourth quarterly report of 2017 had disclosed that there was a new irrevocable FVOCI option available for equity investments not held for trade in conjunction with the fact that the entity also did not disclose a choice, we assumed the entity elected not to make use of the FVOCI option. This assumption was made because FVPL is the standard designated choice if the FVOCI option, which is an exception available to entities if they so choose to make use of it, is not elected. These assumptions naturally imply a limitation; it is however a limitation that is necessary to make the research topic possible to study.

3.2.1 Empirical proxies for CEO's job security

We hypothesize that among entities where the CEOs' jobs are less secure, the probability that FVOCI option will be applied is higher. It can be somewhat problematic to measure job security and its effects since it up until recently have been relatively unexplored within the paradigm of accounting and management research (Graham et al., 2005). Nonetheless, concerns over job security seem to highly influence managers' behavior, which Defond and Park (1997) presented evidence on. They conclude that in situations when managers conducted earnings management, their agenda was partly to secure their employment. In a survey of managers conducted by Graham et al., (2005), a strong majority of the respondents strongly agreed that the motivation for hitting earnings benchmarks and avoiding bad external reputation was driven by career concerns rather than compensation incentives. If managers are indeed concerned about their careers in cases where users perceive the performance of the firm as risky because of prominent location of volatility, we can expect that managers with lower job security tend to make use of the OCI option as this is the less salient option. On the contrary, strong job security is characterized by low turnover of managers regardless of the market's perception of firm performance (Graham et al., 2005).

Bamber et al. (2010) identify two sets of measurements for job security based on the CEO's relation with the board of directors; (1) whether or not the CEO chairs the board and (2) the percentage of independent board members. When reflecting upon the role of the board in internal corporate governance, which is to monitor managers' performance and unseat managers that perform adequately, it seems logical that the CEO's relation with the board is a decisive factor in explaining differences in retention (Bamber et al., 2010). Jensen (1993) recognizes these phenomena and argues that a close relationship between the CEO and the board constitutes a malfunction in the internal control mechanism. In contrast to this, Brickley, Coles, Jeffrey, Jarell and Gregg (1997) points to positive aspects such as decreased information sharing costs between CEO and the board. Nonetheless, CEOs on the board of directors seem

to influence the dismissal of CEO as Goyal and Park (2002) find that sensitivity of CEO turnover to firm performance is significantly lower in such governance structures. With reference to independent board members, studies have shown that higher levels of CEO turnover are associated with board of directors consisting of a majority of independent members (Huson, Parrino & Starks, 2001). Weisbach (1988) came to a similar conclusion that in such governance structures, the sensitivity of CEO turnover to poor performance is relatively lower. The constructed proxies for job security, as well as the proxies used by Bamber et al. (2010), can be expressed as two different variables:

$$\begin{aligned}
 \text{JOB SECURITY} &= \text{CEO_ON_BOARD} \\
 &\text{and} \\
 \text{JOB SECURITY} &= \text{OUTSIDE_DIRECOTRS}
 \end{aligned}$$

Where:

CEO_ON_BOARD = 1 if CEO sits on the board of directors; 0 otherwise
OUTSIDE_DIRECTORS = 1 if the percentage of outside directors on the firm's board is smaller than the sample median; 0 otherwise

A limitation brought up by Bamber et al. (2010) was a potential confounding effect as job security may also reflect weaker corporate governance. The authors, however, maintain that job security nonetheless is an appropriate proxy since weaker governance is associated with less transparent reporting and the board of directors is unlikely to interfere with detailed reporting choices. It is important to note that in case such a confounding relationship exists, it would not conflict with our study. The reason for this is that if job security indicates weak corporate governance and weak governance tend to report less transparently, it would be associated with FVOCI preference of volatility and not with P/L as hypothesized in this study.

3.2.2 Empirical proxies for CEO incentives

There has been empirical evidence suggesting that CEOs with powerful equity-based incentives are more likely to avoid performance reporting of OCI items (Bamber et al., 2010). Our hypothesis is based on this notion, however the proxy used to measure CEOs equity incentives is based on calculations used by Bergstresser and Philippon (2006) as well as by Core and Guay (2002), for which the measurements require information about entities valuations of CEOs stock options. Unfortunately this information is not available consistently in the annual reports and the databases that may provide such information was unavailable for us to access.

Besides equity incentives, CEO incentives can also be analyzed by measuring CEO cash compensation as previously done by Khosravi Samani (2015). Most commonly the cash compensation is composed of annual salaries, which is the fixed component and the received bonuses that year which is the variable component. Khosravi Samani (2015) analyze the structure of cash compensation for CEOs by calculating the ratio of bonus to total cash compensation. The study showed significant relation between stock return as a measure of firm

performance and CEO cash pay. This strengthens the notion that CEO cash pay is determined by a competitive market for CEOs and that profitability of firms directly influences the cash pay of CEOs (Khosravi Samani, 2015). We therefore want to establish whether cash compensations, similarly to equity incentives, makes entities avoid salient reporting of volatility. We expect that CEOs who receive large cash bonuses (variable pay) in relation to total cash compensation are more likely to report changes in equity investments not held for trade in OCI since this decreases the perceived risk of investors and ultimately higher firm performance. The variable is measured and calculated as follows:

$$CEO_COMP = \frac{Cash\ bonus\ pay}{(Cash\ bonus\ pay + Cash\ annual\ salary)}$$

Where:

