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From IAS 39 To IFRS 9: Literature Review of Studies on the Implementation of IFRS in the European Banking Sector

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Abstract:

Purpose: *The study analyses theoretically the impact of accounting rules on the quality of information given by the financial statements of entities which operate in the European banking industry.*
Design/Methodology/Approach: *Content analysis of studies on the Implementation of IFRS in the European Banking Sector.*
Findings: *IASB introduced IFRS 9, as substitute of IAS 39, to improve mechanisms of classification and measurement of Financial Instruments, deemed as one of the main causes triggering the financial crisis. The financial crisis, which started in 2008, led regulators to believe that accounting standards contributed to financial stability or instability.*
Practical Implications: *The primary goal of accounting standards and the financial statements produced under them is not to contribute to financial stability, but to provide information for investors to make a wide range of decisions and contractual arrangements.*
Originality Value: *The information that accounting standard-setters consider relevant for investors may not be the same as that considered relevant by prudential regulators.*

Keywords: *Accounting, Banking, IFRS 9, IAS 39.*

JEL codes: *G21, M41, M48.*

Article type: *Research study.*

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1. Introduction

The application of international IAS/IFRS accounting standards has been an issue for the international literature with the aim of investigating the impact of their adoption by companies. In particular, on 19 July 2002, the European Parliament decided that companies listed on the stock exchange should be obliged to issue consolidated financial statements based on International Accounting Standards IAS/IFRS until 2005[4]. The mandatory implementation of International Accounting Standards is based on the fact that they are high quality and contribute to a more qualitative and reliable representation of the financial condition of companies and institutions. A key contribution is to reduce profit manipulation by companies, a phenomenon that is a widespread practice, distorting the real financial situation of companies and leading to wrong decisions by stakeholders, such as investors.

Standard IAS 39 became effective on 1 January 2005 and sets out the requirements and conditions for the Recognition and Measurement of Assets, Liabilities and purchase and sale contracts of non-financial assets. In October 2008, following political pressures and pressures by financial institutions, the modification of IAS 39, allowing for the reclassification of some financial instruments of entities, in particular banks, was adopted. As of January 1, 2018, IAS 39 was replaced by standard IFRS 9[5]. Below, the study results on the implementation of International Accounting Standards are presented. In particular, section 2 presents studies on the application of standard IAS 39 to companies and banks. Section 3 provides a literature review of the implementation of the modified IAS 39. Reference is made to relevant studies, but also to the reasons for its adoption. Section 4 is devoted to IFRS 9, which was adopted as of 1 January 2018 instead of IAS 39 in response to the need to simplify the previous standard. The last section deals with the conclusions of the literature review.

2. First Implementation of IAS/IFRS (IAS 39) in Companies

A key issue for researchers is to improve the quality of accounting information through the implementation of IASs/IFRSs. The primary objective of the adoption of International Accounting Standards was to promote the development of financial information, which should have been comparable among the countries of the European Union, and to prevent the influence of local political and financial players on the financial statements, therefore the first implementation of IAS 39 has led to a high degree of compliance by European companies (Morais and Fialho, 2008).

The impact on the quality of accounting information due to the application of IASs/IFRSs is also an issue of interest for Barth *et al.* (2008). The researchers found that companies applying IAS/IFRS show less profit management, more timely loss

[4]*Regulation of the European Parliament 1606/2002/EC.*
[5]https://www.ifrs.org

recognition, while their financial statements provide better quality accounting information. The consultations and decisions that preceded the adoption of the new IASs/IFRSs in 2005 also had an impact on the course of the stock market in Europe. Besides, adopting these standards was one of the most important changes in the method of presentation of financial statements and was the subject of conflict, even at the highest levels of governance. The discussion not only concerned the benefits and costs of implementing IASs/IFRSs but also the difficulties and consequences of the convergence of accounting standards at international level. It was not at all certain how investors would react to the changes. Armstrong *et al.* (2009) explored investor reactions to the adoption of new standards between 2002 and 2005.

