HYBRID INSTRUMENTS AND THE ROLE PLAYED BY CREDIT RATING AGENCIES AND IAS 32

AN EXPLORATORY STUDY ON HOW FINANCIAL INSTRUMENTS WITH CHARACTERISTICS OF EQUITY INTERRELATE WITH IAS 32 AND THE ASSESSMENT OF EQUITY CREDIT MADE BY THE CREDIT RATING AGENCIES

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Master Thesis Stockholm School of Economics 2023 Hybrid Instruments and the role played by Credit Rating Agencies and IAS 32:

an exploratory study on how financial instruments with characteristics of equity interrelate with IAS 32 and the assessment of equity credit made by Credit Rating Agencies.

ABSTRACT

Financial instruments with characteristics of equity (FICEs) are complex securities that have features lying in between equity and liability, making their classification particularly challenging. This paper has therefore explored several under-researched areas related to the issuance of FICEs by publicly trading European companies. To do so, this study has collected data from 587 European companies. We then analyzed the frequency and the composition of these hybrid instruments found in our sample. We found certain industries within specific countries to have a particularly high presence of FICEs, such as Swedish Real Estate companies. The study also relates its analysis to the assessments made by Credit Rating Agencies (CRAs) on these hybrid instruments, as they are found to assign "equity credits" to FICEs. We also found that several hybrid securities have provisions in their prospectuses for the early redemption of them, in the case of changes in the equity credits assigned by the CRAs. The study then draws conclusions on firms' abilities to select one or the other classification for the IFRS-aligned target capital structure, while having the same CRAs-assessed equity credits.

Keywords: Hybrid Instruments, IAS 32, Credit Rating, Debt, Equity

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1. Introduction

Financial instruments with characteristics of equity (FICEs) are hybrid securities, meaning that they combine features of both equity and debt. Such securities are classified as debt or equity depending on their specific features, or in a combination of both if the instrument contains both equity and liability as compound components (IAS 32). Because of the increase in issuing size of these instruments (Scope Ratings, 2021), and the complexity of them over time in Europe (IASB, 2018a), research can be of great value so to thoroughly understanding these specific instruments. Challenges mostly arise since these instruments have features lying in between what are commonly known as equity and liability features, blurring the line between the two. The classification and disclosure of these hybrid securities has therefore been a longstanding challenge for the International Accounting Standards Board (IASB) and to preparers (IASB, 2018a).

Besides the challenges understanding FICEs by users, their eventual classification outcome can have considerable implications for financial markets and firms' perceived risk, as their classification can affect how the issuers' financial performance and financial position are depicted (IASB, 2018a). The lack of consensus among stakeholders, conflicting interests, as well as the limited guidance coming from the IASB's Conceptual Framework for Financial Reporting on the matter (IASB, 2018b) has made the treatment of FICEs onerous (IASB, 2018a). This has resulted in criticism of the existing accounting standards, most specifically of International Accounting Standard 32 (IAS 32), as they may not adequately reflect the economic substance of the underlying features of the instrument. Thus, the current relevance of the standard in addressing these increasingly complex hybrid instruments might be limited. The ongoing debate surrounding the classification of FICEs and the guidance currently available has made the IASB ("the Board") recognize that there's need for improved guidance on this matter. The Board has therefore decided to launch a Financial Instruments with Characteristics of Equity research project ("the Project"), with the intention to develop a comprehensive framework for the classification and disclosure of these hybrid instruments (IASB, 2018a).

Additionally, the presentation of these instruments does not exclusively affect the firm's presented financial position, as income statement and other key performance metrics are impacted. By extension, classification affects how the instruments are presented to users of financial statements, which in turn could affect how they interpret and analyze the information. Moreover, it can also influence a firm's ability to raise capital, its borrowing costs, and even its proximity to reaching covenants (White et al., 2003). The importance of accurate classification of FICEs is further highlighted by the significant role these instruments play in financial markets. In recent years, there has been increasing interest in corporate hybrid instruments issued by rated corporates in northern Europe, and FICEs

are becoming increasingly popular among investors (Nordic Credit Rating, 2019; Scope Ratings, 2021). Issuers may use these instruments to diversify their capital structure, as well as to improve their credit metrics depending on how Credit Rating Agencies view their equity credit (or "equity content") (Nordic Credit Rating, 2019). Therefore, an accurate understanding of FICEs is crucial for investors, regulators, and other stakeholders such as Credit Rating Agencies.

Indeed, Credit Rating Agencies (CRAs) are important for the financial markets, as they provide valuable information about the riskiness of firms by categorizing credit risk into a scaling methodology. This allows investors to easily evaluate the general risk profile of companies. This makes the CRAs ratings an important source of information-spreading in financial markets, and are therefore considered highly important by many stakeholders, such as regulators, legislators, issuers, and investors (Becker & Milbourn, 2011). Consequently, as their ratings are widely used and relied upon, the quality of the ratings is crucial for the proper functioning of the financial system. Questions therefore arise on how Credit Rating Agencies view these complex hybrid instruments and how their assessment can be related to financial reporting and investors' decision-making. It will thus be within our scope to understand how CRAs assess these complex hybrid instruments. What kind of assessments do they perform to capture the role that these instruments play in the financial positioning of the issuing firms? Moreover, what kind of information can they signal to the investors of these hybrid instruments? Subsequently, it will be of special interest in this paper to grasp how the three main Credit Rating Agencies (Moody's, S&P Global and Fitch Ratings, "the CRAs") treat these FICEs, by investigating what we will refer to as their "Hybrid Methodologies" for assigning equity credit (Moody's, 2018; S&P Global, 2022; Fitch Ratings, 2020).

To add a layer of perspective on the topic, it is worth mentioning the ongoing debate surrounding FICEs and the limited guidance available for the treatment of these complex financial instruments (IASB, 2018a). This highlights the need for further research in the area. Therefore, the aim of this paper is to contribute to the research by analyzing the narratives used by preparers, as well as the characteristics of these instruments. How are these instruments structured, and how are they presented by the preparers in the annual reports, based on the current accounting standards? Furthermore, as we will also investigate how CRAs treat these hybrid instruments, the perspective of how the CRAs reason on these complex hybrid instruments that lie at different points on the equity-liability spectrum will be added. Since both the IASB and the CRAs are important actors from a regulatory and capital market perspective, discrepancies between them might affect the information comparability of the riskiness of the firms.

Accordingly, we seek to provide insights and to inform the debate on financial instruments with characteristics of equity, by assessing how different stakeholders treat these complex instruments. These will namely be the issuing firms, the standard-setters,

and the Credit Rating Agencies. The exploratory approach of this study could thereby inform the ongoing discussion and provide a more comprehensive overview of current classification issues of FICEs, as well as assessment considerations to investors and to the CRAs. Thus, we believe that the study will provide valuable insights into the current landscape of hybrid instruments to the interested parties.

1.1.Research Question

To shed light and contribute to the ongoing discussion regarding the classification of FICEs by various stakeholders, we intend to examine the fundamental features of these instruments that appear to be more present. We will thus explore how they relate to the classifications and disclosures set by the IFRS standards, as well as how they relate to the Hybrid Methodologies of the CRAs. Since both the IFRS standards and the CRAs' assessment provide important sources of information-spreading in financial markets, it is interesting to investigate if and how there are potential discrepancies between them, and the potential effects that these could have. Therefore, this paper aims to investigate three research questions, which are as follows:

Research Question 1: To what extent do European Companies use FICEs, and are there any industry/country patterns that can be observed?

Research Question 2: Which are the economic characteristics of the issued instruments?

Research Question 3: *How do the issued FICEs interrelate with IAS 32 and the Credit Rating Agencies' assessments?*

To answer our research questions, we use an exploratory approach, and adopt the theoretical lenses of corporate finance theory on equity and liabilities, as well as the definitions of equity and liabilities in the current IFRS framework.

2. Theory

2.1. Previous Research

2.1.1. The current criticism of IAS 32

The Conceptual Framework for Financial Reporting ("The Framework") was issued by the IASB (the Board) in 2010, and then later revised in 2018 (IASB, 2018b). The Framework describes the concept and the general objective of financial reporting and is based on concepts that are consistent throughout the IFRS framework. The Conceptual Framework assists the IASB in the development of their issued standards. The Framework also assists preparers in the development of consistent accounting policies, as well as to make the standards more understandable and easier to interpret for all parties (IASB, 2018b). The current framework, however, provides only limited guidance for the classification of equity and liabilities, thus limiting its relevance to FICEs as these financial securities can be complex and have characteristics of both elements. The development of the nature and complexity of these securities has further made the classification increasingly challenging and related parties have raised their concerns regarding the matter (IASB, 2018a). Challenges mostly arise for those financial instruments that have contractual obligations lying in between these two typologies of equity and liabilities, also known as "the dichotomy". This challenge of classification is affecting many different stakeholders and the application and the principles of IAS 32 Financial Instruments: Presentation has therefore been widely criticized throughout the years. The IASB has recognized the need for better guidance on this issue and has therefore issued a Discussion Paper (2018) regarding this topic. The Board states that most of the criticism associated with the requirements in IAS 32 is related to its complexity and difficulty of application and that it's not robust enough for addressing the increasingly complex and sophisticated financial instruments that are being issued. The IASB has, in response to the feedback of the 2018 Discussion Paper, decided to launch a Financial Instruments with Characteristics of Equity research project (the "FICE Project", or the "Project") to develop a comprehensive framework for the classification and disclosure of these instruments, to their research agenda (IASB, 2018a).

The FICE Project was started in 2020 and topics related to the feedback received from the 2018 discussion paper (DP) have been discussed since. In the Discussion Paper (2018), the Board developed a "Preferred Approach" to make the classification requirements clearer and more consistent. Additionally, to help users of financial statements distinguish financial instruments that lie on different points on the spectrum between equity and liabilities, they also proposed enhanced disclosure requirements and more extensive presentation of FICEs. Under the preferred approach, a financial instrument would be a liability if the entity has a contractual obligation to transfer cash or an asset other than at liquidation of the firm (called the "Timing Feature"). Or, if the entity has a contractual obligation for an amount independent of the issuer's financial performance (called the "Amount Feature") (IASB, 2018a). Under this preferred approach, most of the FICEs would not be expected to change in classification. However, for some instruments, classification could change from equity to liability. This would notably be the case for perpetual bonds with cumulative deferral features, and for nonredeemable fixed-rate cumulative preference shares (EFRAG, 2019). However, after receiving comments and feedback on the proposals (IASB, 2019) in the Discussion Paper (2018), the Board decided not to further proceed with the preferred approach. Instead, to focus on known practice issues when applying the existing standards, and to improve the disclosure and information provided in financial statements about FICEs (EY, 2022). Although they received feedback that the proposals could provide additional guidance to classification challenges proven in practice, several concerns were also identified. Indeed, new accounting challenges and disproportionate negative impacts to corporations and investors affected by the potential reclassifications were raised. The importance and the attractiveness of these hybrid bonds as a source of financing for entities, as well as the investment opportunities of this asset class to the investors were some of major arguments for these stakeholders not to welcome the potential classification changes (EFRAG, 2019; IASB, 2021). Thus, the focus of the Board as of now is mostly related to the presentation and disclosure of FICEs. The next step in the process for the IASB will be the issuance of a new Exposure Draft, which is currently being drafted (EY, 2022).

2.1.2. Prior research about motives behind issuing Financial Instruments with Characteristics of Equity (FICEs)

Previous literature has suggested that the classification of financial instruments required by accounting standards, has influenced how companies select their capital structure, and how they structure financial instruments to fit within a certain classification. In other words, accounting standards affect a firm's behavior (De Jong et al., 2006). A study by Engel et al. (1999) found that firms in the U.S paid between 10 MUSD to 43 MUSD for balance sheet structure profiling, so to reduce their debt-to-asset ratio by an average of 13%, pointing to the relevance of additional insights on how these instruments are constructed and presented.

Dutordoir et al. (2014) have reviewed literature on issuance motives behind convertible bond financing and found several motivations as to why companies in the U.S issue compound financial instruments. The authors identified four main motivations for such issuance: the reduction of agency cost by shifting risk, backdoor-equity financing, to moderate uncertainty when information asymmetry is assumed by using the conversion option to align assumptions of the value of the bond. Lastly, as a response to investor demand when access to common equity is limited. A prior study made by Lewis and Verwijmeren (2011) came to similar conclusions as Dutordoir et al. (2014), about motivations for issuing convertible bonds. Dutordoir et al. (2014) further found that in the geographies where corporate governance is stronger, convertible bonds (i.e., compounded financial instruments with characteristics of debt and equity) are more commonly issued in relation to "straight debt" and "common equity". Additionally, investors seem to consider the issuance of convertibles as a sign of stronger corporate governance quality. Consequently, firms with lower sophistication and corporate governance quality experience a relatively higher favorable reaction from investors when these instruments are issued, as their issuance could be related to an improved picture of the company's corporate governance quality. Other research papers (Levi & Segal, 2014; King & Ortegren, 1988; Engel et al., 1999) found that U.S firms selectively design hybrid financial instruments to classify them as equity if the aim is to have a proportionally lower debt and as a liability for interest tax shield purposes. Another paper by Schmidt (2013) also concludes that certain hybrid instruments could be constructed in such a way to take advantage of the current classification of the debt and equity.