Cash bonus pay = The variable component in the compensation to CEO

Cash annual salary = The fixed component in the compensation to CEO

3.2.3 Empirical proxies for debt covenant violation

We argue that debt/equity is an adequate proxy for measuring tightness to debt covenant violations and refer to empirical evidence provided by Dhaliwal (1980), who also argued that there is a connection between volatility and financial leverage. As mentioned in the hypothesis development of this paper, entities with high financial leverage disfavour accounting standards which increase volatility of earnings since it risks loan agreements to be violated and can lead to additional costs (Dhaliwal, 1980). We expect that among these types of entities, FVOCI option will be used since volatility in OCI relative to net income is not priced by the market and equity is more strongly associated with net income than OCI (Khan and Bradbury, 2016; Dhaliwal et al., 1999). There is extensive literature confirming that a higher debt/equity ratio is related to tighter constraints in debt covenants which can lead to incurring costs of technical default (Kalay, 1982; Watts & Zimmerman, 1990; Duke & Hunt, 1990). These studies have used the debt/equity hypothesis, which assumes that financial leverage influences accounting choices that increases income. Although the accounting choice in this study affects location of numbers and not total equity per se, we expect that the debt/equity hypothesis can predict the use of the less salient reporting option which is FVOCI. Our proxy used for closeness of debt covenant violation is as follows:

$$\frac{D}{E} = \frac{Current\ and\ Longterm\ debt}{Total\ Common\ Equity}$$

3.2.4 Empirical proxies for materiality

We predict in our study that entities which have material holdings in equity investments not held for trade are more likely to make use of the FVOCI option than other entities since this is the less salient option to disclose volatility. As the holdings increase, so does the effect of

volatility. To assess materiality of information, the nature or magnitude of an item should be put into the context of the entity (IASB's Conceptual Framework). A common measurement of assessing materiality is to use a relatively stable measurement such as total assets or normal income (Gleason & Mills, 2002). The level of materiality in this study will thus be measured using equity investments not held for trade divided by total assets as described below:

$$MATERIALITY = \frac{\text{Equity investments not held for trade}}{\text{Total assets}}$$

Where:

MATERIALITY = as the ratio increases the more material is the entities holdings

3.2.5 Empirical proxy for perceived risk

One way to create a proxy for perceived risk is to calculate stock price volatility. Volatility can be measured using variance of the stock return. In this paper, we use daily closing prices in order to measure returns and subsequently variance of returns. We calculated the returns and variance of the stocks of those entities which disclosed the choice from 2015 to 2017. Since some entities were not traded for the entire period, we multiplied the variance with the square root of the number of rows in order to have control for this. We predict that higher historic perceived risk increases the probability that entities are less inclined to add further volatility to P/L and instead will make use of the FVOCI option.

$$\text{Perceived risk} = \text{Price Volatility} = \frac{\sum \left(\left(\frac{P_t}{P_{t-1}} \right)_j - \mu_j \right)^2}{N}$$

Where:

P = Closing stock price

t = Time

μ = Mean value of stock closing price

N = Number of terms in the distribution

3.3 Statistical analysis

The statistical analysis model that will be used in this study is specified and presented below. The regression model is presented together with a description of the variables used in this study.

3.3.1 Regression model

We use a logistic regression model to test the determinants of entities choice in either reporting changes in equity investments not held for trade in OCI or in profit and loss:

$$\Pr(FVOCI = 1) = \lambda(\beta_0 + \beta_1 MATERIALITY_j + \beta_2 CEO_ON_BOARD_j + \beta_3 OUTSIDE_DIRECTORS_j + \beta_4 CEO_COMP_j + \beta_5 \frac{D}{E}_j + \beta_6 VOLATILITY_j \sum_{i=1}^{n=5} \alpha_i Country_j + \beta_7 SIZE_j + \epsilon)$$

where:

CEO_COMP = a measure of CEOs incentives as described in the previous section

CEO_ON_BOARD = a measure of CEOs job security as described in the previous section

OUTSIDE_DIRECTORS = a measure of CEOs Job security as described previously

$\frac{D}{E}$ = a measure of tightness to covenant violation as described in previous section

Country = country dummies based on origin of law in accordance with Porta et al. (1997)

MATERIALITY = a measure of the firm's total holding in equity investments not held for trading divided by total assets.

SIZE = size of the entity measured as the natural log of total assets

VOLATILITY = a measure of perceived risk as described in the previous section

Apart from the identified test variables, we include a number of control variables. First we control for countries since there may be regional differences in applying IFRS because of business clusters as well as disclosure quality between countries that can ultimately influence whether or not the FVOCI option is disclosed. When gathering the data we could identify that the disclosure quality is of higher standard for entities located in the UK and we therefore anticipate that entities from the UK are more likely to disclose a choice.

In order to facilitate a statistical output, the countries are divided into subcategories in accordance with Porta, Lopez De Silanes, Shleifer & Vishny (1997, 1998), which classified countries into categories according to their legal origin and system. Porta et al. (1997) finds that countries with poorer investor protection measured through legal rules have smaller and narrower capital markets. Since there will be no analysis of the countries and the categories only function is to act as a control variable, the empirical evidence provided by Porta et al. (1997) will not be compared with the results of this study. The division of countries in our regression analysis is presented in table 3.2 which can be found below. The countries that did not fit the categories of Porta et al. (1997) were placed into the category “other”, which mainly contains eastern European countries.