Initially, an increasing positive response was observed from investors to companies that had poor information quality and information asymmetry before the new standards were adopted, which indicates that investors believe that for such companies the use of IASs/IFRSs managed to improve the quality of information. In addition, the researchers identified a strongly positive response by investors to banks with poor quality of information before the new standards were adopted, which shows that investors expect better information from these banks after adopting standard IAS39. Overall, it was observed that investors associate the benefits of adopting new standards with increasing the quality of information, reducing asymmetry in information, enforcing the use of specific standards and convergence in the method of presentation of corporate financial statements.

International Accounting Standard IAS 39 set the principles for the recognition and measurement of financial instruments used by the companies. As it is known, derivatives are widely used secondary financial instruments, the accounting treatment of which was specified in IAS 39. According to Tahad aand Alshbiel (2014), listed companies in the Jordan Stock Exchange, following the application of IAS 39, use derivatives to hedge trading risks (35%), risks posed by exposure to competition, and economic conditions (18.6%) and to reduce financing costs (2.3%). Another important area of study is the relationship between the application of IAS 39 and a potential profit manipulation. The results of the study by Capkun et al. (2016) show that companies that adopted the new IASs/IFRSs International Accounting Standards before 2005 showed lower profit manipulation rates compared to those that they showed when they used the national accounting systems to represent their financial activity.

3. First Implementation of IAS/IFRS (IAS 39) in Banks

Following the presentation of significant studies on the application of standard IAS 39 to companies, the following is a literature presentation on the application of this standard in the banking sector. In addition, the financial instruments such standard deals with are mainly traded by the banks. Walton (2004) presented a fairly comprehensive study on the argumentation regarding the application of IAS 39, which led to the conclusion that transparency, reliability and high quality of financial reporting are of primary importance and that new accounting standards are designed in the light of these principles.

In order to better understand the conflict over accounting standards, which are more appropriate to present the financial situation of economic entities, especially banks, which are primarily the traders and users of financial instruments, which are mainly the subject of a study be researchers, Gebhatrdt *et al.* (2003) developed a model and, through a simulation process, analyzed the effects of three different accounting standards on financial statements of banks. The accounting standards used were the "old IAS" before applying IAS 39, the new IAS, similar to US GAAP, and the Full Fair Value standard proposed by the Joint Working Group (JWG). According to Gebhatrdt *et al.* (2003), the full fair value method at fair value provides better comparability. There are, of course, problems that need to be solved, such as when the method is also extended to the valuation of other assets and liabilities. In this context, the modified IAS 39 could, according to the researchers, be a good practice, since it gives banks an opportunity to gain experience in using fair value.

The implications of the mandatory application of IASs/IFRSs to the European banking sector, in the quality of accounting information, are also being studied in Gebhardt and Novotny-Farkas (2011) study. In particular, the way in which the change in the recognition and measurement of provisions for losses from non-performing loans affects the result achieved by the economic entity and the timely recognition of losses is analyzed. It is ascertained that the limitation of loss recognition due to the application of IAS 39 significantly reduces the normalization of the results. The researchers emphasize that this is less intense in countries with stricter banking supervision, therefore the institutions play an important role in shaping the results of the financial statements. It was also found that, due to the application of the standard, the timely recognition of loan losses was limited, resulting in the delayed recognition of future expected losses. In the light of the financial crisis, which characterized the period when the study was carried out, it is doubtful whether the above findings were a desirable financial reference result from the mandatory adoption of the IAS/IFRS.