De Jong et al. (2006) studied the decision making of 34 Dutch companies with regards to their preferred stocks as the IAS 32 standard was implemented. Due to the new standard, most of the preference shares lost their equity classification. In the study, the analyzed companies were seen to have a 35% increase of the debt-to-equity ratio because of the implementation of the new standard. At the time, 71% of these companies chose to either redeem these preferred stocks or change the specifications of the instruments to maintain the equity classification. Consequently, responding to the apparent new riskier profiles of their balance sheets. Other studies have also shown that managers in the U.S have structured these instruments for the purpose of gaining a desirable effect on their diluted earnings per share (Lewis & Verwijmeren, 2014; Marquardt & Wiedman, 2007). Previous research shows that there are incentives and motives to strategically issue these increasingly complex and sophisticated financial instruments to achieve a desired outcome. Companies' incentives for issuing complex financial instruments can further be related to the criticism of IAS 32, especially regarding the robustness and inability of the framework to capture the economic substance of the instruments being issued. Additionally, as these instruments becomes more sophisticated, it becomes harder for users of the financial statements to understand the underlying substance of the contracts and in extension the financial position and performance of the firm (IASB, 2018a).

2.1.3. Making sense of the characteristics of FICEs

Fargher et al., (2019) discuss in their paper prior research that investigates the effects of classification requirements on entities financing choices, and on the decision-making for users of financial statements. The authors conclude that there is limited evidence in the research about the impact of different classification outcomes. Hopkins (1996) investigates whether the "structure" of written text can affect how individuals interpret information from a psychological perspective. The study explored the impact of different classifications for instruments with characteristics of both equity and liability features, by

how financial analysts predicted share prices. In the first setting, the hybrid instruments were categorized into equity or a liability and in the other setting, the instruments weren't categorized but were given in a mezzanine condition. In the first condition, analysts predicted different share prices, whereas in the mezzanine condition analysts did not make price judgements between those observed in the equity and liability condition. The result of the study suggests that classification of a hybrid instrument as equity or liability indeed influences the stock price judgements of experienced user groups such as financial analysts.

Another study by Clor-Proell et al. (2016) investigated how experienced finance professionals in the U.S assessed hybrid financial instruments in their judgment on creditworthiness. The study illustrated that the disclosure of the underlying features of the instruments was more important than how the instruments were classified. Furthermore, a study by Peasnell (2013) found the disclosure of relevant information as a more important issue than the actual classification per se. Peasnell (2013) argues that if the user of financial statements is well informed the classification of the instrument is of little consequence, if there is sufficient disclosure, and that the user can recast the instrument on the balance sheet at relatively low cost.

Additional research on analysts' interpretation of hybrid instruments by Linsmeier et al. (2004) and Cheng et al. (2003), concludes that investors viewed preferred stock as liabilities or equity depending on the characteristics of the issuing firm, rather than the contractual provisions of the instruments. When the risk of insolvency was high (as measured by stock return volatility), investors focused on solvency and viewed preferred stock as more equity-like. However, when the risk of insolvency was low, investors focused on valuation and viewed preferred stock as more debt-like. Furthermore, related to cultural aspects of analyst's interpretation of these instruments, Doupnik and Richter (2004) found that German accountants provided more conservative numerical probabilities to liabilities than their US counterparts. Questions can then arise as there is room for interpretation, as different corporations in different geographies will have more or less cultural biases. This is especially relevant for our study, as most European companies still report according to the same IFRS standards. Discrepancies within the EU and between European countries in terms of reporting could thus emerge as results of reporting from formal written standards yet understood differently as a result of cultural differences.

Prior research in psychology from Bonner & Sprinkle (2002) and from Kunda (1990) are also of interest, as they indicate the role of motivations of users when interpreting pieces of information. Particularly, that prior beliefs held by the users could bias against increased accuracy of its understanding. Users of financial statements could thereby be biased in keeping their previous conclusions, supporting themselves by building the most plausible justifications they could come up with. Different incentives for different parties (preparers, users, auditors, lenders etc...) could therefore affect their interpretation and judgment of complex hybrid financial instruments with compounded characteristics.

2.1.4. Prior research on potential ways forward

A paper by Schmidt (2013) questions whether the current classification methodology provides the user with useful information for decision making. The author illustrates that a way forward to these problems could be ending the current dichotomy of equity and liability, thus creating a *mezzanine* category in the balance sheet to collect all hybrids in between the two sets. The EFRAG (2008) Discussion Paper had already questioned at the time whether the current dichotomy was the best way forward. However, the paper also presented issues for practitioners and other interested parties should a mezzanine category lying between liability and equity be created. One of the main issues relates to the basic accounting equation, Equity = Assets - Liabilities. Should a mezzanine category be created, it would be less evident how to place it within this basic equation, as the category would include equity elements of the firm. Additionally, flows to usually seen as debt holders are shown in the Income Statements as Interest Expenses, whereas flows to usually seen as equity holders are shown as transactions between owners in the Statement of Changes in Equity. The EFRAG (2008) Discussion Paper further questioned where the claim to cash flows to mezzanine holders would be presented, aside from in the Statement of Cash Flows. Additionally, the current dichotomy has implications to the receiver of these benefits, as it has tax implications. Dividend streams may be taxed at a different rate than income streams depending on the geography of residence of the beneficiary. Surely, interest payments are tax deductible for the companies, whereas a classification of the instrument as equity would provide no such benefit. As the economic reality is different from the model economy (no frictions from taxation, no transaction costs) used by Modigliani & Miller (1958), these decisions are impactful from a valuation perspective. Questions thus also arise in terms of the alleged tax implications of such a cash-flow from this supposed *mezzanine* category (EFRAG, 2008). Additionally, Fargher et al. (2019) also discussed the eventual *mezzanine* category as a solution to the classification issues. However, the authors have several points that set the stage as to why they believe the current dichotomy of debt and equity is there to stay. Among those points is the fact that a mezzanine category would still need "robust" definitions to mark the line between the straight liabilities and the hybrid category (as well as for between the equity and the hybrid category).

2.1.5. Research gap in existing literature

Building on the aforementioned literature, a comprehensive understanding on how hybrid instruments are presented and constructed within the current relevant standards (namely IAS 32, IFRS 7 and IFRS 9) is needed (IAS, 2003; IASB, 2005; IASB, 2010). It is also important to have a preliminary understanding of the relevance i.e., the presence of hybrid instruments to answer the underlying questions of this thesis. As corporations and legal advisors keep coming up with new structured products, it is necessary to keep track of

studies that have researched the presence and the structure over time of these hybrid instruments. Here already, the task is not self-evident. As raised in Fargher et al. (2019) most of the studies covering these instruments rely on third-party databases originated by commercial providers as input sources. This may be a limiting aspect, as these third-party databases rely on the information disclosed by companies' financial statements. Instruments with peculiar components might be omitted by these studies, and the conclusions could be inevitably skewed towards statements favoring self-reported form over the actual substance of the contracts.

Additionally, most of the research about Financial Instruments with characteristics of Equity and their impact on the financial industry concentrates in the US (EFRAG, 2019). This gives an additional layer of void in the literature, as U.S public companies have SEC filings and U.S GAAP standards to follow and therefore won't be completely comparable to our research on companies applying IFRS. As such, we have mostly focused on papers having had a research analysis in Europe or in other jurisdictions where the IFRS standards are applied (thus limiting the sources coming from US case studies). We believe this paper to be of considerable contribution to the assessed absence of literature in the field of FICEs in Europe and in IFRS jurisdictions, as highlighted by previous research (EFRAG, 2019; Fargher et al., 2019). Another potential limitation to the current research of hybrid instruments is that many of them are made during periods of time when new accounting standards allowed observations of apparent changes in structuring behavior in companies. The evidence in these studies may therefore not be generalizable to other periods of time where no new accounting standards allows for apparent changes in behavior. We therefore believe that this paper can provide additional insights into the phenomenon based on its different methodological approach and relevance in relation to the potential amendments to IAS 32 Financial Instruments: Presentation.

2.2. Corporate Finance Theory

Financial statements are the most important information-sharing tool for publicly traded companies. Financial analysts, investors, credit rating agencies, creditors and other interested parties use financial statements to obtain information and make judgments about the financial performance of a company. Financial statements are also an important source of information for firms as managers use them for corporate financial decisions (Berk & DeMarzo, 2017). Therefore, these reports need to be accurate and understandable. The current International Financial Accounting Standards ("IFRS") issued by IASB provide a common set of standards and rules for firms in their preparation of the reports, as such, most of the European countries have chosen the IASB as the body governing the issuance of accounting standards. The accounting standards further provides a standardization of the financial reports which increases comparability and

makes it easier for different stakeholders to compare the financial performance of different firms in a coherent way (IASB, 2018b).

All public companies need to prepare and publish four financial statements i.e., the *income statement*, the *balance sheet*, the *statement of shareholders' equity* and the *statement of cash flows*. These four financial statements provide a complete overview of the financial performance of firms. In addition to these statements, companies need to provide additional detailed information and disclosures in "notes". This additional information is often essential in order to fully interpret a company's financial statements. The balance sheet provides a picture of the financial position of a firm at a given point in time and consists of assets, liabilities and shareholders' equity. Assets are presented on the left-hand side of the balance sheet and provides information on investments made by the firm and its use of capital, while the right-hand side of the balance sheet summarizes how the firm has financed their investments (Berk & DeMarzo, 2017).

Equity represents the ownership interest of the shareholders in the company, while liabilities represent the company's obligations to third parties. Moreover, equity represents the residual interest in the assets of the company after deducting its liabilities from its assets and is called the book value of equity. In other words, equity is what remains after all debts and obligations have been paid and includes both common and preferred stock, retained earnings, and any other items that represent ownership in the company. Furthermore, equity is characterized by the fact that it represents the owners' claim on the company's assets, which can fluctuate depending on the performance of the company. Liabilities can be categorized as current or long-term, depending on whether they are due within one year or more than one year, respectively. Examples of liabilities include accounts payable, short-term and long-term loans, and bonds payable and are characterized by the company's obligations to repay a debt or fulfill an obligation, and do not fluctuate depending on the performance of the company (Berk & DeMarzo, 2017).

The capital structure of a firm consists of the relative proportions of equity and liabilities. Companies that need to raise external funds to finance ongoing operations or a new investment, needs to decide what kind of security they want to issue (Berk & DeMarzo, 2017). Modigliani and Miller (1958) argue in their important paper that in a perfect capital market, the value of a company does not depend on the company's capital structure. Since different capital structures don't change a company's total cash flow, it has no effect on the present value of the firm's cash flows i.e., the value of the firm. Furthermore, since debt includes obligations of repayment to third parties and equity does not, increased levels of debt in a company increase the riskiness of the firm. To compensate for this risk, equity holders want a higher return on their investment. So, in the case of perfect capital markets, leverage increases the risk of equity and therefore raises the cost of capital for equity. However, as the cost of debt generally is cheaper than equity when considered on its own, the average cost of capital with leverage is the same as for a firm with only equity

as a source of financing (Modigliani & Miller, 1958). This relationship was first demonstrated in Modigliani and Miller's Proposition 1, where they argued that in a perfect capital market, the total value of a firm is equal to the present value of the total cash flows generated by its assets and not affected by the firm's choice of capital structure. However, firms do invest time and money to manage their capital structures and the level of leverage can be of great importance for a company's future success and current value, as perfect capital markets do not exist due to market imperfections such as taxes. Corporations that earn income are required to pay taxes. However, they are allowed to deduct interest payments from their profits before calculating their tax liability. This means that interest expenses lower the amount of corporate tax that companies have to pay. As a result, there's a motivation for firms to take on debt, as it can reduce their tax burden. Since leverage allows a firm to pay interest to debt holders as well as dividends to equity holders, the total amount paid to all investors will be higher due to the interest tax shield, which in turn increases the value of the company. As aforementioned, higher levels of debt, however, increase the risk of the company due to the contractual obligation of repayment. High interest expenses increase the probability of failure to make interest payments which in most cases will force a firm into default. Therefore, optimal capital structures vary between companies depending on internal and external factors, such as earnings and interest rates in the economy (Berk & DeMarzo, 2017).

Hybrid financial instruments are one source of financing for companies. These hybrid instruments typically contain both debt and equity-like features, and as a result, they do not fit easily into the current dichotomous structure of capital. The classification of hybrid instruments can vary depending on the specific characteristics of the instrument and the applicable accounting standards. In general, the classification will depend on whether the instrument has more equity or more liability characteristics. If an instrument has more equity features, it may be classified as equity, and if it has more liability features, it may be classified as a liability. Overall, hybrid instruments can provide companies with a flexible source of financing, but they can also be complex and difficult to value (Coyle, 2002). As these instruments can have a combination of characteristics that generally are associated with either "straight debt" or "straight equity" the classification can be difficult. Especially when single characteristics point in different directions such as an instrument that is payable at a fixed date i.e., characterized by a "straight debt" attribute, but simultaneously includes a participation in gains and losses, which generally is an attribute of "straight equity". In a discussion paper issued by the German standard-setter in 2008, it is argued that for a company to classify a hybrid instrument and to distinguish equity from debt, the company would need to focus on the more "distinct" characteristics. These "distinct" characteristics should be deemed more important to the users of financial statements regarding their decision-useful information than other less essential attributes inherent in the instrument (EFRAG, 2008). The EFRAG Discussion Paper from 2008 also argues that, in simple terms, that the difference between equity and debt is not a scientific fact but rather an accounting practice. Furthermore, that there is no fixed or objective

definition of what equity or debt is and that equity is based on people's varying interpretations, which can be influenced by traditional accounting conventions. Because of the lack of a one-size-fits-all criterion, any distinction between equity and debt involves selecting certain criteria while rejecting others. In the EFRAG Discussion Paper (2008), it is further argued that people may have different views on what should be categorized as equity or debt and that individuals give varying levels of importance to any one or a mix of these criteria because diverse user requirements and needs will ask for different classifications (EFRAG, 2008).