Table 3.2: Observations Divided Into Countries

Country	Observations
English Origin	15
French Origin	31
German Origin	14
Scandinavian Origin	27
Other	28

Furthermore, we control for size of the entities since it significantly positively correlates with disclosure quality (Lee, Petroni & Shen, 2006; Bamber et al., 2010). The size is measured by the natural log of total assets similarly to Lee et al. (2006).

3.4 Robustness test for hypotheses

Entities that do not disclose the FVOCI choice will in our study be classified as missing observations and consequently only be part of the descriptive analysis. The reason for not disclosing may be that it is not material. Relevance is a fundamental qualitative characteristic according to the IASB's Conceptual Framework. Materiality is a term referring to entity specific relevance regarding an item (IASB's Conceptual Framework). If an item is material, the financial information of this item is relevant and thus can affect the decision made of users of financial statements (IASB's Conceptual Framework). Since entities should disclose changes in accounting policies if they are material according to IAS 8, we expect to find a disclosed choice at the latest in the fourth quarterly report in 2017 of firms in which the holdings are material.

The entities that did not disclose the choice could possibly do so in the annual report of 2018. To assure that these missing observations do not constitute a weakness in our study we will test if materiality is a determinant for not disclosing the choice. If we can establish that this prediction is true then it indicates that the other hypotheses in part two are more robust and has higher quality assurance over time since the hypotheses assumes that the entities hold enough equity investments not held for trade to affect the behavior of management.

4. Results and analysis

Below we present the results and analysis of this study, which are based on a correlation analysis, descriptive tests, logit tests and mean comparisons. We constructed histograms to establish the sample distribution, which we identified as not normal. In order to increase the reliability of the results we performed untabulated tests where we removed extreme outliers and winsorized. In these tests there were no significant differences in results from tests including outliers. We therefore elected to include outliers in the tables presented in this section of the paper.

4.1 Correlations analysis

Table 4.1
Pearson's correlation

Variable	OCI OPTION	SIZE	D/E	MATERI ALITY	OUTSIDE _DIRECT ORS	CEO_ON_ BOARD	CEO_CO MP	VOLATILTI Y
SIZE	0,035	1						
D/E	-0,108	-0,017	1					
MATERIALITY	0,068	-0,328	-0,042	1				
OUTSIDE DIRECTORS	0,152	-0,162	0,124	0,099	1			
CEO_ON_BOARD	0,129	0,074	0,181	-0,177	0,195	1		
CEO_COMP	0.100	0.195	-0.002	-0.133	0.016	0.386	1	
VOLATILITY	-0.165	-0.092	0.539	-0.014	0.063	0.108	0.103	1

Boldface: $P \leq 5\%$

In order to detect and eliminate multicollinearity between our independent variables we conducted a Pearson's correlation analysis, which is suitable for our data since it is parametric and continuous (Collis & Hussey, 2014). The pairwise correlation test can be seen in table 4.1. Except for the variables *VOLATILITY* and *D/E*, no multicollinearity exists since no correlations coefficient exceeds 0.39 (Collis & Hussey, 2014). To ensure that the correlation does not disturb the validity of the tests and increase the standard errors of the coefficients, a regression tests was conducted individually for each of the variables *VOLATILITY* and *D/E*. One may also notice that the correlation between the variables *CEO_ON_BOARD* and *OUTSIDE DIRECTORS* almost exceeds 0.39. This is however something we expected since they both are proxies for measuring job security and are based on the same theoretical argumentation.

4.2 Descriptive statistics

Descriptive data for the independent variables and origin of law for the sample are shown in table 4.2 and 4.3 below (Porta et al., 1998). Table 4.2 to 4.4 describes which choice was made by the entities divided into our independent variables.

Table 4.2

Descriptive data - Variables								
	<i>OCI OPTION</i>	<i>SIZE</i>	<i>D/E</i>	<i>MATERIALITY</i>	<i>OUTSIDE_ DIRECTORS</i>	<i>CEO_ON_ BOARD</i>	<i>VOLATILITY</i>	<i>CEO_COMP</i>
<i>Mean</i>	0.730	12.275	12.489	0.44727%	0.70	0.46	309.559	0.238
<i>Std. Deviation</i>	0.445	1.112	7.633	1.78329%	0.46	0.50	3020.484	0.265
<i>Lower quartile</i>	0	11.441	7.430	0.00015%	0,00	0.00	0,005	0.000
<i>Median</i>	1	12.333	11.435	0.00196%	1,00	0.00	0,010	0.146
<i>Higher quartile</i>	1	13.147	15.896	0.05124%	1,00	1.00	0,018	0.430

Table 4.2 contains mean, standard deviation, lower quartile, median and higher quartile of the independent variables of the sample. *OCI OPTION* is the choice to present changes in fair value of equity investments not held for trade in either OCI (1) or P/L (0). *SIZE* variable consists of total assets which is logarithmic to decrease the spread. *D/E* has a similar mean and median, indicating outliers are few. The spread of *MATERIALITY* is significant; indicating that the amount of equity investments not held for trade in relation to total assets can vary substantially around the mean. *OUTSIDE_DIRECTORS* is a dummy variable where “1” means that the percentage of inside directors is higher than the median value of inside board of directors in the sample. *CEO_ON_BOARD* is also a dummy variable, where “1” means that the CEO is a member of the board and 0 otherwise. The standard deviation and mean of *VOLATILITY* is affected by several entities having significantly higher volatility in price than the rest of the entities. *CEO_COMP*'s lower quartile is close to zero and the size of the standard deviation indicates a large spread around the mean. Similarly but to a lesser extent than *VOLATILITY*, we can observe that some entities have significantly more variable cash compensation than others.