Amidst the economic crisis, in October 2008, the IASB, after political pressure, had to revise IAS 39, bypassing indeed the prescribed formal procedure. The criticism of this standard was based on the fact that many of the problems that the crisis revealed were due to the complexity and growing lack of transparency of the financial statements. According to ECOFIN (Economic and Financial Affairs Council), the use of fair value for the valuation of financial figures and the recognition of losses on securities (the value of which declined significantly due to the crisis) would increase the impact of the credit crisis, increasing the variation of bank profits. In this context, Duh *et al.* (2012) explored how mandatory use of IAS 39 may affect the variation of profits and credit provision. The study results of Duh *et al.* (2012) show that the variation of profits increases with the use of fair value in the calculation of financial figures. Also, variation of profits is an important factor affecting the credit rating of banks. Indeed, it appears that the mandatory application of the IAS39 has allowed a direct representation of the variation of profits in the financial statements, which is reflected in the assessment of the credit rating of banking institutions.

Following the 2008 financial crisis, the method of calculating provisions for loan losses by bank was mainly disputed on the basis of the timely recognition of the “loan losses” expense. Thus, IASB decided to replace the current calculation method, where the provisions were calculated on the basis of the losses already created, with a method that would also calculate possible future instabilities. One important issue that emerged was the emphasis that should be given – using the new method – to reporting the objective losses in relation to the reporting of expected losses. O’Hanlon (2013), in order to investigate the above issue, compared the method of calculating loan loss provisions with two methods which differ in the severity of their requirements for the recognition of loan losses. In particular, he investigated whether provisions for losses from UK bank loans became timely following the use of IAS 39, in relation to the previous regime, where the requirements were less strict. According to the results of the study, the provisions for loan losses, as reflected in the IAS 39 regulations, are more timely than during the time in which that standard was not applied.

Value relevance is, according to IASB, a key qualitative feature of financial reporting that improves the quality of accounting information. The IAS/IFRS applied downgraded the conditional conservatism, which was considered a significant qualitative feature of accounting reports that facilitated the decision-making process. Using a sample of banks listed on the stock exchanges in 15 European countries, Manganaris *et al.* (2015) studied the degree of relevance of the financial statements before and after the mandatory adoption of IAS 39 and examined the relationship of relevance to conditional conservatism, which also governs the financial statements of banking institutions. They also examined how this relationship changed following the mandatory implementation of the new International Financial Reporting Standards.

The researchers assume that if the IASB has achieved its goal, the results of their study will show a negative relationship between relevance and conservatism (greater relevance, less conservatism). The reasons why the researchers chose to analyze data of banking institutions are two: initially, IAS 39 had a particular impact on the financial statements of the banking sector. Measuring and recognizing financial figures at fair value has led to the use of a model that uses both fair and historical value, and thus the financial figures were calculated using two methods, resulting in differentiations that may adversely affect the relevance of accountancy data. Secondly, the impact of both conservatism conditions and the application of the new International Accounting Standards had not been sufficiently researched, according to Manganaris *et al.* (2015). Given the primary importance of the banking sector in the financial markets, according to the researchers it is interesting to analyze the industry's reaction both to the adoption of new standards and the recent economic crisis.

Liquidity constraints, according to Alexandre and Clavier (2016), are one of the most important issues related to stability in the banking sector. The more banks support constraining liquidity, the more difficult they can finance their borrowings and thus the risk of crisis in the banking sector is growing and then it can spread across the economy. Moreover, internationally, the cost of liquidity offered by external investors is higher in relation to that of the liquidation of the bank's assets (eg sale of securities). Thus, banks, which rely on external financing, are more difficult to increase their cash available, which leads to a limitation in credit. On the other hand, the liquidation of equity has been a subject of particular interest in recent years. For the above reasons, the quality of financial information, as well as transparency, is of paramount importance as it can help banks to borrow cheaper and also be able to grant loans.

In this context, the Alexandre and Clavier study (2016) illustrates whether the adoption of IASs/IFRSs, which contribute to the provision of high-quality financial information, had resulted in an increase in credit provided by banks facing liquidity constraints. According to the results of the study, the adoption of International Accounting Standards by small banks leads to a significant increase in credit provision, which is very important, especially for banks facing liquidity constraints.