2.3. IASB Conceptual Framework, IAS 32 & Hybrid methodologies of the three main Credit Rating Agencies

Understanding the accounting classification of equity and liability is essential for companies to accurately report their financial statements. Since discrepancies in presentation might affect users' interpretation of the hybrid financial instruments, thus limiting consistency in capital market pricing factors. However, Credit Rating Agencies are recognized for providing valuable information about the riskiness of firms, allowing investors to easily evaluate the general risk characteristics of these individual securities. Furthermore, as their assessment of these hybrid instruments also affects many other stakeholders, such as regulators, legislators, issuers, and creditors, their quality of ratings is central for reporting and financial decision-making (Becker & Milbourn, 2011). In this paper, focus will therefore be put on the three largest credit rating institutions (Moody's Investors Service, S&P Global Ratings and Fitch Ratings), by reviewing their methodologies for assigning equity credit to financial instruments with characteristics of equity. This section of the paper will therefore describe the current accounting standards and the IFRS guidance of how companies should classify their financial instruments according to the standards. In addition, how three different Credit Rating Agencies assess the financial instruments issued by these companies.

2.3.1. IASB Conceptual Framework and IAS 32

The International Accounting Standards Board (IASB) is the organization responsible for developing and issuing the International Financial Reporting Standards (IFRS) accounting standards. IFRS provides guidance on how public companies around the world should classify, measure, and present their financial statements. The Conceptual Framework for Financial Reporting ("The Conceptual Framework") describes the concept for and the objective of general-purpose financial reporting and is based on consistent concepts to assist the IASB in their development of IFRS Standards (IASB, 2018b). IAS 32 is a specific standard issued by the IASB that deals with the classification and presentation of financial instruments. IAS 32 provides guidance on how to classify financial instruments into equity, liabilities, or a combination of both (IASB, 2003). In other words, IAS 32 is a specific standard within the broader framework of IFRS that

addresses the accounting treatment of financial instruments and is one of the many standards that make up the broader IFRS framework. Overall, IFRS sets the general principles and guidelines for financial reporting, while IAS 32 provides specific guidance on how companies should classify and present financial instruments.

In the Conceptual Framework, five elements of financial statements are defined i.e., assets, liabilities and equity which are related to the financial position of a reporting entity, and income and expenses which are related to the financial performance of a reporting entity. The Conceptual Framework also provides definitions for these five elements and how they should be classified. Assets are defined as a present economic resource with potential to produce economic benefits while being controlled by the entity as a result of past events. A liability is defined as a present obligation of the entity as a result of past events, to transfer an economic resource and equity is defined as the residual interest in the assets of the entity after deducting all of its liabilities (IASB, 2018b). In other words, the classification of financial instruments as a liability also influences what can be classified as equity. Table 1 below is an excerpt from the current IAS 32 Financial Instruments: Presentation (IASB, 2003). As the table shows, IAS 32 defines a liability as a contractual obligation to deliver economic resources to another entity or to exchange present economic resources controlled by the entity to another entity. In addition, also as a contractual obligation to exchange financial liabilities of assets with another entity that can be unfavorable for the entity. IAS 32 further specifies certain criteria for a liability with regard to a contract that might be settled in the entity's own equity instrument with a variable number of the entity's own equity instrument, the "fixed-for-fixed" criteria. Meaning that if the entity is obliged to deliver a variable number of the entity's own equity instrument to settle the obligation, the contract is classified as a liability, but for a fixed number of the entity's own equity instrument it is classified as equity under IAS 32. Nonderivative financial instruments that contain both an equity and liability component are referred to as compound instruments i.e., instruments that create a financial liability for the entity with an option for the holder of the instrument to convert it to an equity instrument of the entity. These financial instruments shall be classified in two separate parts, one in equity, containing the call option that grants the holder the right to convert it into a fixed number of ordinary shares and one in liability (IAS 32, para 29). The equity amount is the residual amount of the total fair value of the instrument after deducting the liability component, i.e., the residual amount (IAS 32, para 31).

A *financial liability* is any liability that is:

- a) a contractual obligation:
 - i) to deliver cash or another financial asset to another entity; or
 - ii) to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavorable to the entity; or
- b) a contract that will or may be settled in the entity's own equity instrument and is:
 - i) a non-derivative for which the entity is or may be obliged to deliver a variable number of the entity's own equity instrument; or
 - ii) a derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments. For this purpose, rights, options or warrants to acquire a fixed number of the entity's own equity instruments for a fixed amount of any currency are equity instruments if the entity offers the rights, options or warrants pro rata to all of its existing owners of the same class of its own non-derivative equity instruments. Also, for these purposes the entity's own equity instruments in accordance with paragraphs 16A and 16B, instruments that impose on the entity an obligation to deliver to another party a pro rata share of the net assets of the entity only on liquidation and are classified as equity instruments in accordance with paragraphs 16C and 16D, or instruments that are contracts for the future receipt or delivery of the entity's own equity instruments.

An *equity instrument* is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities.

IAS 32 Financial Instruments: Presentation (IASB, 2003 Para 11)

The definition of liability in both the Conceptual Framework and the IAS 32 is very similar and both define equity the same way except for the additional "fixed-for-fixed" criteria in IAS 32. Although the principle for the classification of equity and liabilities is quite straightforward in both the Conceptual Framework and the IAS 32, they may not always be adequate to determine the classification of an instrument due to the complexity of financial instruments today. The classification becomes challenging when an instrument has features of both equity and debt and thereby requires assessments based on the attributes to determine its classification (IASB, 2018a).

2.3.2. Hybrid Methodologies of the Credit Rating Agencies

Credit ratings and the Credit Rating Agencies (CRAs) play a significant role in financial markets by providing information about the likelihood of default and recovery rates of securities, which reduces the duplication of effort. They also allow uninformed investors to easily evaluate the general risk characteristics of individual securities and of the overall

corporate repayment ability thanks to the categorization of credit risk into a scaling methodology (Becker & Milbourn, 2011). This categorization of rating is known in the industry as "notching". The reader can refer to the Appendix A. for further clarifications on the notching of the three main CRAs. A rating of Baa3 and above would be considered "investment grade" for Moody's, whereas a rating of Ba1 or below would be considered as "speculative". In the same manner, yet with a different naming for their nomenclatures, S&P and Fitch would consider a rating "BBB-" and above to be "investment grade", whereas a grade of "BB+" and below would be deemed as "speculative" (Moody's Investors Service, 2018; S&P Global Ratings, 2022; Fitch Ratings, 2020).

Additionally, credit ratings are widely used and relied upon in regulation and private contracting as a means of measuring and limiting risk, supporting the decision-making of credit underwriters (being suppliers, asset managers etc.). Furthermore, credit ratings also influence the regulatory requirements and the investment mandates put forward on institutions such as commercial banks, insurance companies, pension funds, asset managers etc. Many investors, such as pension funds and money market funds, can only hold securities with investment grade ratings i.e., securities with a rating of BBB- or higher, while other investors such as insurance companies are required to hold different levels of capital on their balance sheet based on the ratings of the securities they have outstanding. This makes ratings a vital source of information-spreading in financial markets and are therefore considered highly important by many stakeholders such as regulators, legislators, issuers, and investors. Consequently, the quality of ratings is crucial for the proper functioning of the financial system (Becker & Milbourn, 2011).

This subsection will therefore focus on the three main credit rating agencies (CRAs) namely Moody's Investor Services, S&P Global Ratings and Fitch Ratings and how they methodologically approach hybrid instruments with characteristics of both debt and equity. The emphasis will be put on how the treatment of the hybrid instruments according to these "hybrid methodologies" will impact the overall rating of the corporates. Moreover, this section will describe the most relevant and impactful characteristics for the equity credit adjustments of these hybrids, which will then in turn drive the apparent capital structure for the rating purposes of the CRAs. Consequently, these adjustments are supposed to feed the overall balance sheet compositions of corporations.

It is important to understand that these agencies have what could be regarded as a "mandate" to provide a service of practical use for the risk assessment and the decision making of the final users. As such, their work could come across as more pragmatic as opposed to the work illustrated by the IASB in the previous subsection. The studies of Kisgen (2009, 2019) highlight the relevance of CRAs assessments to companies (or at least the impact of the changes of these assessments). Companies receiving a riskier rating will compensate by de-leveraging themselves. This finding is exacerbated for companies going from the "investment grade" group to the "speculative graded" one (Kisgen 2009).

Also, it has been found that firms reconsider their capital structure when rating agencies change parts of their assessment methodologies (Kisgen 2019). Moving forward, as the three rating agencies are autonomous in their work, they have different ways for approaching different questions, namely for these hybrid instruments. As hinted, the three CRAs have three guiding, publicly available, documents when it comes for their decision making in the field of Hybrid Instruments. These are the "Hybrid Equity Credit (2018)" for Moody's Investors Service, "Hybrid Capital: Methodology and Assumptions (2022)" for S&P Global Ratings, and "Corporate Hybrids Treatment and Notching Criteria (2020)" for Fitch Ratings. These documents (collectively referred to as "the hybrid methodology(-ies)" from now onwards) are reviewed and continuously updated by the CRAs and in this section the latest versions of the hybrid methodologies are used for theoretical and analytical inputs.

Initially, it is important to note that the three CRAs have similar limits for the application of these hybrid methodologies. Indeed, only instruments considered to be "common equity/ordinary shares" and bonds with no deviating characteristics (i.e., equity characteristics) are not assessed using these hybrid methodologies. From a theoretical and methodological stance, the reader will find out in the Methodology (Section 3.2 Data Collection) that these limits in terms of "research for hybrid instruments" only slightly deviates in intent from the approach used in this paper when it comes to the data collection of hybrid instruments. As a starting base, all these instruments start with a complete debt recognition and "work their way through" a framework in order to get allocated equity content. This procedure is also applied to what are usually known as "preferred shares" (which are usually booked as equity) and to convertible bonds eligible to compounded recognition into debt and residual equity components as per IAS 32 and IFRS 9. The main similarity between the three CRAs comes from their assignment of "equity credit" (or "equity content", as S&P refers to it) to any hybrid security. These equity credits are given by the order of 0%, 50% or 100% (Moody's also having 25% or 75% as possible allocations of equity credit) to the booked face value of the hybrid security, thus "adjusting" the total indebtedness for rating purposes of the issuer (Moody's Investors Service, 2018; S&P Global Ratings, 2022; Fitch Ratings, 2020).

To assign the equity credit to financial instruments with characteristics of equity, the three CRAs use methodologies that consider factors such as the degree of subordination, the permanence of the investment, effective maturity and the ability of the issuer to defer payments on the instrument, and thus the loss absorbing attributes of them. However, leaving these general agreed points, the three rating agencies seem to approach the intrinsic characteristics of the instruments in different manners that will be summarized later in this section. Also, the three CRAs, as a guiding principle, generally qualitatively assess the context in which they are issued and the intentions for the issuance of such hybrids by the corporations (Moody's Investors Service, 2018; S&P Global Ratings, 2022; Fitch Ratings, 2020).

When it comes to the extent to which the three CRAs "reshuffle" the right side of the balance sheet of the companies having hybrid instruments, it is interesting to notice the divergence between the three. Moody's would typically "cap" the calibration of equity credit given at group level considering that Hybrid Equity Credit divided by Adjusted Equity has to be smaller or equal to 30%. Adjusted Equity would be any equity reported plus any adjustments of the equity. After this ratio is surpassed, the excess equity credit will be seen as 100% debt. Still, Moody's reserves itself to change this ratio limit for qualitative reasons, and the "Adjusted Equity" figure as well could be modified with factors external to the hybrid methodology. We have not been able to understand how recurrent these qualitative prerogatives trespass on the quantitative methodology is, however, we still think they are worth the notice. S&P Global on the other hand decides to put a cap of 15% of the nominal amount of the equity content given to the company in relation to the overall capitalization of the company. When this amount is reached, the remaining nominal value of these hybrid securities do not receive any additional equity content. In the case of S&P, this threshold appears to be stricter, as no additional equity content will be reclassified "back" in the case of the company redeeming other hybrids or contracting the size of its capitalization. When it comes to Fitch Ratings instead, they do not apply caps on the maximum amount of equity credits that can be given, except for qualitatively assessed specific cases where the amount of equity credit would be deemed as "unsustainable" (related to the general principles of the intended capital structure) (Moody's Investors Service, 2018; S&P Global Ratings, 2022; Fitch Ratings, 2020).

Additionally, Fitch is the only company that has not expressly stated that a hybrid instrument will be considered in a different way if the company is rated as "investment grade" or with a "speculative grade". On the other hand, Moody's and S&P have different provisions depending on the current credit situation of the company. Moody's is the CRA having the most extensive set of rules for allocating different equity credits for similar hybrid instruments issued by differently related firms. The rationale revolves around different expectations from investors and performance on these hybrids depending on the financial hardship experienced. As a matter of fact, the guiding principle according to Moody's is that investment-graded companies are expected to perform on their hybrids, even on hybrid securities where the coupon-skipping and non-cumulative provision exist, as they would have no tangible reason as to why they would not comply with their expected pay-outs. On the contrary, a speculative-graded company, thus one in a more dire financial situation, is more entrusted with the non-performance on hybrids having no defaulting-triggering provisions. For these reasons, investment grade companies could be assigned lower equity credit than their speculative-grade counterparts (that usually end up with a full equity credit). When it comes to S&P, they have two main instances where rating impacts their decision making. For when it comes to the decision of the effective maturity date, S&P would consider a step up of 100 bps as an effective maturity of the security if it is issued by an investment-grade company. This increase would need to be

of 200 bps for it to be considered an effective maturity date if that came from a speculative-graded company. The reasoning being that a speculative-rated issuer might still find itself in a better contractual position in accepting a contractual obligation to increase its coupon by 100-200 bps, rather than having to start a new origination process for its financing Moody's Investors Service, 2018; S&P Global Ratings, 2022; Fitch Ratings, 2020).