Table 4.3

Descriptive data - Choice by country			
	Frequency	FVPL	FVOCI
French origin	31 (27%)	6 (19%)	25 (81%)
German origin	14 (12.2%)	4 (29%)	10 (71%)
Scandinavian origin	27 (24.3%)	10 (37%)	17 (63%)
English origin	15 (13%)	5 (33%)	10 (67%)
Other	28 (23.5%)	6 (21%)	22 (79%)
Total	115	31	84

Table 4.3 shows the specific choice made by the entities divided into their country origin (Porta et al., 1998). In the sample French, Scandinavian and other represent the largest categories. English and German contain the least percentage of the observations; 13 and 12.20 percent respectively. 31 opted for FVPL and 84 chose to utilize the FVOCI option. In total 115 entities disclosed a choice. The majority of entities chose to use the FVOCI option. This choice is the

less salient option for presenting the volatility (Bamber et al., 2010; Hirschleifer & Teoh, 2003) and is most beneficial in terms of market evaluation of the entity (Khan & Bradbury., 2016; Dhaliwal et al., 1999). As suggested by literature, having volatility presented in a less salient manner seems to be the preferred choice by the decision makers (Graham et al., 2005; Bamber et al, 2010; Hirschleifer & Teoh, 2003). The table also shows that the FVOCI option was most commonly applied by entities within the French origin. In contrast, Scandinavian entities had the highest FVPL appliance compared to the other origins.

Table 4.4

Descriptive data - Choice by Materiality, SIZE and VOLATILITY			
Panel A			
<u>Materiality</u>	FVOCI	FVPL	Entities
Lower than 25 percentile	20 (69%)	9 (31%)	29
25 percentile	21 (72%)	8 (28%)	29
50 percentile	22 (79%)	6 (21%)	28
75 percentile	21 (72%)	8 (28%)	29
Total	84	31	115
Panel B			
<u>SIZE</u>	FVOCI	FVPL	Entities
Lower than 25 percentile	21 (72%)	8 (28%)	29
25 percentile	23 (79%)	6 (21%)	29
50 percentile	16 (57%)	12 (43%)	28
75 percentile	24 (82%)	5 (18%)	29
Total	84	31	115
Panel C			
<u>VOLATILITY</u>	FVOCI	FVPL	Entities
Lower than 25 percentile	20 (74%)	7 (26%)	27
25 percentile	18 (72%)	7 (28%)	25
50 percentile	19 (73%)	7 (27%)	26
75 percentile	19 (73%)	7 (27%)	26
Total	76	28	115

In Table 4.4 the choice is examined using the variables *SIZE*, *MATERIALITY* and *VOLATILITY*. Panel A presents *MATERIALITY* in the context of the choice and one may notice that the ratio of the choice does not deviate much from the different percentiles. However, in Panel B where *SIZE* is presented, one may notice that FVOCI is preferred among the entities in the 75th percentile. Panel C shows the entities' choices divided into the *VOLATILITY* variable. Like *MATERIALITY*, there is not much difference between the percentiles for *VOLATILITY*

Table 4.5

Descriptive data - choice by CEO_ON_BOARD and OUTSIDE_DIRECTORS		
Panel A		
<u>CEO_ON_BOARD</u>	FVPL	FVOCI

	Yes	11 (21%)	42 (79%)
	No	20 (32%)	42 (68%)
Total		31	84

Panel B

	<u>OUTSIDE_DIRECTORS</u>	FVPL	FVOCI
	Yes	18 (23%)	62 (77%)
	No	13 (37%)	22 (63%)
Total		31	84

In Table 4.5 the choice is examined using the variables CEO_ON_BOARD and OUTSIDE_DIRECTORS. The results in Panel A shows that among the entities that have the CEO on the board of directors, 21 percent of the entities elected FVPL and 79 percent FVOCI. Regarding entities which did not have CEO on the board of directors, 32 percent of the entities chose FVPL whereas 68 percent chose FVOCI. Furthermore, Panel B shows that among the entities where the percentage of outside directors on the firm's board are smaller than the sample median, 23 percent chose FVPL and 77 percent chose FVOCI. Among entities where the percentage was larger than the sample median, 37 percent chose FVPL and 63 percent chose FVOCI. These numbers indicate that the third hypothesis might not be rejected; however we have not conducted tests to establish potential differences between these groups. Therefore, the hypothesis cannot be confirmed yet.

4.3 Logit results

The results from the logistic regression analyses are listed below. We first present results regarding entities which did not disclose. We then present the results relating to our six hypotheses.

4.3.1 Logit results for entities that did not disclose

Table 4.6

Logit analysis of FVOCI option for entities that did not disclose			
Variable (N = 225)	Predicted sign	With control variables	Without control variables
MATERIALITY	+	0.157 (0.014*)	0.132 (0.027*)
Other origin	?	-1.282 (0.039*)	
French origin	?	-0.795 (0.267)	
Scandinavian origin	?	-0.609 (0.383)	
German origin	?	-1.058 (0.157)	
SIZE	+	2.110 (0.000**)	
<u>R-square</u>		0.716	

Country origin = country dummies based on origin of law in accordance with Porta et al. (1997)

SIZE = size of the entity measured as the natural log of total assets

MATERIALITY = a measure of the firm's total holding in equity investments not held for trading divided by total assets.