In addition, for small banks, which were not previously obliged to use international accounting standards, the adoption of IASs/IFRSs has increased transparency and encouraged investors. On the other hand, for large banking institutions, which have high value current assets and equity, the adoption of new standards does not seem to have any significant impact on their lending capacity. This is, according to Alexandre & Clavier (2016), due to the fact that large banks were already obliged to follow international standards (such as those of Basel I and II) and that – as shown in the recent economic crisis – there is a high degree of asymmetry in information for such institutions.

4. Reclassification of Financial Assets

The possibility to reclassify financial assets relates to the modification of IAS 39 performed by IASB in 2008, following strong, mainly political, pressures. This modification allowed companies to reclassify their financial instruments and evaluate them, not at their fair value but at the amortized cost. The adoption of International Accounting Standards by the banking sector has been a concern of the stakeholders for the past decades. A basic aim of both banks and governments was to achieve greater comparability of bank financial statements in Europe. Thus, the decision to adopt IASs/IFRSs appeared to be a positive step in this direction, especially since there was no specific accounting standard for the financial assets of banks.

Nevertheless, it remains questionable whether the desired comparability was achieved, as banks do not follow a uniform method of presenting their financial instruments. Bischof and Wustemann (2007), in their work *"How Does Fair Value Measurement under IAS 39 Affect Disclosure Choices of European Banks?",* present the different practices used by banks and explain the causes of heterogeneity in the representation of financial figures. The use of fair value as a basis for measurement of financial figures plays an important role in their analysis and broadens the relationship between a bank's options of how its financial assets and the measurement basis it uses for these assets are displayed. According to the results of the Bischof and Wustemann (2007) study, most European banks present their assets according to the categories defined by IAS 39. The presentation of financial instruments by type is the second most preferred method, but it is now applied by less than 20% of European banks. Indeed, in order to achieve greater homogeneity in banks' financial statements, according to Bischof & Wustemann (2007), more specific rules had to be established by the regulatory authorities.

With regard to the criteria for choosing the method of displaying financial assets in bank statements, they vary. The study has shown that the current regulatory framework is a key factor. Also, banks often decide based on the image they want to show, so as to attract investors. Moreover, it appears that the more banks use the valuation in book value, the less they analyze their financial data. Finally, as far as financial derivatives are concerned, it appears that banks are no longer afraid of negative reactions by the market in case they report information on their activity in derivatives.

The article of Andre *et al.* (2009) analyzes the impact of the economic crisis and efforts to "blame" the IAS 39, and IASB in general, for creating the crisis, rather than the banks and their wrong investment decisions. In conclusion, according to Andre *et al.* (2009), 2008 was a year of intense questioning of IASB. The use of fair value in the valuation of financial assets and the financial crisis gave the opportunity to those opposed to the adoption of IAS 39 to insist on its abolition. On the other hand, the European Union has supported the IASB and International Accounting Standards, as it was also shown in the following years.

The reclassification capabilities provided for by the modification of IAS39 carried the risk of being adopted for the purpose of profit management. Quagli and Ricciardi (2010) studied this possibility by analyzing the data of 71 banks listed on European stock exchanges. Indeed, their study is the first one to use the amount of avoided losses, both in profits and in capital, to identify possible opportunistic behavior by the bank management. According to the study results, Quagli and Ricciardi (2010) found that there is a relation between the use of reclassification, as provided for by the modification of standard IAS 39, and past practices of profit manipulation by banks. Indeed, they found indications of using the reclassification with the aim to present improved profitability for banks. The analysis also showed that banks used the reclassification in order to show increased profits, but not to manipulate capitals.

Finally, the study confirms the possibility of using the modifications of IAS 39 for opportunistic reasons, which disputes the quality of the financial statements that follow the rules of IASs/IFRSs. Therefore, researchers argue that the decisions of the competent bodies of the European Union need to be careful with regard to issuing regulations that allow flexibility in the representation of the financial data of institutions, such as the reclassifications permitted in 2008, since they can be used to manipulate profits.