Related to this last hinted point, CRAs have similar views on what constitutes an effective maturity date for a FICEs, as all three generally agree (as per the time of this paper) that a contractually agreed step-up increase in coupon rate of 100 bps constitutes to an effective maturity date, even if the instrument would be "perpetual" by its nature (with Fitch expressly stating that cumulative increases till the reach of 100 bps will be included in this definition). A substantial increase in the coupon to be paid would represent a too onerous cost for the firm, thus effectively incentivizing the firm(s) to redeem the FICE by that date (Moody's Investors Service, 2018; S&P Global Ratings, 2022; Fitch Ratings, 2020).

Overall, Moody's came across as the rating agency willing to quantify and measure to a larger extent. On the other hand, Standard & Poor's and Fitch Ratings expressively used wordings indicating a more discretionary approach. This approach also indicated the complexity of these structured instruments, that cannot easily be prescribed into a set of rulings.

Finally for this sub-section, the equity credit assessments by CRAs are thus non-IFRS assessments. Would they find their way through annual reports, we believe them to be part of the APM (Alternative Performance Measurements). There seem to us that limited research has been made on these kinds of alternative measures. A comprehensive resource that we used to contextualize the phenomenon (that comes from practice) is EY (2018).

3. Methodology

The following chapter describes the research methodology used in this study. The first section motivates the choice of our research design, explaining how an exploratory approach, that supports itself with content analysis, is the appropriate approach for tackling the issue at hand. The sections thereafter describe the process of data collection and analysis, then concluded by a discussion of the quality and reliability of the data used in our study.

We believe this section of our study to be of great importance, as it contributes to laying down our procedural methodology for the investigation of a phenomena that is of great complexity and actuality. Additionally, this section will be of interest for the future research of FICEs that would investigate the phenomenon in different geographies and/or at different points in time. Overall, having similar methodologies could help future researchers to work in different scenarios, while being able to combine the result of different studies for comparability purposes. We believe this to be especially relevant for addressing such a topic that is under-researched yet extremely relevant for current research.

3.1. Research Design

One of the aims of this paper is to assess the occurrence and the relevance of the contemporary phenomenon of FICEs within European countries. Subsequently, looking at potential relationships and performing relevant analysis (also for the aim to strengthen future research proposals). To answer our research questions, this study was conducted having an exploratory approach, that is motivated by the current dearth of research within the topic, as well as by the complex nature of the phenomenon investigated. The study is based on archival data, and content analysis was performed on annual reports and other documents that would bring complementary inputs to our study.

Content analysis enables us to analyze a large volume of annual reports data in a systematic and replicable manner (Drisko and Maschi, 2016). By doing so, we are able to systematically identify specific economic characteristics and narratives of these complex hybrid financial instruments. Once these elements are identified they can be "compressed" into a few content "categories" (further discussed later) that are based on our rules of information codification. By applying structured content analysis, while using our specified research design, we aim to make replicable and valid inferences from written text. Furthermore, the summarization of the data found in our sample will also enable the evaluation of these inferences. Still, the coding of data from annual reports

requires deep initial understanding of the content being analyzed by the researcher, while the summarization of the data found will require to classify it into appropriate categories (Drisko and Maschi, 2016).

We believe this set-up to be useful to us in order to understand the rationale underlying potential relationships that will be found in our data. Furthermore, suggested theories from qualitative analysis can be reinforced by quantitative support (Jick, 1979). When there is support in a relationship, the analysis of the documentation can often offer a more comprehensive insight into the underlying dynamics of the relationship, which is essentially the "why" present behind the phenomenon that we investigate. This is of great importance for ensuring internal validity (Eisenhardt, 1989). As this study intends to develop additional understanding of why companies issue hybrid instruments, as well as how they structure them, exploratory research has a distinct advantage when the researcher has little to no control over a contemporary set of events (Yin, 2014). Consequently, as this study has the purpose of developing an initial understanding of the phenomenon of hybrids, the exploratory approach was taken (Eisenhardt, 1989).

To the best of our knowledge, this study is one of the first papers analyzing hybrid instruments by means of thorough understanding and internal assessments of the hybrid instruments issued by companies applying IFRS. This relative uniqueness is also present when it comes to the study of hybrids in European jurisdictions. Additionally, the peculiarity of the study is further enhanced by including the credit rating dimension. Therefore, this paper addresses the strong calls for additional investigation of the topic, within these geographies, as pointed out by EFRAG (2019) and Fargher et al. (2019).

Furthermore, as one of the recurrent mantras of the paper is to keep a "substance over form" approach, we wanted to construct our research design so to rely as little as possible on external data providers. Fargher et al. (2019) raises the issue of external providers relying mostly on classification and disclosures that are self-performed by the firms about their instruments. Relying on external providers for databases would thus dilute the value added to our research. Once again, the research methodology had to rely on definitions and understandings of the characteristics of debt and equity coming from Corporate Finance theory. Instead of relying on external providers, our research design would enable the analysis of FICEs to be more comprehensive, an outcome that would have been mitigated had we relied on the self-reporting of corporates to these external data providers (Fargher et al., 2019). This methodology would thus help us to reinforce the construct validity of the case study (Yin, 2014). Finally for this sub-section, to provide relevant explanations and interpretations, data and theory were continuously compared (Glaser & Strauss, 1999). Indeed, the classification process (i.e., coming up with the relevant categories) was an iterative one, as new theoretical and data inputs emerged.

3.2. Data Collection

The initial step for the data collection of FICEs was based on empirical data, primarily gathered via publicly available documents. This empirical data was collected and analyzed according to the process of building theory from case study research, as outlined by Eisenhardt (1989). Our main data sources were Annual Reports and CRAs' Hybrid Methodologies. In addition to our main data sources, we have reviewed relevant prospectuses for the analysis of certain FICEs, and public announcements made by CRAs on specific corporates' instruments. The following section will focus on the intentionality of the data collection, as well as practical executions.

To address the presence in Europe, while still conscribing the efforts of our collection process, we selected specific geographies. Six countries of interest were chosen: the UK, Germany, France, Switzerland, the Netherlands and Sweden. Moreover, we decided to focus on publicly traded companies with a Market Capitalization of 1,250 MUSD and above on the 31st of December 2021. The reason for the selection of this date was a practical one, relating to the availability of Annual Reports at the time of the start of this study. Consequently, we will analyze FICEs that were outstanding on the 31st of December 2021.

As expressed earlier in the paper, we also wanted to focus our work on those companies that reported under IFRS rules, as there is a research gap within this area. For this reason, it was important in the sampling and during the data gathering process to exclude companies that did not report under IFRS rules. This mainly applied to companies from Switzerland, as Swiss public companies can also report according to the local Swiss accounting principles, collectively known as "Swiss GAAP FER". The next criterion for our sample of companies was to only include companies that weren't financial institutions. For the sake of this paper, this exclusion was specifically motivated by the fact that we did not want to have the quality of our results blurred by the complexities of financial institutions' reporting. We wanted to focus on how these instruments work within the scope of IFRS, and as such we excluded instruments of financial institutions. Indeed, their existence is mostly dictated by Basel Accords as set by the Basel Committee on Banking Supervision (BCBS, 1999). We also explicitly made sure that publicly listed British "Trusts", Exchange-Traded Funds (ETFs) and insurance companies were excluded from the sample. To exclude these companies (financial institutions, ETFs, insurance companies and British Trusts), we used a combination of qualitative understanding of the operations of the company, a check of whether they needed to follow the Basel Accords rules, as well as an automatic exclusion if their ICB Industry name was "Financials". More details on this last process will be disclosed further down. To summarize, our inclusion criteria for the sample of companies used to collect data (and thereby answer our research question) were that the company should have their primary operations in one of the six chosen geographies, apply IFRS, have a Market Capitalization

over 1.250 MUSD, and be non-financial institution (thus not a financial institution nor having an ICB industry classification of "Financials").

For the actual collection of the sample of companies (the initial list), we still relied on external data providers. CapitalIQ was used (part of the S&P Global group) for the collection of the sample. Here, it was important with the consistency of the timing of the data collection process. Therefore, the sample of companies was retrieved for the 31st of December 2021, to reflect the annual reports of 2021. The filtering was made with the criteria of: "Financial Information>Valuation>Market Capitalization (mm USD)" and on "Company Details>Geographic Locations". The first filtering required to select companies having more than 1,250 MUSD in capitalization, the second filtering required the selection of the six geographies (UK, France, Germany, Sweden, the Netherlands and Switzerland). The service provider then allowed us to download an Excel spreadsheet which consisted of 962 entries (companies). In this initial sample, financial institutions, "Trusts", ETFs and non-IFRS companies were included. After having manually cleaned the sample for the removal of Trusts, ETFs and non-IFRS companies; and after having filtered out the remaining "Financial" companies from the sample, we ended up with a final sample of 587 companies. The inclusion of the "Financial" ICB Industry name will be explained later in the following paragraph.

Indeed, for the collection of Industry data of the sampled companies, we decided to use the "ICB Industry Name" (the "Industry") classification to allocate industries to companies. We have chosen the framework as it is well-known and used across the geographies that we are investigating (Vermorken, 2011). For the collection of "ICB Industry Name", we relied on another database provider, Refinitiv Eikon. We thus screened companies using the same criteria, then incorporated the Industry to the file, and downloaded the Excel sheet. We did not use the server initially, as it did not allow us to retrieve historical Market Cap data (which was key for consistency reasons). Once the Industry data was merged to the previous (CapitalIQ-based) Excel spreadsheet, a manual check was sufficient for ensuring that every company had an Industry. Additionally, we manually searched in the Refinitiv Eikon database the Industry for any company initially missing.

The next step was then to collect data on FICEs from our sample of 587 companies, using the publicly available Annual Reports of these companies. In the Annual Reports, relevant sections (most importantly the Statement of Financial Position and the Notes of the Annual Report) were reviewed to identify Financial Instruments with Characteristics of Equity. Crucial in supporting the collection of data of hybrid instruments in the ARs were "key search words" for identifying areas of interest in the documents. See Table 2 below on the process of using "key search words" for identifying FICEs in the Annual Reports.

Process of finding	Step 1: Check for	Step 2: Check for FICEs	Step 3: Check for FICEs
FICEs in the Annual	Accounting Principles	within Liabilities	within Equity
Reports			
Search words used	IFRS	Hybrid	Class
in each step	IAS 32	Bond	Shares
	IFRS 7	Subordinated	Equity
	IFRS 9	Perpetual	Voting Rights
		Conver* (Conversion,	Pref* (Preferred,
		Convertible)	Preference, Preferential)
		Exchange* (Exchanged,	Capital Stock
		Exchangeable)	Series
		Compound	Ordinary
		Embedded	Cumulative

 Table 2. Search words used in the data collection

The aim of this process was to go beyond the plain presentation in the financial statements by the companies. Moreover, the process was also for capturing the narratives that were used by companies for the presentation of their FICEs, by using an internally agreed understanding in a critical and independent way. Indeed, our approach anchored itself on the reality we could observe, limiting the bias we could have from the IFRS standards and the CRAs' Hybrid Methodologies. As the data was collected, we simultaneously analyzed it, and categories capturing the economic characteristics (or "attributes") of the FICEs most commonly presented by the companies were created and added to the Excel file. Based on these categories we continued to collect company data on, reassessing the previous data collected on these companies, if necessary. This iteration was made until the theoretical saturation of categories used (Appendix B. for further reference).

Table 5. Categorization of Economic Chara	icteristics within FICEs	
Characteristic feature	Characteristic of Equity	Liability
(Compound Reporting)	N/A	N/A
Convertible	N/A	N/A
Higher claim on Assets	No	Yes
Perpetual or more than 50 years	Yes	No
Explicit Subordination/Junior in naming	Yes	No
Variable for external reasons/Outside the co	ontrol of the firm No	Yes
Variable for internal reasons/Based on perfe	ormance Yes	No
Fixed or Capped Coupon/Dividend	No	Yes
Skipping payment	Yes	No
Cumulative	No	Yes
Preferential repayment over other		
instruments	No	Yes
(No mandatory payment but have to pay	INO	ies
if dividend is distributed)		
Other	N/A	N/A

Table 3. Categorization of Economic Characteristics within FICEs

Additionally, the method used to gather data on how the three Credit Rating Agencies (Moody's Investor Services, S&P Global Ratings and Fitch Ratings) assign equity credit to FICEs was a documentary analysis of the three (publicly available) guiding documents issued by the CRAs (Moody's Investors Service, 2018; S&P Global Ratings, 2022; Fitch Ratings, 2020).

3.3. Data Analysis

When it comes to data analysis, we decided to have a comprehensive approach about how to interpret the data collected about FICEs, therefore we also needed to structure the company data with regard to Geography and Industry to facilitate the analysis. Consequently, dummy columns in the Excel file were created for Geography and ICB Industry Name. For "Geography", this meant six columns (one per country), with a dummy variable "1" if a company was from that Geography, and "0" for the other five columns, as each company can only be assigned to one Geography. For "ICB industry name" (similarly to "Geography"), we have made 11 dummy columns, where each company would be allocated to one column, as each company can only be one ICB Industry. This will allow for filtering the sample of companies and FICEs by specific combinations of interest to the analysis.