Table 4.6 shows the results from the logit model constructed for entities that has not disclosed a choice. In total, 110 entities did not disclose a choice and 115 entities did. The dependent variable is whether or not a choice has been disclosed for equity instruments not held for trade and the independent variable is materiality. In the test, entities were divided into a category of origin of law which was one of the control variables (Porta et al., 1998). We controlled for origin of law since we discovered that disclosure quality seemed to differ from region to region when collecting the data from the annual reports. During the data collection we noticed that entities that operate within the *English origin* were producing higher disclosure quality regarding the choice and we therefore expect that entities from that origin are more likely to disclose the choice than entities from other origins of law. Hence, we use the English origin as the base of the variable. According to Lee et al. (2006) and Bamber et al. (2010), disclosure quality increases as the size of the entity increases, which is why we suspected that larger entities as opposed to smaller entities are more likely to disclose a choice. For this reason, size was also used as a control variable in the logit test.

The results of the test support our prediction that entities that have more material holdings in equity investments not held for trade are more likely to disclose the choice than entities that have less material holdings ($p \leq 0.05$). This finding is consistent with the requirements of IAS 8 (§16 & §30) which contains guidelines wherein entities must disclose material changes of accounting policies. The results also confirms our prediction that materiality is an underlying determinant for not disclosing a choice and it is probable that the entities in our sample which

did not disclose the choice is because they hold lower amounts of equity investments not held for trade in relation to their total assets. Even though there are many dropped observations because of omission of choice disclosures (n=110), these results provides validity to the study since our hypotheses require that the fair value changes in equity investments not held for trade are big enough to actually impact the management's' behavior. Since these dropped entities do not have material amounts of equity instruments, it is necessary for us to drop these in order to truly test the hypotheses. We can also establish from the results that *SIZE* is strongly associated with the likelihood to disclose a choice ($p \leq 0.01$) and hence provide higher quality disclosures, which is in line with Lee et al. (2006) and Bamber et al. (2010). The association may indicate that bigger entities have the resources that are necessary to focus on the disclosures of even smaller assets such as equity investments not held for trade in contrast to smaller firms with lower equity investments which must concentrate their resources on disclosures that are more material.

Other origin is significant ($p \leq 0.05$) with our dependent variable and it has negative b-coefficient, which also the other country origins have. This indicates that entities in the *English origin* category have better disclosure quality regarding the disclosure of the FVOCI choice than the entities from the other origins. These results confirm our initial predictions that entities from the English origin produce better disclosure quality regarding the disclosure of the FVOCI choice. Nagelkerke R-square is 0.716, indicating that the independent variables in this case explain 71.6% of the variability of the dependent variable. We earlier brought up the potential validity problem derived from the fact that materiality is measured in the annual report of 2016 while disclosures about choice is measure at latest in the fourth quarterly report in 2017. The high R-squared value indicates that the potential validity problem is not likely to have impacted our study which we originally suspected.

4.3.2 Logit results for variables except CEOs incentives

Table 4.7
Logit analysis of FVOCI option without CEO_COMP

Variable	Predicted sign	With control variables
(N = 115)		
D/E	+	-0.001 (0.066)

MATERIALITY	+	0.141 (0.453)
OUTSIDE_DIRECTORS	+	0.940 (0.066)
CEO_ON_BOARD	+	0.685 (0.935)
SIZE	?	0.033 (0.894)
Other origin	?	0.632 (0.481)
French origin	?	1.309 (0.123)
Scandinavian origin	?	0.020 (0.980)
German origin	?	0.880 (0.355)

R-square 0.147

CEO_ON_BOARD = 1 if CEO sits on the board of directors; 0 otherwise.

OUTSIDE_MEMBERS = 1 if the percentage of outside directors on the firm's board is smaller than the sample median; 0 otherwise.

Country origin = country dummies based on origin of law in accordance with Porta et al. (1997)

SIZE = size of the entity measured as the natural log of total assets

MATERIALITY = a measure of the firm's total holding in equity investments not held for trading divided by total assets.

D/E = Debt divided by equity as a measure of financial leverage of the entity.

Table 4.7 shows the results of the logit model presented in the research design section with all the control variables included. The table shows the results for all dependent variables except the variable that is based on our third hypothesis about CEO compensation structure and the variable for our sixth hypothesis about volatility. The reason for this is because the amount of observations differs for these tests and the results will be subsequently presented in different tables. The results from the table above indicate that none of the control variables are significant.

We expected that entities would choose to locate the incrementally higher volatility in OCI since the market does not price it according to Khan & Bradbury (2016) and it increases the cognitive costs for users to identify the volatility according to (Maines and McDaniel (2000)). We developed six hypotheses based on previous research which provided empirical evidence on the incentives for wanting to increase the cognitive costs and avoid pricing of volatility. When testing our hypotheses, we found that the variables *OUTSIDE_DIRECTORS* and *D/E* are significant at the ten percent level ($p \leq 0.1$). Nagelkerke R-square is 0.147, indicating that the independent variables explain 14.7% of the variability of the dependent variable. The low value of the Nagelkerke R-square can be explained by the fact that many of our control and independent variables are not significant and our sample consists of limited observations. Contributing factors for why more variables were not significant may be that entities chose to

apply the FVOCI option since it was standard practice from IAS 39 and therefore it has become a natural habit. The reason could also be that entities simply comply with the default fair value setting in IFRS 9 which is FVPL because the fair value changes are nonetheless immaterial compared to total assets, as is shown by the high standard deviation in the descriptive data. This could not be captured in our study and might be one of the reasons why only two of our variables are significant in the analysis.