The use of fair value in the valuation of the bank financial assets has led to many discussions, particularly on the relevance and reliability of valuation by using this practice. Fiechter (2010) studies whether the use of fair value actually reduces the volatility of profits. His study concerns the period from 1 January 2006 – 31 December 2007 and the survey sample consists of 222 banks operating in 42 different countries. The results of the Fiechter (2010) study confirm the IASB’s initial intention to use fair value valuation to reduce the variation in profits. However, following the global financial crisis, the impact of using fair value on the variation of profits has been a difficult but interesting issue in accounting theory and practice.

Kholmy and Ernstberger (2010) dealt with the issue of adopting modifications of standard IAS 39, and in particular with factors related to the decision of European banks to reclassify their financial assets. The continuing financial crisis has put the use of fair value valuation in question, as this practice has been accused of contributing to reducing the banks’ credibility through the deterioration of their financial image. According to the results of the Kholmy and Ernstberger (2010) study, banks with low profitability are more likely to use the reclassification option. Also, the size of the banks influences the relevant decision, since it seems that larger banks are more willing to reclassify their financial assets. The second assumption of the model is not confirmed, since the results of the analysis do not indicate that banks with a low “Equity to Total Assets” Index are more likely to use the reclassification option. Finally, the researchers note that the use of reclassification leads to an increase in information asymmetry and should therefore be avoided.

Two years after the issue of the modification of IAS 39, Bischof *et al.* (2010) explored the economic impact of its implementation on banks, both in the short and long term. In conclusion, empirical study supports the fears of the IASB and investors that the transparency of financial reporting decreases when the use of valuation at fair value is limited.

Fiechter (2011) dealt with the reclassification of the financial assets of banks, according to the modification of standard IAS39. In particular, he investigated the degree of use of the reclassification by banks, as well as the effect of the reclassification on the financial statements of the banks. The significance of his study, according to the researcher, is that the use of the fair value valuation method applied according to IAS/IFRS was questioned by both institutions and bankers, and was indeed accused of contributing to the crisis. Thus, Fiechter (2011) did not investigate the reasons why the banks adopted the modification, but whether and to what extent the reclassification and some important financial indicators were adopted.

In conclusion, Fiechter's empirical study (2011) showed that banks used the reclassification to a large extent and this had a positive impact on key financial indicators. This result justifies the motivation of those who advocate the use of the modification of IAS 39. Nevertheless, Fiechter (2011) argues that the reclassification option only affects the accounting data and thus does not change the bank's exposure to risk. This is also apparent from the large number of banks which, although they used the reclassification option, had to be supported by the governments of their countries.

The reclassification option by the banks, with the modification of IAS39, was the subject of the study by Bischof *et al.* (2012). The results of the Bischof *et al.* (2012) study showed that more than one third of the sample banks used the reclassification. At the same time, the closer the bank's return on capital to the country's minimum return on capital ratio is, the higher the likelihood of recapitulation. In addition, the capital market only responds favorably to the reclassification if the benefits for the bank are sufficiently significant. Furthermore, some banks also use the reclassification option in order not to disclose some information they should include in the notes. Finally, the effect of the reclassification on the information asymmetry is related to the extent to which the bank complies with the relevant requirements. Banks reporting full information on fair value do not show changes in information asymmetry.

Guo and Matovu (2012) also dealt with the impact of the modification of International Accounting Standards and the reclassification of assets in the banking sector. In particular, they collected data about 53 banks and examined empirically how banks from different geographical areas used reclassification as a management strategy for their troubled financial assets and how the use of this strategy is related to the different characteristics of the sample banks. They also demonstrated that the modifications of IAS 39 affected the accounting results and the financial statements of the banks. They draw the conclusion that asset reclassification is a reasonable option in order to maintain the financial stability of banks in times of economic crisis. However, the impact of this option on the results of financial activity, as reflected in the financial statements of the banks, should not be neglected.