One aspect to consider for the scope of future research and analysis relates to the granularity of this industry classification. Since we decided to perform our analysis in relation to ICB Industry names, each company in our original sample was classified according to one of the 11 industries (Basic Materials, Consumer Discretionary, Consumer Staple, Energy, Financials, Health Care, Industrials, Real Estate, Technology, Telecommunications, Utilities). Future researchers in this field could thus go for more specific classifications, by allocating ICB Supersectors, ICB Sectors and/or ICB Subsectors to each company. However, we believe that, as our sample is relatively limited in terms of entries, having less subcategories would increase the quality of the overall analysis.

3.4. Discussion and Limitations of the Methodology

We believe that the interest of this paper lies in its exploratory nature, as it tries to combine different elements in an area that is relatively under-researched. However, there are several structural problems that need to be addressed and motivated. The aim is to stimulate the thought process of the reader, as other researchers could identify improvements to the methodologies that could enhance the results of the findings.

A possible concern for the paper stems from its extensive usage of manual work. This mainly related to the identification of these "hybrid instruments", and to the "reporting" of their economic characteristics into categories by reading the Annual Reports. In section 3.1 we explained why such methodology was of interest, and why it would be less relevant to rely on external data providers for the analysis of the hybrids present in these companies. Still, there could be concerns about the continuous quality of the data gathering. This process is quite time-consuming and requires continuous critical thinking. While we have come up with a rigorous methodological process, human error factors, or missing elements could be present. Moreover, as this paper was the combination of efforts of two writers, discrepancies could arise in the reporting of these hybrids. Similarly, our methodological process might not be as robust in terms of avoiding personal judgment, thus hindering the potential replicability and comparability of similar studies in the future.

Additionally, future researchers might be interested to have a more quantitative approach to the data collected. However, we believe that more advanced analysis would be helped by having a larger sample. This could be done by allowing less large companies in terms of market cap to be included, or by including other geographies (most notably similar and neighboring geographies, like the rest of the Nordics and of the Benelux countries). Furthermore, it could also be interesting for future researchers to investigate any potential correlation between credit rating and the issuance of FICEs. However, we could not retrieve the historical ratings of the companies' credit rating related to the same time frame as the outstanding hybrid instruments analyzed (31st of December 2021). In our case (to the best of our abilities), we were only able to collect current rating data for these companies. This would have created a timing lag between the rating of the companies, and the presence of the hybrid instruments. Therefore, we decided to not include company credit rating in our analysis. Assuming this time lagging problematic to hold true, we would recommend future researchers interested in performing a similar study (one with a more quantitative emphasis) to split their work in two time periods. A first period could be devoted to the decisions of the screening criteria of companies (Market Cap size, geography etc...), as well as to the collection of the "at the time current" companies' credit rating data. Later then, would come the period for the collection of data from the annual reports of these companies, as well as to the new, "current", credit rating.

4. Empirical Findings

In this section, we present our empirical findings based on our methodology for data analysis, which will mostly relate to the first two research questions of this paper. The intention is to describe the current landscape of FICEs. After going through the screening procedures set in the Methodology, we ended up with a sample of 587 companies. Subsequently, these findings relate to what had been found in the Annual Reports of these companies.

From our sample, we found that 101 companies out of the 587 had Financial Instruments with Characteristics of Equity outstanding as of the 31st of December 2021. This represents 17.2% of the sample. The total number of FICEs found was, however, of 115, as 10 companies had two distinct *types* FICEs, and 2 companies were found to have three distinct *types* FICEs. We use the word *type* to refer to FICEs that have intrinsic economic characteristics that are different from other FICEs outstanding within the company. As such, a company having three outstanding "Hybrid Bonds" with economic characteristics that would be considered indistinct from each other, would be considered to have "one" outstanding type of FICE. This relates, for instance, to different instruments that would have indistinct economic substances, while only having elements such as "issuing date" and "coupon rate" as being different. These instruments would be classified as one type of indistinct FICE. Therefore, focus was put on *if* the company has any *type* of FICE outstanding and *how* that *type* is structured, thus accounting only for instruments with distinct attributes.

This early finding points to the fact that it's uncommon for a company to have several distinct types of FICEs outstanding. Indeed, we only found 12 out of the 101 companies rely on financing from FICEs having several distinct types outstanding. The following sections will further break down our findings into five categories i.e., Country level, Industry level, Country and Industry, by Market Cap size, and at the level of the economic characteristics of the instruments. Furthermore, the last two sub-sections will relate to additional lateral findings that have been encountered during the research process. These latter findings further exemplify the explorative nature of this study.

4.1. Empirical Findings on Country level

In this section, our findings on country level are presented. As can be seen in Table 4 below, the sample of companies in each country differs. This is due to the inclusion criteria of a minimum of 1,250 MUSD used for our sample. Therefore, some countries have more companies included in our sample than other countries. We find that publicly traded German companies with a Market Cap of 1,250 MUSD and above have the highest

percentage of FICEs outstanding (26.0%), followed by Netherlands (22.2%), France (16.8%), Sweden (13.8%), Switzerland (13.2%) and lastly UK (13.0%). This implies a range between 26.0% and 13.0% in our sample. With an average of 17.5%, and a median of 15.3% of FICEs, our sample shows that there is not any particular country that disproportionally stands out, relative to the others, with regard to the percentage of companies using any type of FICEs in their capitalization. This further shows that it's more uncommon than common for a company to resort to FICEs on their balance sheet.

By Country	UK	Germany	France	Sweden	Switzerland	Netherlands
Companies	177	127	107	87	53	36
w. FICEs	23	33	18	12	7	8
%	13,0%	26,0%	16,8%	13,8%	13,2%	22,2%

Table 4. Occurrence of companies with FICEs (country figure)

4.2. Empirical Findings on Industry level

In this section, we present our empirical findings on an industry level for the six geographies. In this case, the likelihood of an industry relying on financing from FICEs differs among the industries.

As shown in Table 5 below, companies within Utilities have the highest percentage of FICEs, with 34.6%. They are followed by Basic Materials (23.8%), Real Estate (21.9%) and Consumer Staple (20.5%). The other Industries have a relatively similar percentage of FICEs outstanding, with Telecommunications at 16.7%, Healthcare with 16.4% and Consumer Discretionary at 15.6%. Technology, Industrials and Energy companies have the lowest percentage of FICEs (13.0%, 12.9% and 12,5% respectively). The average of FICEs outstanding across the industries is thus 18.8%, and the median is 16.5%. With the exception of Utilities (having the highest percentage of occurrence) and of Technology, Industrials and Energy companies (having the lowest percentages of occurrence), the use of FICEs across industries is relatively similar. Still, we can observe larger differences among Industries than among Countries.

Industry	Basic Materials	Consumer Discret	Consumer Staples	Energy	Health Care	Industrials	Real Estate	Technology	Telecomm- unication	Utilities
Companies	42	122	44	16	55	140	64	54	24	26
w. FICEs	10	19	9	2	9	18	14	7	4	9
%	23,8%	15,6%	20,5%	12,5%	16,4%	12,9%	21,9%	13,0%	16,7%	34,6%

 Table 5. Occurrence of companies with FICEs (industry figure)

4.3. Empirical Findings combining Country and Industry

In this section, we will put forward the results coming from the combination of Country and Industry findings. The findings are illustrated in Table 6 below.

	Basic	Consumer	Consumer	Energy	Health	Industrials	Real	Technology	Telecomm-	Utilities	Total
Industry	Materials	Discretion	Staple	00	Care		Estate		unication		
UK											
Companies	9	44	15	6	11	38	22	13	9	10	177
w. FICEs	3	5	4	1	1	3	2	1	2	1	23
%	33,3%	11,4%	26,7%	16,7%	9,1%	7,9%	9,1%	7,7%	22,2%	10,0%	13,0%
Germany											
Companies	12	28	6	5	15	25	8	13	6	9	127
w. FICEs	4	10	2	0	6	5	2	1	0	3	33
%	33,3%	35,7%	33,3%	0,0%	40,0%	20,0%	25,0%	7,7%	0,0%	33,3%	26,0%
France											
Companies	7	29	6	3	8	26	12	9	2	5	107
w. FICEs	1	2	2	1	0	4	2	1	0	5	18
%	14,3%	6,9%	33,3%	33,3%	0,0%	15,4%	16,7%	11,1%	0,0%	100,0%	16,8%
Sweden											
Companies	7	12	5	1	10	22	16	8	5	1	87
w. FICEs	0	0	0	0	1	1	8	1	1	0	12
%	0,0%	0,0%	0,0%	0,0%	10,0%	4,5%	50,0%	12,5%	20,0%	0,0%	13,8%
Switzerland											
Companies	5	5	6	0	8	19	3	5	1	1	53
w. FICEs	1	1	0	0	1	3	0	1	0	0	7
%	20,0%	20,0%	0,0%	0,0%	12,5%	15,8%	0,0%	20,0%	0,0%	0,0%	13,2%
Netherlands	6										
Companies	2	4	6	1	3	10	3	6	1	0	36
w. FICEs	1	1	1	0	0	2	0	2	1	0	8
%	50,0%	25,0%	16,7%	0,0%	0,0%	20,0%	0,0%	33,3%	100,0%	0,0%	22,2%

 Table 6. Occurrence of companies resorting to FICEs (combining Country and Industry)

Some early groupings are of particular interest. For the companies within Health Care in Germany, 40.0% of them have FICEs outstanding. For Utility companies in France, 100.0% of them resort to FICEs for their financing. While it's worth noticing that there are only five companies within the Utilities industries in France, this strong percentage could hint to an established practice within that grouping. We encounter very strong percentages also in the Netherlands within Basic Materials and Telecommunications (50% and 100% occurrence), yet the low number of appearing companies in those groupings does not allow for any strong consideration to be made.

Our empirics cannot be used to a full extent for the explanation of the correlations between Country and Industry for the issuance of FICEs, as there also are limitations on the sampling size. As aforementioned, the intention here is to provide a picture of the current landscape of Financial Instruments with Characteristics of Equity in Europe. Still, to facilitate further analysis, we focused our attention on empirical findings that appeared to be of special interest. Therefore, we came up with two criteria for identifying groupings of Country and Industry of special interest to us, which will later enable us in the Analysis to focus our attention on special groupings.

The first criterion we have chosen, is that there needs to be at least five instances of companies using FICEs within a specific grouping of Country and Industry. As an example, the grouping of UK and Consumer Staples will not be considered, as it consists

of only four instances of companies using FICEs for their financing. The second criterion we have chosen is that the occurrence of FICEs within the grouping of Country and Industry needs to be of at least one third (i.e., having more than a 33.3% occurrence) for it to be deemed of interest.

Applying these two criteria, we notice that the following groupings are of interest: Germany and Consumer Discretionary (10 FICEs, 35.7% occurrence in the group), Germany and Health Care (6 FICEs, 40.0% occurrence in the group), France and Utilities (5 FICEs, 100.0% occurrence in the group), and Sweden and Real Estate (8 FICEs, 50.0% occurrence). These groupings will be reconsidered in the Analysis. However, another specific finding pops up when cross-referencing to our earlier findings. We had previously stated that 12 companies out of the 101 relying on FICEs for their financing had more than one distinct type of FICE on their balance sheets. Out of these 12 companies, 6 were firms within Swedish Real Estate. This aspect will be further explained in the Analysis, but it further pushes for an argument of overrepresentation and high sophistication of the financing coming from FICEs done by Swedish Real Estate companies. Indeed, would one look at the number of distinct types of 8 companies having any type of FICE in their balance sheet.

4.4. Empirical findings based on Market Capitalization Size

To further analyze our empirical findings, we divided our sample of companies into 5 categories that are based on the market capitalization, so to try to capture potential size determinants. These size categories, however, are not commonly used. These categories were chosen as they would allow us to refer to companies of different sizes in our sample. Anyhow, "Very Large" represents companies with a Market Cap of 50,000 MUSD to infinity. "Large" refers to companies between 20,000 MUSD and 50,000 MUSD, "Medium" refers to companies between 5,000M and 20,000 MUSD, "Small" size refers to companies between 2,500 MUSD and 5,000 MUSD and finally "Very Small" refers to companies between 2,500 MUSD and 1,250 MUSD in Market Cap. As shown in Table 7 below, there is no strong difference between the size categories of the firms and their use of FICEs. However, based on our categories, we can see a trend in that larger companies seem to have more FICEs outstanding, at least as of the 31st of December 2021.

					Very
Market Cap Bracket	Very Large	Large	Medium	Small	Small
Companies	43	66	165	141	172
w. FICEs	11	17	27	26	20
%	25,6%	25,8%	16,4%	18,4%	11,6%

Table 7. Occurrence of companies with FICEs, by Market Cap category

4.5. Empirical Findings Related to Economic Characteristics of FICEs

In this section, we will present our empirical findings related to our categorizations made for the aggregated economic characteristics of the FICEs found in our sample. As described in the Methodology section, the categories constitute the economic characteristics of the instruments, features that we have identified as being the most commonly used by companies in their structuring and presentation of FICEs. Table 8 will show and summarize these economic characteristics used in the study.