Regarding our first hypothesis, we found it to not be significant and we therefore cannot establish that the likelihood that entities make use of FVOCI option increases as equity investments not held for trade increases in relation to total assets. We assumed it would be logical for entities with higher equity investments not held for trade to choose FVOCI as higher materiality causes higher volatility. According to Bamber et al. (2010) this would trigger management to choose the less salient option for disclosing volatility. It remains unclear as to why materiality does not affect which choice is made by entities but the reasons stated in the paragraph above may be legitimate explanations.

Regarding the second and third hypotheses; `OUTSIDE_DIRECTORS` and `CEO_ON_BOARD`, the only variable that gave significant result was `OUTSIDE_DIRECTORS`, which is significant on a 10 percent level ($p \leq 0.1$). These results lend support to the empirical evidence provided by Bamber et al. (2010) who found that as there are more outside directors, the tendency increases to avoid salient performance reporting, which in our case means that the FVOCI option is elected. This also confirms earlier studies by Fama (1980), Fama and Jensen (1983) and Beasley (1996) which indicated that the composition of the board of directors affects monitoring of management.

The findings of this study do not lend support to the connection between high leverage and a preference for showing volatility in a relatively less salient form of presentation. Instead, the association is significant at the 10 percent level in the opposite direction, i.e. higher D/E ratio is associated with choosing a more salient presentation of volatility. Arguing from the point of view of Dhaliwal (1980) and Khan and Bradbury (2016), FVOCI should be preferred in these circumstances since it is the less salient option and may prevent debt covenant violations. The reason for not getting a stronger p value and positive b-coefficient could be that entities with high leverage do not concern themselves with the volatility of equity investments not held for trade since it is only a fraction of the total assets. In other words, there would be low risk to violate debt covenants by introducing volatility in earnings that changes in fair value of equity investments not held for trade. As with the hypotheses that are based on the job security framework, we do not know exactly why there is no association, but we suspect the low level of materiality of equity investments not held for trade in relation to other more material items could be a factor affecting the association. Another possibility is that highly leveraged entities take on more risk in the short term in order to recycle the equity investments through P/L later on since recycling is not allowed when making use of the FVOCI option. Since the sample

consists of mostly banks, it is also possible that the current low interest environment causes the entities to take on more risk by electing FVPL (Dell’Ariccia et al., 2014).

Table 4.8

Logit analysis of FVOCI option for volatility		
Variable		Without the D/E variable
(N = 104)	Predicted sign	
VOLATILITY	+	0.001 (0.921)
R-square	0.151	

VOLATILITY= a measure of the entities’ stock price volatility as a proxy for perceived risk.

Table 4.8 shows the results for our sixth hypothesis. According to our sixth hypothesis, entities that are perceived as more risky because they have more volatile share prices are more likely to avoid presenting salient volatility. For our study, this means that the FVOCI option will be used as this is the less prominent option to report volatility (Barth et al., 1999; Heflin et al., 2002; Francis et al., 2004; Graham et al., 2005). Since a correlation was identified between the variables *VOLATILITY* and *D/E*, separate logit tests with and without the combination of those variables was done in order to assure that the validity and standard errors of the coefficients were not affected by the variable correlation. There are fewer observations for this test since 12 entities of the sample selection were not listed and we could therefore not find data for *VOLATILITY* for these entities. With the results of this test, the hypothesis cannot be supported. By doing a separate test with this variable we could however avoid problems with collinearity and thus confirm with certainty that our sixth hypothesis was correctly rejected. The probable reason for this is that financial users nonetheless regard the choice as insignificant since the fair value changes of equity investments not held for trade are likely deemed not material in this case.

4.3.3 Logit results for CEOs incentives

Table 4.9

Logit analysis of FVOCI option for CEO_COMP		
Panel A		With control variables
Variable (N = 85)	Predicted sign	
CEO_COMP	+	0.805 (0.507)
R-square	0.167	

Panel B		With control variables
Variable (N = 115)	Predicted sign	
CEO_COMP	+	0.085 (0.932)
R-square	0.108	

CEO_COMP = CEO compensation structure calculated by variable cash pay divided by total cash pay.

Panel A in table 4.9 shows the results of the logit model including our fourth hypothesis about CEO incentives measured by the annual compensation structure. The results cannot confirm our hypothesis that larger CEO variable cash compensation in relation to total cash compensation increases the probability that entities make use of the FVOCI option. This result does not lend support to prior research (Barth et al., 1999; Francis et al., 2004; Graham et al., 2005, Bamber et al., 2010; Heflin et al., 2002). Nagelkerke R-square is 0.108, indicating that the independent variables explain 10.8% of the variability of the dependent variable. The number of observations is however limited to 85 in contrast to the original 115 observations which are analyzed for the other hypotheses, which could have an impact on the R-square value. The missing observations are due to lack of information about the CEO compensation structure and we chose to disregard these observations. To make the study more robust we also assume that the lack of information about the compensation structure is because the CEO do not receive any variable pay and we do an analysis with this assumption to assess if there will be any deviation. The test with 115 observations for this variable is presented in panel b of table 4.9.