The reclassification of the banks' financial assets, as provided for in the modification of IAS 39, to allow the valuation of certain items in historical cost rather than fair value, may lead to an increase in the banks' income, particularly in times of economic crisis. Lim *et al.* (2013), are looking at a particular aspect of the reclassification issue, namely at the accuracy of forecasts by financial analysts during the 2008-2009 period, where the economic conditions were quite unstable.

Their study focuses on economic analysts and the effects of reclassification on their forecasts. Financial analysts play an important role as information providers to capital markets. By collecting and analyzing information, they reduce information asymmetry and improve market efficiency. Lim *et al.* (2013) emphasize that their study is subject to the small size of the sample, nevertheless it contributes to the literature on the costs and benefits of the modification of IAS 39 and state that, as far as the negative effects on analyst behavior are concerned, the results of the study show that these are transient and have no long-term effects.

Recapitalization in the banking sector was the key priority of politicians, governments and regulatory authorities at the peak of the economic crisis in October 2008. At the same time as bank recapitalization programs, the modification of IAS 39 was adopted, allowing banks to evaluate some of their financial figures at amortized cost rather than at fair value. The literature about the contribution of the reclassification both to the banks' recapitalization, which was a matter of political will, and to the reduction of the alternative cost from its use, is limited. The study of Bischof *et al.* (2017) explores this issue. In conclusion, Bischof *et al.* (2017) report that, according to their empirical study, reclassification is a measure acting in addition to other measures in times of crisis, such as in 2008. Politicians and regulatory authorities have implemented, almost simultaneously, various mechanisms and accounting rules in order to deal with the economic crisis. Thus, the effect of the reclassification appears to be moderate and similar to other options, such as "provisions for loan losses". According to researchers, all accounting measures are much less effective at times where there are significant liquidity problems than actual corrective actions, such as the reduction of risk-bearing assets or capital injections.

5. **Application of IFRS 9**

IFRS 9 is the new accounting standard for the classification and measurement of financial assets and liabilities prepared by the IASB in response to the mandate received from the G20 in the light of the performance of previous accounting standards during the global financial crisis[6]. Fair value and impairment losses during the crisis were recognized using the accounting standards in force at that time (eg IAS 39) and the significant increases in such losses observed at that time were considered to have pro-cyclical features.

In accordance with IFRS 9, the classification decision for financial assets is based on two basic criteria, the business model in which the asset is held and the contractual cash flows of the asset (SPPI)[7]. A business model refers to the way in which an entity manages its financial assets in order to generate cash flows. IFRS 9 defines three types of business models and in order to determine what type of business

[6]*European Systemic Risk Board, 2017.*
[7]*Commission Regulation (EU) 2016/2067.*

model an entity has, it is necessary to understand the objectives of each business model and the activities undertaken. In this way, an entity should consider all relevant information, including, for example, how business performance is announced to the entity's key managerial personnel and how the company’s managers are remunerated.

As mentioned, the recent economic crisis highlighted the importance of Liquidity Risk in the banking sector and led to the need to revise accounting standards, which considered of little importance the impact of this risk on the operation and stability of the banking system. Cipullo and Vinciguerra (2014) argue that liquidity management is now necessary to maintain the credibility of banking institutions, but also the stability of the entire economic system. The development of banking activities influences the nature of the exposure to liquidity risk, which is becoming increasingly complex, with the result that banking institutions have not had time to develop the appropriate tools for managing it, while the choice of how to calculate it liquidity risk depends on the banking institution concerned and on the rules adopted by the regulatory authorities. The standards being developed have advantages but also weaknesses and the effort to converge Basel III and IFRS 9 standards requires both will and continuous empirical study.