Category	Conv	High Claim	Sub	Perp	Var Ext	Var Int	Fix Pay	Skip	Cum	Pref Obl	Other	Total
Equity	3	9	50	50	6	15	39	42	32	29	6	50
%	6,0%	18,0%	100,0%	100,0%	12,0%	30,0%	78,0%	84,0%	64,0%	58,0%	12,0%	100,0%
Liability	11	N/A	9	15	0	0	26	15	15	5	0	27
%	40,7%	N/A	33,3%	55,6%	0,0%	0,0%	96,3%	55,6%	55,6%	18,5%	0,0%	100,0%
Compund	38	N/A	2	0	0	0	32	1	0	0	0	38
%	100,0%	N/A	5,3%	0,0%	0,0%	0,0%	84,2%	2,6%	0,0%	0,0%	0,0%	100,0%

Table 8. Economic Characteristics of distinct type of FICEs, by AR booking

The categories were created in order to gather similarities among instruments, as well to assess the frequency of certain combinations of "narratives" i.e., economic characteristics, independent of the consideration pushed by the IAS 32 and the Credit Rating Agencies Hybrid Methodologies for assigning equity credit. Since all companies in our sample apply IFRS, there should be no discrepancies between countries and industries with regard to the application of accounting standards, and by extension on how firms are "allowed" to structure their FICEs. Therefore, this section will focus more on the aggregated number of characteristics within FICEs found in our total sample, and less so on discrepancies between countries and industries, as in the previous sections.

To provide useful information, we have split the FICEs into three branches, depending on their original classification according to IAS 32. Indeed, there are three different ways a FICE can be classified according to IAS 32. Either in Equity, or in Liabilities, or in a split way between equity and liability for instruments eligible to compounded treatment (i.e., debt instruments that give the holder of the instrument the right to convert the instrument into a fixed number of common shares, therefore certain types of commonly known "convertible bonds"). Table 9 below illustrates the frequency of each economic characteristic per class.

Table 9. The different Classes of FICEs							
Equity	Total	50					
Hybrid Capital Instruments		21					
Preferred Shares		21					
Other Classes of Shares		7					
Other		1					
Liabilities	Total	27					
Hybrid Bonds		13					
Convertible Bonds		11					
Convertible Bonds		11					
Other Classes of Shares		3					
	Total	3					

FICEs recognized in Equity or Liabilities explicitly exclude Compound Instruments, which are accounted for in a separate category. However, this study will put less emphasis on Compound Instruments, as they are a relatively well identified and studied phenomenon compared to other FICEs.

As shown by the table, the majority of the FICEs are classified as Equity instruments (50 instruments). Looking at the naming's of these instruments as well as their economic characteristics, we decided to group them into the following classes: "Preferred Shares", "Other Classes of Shares" and "Hybrid Capital Instruments". The latest class will be also called "Hybrid Bonds". We thus find Preferred shares to be 42.0% (21 instruments) of the FICEs booked in Equity, Other Classes of Shares to be 14.0% (7 instruments) of the FICEs booked in Equity. Additionally, we also found one special case ("Other"), which related to a state intervention program, and was thus omitted going forward (1 instrument, 2.0% frequency). Furthermore, Hybrid Bonds booked as Equity represented the final 42.0% of the sub-sample.

A relative minority of FICEs were thus classified within Liabilities (27 instruments). Looking at the naming's of these instruments as well as their economic characteristics, we decided to group them into the following categories: "Hybrid Bonds", "Convertible Bonds" and "Other Classes of Shares". Hybrid Bonds booked in Liabilities represented 48.1% of the FICEs booked in Liabilities (13 instruments). These Hybrid Bonds should have economic characteristics that differ from the hybrids recognized in Equity and are therefore not eligible for equity recognition in accordance with IAS 32. Following up with the categories of FICEs booked in Liabilities, we have Convertible Bonds representing 40.7% of the FICEs booked in Liabilities (11 instruments). These are convertible instruments that did not meet the criteria of "fixed-for-fixed", and as such were not eligible for the compounded recognition in Equity and Liabilities. These instruments have a fixed maturity date and for all but one, a contractually fixed interest

payment. The Convertible Bonds recognized in Liabilities were included in our sample, as they can be converted into shares. Still, they are very similar to a straight bond. Finally, we have a small sample of Other Classes of Shares that are booked in Liabilities (11.1% of the FICE's booked as Liabilities, 3 instruments). These Other Shares have different economic characteristics than the Other Shares that were recognized in Equity, namely additional features of preferential rights to the assets of the company and fixed interest payments, thus behaving very similar to a straight bond. In the next section, the analysis on how the IASB standards and the Credit Rating Agencies reflect on FICEs is presented.

In the following section, we will focus on another finding relevant for the Analysis of the paper. This finding will only relate to the Hybrid Bonds (booked in Equity or in Liabilities).

4.6. Empirical findings related to Provisions of the Hybrid Bonds

For the scope of deeper and more accurate analysis of the Hybrid Bond, we also tried to collect the prospectuses of these instruments (being them booked as equities or as liabilities). It is worth mentioning however that the following findings will be grouped regardless of whether the issuing firm had more than one *non-distinct* type of Hybrid Bond outstanding on the 31st of December 2021. We made this choice for the simplification of these findings, as well as since all the firms that used these wordings consistently applied them to all the other Hybrid Bonds prospectuses we could find.

Anyhow, the findings consist of provisions laying the ground for an "early redemption" of the Hybrid Bonds in relation to changes in the equity credit assigned by the CRAs on the Hybrid Bonds. To the best of our knowledge, we could not find any research that expressly mentioned this element found in the prospectuses of FICEs in an extensive way, nor research that tried to express the extent of this type of provision in the prospectuses of FICEs. While this provision can be grouped within the "Rating Agency Event" type of provisions, we understand that the latter is usually understood as "changing in the overall rating of the security (or of the issuer)", rather than the specific equity credit assigned (as per changes in the Hybrid Methodologies or other circumstances).

While we understand that this finding could lay beyond the scope of our paper, here is the summary of it. Of the 13 Hybrid Bonds booked in Liabilities, we could find 13 of the prospectuses (do refer to the "simplification" made two paragraphs above). Interestingly, all 13 of them had this provision. When it comes to the Hybrid Bonds booked in Equity, of the 21 instruments, we were only able to find 16 of the prospectuses. Out of this number, 14 prospectuses of the Hybrid Bonds booked in Equity had provisions for early redemption in case of changes in the equity credit of the securities (an incidence of 87.50% in the sub-sample).

4.7. Empirical Findings related to the assignment of Equity Credit to the Hybrid Bonds by the Credit Rating Agencies

Additionally, information on the equity credit assigned to the Hybrid Bonds by the CRAs was also collected. The aims of such exercise were to support our understanding of the CRAs' Hybrid Methodologies in relation to the Hybrid Bonds, as well as to better grasp the extent by which Hybrid Bonds are assigned full, nil, or intermediate equity credits.

For the 13 Hybrid Bonds booked in Liability, all of them were found to have had intermediate equity credit (i.e., 50% equity credit). However, for the 21 Hybrid Bonds booked in Equity, we could only find the equity credit of only 12 of them. These twelve were all assigned intermediate equity credit (i.e., 50% equity credit, the remaining 50% being considered a liability by the CRAs). These findings will be further put into perspective in the Analysis.

5. Analysis

5.1. Economic Characteristics present in FICEs and IAS 32

As shown in the empirics, for FICEs recognized in Liabilities, Hybrid Bonds are the most common instruments yet the most challenging to assess due to their complex structure. Based on our findings, we can see that the most common combination of economic characteristics, within the category of Hybrid Bonds booked as Liabilities, are those having a perpetual maturity, fixed payments and a cumulative deferral feature. This accumulation of deferred payments is usually mandatorily repaid at the earliest of distribution of dividends to shareholders, redemption of the bond, liquidation of the firm, or under other conditions presented in the prospectuses. This group of Hybrid Bonds constitute 85% of them (14 Hybrids Bonds). If the element of "explicit" subordination is also added, then 62% of the Hybrid Bonds would comply with the characteristics selected. Still, although these Hybrid Bonds can be quite complex and the provisions in the contracts of the instruments can differ substantially, they all have (the 21 of them) provisions that allow these instruments to skip payments, thus avoiding defaulting. Essentially, this means that they do not have any contractual obligation to transfer cash or another asset to settle the obligation at the established dates, along the lines of what required as per IAS 32.

Following up on Convertible Bonds booked in Liabilities, these instruments have a fixed maturity date and a fixed interest payment, as well as a conversion option that does not meet the criteria of "fixed-for-fixed". Together with the small sample of Other Classes of Shares booked in Liabilities, these groups of instruments are not as complex as the aforementioned Hybrid Bonds. As such, classification outcomes applying IAS 32 seems to be straightforward and consistent for these instruments, and little emphasis has been put in their analysis.

For Hybrid Financial Instruments recognized in Equity, Preference Shares and Hybrid Bonds booked in equity are the most common category of FICEs. All Hybrid Bonds booked in Equity are perpetual and can defer payments, with 82% of them having a fixed or capped interest amount (or more rightly said in this case, a fixed or capped dividend). This percentage jumps to 100% in the case of Hybrid Bonds booked in Equity that are perpetual, can defer payments, and pay a fixed or capped or variable dividend amount for external reasons (i.e., outside of the control of the firm). Additionally, 78% of these instruments must accumulate the dividends amounts deferred (the "cumulative feature"), while only 22% of them have the ability to get freed of the dividends that have been deferred. Preference Shares, Other Classes of Shares booked in Equity (except for the "Class D Shares") and the special government intervention program received limited analysis (see later in the Analysis), as their classification as per IAS 32 and their overall implications were deemed to be less relevant for this study.

Interestingly, when comparing the Hybrid Bonds recognized in Equity and Liabilities, using our categories of economic characteristics, we find that 85% of the Hybrid Bonds recognized in Liabilities and 100% of the Hybrid Bonds recognized in Equity have the same underlying characteristics. Based on the aggregated findings of arguments used by companies in their Annual Reports, this group of similar Hybrid Bonds instruments are perpetual instruments with a fixed (or capped) coupon amount, and with the ability to defer payments that would then accumulate over the life of the instrument (or till the relevant events cited beforehand). Under IAS 32, these Hybrid Bonds are classified as liabilities or as equities based on whether any contractual obligation exists to settle the agreement through the payment of cash, another financial asset, or if there are conditions that are potentially unfavorable to the entity. So, if the Hybrid Bond has no maturity date and the investors have no right of termination that could impose conditions potentially unfavorable to the issuing entity, and that the distribution of payments are made at the entity's discretion, the instrument can be classified as an equity instrument according to IAS 32. Still, our findings suggest that it is possible to classify the aforementioned economically similar Hybrid Bonds as either equities or liabilities, with probably minimal changes to the provisions in the contracts of the securities needed. Additionally, it seems like the actual IFRS classification can be achieved through arguments (as similar instruments can be found in both equity and liabilities), that is based on the underlying incentives of the issuing entity. Since the bonds seem to be reflections of each other regardless of their classification, the issuing entity could use arguments such as "no contractual obligation to pay" for an equity classification outcome. On the other hand, entities could also use the opposite narrative, that "payments are made regularly". Companies could therefore choose to classify the instrument within liabilities even if there is no contractual obligation (as per the current IAS 32 understanding of it) for the issuer, as the entity has the ability to skip payments. These findings are very interesting in the sense that we couldn't find any relevant differences in the underlying economic characteristics between the Hybrid Bonds classified within equity and liabilities. This point could be put in relation to the motivations that firms could have when it comes to "target" capital structure and consideration on tax shields, as explained in Levi and Segal (2015), King and Ortegren (1988) and Engel et al., (1999), among others.

As a reference to the reader, the other categories of FICEs classified within Equity included Preference Shares. In our sample of companies these were mostly characterized by having a preferential right to a fixed or capped dividend (16 out of 22 Preference shares, frequency of 72.7%). Out of these 16 Preference Shares, three quarters of them (12) had skipping payment features, where 9 were cumulative and 3 of were non-cumulative. This element can be put into relation to the "Preferred Approach" by the

Board (further explained later), to grasp the nature of these Preference Shares and if and how they would be impacted by potential changes in the standards.

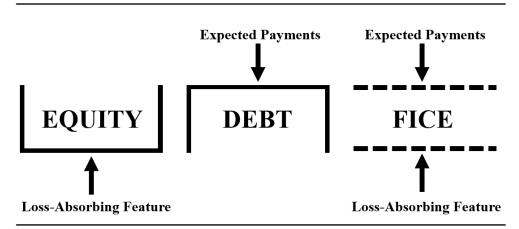
Furthermore, we also had the group within FICEs booked in Equity called "Other Class of Shares", which consisted of 6 instruments. In this group, we found a commonly used denomination for extremely similar instruments - the "Class D Share" (five of them were found). This share class was only found in the Swedish Real Estate Industry. These Class D shares behave in a similar manner to what are commonly known as "Preferred Shares", while only providing an apparent reduced certainty of dividend payments. Indeed, Preferred Shares usually pay dividends based on a percentage of their face value. The case of Class D share is more sophisticated yet standardized in the Swedish Real Estate. All of them give the holder one tenth of a vote. However, it is in their dividend payment rules that, in our opinion, the reader should be particularly interested in. The holder of one of the five Class D shares would receive a yearly "variable" amount of dividends, calculated as *five times* the amount that will be paid to a Class A share (or of five times the sum of the dividends paid to a Class A and a Class B share, in the case of further splitting into A and B Shares). This formula relates to the variable amount to the dividends paid for internal reasons (i.e., the performance of the firm, as assessed by the dividend paid by the other classes of ordinary shares). However, this variable amount is capped (therefore our "double counting" in our data set, as they pay a dividend that is variable for internal reasons yet capped) to such a low threshold in relation to the "five times formula", that these shares most likely will pay an amount equal to the capped maximum amount. As a consequence, investors could view these classes of shares very much like a Fixed Income security in the normal course of business, along the lines of a Preferred Share. Therefore, the value on the D Shares is dependent on the company keeping paying dividends, and thereby maintaining confidence in the capital market, the reason why we think the instrument has debt-like features. Interesting to note however, is that this class of shares could only be found in the Swedish Real Estate Industry as previously mentioned, implying that there might be incentives for these companies to structure these instruments in a certain way. However, applying IAS 32, the framework is clear and straightforward and the classification outcome for these instruments is consistent within equity.