As Panel B shows, the variable is not significant which adds to the robustness of our original test of 85 observations. The results are however still inconsistent with prior research (Barth et al., 1999; Heflin et al., 2002; Francis et al., 2004; Graham et al., 2005; Bamber et al., 2010). However there is a difference with the incentive variable between our study and Bamber et al. (2010). One should therefore be careful when comparing our study since the proxy used by Bamber et al. 2010 was equity incentives and our study measure CEO incentives in accordance with Khosravi Samani (2015) by compensation structure. The incentives for the CEO to choose FVOCI may not be as strong for variable compensation as it is for equity incentives. If Hirschleifer and Teoh's (2003) arguments about investors limited attention-span and location of volatility holds true, then the explanation for the lack of significant results may be that the CEO knows that the choice would not affect the investors perception of the entity's performance since the marginal volatility is not high enough. If they were high enough, the investors would react and it would eventually influence the behavior of the CEO. Furthermore, the sample used for the study by Khosravi Samani (2015) was limited to entities from the Swedish Stock Exchange whereas our sample also includes other EEA countries and a substantial concentration of banks. This could have an effect on the results and may be one of the reasons for why the variable was not significant.

4.3 Mann-Whitney U

In order to compare the means of the non-parametric data in this study, we conducted a Mann-Whitney U-test. A t-test would be less appropriate since one assumption of a normal t-test is that the data is normally distributed, which is not the case for the data in this study. The hypotheses based on CEO job security (H2, H3) are excluded from the test since the proxies are measured using dummy variables.

Table 4.10
Ranks – choice

		N	Mean Rank	Sum of Ranks
SIZE	FVPL	31	57.26	1775
	FVOCI	84	58.27	4895
	Total	115		
D/E	FVPL	31	61.71	1913
	FVOCI	84	56.63	4757
	Total	115		
MATERIALITY	FVPL	31	56.00	1736
	FVOCI	84	58.74	4934
	Total	115		
CEO_COMP	FVPL	26	40.92	1064
	FVOCI	59	43.92	2591
	Total	85		
VOLATILITY	FVPL	27	48.30	1304
	FVOCI	76	53.32	4052
	Total	103		

From table 4.10 can be observed that *D/E* and *Volatility* contains the largest gaps between mean ranks. Entities with high volatility seem to prefer making use of the FVOCI option while entities with high debt/equity ratio appear to be more content with showing fair value changes in FVPL. *SIZE*, *MATERIALITY* and *CEO_COMP* all were at a lower mean rank for entities electing to show volatility in P/L compared to those which elected to make use of the FVOCI option. The mean rank comparison between FVOCI and FVPL for *D/E* in table 4.10 indicates that there might exist an association between higher leverage and electing salient reporting of volatility. In order to establish whether any such association exists we need to observe the significance level in table 4.11 below.

Table 4.11

Grouping Variable: Choice of the location of Fair Value Changes

	SIZE	D/E	Materiality	CEO_COMP	VOLATILITY
Mann-Whitney U	1024	920	973	621	926
Wilcoxon W	3950	3846	3899	2766	1304

Z	-0.014	-0.794	-0.397	-0.303	-0.749
Asymp. Sig. (2-tailed)	0.988	0.426	0.690	0.761	0.453

Table 4.11 shows the level of significance of association of the independent variables and the dependent variable in a 2-tailed Mann-Whitney test. Similar to our logit analyses, we find no significant association for any of the independent variables. The only relevant difference between the tests is that we found significance at the 10 percent level in our logic analysis for *D/E*, but not in the Mann-Whitney U-test. This finding suggests that the control variables used in the logit model are relevant since there is no significance of *D/E* without them. Regarding the other three hypotheses (H1, H4, H6), the mean comparison test indicates that they can be rejected since they are insignificant in both the logit model and the mean comparison analysis. It is important however to acknowledge that our study is based on a small sample which may contribute to why he have not found any significant association for the independent variables. It is possible that the tests would give significant results if a larger sample was available.

5. Concluding discussion

In this study, we tested the predictive ability of six determinants on the choice between presenting changes in fair value of equity investments not held for trade in OCI or P/L. In addition to presenting volatility of fair value changes in OCI, the choice also comes with no possibility to recycle back to P/L if the FVOCI option is elected (IFRS 9). We also presented descriptive data on entities with equity investments not held for trade in their balance sheet. Potential influencing factors for disclosing the choice; origin of law, size and materiality was investigated.

Empirical evidence suggests managers prefer to present volatility in a location which they perceive to be the least salient when given an option to do so (Barth et al., 1999; Hirschleifer and Teoh, 2003; Francis et al., 2004; Graham et al., 2005). As volatility increases, management are more likely to prefer presentation of volatility in OCI rather than P/L as this is the least salient option (Bamber et al., 2010). One reason for this may be that empirical studies suggests salient information about volatility leads to decreased multiples and lower performance assessments by users (Barth et al., 1999; Francis et al., 2004; Graham et al., 2005). Managers seem aware of what research indicates, that P/L is more relied on by investors when valuing an entity (Graham et al., 2005). Empirical evidence also suggests that the market tend not to price volatility when it is located in OCI except for asset revaluations. (Khan & Bradburry, 2016). Investors seem to have a limited attention span, which is suggested to be the reason why location of accounting numbers matter (Hirshleifer & Teoh, 2000). Research also indicates that cognitive costs for users increase as information is presented in more disaggregated formats (Maines & McDaniel, 2000, Mitra & Hossain, 2009). Embedded in this study is therefore the assumption that cognitive costs are maximized for users when the FVOCI option is elected.