We believe that, for the Hybrid Bonds, classification within liabilities might better represent the actual underlying substance and economics of the expected behavior of the instrument when the company is performing as in a normal state of business. However, this classification would not faithfully represent the equity-like features inherent in the instrument when the company is experiencing financial distress, such as their loss absorption features by being able to skip payments. This further demonstrates the complexity of these instruments and the classification issues under the current Accounting Framework. Additionally, as shown in previous research, accounting standards affect a firm's behavior (De Jong et al., (2006), or impose the possibility for advocating a certain behavior, as our results also seem to indicate. As the current Accounting Standards seem to allow for different classification outcomes for the same instruments, as pointed out by their complexity, determination of classification is a challenging task for the standard-setters. Related to this, and as pointed out by other previous research, firms tend to selectively design hybrid financial instruments to classify them as equity if the aim is to have a proportionally lower debt, and as liabilities for tax shield purposes as in terms of interest payments deductions (Levi & Segal, 2014; King & Ortegren, 1988; Engel et al., 1999). Our findings also seem to support the abovementioned points on how firms chose to classify the instrument. One additional question that could then be raised however relates to how Credit Rating Agencies might influence how firms structure their hybrid instruments under the Accounting Standards and their impact on the issuance of hybrid instruments with characteristics of equity.

5.2. Economic Characteristics present in FICEs and the assessments made by the Credit Rating Agencies

Credit ratings and the Credit Rating Agencies (CRAs), namely Moody's Investor Services, S&P Global Ratings and Fitch Ratings for the scope of this study, play a significant role in financial markets. They provide information about the likelihood of default for corporations and for specific securities, providing valuable inputs and external opinions for investors' teams tasked with the evaluation of the risks of their investments. For FICEs, their hybrid methodologies and decisions to allocate parts or the entirety of an issuer's hybrid instruments into "equity credits" are not driven by IFRS and IAS 32. Actually, CRAs are also freer to adjust their methodologies overtime, as new practices emerge. Therefore, their work could be seen as more of a pragmatic solution to a complex issue, as opposed to the IASB's classification guidance illustrated in the previous subsection, which grounds more its intentionality in theory and longer-term relevance.

As outlined in the Theory section 2.3.2, the CRAs essentially start their assessment of the hybrid instrument with it having a "complete debt recognition", and having it work its way through different criteria and assumptions, so to allocated with an equity credit. Furthermore, the CRAs use methodologies that consider diverse factors such as the degree of subordination and the expected lifetime (or the effective permanence) of the investment. Indeed, they consider the expected maturity of the instrument, measured as a function of "target capital structure", step-up provisions in the coupon and public announcements regarding redemption by the issuer among others. They also assess the ability, and the willingness, of the issuer to defer payments on the instrument (be it based on the ease of their financial position, or for other reasons), thus assessing by what degree these issuers will rely on the loss absorbing features of these hybrids. The following figure (Figure 1) tries to summarize what we believe are the intended motives for the Hybrid Methodologies of CRAs.



When independently applying the methodologies of the three CRA's on the FICEs of our sample, we found that most of the hybrids, especially the Hybrid Bonds, had similar treatments by the CRAs, regardless of the classification mandated by the IFRS standards. Indeed, when analyzing the hybrid methodologies of the three CRAs, we found that there are a few prominent criteria for the allocation of "equity credit" on hybrid instruments, that also characterized many of the FICEs of our sample. Additionally, while the IFRS standards do not consider the issuers financial position and probable grounds for deferral of payments (i.e., its ability to pay the coupon and its willingness to defer it, if allowed), the CRAs methodologies include this element as a fundamental one. One can refer again to Figure 1, but the Hybrid Methodologies of CRAs implicitly give equity credits based on the ability and probability of loss-absorption (and generalized default avoidance) of the instrument, while assessing the remaining debt amounts of the FICEs as an indication for the eventual repayment of the obligation to the investor.

Entities need to have a provision of coupon deferral or omission that doesn't lead to a default. Further, no provision that can impose a mandatory payment of principal and accumulated coupons within the next 5 years at least (small changes depending on the CRAs apply). If these criteria are "checked" the instrument will generally be assigned a 50 % equity credit. These criteria are particularly similar to the economic characteristics of the majority of Hybrid Bonds found in our sample (both in Equity and Liability classifications). These namely are the perpetuality of the instrument, coupled with a fixed coupon payment, an ability to defer payments (that accumulate over the life of the instrument). These accumulated promises would only need to be paid if a dividend is distributed, at liquidation, or under other conditions that are solely under the company's discretion (but also in case of decision of the firm while in going concern, naturally). By applying the CRA's methodologies, it seems like these Hybrid Bonds recognized in Equity, would be assigned a 50% equity credit; and the Hybrid Bonds with the same characteristics, but recognized in Liabilities, would also with be recognized with a 50%

equity credit. Furthermore, this implies that the firms structure these Hybrid Bonds to fit within the Hybrid Methodologies, rather than having their structuring objective to revolve around the IFRS-aligned classification exclusively. However, there might be instances where the issue of additional common equity will not be available to the firms. In these cases, however, an issuance of an equity-booked hybrid bond (or other FICE booked in equity) would be put into perspective by the CRAs, as they could recognize only half of that equity-booked issue as equity. Interestingly, as shown in section 4.6 of the empirics, the majority of hybrid bonds issuers include provisions for the early redemption of their hybrids in the case of changes in the equity-credit assigned by the CRAs. We could analyze it as a way for firms to hedge themselves against external factors that they cannot fully control. In the case of changes in the equity-credit (thus affecting the intended, CRAs-aligned, capital structure and risk profile), the instrument will be redeemed, as its "strategic" capital structure usefulness will be limited.

Still, a company can structure the instrument with equity classification for the benefit of IFRS key-ratios, solvency and loan covenants but still get 50% equity credit from the CRAs. While a company that classifies the same instrument within liabilities can receive the benefits of tax-deductible interest payments and still get the same equity credit of 50% from the Credit Rating Agencies. These findings suggest that, besides traditional corporate finance trade-offs inherent within capital structure choices, firms can structure their FICEs to take advantage of a certain IFRS classification, CRA Classification or a combination of both.

6. Discussion

To start our discussion, we must acknowledge once again that the distinction between debt and equity is not a scientific one. It rather is an accounting exercise, stemming from corporate finance theory, from evolving practices and naturally from accounting standards, as expressed in the EFRAG Discussion Paper 2008 (EFRAG, 2008). As there isn't an immutable and objectively entrusted definition of what constitutes equity and what constitutes debt, for these complex hybrid instruments the decision-making could differ depending on people's interpretations of the extent of the instruments' equity features and liability features. These interpretations are also further influenced by the traditional accounting conventions.

Still, as the lack of consensus on an immutable definition, distinguishing between debt and equity requires selection of certain criteria while rejecting others. Such criteria can revolve around the loss-absorbing features of equity and the contractually agreed cashflow expectations typical of liabilities. Additionally, users might give various levels of importance to different criteria, since users' divergent demands will emphasize different elements. To partially illustrate this thematic, as outlined in section 2.1.1, the reader can refer to certain "comment letters" sent in relation to the IASB's invitation for comments on the Discussion Paper (2018) (IASB 2019). While we have previously argued in favor of the preferred approach, several stakeholders made public claims that such changes would diverge from the perceived reality as seen by certain issuers and investors. Several letters claimed that pushing for a stricter definition of equity would counter the reality of the investment community, where more vague concepts like expectations and tacit promises can play a prominent role for sense making of complex agreements (IASB 2019).

Based on our findings, had the "Preferred Approach" of the Board been pushed forward, several of the Hybrid Bonds (as well as for most Preferred Shares) would have run the "risk" of reclassification from Equity to Liabilities. This is since these instruments booked in Equity would have collided with the "Amount Feature" established in the Preferred Approach. Accordingly, if the instrument would have had a cumulative deferral feature, the instruments would have not been deemed as independent from the available economic resources of the entity (as the obligation would keep accumulating regardless), and thus would have not been eligible for equity classification under IFRS. Our findings therefore suggest that a relatively high number of the FICEs found could be reclassified under the Preferred Approach, which could have had a material impact on the IFRS-aligned financial statements.

Since the composition of equity and liabilities in the balance sheet would change, important IFRS-aligned metrics would have also been impacted, such as solvency and leverage ratios, as well as performance metrics like EPS due to additional interest expenses (shifting from what were "dividends"). Although the IASB didn't proceed with the new classification proposals (or at least is reasonably not expected to do so, as summarized by EY (2022)), it is worth acknowledging the impacts it might have had, as well as the classification outcome.

This point has to be considered, as parts of the interest of issuing FICEs still relate to IFRS-aligned considerations. Thus, it is relevant to address the fact that firms' issuance of FICEs could be severely impacted by changes in the standards, changes that are outside of the control of the firm. As such, somewhat related to what argued since the original Modigliani and Miller (1958) principles, firms capital structure do not impact their valuecreation abilities. However, as extensively discussed in the literature and in this paper, since frictions like taxes and transaction fees exist, capital structure decisions do play a role. In the case of FICEs then, external changes in the standards could impact this aspect. However, we reasonably believe that, had the IASB proposals been adopted, the decisionmaking of entities on the issuance of hybrid instruments would more likely be even more dependent on the probable assessment by the CRAs (i.e., their assignment of equity credit to the hybrid instrument). This consideration was already hinted at in the relevant section of our Empirics, as most Hybrid Bonds already integrate provisions for early redemption in the case of changes in the equity credit assigned. As firms would have to recognize more external financing into liabilities either way, a stronger emphasis on the equity features of this hybrid financing (as assessed by the CRAs) could make its way through into contractual arrangements. General business interactions with lenders and other stakeholders could also emphasize further the equity credits of these instruments. Moreover, as these instruments are complex to understand, investors (regardless of their experience and actual lack of bias from classification) would rely more on the qualified "second opinions" that would come from the CRAs.

Regardless of the decision made by the Board, we believe this could lay the ground for closer observation. We believe this element to be put in relation to the field of non-IFRS reporting, also known as APM (Alternative Performance Measurements), as can be seen in EY (2018). We believe the topic of this paper to be a prominent example on how to calibrate the emphasis that certain entities, or even industries within specific geographies, may have in the future on performance measurements other than those mandated by IFRS.

However, we also believe that the Preferred Approach of the IASB could have diminished the discrepancies between the accounting standard and the CRA's hybrid methodologies, as well as helping in distinguishing instruments at different points on the equity-liability spectrum. While this point might sound contradictory with the previous paragraph, we really do not believe so. Indeed, by increasingly emphasizing the substance over the legal form of the instruments, more FICEs would have been recognized in Liability. Therefore, the equity class would have been populated by instruments that would less controversially be seen as unequivocally equity. Having more FICEs shifting into Liability, "disregarding" their effective equity features, would incentivize deeper understanding of the economic substance and expectations by the user. This is since the user would be "ensured" that the Equity class would be populated *only* by instruments closely associated to the well-understood concept of "ordinary shares", conscribing the effort on identifying equity-like features only to instruments within Liabilities. Thus, here stems our view of greater alignment with the CRAs hybrid methodologies. The CRAs would have, most likely, exclusively applied equity credits to instruments populating the liability side of the balance sheet (and by extension, less IFRS-presented instruments would have been "calibrated" downwards of their equity content by the CRAs). In a way, this would have clearly delimited the scope of "showcasing" equity features of FICEs to entities that are entrusted experts in the field, and that are more flexible in the scope of their actions (the CRAs). In our view, this outcome would have eventually been recognized as clearer to the users, one that would have provided useful enhancements to both the IFRS-aligned Financial Statements, as well as to the equity credits to FICEs presented by the CRAs.

Indeed, when it comes to the judgement of these complex hybrid instruments, expectations also need to be reassessed. These expectations can naturally be reassessed over time. This study has highlighted several reasons for such reassessments, namely changes in the financial position of the firm (captured by the issuer's rating) and public announcement regarding the future redemption of the instrument by the issuing entity. Moreover, we have addressed at several instances the importance of grasping the need for loss absorption by the issuing entity (using these hybrid securities), while calibrating with the expected timing of the payments to the investors (expectations that, if not met for "unjustified reasons", will most likely result into severe difficulties for future capital raising purposes). We have expressed how, while with some pitfalls, the CRAs make these flexible assessments. The IFRS framework, however, isn't able to capture this, and it should not, as its scope is to be as consistent as possible over time. As expressly mentioned in Moody's methodology (and more qualitatively remarked by S&P and Fitch), investment graded companies are expected to make their Hybrid Bonds behave more similarly to a straight bond. As such, these Hybrids Bonds in such context could be well analyzed as liabilities. On the other hand, similar Hybrid Bonds outstanding within speculative-graded companies (especially in one proven to have financial complications), the uncertain performance of these Hybrid Bonds will resemble more the one of ordinary shares. These assessments by the CRAs are also in line with the conclusions of Linsmeier et al. (2004) and of Cheng et al. (2003), further linking findings by researchers with CRAs and industry practices. Indeed, it would be reasonable to see that no dividend is distributed to the shareholders of a company in current financial complications. The same would then apply to the interest paid to the holders of these Hybrid Bonds, as their deferral does not constitute a ground for default. Consequently, the CRAs Hybrid Methodologies, while providing a seemingly easy solution to a complex problem (the splitting of the FICE with pre-established percentages), might appear to be more sophisticated tools for the

understanding of the FICEs. Not only do they capture equity-like features for FICEs booked in Liabilities, but they also reconsider the degree by which certain equities are seen as "full equities" (thus considering the expectation of performance of these instruments other than ordinary shares). Therefore, they reasonably should provide experienced investors with meaningful "second opinion" assessments.

Furthermore, as our findings suggest, firms' issuance of hybrid instruments is considerate of the equity credit that will be received by the instrument from the CRAs. Thus, the issuance of the Hybrid goes beyond classification purposes, but is strongly interrelated to CRAs assessments. This aspect must be put in relation to our finding that several instruments considered to be "Hybrid Bonds", while being booked in Equity or Liability, have considerably similar economic characteristics. On that note, it would be of interest to investigate, assuming an intermediate equity credit recognition in both cases, which would be the drivers for preferring an equity classification rather a liability classification, and vice versa. For instance, certain issuers might prefer to showcase less-leveraged, IFRS-aligned ratios, while not giving up extensive voting powers to these new "owners" (the investors of equity-booked FICEs). Other companies might instead prefer to issue hybrid liabilities that, while receiving intermediate equity recognition, will enable the issuing entity to enjoy additional tax shields benefits. Indeed, this combination might be one for additional value creation (taking advantage of tax shields), while having minimal impact on relevant risk metrics, and the subsequent cost of capital of the firm. Research on the specific motives and context for the issuance of similar FICEs in equity or liability might be of great interest. Factors like industry, governance structure and consolidation of ownership among others might provide additional insight into the choice.

This paper does not provide clear grounds for the analysis of the latter point, as it did not target said point (as per the explorative nature of the study). However, it incidentally came across a particular case where deeper analysis was of extreme interest. Indeed, for the scope of deeper insights on the prominence of financing via FICEs, this paper initially identified four "country and industry" groupings of interest. After deeper research, one specific grouping stood out and deserved, in our eyes, a particular analysis. This was the case of Class D Shares within the Swedish Real Estate Industry. We believe this type of FICE to be of potential interest to both the Board and the CRAs. Indeed, its strong presence within a specific industry within a specific country signals the emergence of a particular "market practice" worth highlighting. Moreover, we believe its characteristics to be one of high sophistication and originality. While being an equity instrument whose payment is mathematically determined by the proposed dividends of the other classes of ordinary shares (thus tied on the economic performance of the firm), it also pays a dividend that is capped to such a low threshold that it is essentially always met (assuming the payment of any ordinary dividend). As such, a knowledgeable user could, understandably, see its performance as one of a fixed-income security. Still, we believe that this sophistication would "escape" the current framework of the hybrid methodologies, as well as the intentionality of the Preferred Approach of the Board. Based on our understanding of the security, that is mainly related to its expectations of performance by the investors (having a variable, but capped low threshold of dividends to be paid, cap that is usually met), its ability to defer payments (while accumulating them), and its similarity to other fixed-income securities such as cumulative preference shares, considerations need to be raised. Indeed, we believe that the intention of the CRAs could be to that of considering these D shares as intermediates between debt and equity (50% equity credit). However, as the hybrid methodologies do not capture capping payment features, we believe that their assessment would "escape" the methodology, as they would be considered in the same bracket of "ordinary shares" (thus not needing an assessment of their equity contents). On the other hand, we also believe that, while the intention of the Preferred Approach could have been to capture these D shares in a similar manner to those of cumulative preference shares, the "on paper" variable payments of their dividends would have kept them in equity, even if they would have most likely kept paying a fixed amount.

Additionally, this paper gives insights on the criteria that CRAs try to capture for these instruments, which we now know is relevant for a considerable type of users, investors. There are still some shortcomings in their methodology that we have identified. Such as the importance of effective maturity dates for CRAs. Still, this point in our mind relates to one main issue between the spirit of the understanding of FICEs by credit rating agencies and the fair representation spirit of the IASB. On the one hand we find an influential user for balance sheet management of the companies. On the other hand, we find a Board entrusted to provide guidance for complex tasks, a guidance that needs to be grounded in theory and with as few logic pitfalls as possible. One logical pitfall we find here comes from the intentionality of the rating agencies. Their overarching aim when it comes to FICEs can be summarized as being about giving equity credit to FICEs that are able to absorb losses for the firm, effectively providing default-mitigating instruments. Having this major point in mind, it made some sense for the methodologies written in the 2018-2020 timeframe to consider a 100 bps increase as an effective maturity date. The cost step-up would not justify its maintenance. However, this statement maintains its logic if the assumption is made of a stable interest rate economy. Basic economic theory would incentivize the company to not redeem the Hybrid Instrument when interest rates in the economy are increasing faster than the step-up provision for the outstanding hybrid. Assuming the intrinsic risk of the company staying the same, there should be no circumstance under which the company would be able to negotiate the issuance of any security at a better rate in the new high interest economy. In a way, following the spirit of the CRAs would motivate equity credit. Still, the methodology would not recognize any equity credit, while assessing the date as an effective maturity date. In our opinion, it will be interesting to notice if and how these step-up thresholds will be changed by the CRAs, as the overall interest environment continues to mutate.

7. Conclusion

This paper has explored several areas of interest related to the issuance of FICEs by publicly trading European companies. Indeed, the paper addresses several of the pressing issues about this increasingly complex topic; issues that have been raised in previous instances, as the topic is particularly under-researched. As these instruments are characterized by features of both equity and liability, the classification of FICEs within the IFRS framework is particularly challenging, as these hybrid instruments tread on the blurred line in between equity and liability. This presentation challenge is further pushed down to the users of financial statements, as they will have to rely on deeper analysis for the correct assessment of these hybrid instruments. Consequently, it was decided to include the Credit Rating Agency (CRA) dimension in the paper, by analyzing the "Hybrid Methodologies" of these CRAs (i.e., the pre-established frameworks they use for their assessments). These agencies provide users with qualified opinions on complex matters such as FICEs, opinions that can later be used by interested parties for their sense-making or decision affirmation.

Moreover, the classification of FICEs will impact the presented financial position of the firm, impact that will in turn alter many other aspects. For instance, the income statement will be affected by the increase or decrease in the "interests" paid. Taxation figures could also be impacted, as interest expenses would generally be eligible for tax deductions. Finally, several IFRS-aligned solvency and performance measurements would be affected, measurements that could have an impact on the firm's ability to raise capital, on its borrowing costs and on its proximity to breaching covenants.

The paper thus explored questions related to the occurrence of these hybrid instruments, as well as the economic nature of them. To do so, after performing the relevant screenings, we have analyzed the Annual Reports of 587 companies found in six targeted European geographies (the UK, Germany, France, Sweden, Switzerland and the Netherlands). The paper illustrated that, within these six European geographies, the percentage of companies resorting to hybrid financing was similar. However, as found in the empirics, a considerable minority of firms used FICEs. The paper also showed that some ICB industries within these six geographies (namely Utilities, Basic Materials, Real Estate and Consumer Staples) presented a higher incidence of companies resorting to FICEs. On the other hand, other industries (Technology, Industrials and Energy) showed a low incidence of firms resorting to FICEs.

Furthermore, four groupings combining countries and industries were highlighted. These were "Germany and Consumer Discretionary", "Germany and Healthcare", "France and Utilities" and "Sweden and Real Estate". Still, the fragmentation of the types of FICEs

issued did not allow us to identify "industries practices" within these groupings, with the sole exception of the Swedish Real Estate industry. Indeed, we were able to identify a peculiar type of FICE in the grouping (known as a "Class D Share"), whose characteristics were deemed of particular interest for further analysis. This analysis concluded that these Class D Shares were of particular sophistication. Indeed, they included variable repayment features (tied to the performance of the ordinary shares, i.e., equity), while capping the payment to investors to an easily reached threshold (thus making them behave in a similar manner to a fixed-income security, i.e., liability). On that note, we concluded saying that standard setters, CRAs and investors might want to keep a close eye to this new type of sophisticated security.

Furthermore, as a following step, the paper discussed the economic characteristics of the issued hybrid instruments, by splitting the FICEs in three branches according to their presentation (i.e., equity, liability or "compounded"). Within instruments booked in equity, Hybrid Bonds booked in equity and Preferred shares were the most occurring. Within liabilities, Hybrid Bonds booked in liabilities and convertible bonds (not eligible for compounded recognition) were the most occurring. The third branch, compounded instruments, was not analyzed as it constituted a class of FICEs commonly understood and well framed. Thus, Hybrid Bonds (whether they were found in equity or liability) constituted the main family of FICEs found within our sample. These hybrid bonds were found to be similar in their terms (as expressed by our economic characteristics), thus further raising our point about firms' abilities to structure hybrid instruments in such a way to achieve one or the other classification. As such, it appears that the framework allows for different classification outcomes for instruments that have similar underlying economic characteristics. Thereby, we hinted at the relative ease of firms in achieving IFRS-aligned "target capital structure", tax shields etc... by resorting to FICEs.

The study then further analyzed how the instruments interrelated to the IFRS framework and the Hybrid Methodologies used by the CRAs. The study addressed the latter point, as it remarked the relevance of CRAs for the assessment of the equity features of the FICEs. For the case of Hybrid Bonds, we find that the majority of these instruments are assigned with a 50% equity credit from the Credit Rating Agencies, no matter the actual IFRS classification. This suggests that firms structure the Hybrid Bonds to fit within the Hybrid Methodologies, rather than having their structuring objective to be revolving around the IFRS-aligned classification. Furthermore, these findings illustrate the fact that, besides traditional corporate finance trade-offs (inherent to capital structure choices), firms can structure their FICEs to take advantage of a certain IFRS classification, or of the equity credit assigned by the Hybrid Methodologies (or to take advantage of both). Thus, the issuance of the Hybrid financial instruments goes beyond classification purposes and is strongly interrelated to CRAs assessments. We remarked how this could be put into consideration to the overall discussion surrounding "APMs" (alternative performance measurements, other than those mandated by IFRS). To further strengthen our analysis, the study has found that issuers of FICEs are including provisions allowing them for the early redemption of their outstanding hybrid instruments (or more precisely, for Hybrid Bonds). Should their equity credit change, the issuer would be able to call for the redemption of it (as it would, in our opinion, not be of use for the achievement of the intended CRA-approved capital structure). Our analysis of Credit Rating agencies' criteria for assigning equity credit and their role in influencing preparer behavior, shows a possibility that the relative reliance on IFRS information (versus CRAs credit criteria) could diminish. This grounds itself to the fact that CRAs hybrid methodologies are able to consider other relevant elements of particular use to users of financial statements. These elements relate to the ability of the firm to use the FICE as a loss-absorbing instrument, as well as to its expectation on continuous payments and expected redemption.

In conclusion, we believe this topic of extreme interest to both research and industry. We contribute by providing an extensive description and analysis of the reliance on hybrid instruments by European companies, as well as by relating these instruments to the (current) IFRS framework and to the methodologies used by CRAs. Future researchers could explore additional motives to their issuance, such as motives related to governance and ownership (as expressed in the Discussion). Moreover, studies related to the evolution of the overall rating of companies, in conjunction with the issuance of hybrid bonds, could be of extreme interest for quantifying the impact of FICEs for targeted rating (especially for corporates just below the "investment grade" threshold). Additionally, we want to echo the strong calls for further exploratory research in the field, as it is under-reaserched yet necessary to the understanding of current market financing practices.

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Appendix:

Moody's	S&P	Fitch		
Aaa	AAA	AAA	Prime	
Aa1	AA+	AA+		
Aa2	AA	AA	High Grade	
Aa3	AA-	AA-	1	
A1	A+	A+		
A2	А	А	Upper Medium Grade	
A3	A-	A-		
Baa1	BBB+	BBB+		
Baa2	BBB	BBB	Lower Medium Grade	
Baa3	BBB-	BBB-		INVESTMENT GRADE
Ba1	BB+	BB+	New investment Crede	SPECULATIVE GRADE
Ba2	BB	BB	Non-investment Grade Speculative	
Ba3	BB-	BB-		
B1	B+	B+	Highly Speculative	
B2	В	В		
B3	В-	B-		
Caa1	CCC+	CCC	Substantial Risk	•
Caa2	CCC		Extremely Speculative	
Caa3	CCC-		Default Imminent with	
Ca	CC	CC	little Prospect for Recovery	
	С	С		
С				
/	D	D	In Default	
/				

Appendix A. Notching of the three main Credit Rating Agencies

Appendix B.				
Abbreviation	Name	Explanation		
Conv	Convertible	The holder has the right to convert the instrument into shares of the issuing entity		
High Claim	Higher claim on assets	Higher Claim on Assets on liquidation (for Equity instruments)		
Sub	Subordinated	Explicit Subordination of the instrument (for Liability instruments)		
Perp	Perpetual	Perpetual maturity, or > 50 years		
Var EXT	Variable (External)	Variable Payment based on external factors, outside the control of the firm		
Var INT	Variable (Internal	Variable Payment based on internal factors, like the performance of the company		
Fix	Fixed (or capped)	Fixed or capped payment of interest/dividend		
Skip	Skipping Payment	Skipping payment feature that allows the entity to defer payments		
Cum	Cumulative	Cumulative feature if payment is skipped (the "Deferral" feature)		
Pref	Preferential repayment	Holder has a preferential right of payments vs other (for Equity instruments)		
Other	N/A	Other unique economic characteristics not captured by other categories		