115 out of 225 entities in the sample disclosed the choice before March 15th, 2018. According to IAS 8 it is required that entities disclose any relevant change in accounting policy before implementation. After conducting a logit test, we could confirm that there was a significant association between higher materiality of equity investment not held for trade in relation to total assets and the disclosure of the choice. The data presented in this study indicate that most entities elected to present volatility in OCI rather than P/L (73 %) when such a choice was given through IFRS 9. The data also indicates that the mean level of materiality of equity investments not held for trade was 0.45 percent. Entities with a Scandinavian origin of law have the highest rate of choosing FVPL (37 %) and entities with French origin of law had the highest rate of choosing FVOCI (81 %). English origin of law and increased size of entities was found to increase the probability of the choice being disclosed.

Our empirical results indicate that five of the six hypotheses can be rejected. Materiality (H1), CEO board membership (H3), CEO cash compensation (H4) and perceived risk of an entity (H6) could not significantly predict which choice would be made. The hypothesis that higher leverage increases the probability that entities elect FVOCI rather than P/L (H5) could also be

rejected. However, this hypothesis was significant in the opposite direction, i.e. higher leverage leads to a higher probability that entities elect FVPL. We could not reject our hypothesis that the share of independent board members in relation to inside board members predicts the election of FVOCI (H2).

Higher materiality could not predict which choice was made. We argued that as materiality increases, managers are less inclined to show items for which they have no control over in salient performance statements. Nobes & Parker (2010) found that managers both avoid salient reporting of items over which they have no control and that managers use to prefer to place equity instruments in the non-trading category in IAS 39. It is unclear why materiality has no predictive power on which choice is made. It's possible is that the holdings of equity investments not held for trade in entities are not large enough to make a choice matter for managers.

Job security has been proven to be a great motivator for earnings management and hitting benchmarks has sometimes been driven more by job security than short-term compensation (Defond and Park, 1997; Graham et al., 2005). Bamber et al. (2010) found empirical data suggesting CEOs with lower job security are more susceptible to avoid performance reporting and choosing less salient reporting options for volatility. We decided to measure job security in accordance with Bamber et al. (2010) by seeing whether board composition or CEO board membership could predict which choice was made. We could not reject the hypothesis that a higher share of independent board of directors in relation to inside board members significantly predicts that the FVOCI option will be chosen. CEO board membership could not predict any specific choice in our study.

Prior research has established that CEOs with powerful equity-based incentives are more prone to avoid performance reporting of OCI items (Bamber et al., 2010). This finding lead us to the construction of our hypothesis that CEOs with more economic incentives are more likely to choose the FVOCI option since the volatility is not priced by the market if it is located in OCI rather than in profit and loss (Khan and Bradbury, 2016). Instead of equity incentives as used by Bamber et al. 2010, we used the variable cash payments to CEO compared to the total cash payments as a proxy for CEO incentives as used by Khosravi Samani (2015). The results of the study could however not lend support to the hypothesis. One reason for the hypothesis being rejected in this case could be that the sample size was too small (85).

Entities with high leverage are more concerned about standards that increase volatility (Dhaliwal, 1980). The debt/equity hypothesis has been widely applied in research (Kalay, 1982; Watts & Zimmerman, 1990; Duke & Hunt, 1990). High leverage can cause constraints on debt covenants, in turn leading to increased costs (Kalay, 1982; Watts & Zimmermann, 1990; Duke & Hunt, 1990). We therefore hypothesized that volatility would be preferred by managers to be presented in OCI rather than P/L. We tested the predictive power of the debt/equity ratio on entities which disclosed a choice to see if higher leverage indeed was associated with choosing

FVOCI. The hypothesis was rejected. However, it was significant in the opposite direction. Higher leverage increases the probability that entities elects to show volatility in P/L. This finding does not lend support to the previous research that indicates debt covenant violation fears increase the preference for less salient volatility. Since the sample mostly consists of banks, the significant result arguably lend support to the empirical findings of Dell'Ariccia et al. (2014) that banks tend to increase risk-taking in low interest environments.

According to our sixth hypothesis, entities which are perceived to be riskier are more inclined to avoid salient performance reporting. This hypothesis was based on empirical research indicating that salient volatility negatively affects P/E multiples (Barth et al., 1999; Francis et al., 2004; Graham et al., 2005). The results of the test could however not confirm our hypothesis. We speculate that the reason may be rooted in the fact that equity investments not held for trade usually is not material enough for a choice to matter. Consequently, the users do not concern themselves with this option which also reflects the decision making by the management.

The findings of this study can provide regulators with valuable information on the practical implementation of their latest standard as well as some of the underlying determinants of the outcome. Even though we could only find two significant predictors, the results nonetheless provide regulators with information about what does not determine this accounting choice. It may be that this item is so small that determination in some cases is based on something else that is not measurable. This study is somewhat limited by the size of the sample and that the information regarding the irrevocable FVOCI option was in some entities open for interpretation. Larger sample sizes could improve the accuracy of finding determinants in future studies.

Future research could look into if the change in equity instruments not held for trade before and after the implementation of IFRS 9 to examine whether the choice has resulted in different classification patterns of newly acquired equity investments. Another possibility is to examine earnings quality and earnings performance of the groups of entities which made a choice and investigate whether there is any association between them. It would be interesting to know whether the company's industry has any effect on the choice, if a sample consisting of more varied entities that used in this study is attained. A study of the implementation of the new expected loss approach to impairment of loans could be of value as well since it probably represents the most significant difference between IFRS 9 and IAS 39 (Bischof & Daske, 2016). While we did not get any significant association of choice and CEO incentives, future studies could test CEO incentives using equity incentives as a proxy rather than variable cash compensation. Lastly, more extensive studies specified on why firms with high leverage seem to prefer having salient volatility could provide insights valuable to researchers interested in the debt/equity hypothesis.

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