The market reaction to the announcements on the adoption of IFRS 9 in replacement of IAS 39 was an issue for Onali and Ginesti (2014), who used a sample of 5480 European listed companies. The questions answered by their study refer to market reactions to the likelihood of imposing a new way of valuing financial instruments and whether the national characteristics of the country where each company is located affects the investors’ reactions. In conclusion, Onali and Ginesti (2014) report that investors believe that the introduction of IFRS 9 will help to solve the problems presented by the use of IAS 39, but differences are expected among countries. However, with the introduction of the new standard, the possibility to compare financial statements among countries is achieved to a greater extent than before.

Cipullo and Rosa (2014) explore a very important issue, that of liquidity and liquidity risk, and how IASB standards, in particular IFRS 9 and IFRS 7, address these issues. In conclusion, the researchers say the international accounting standards need to define the concept of Liquidity and then to provide information on forecasting the future cash flows of the banks. It is also necessary to take into account that the banking activity follows the “Business Model” and the values of assets and liabilities need to forecast future cash flows.

Lackmann *et al.* (2015) in their article *“Fair value accounting for liabilities: Presentation format of credit risk changes and individual information processing”* refer to IFRS 9 and its requirement that the effects of credit risk are presented in “Other comprehensive income” instead of “Net Income”. According to the study results, individuals are more likely to receive information from the “Other

Comprehensive Income" account. However, the risk for profits, when using the fair value method, is not affected by the method of presentation. Also, the overall assessment of the company's profitability is less discriminatory when the profits from exposure to credit risk are presented in the "Other Comprehensive Income" account. When a company reports profits and losses in terms of credit risk, the differences between the display mode are reduced.

Bischof and Daske (2016), on the occasion of the adoption of IFRS 9, studied an interesting issue. They mention that, according to the European Union, any International Accounting Standard adopted by the member states needs to meet three main criteria, the True & Faire Value (TFV) criterion, the qualitative criteria and the criterion of "European Public Good" and conclude that, despite any uncertainties and costs for some areas of economic activity, such as the insurance sector, the application of IFRS9 will have positive results, since many of its features are improvements of the previous standard IAS39.

Novotny-Farkas (2016) investigated provisions for loan losses, as reflected in IFRS9, however they studied a different aspect, namely the interaction between the provisions of the standard with the rules on bank guardianship, and the relative implications for financial stability. In conclusion, the use of the new standard can only have the desired positive results if its rules are applied correctly and consistently. The above can be achieved with the concerted effort of all stakeholders.

The "business model" is also mentioned in the Le Quang study (2018), which aims to explore the potential effects of the new classification mode of the financial instruments proposed by IFRS 9 on development (and therefore on investment financing) and on economic stability. Le Quang (2018) concludes that the use of the mixed classification system of the assets, proposed by the standard, gives better results in terms of financing investments than fair value valuation, for assets whose expected value is not very high. On the other hand, with respect to assets with a high expected value, the negative impact associated with the expectation of inefficient sales to finance the investments is very important in the mixed method regime and outweighs any benefits. In this case, the use of fair value for investment financing is preferable. Le Quang (2018) concludes that when the "business model" of each financial institution is also taken into account, liquidity crises are more effectively prevented, which contributes to maintaining financial stability.

Banks' forecasts for losses from non-performing loans was also an issue for Gaffney and McCann (2018). Banks' forecasts for losses from non-performing loans were calculated as credit losses in the final results of the financial year. The analysis of Gaffney and McCann (2018) shows that the use of the new template seems to better calculate the provisions, depending on the current economic situation. Understanding the provisions for loan losses using IFRS 9 is an interesting issue, as already analyzed above, and has also been the subject of the study of Seitz *et al.* (2018). According to the results of their study, the cash provisions using the standard are not, in general, higher than those calculated with IAS 39. Indeed, in times of crisis, they are higher. Reserves are also highly volatile in changing market environments and differ significantly between failing and non-failing banks as well as among European countries and different regions. In particular, in the countries of southern Europe the levels of cash are comparatively higher. In conclusion, Seitz *et al.* (2018) conclude that the reserves provided for in IFRS 9 do not appear to be able to contribute to the increase in anti-cyclical nature envisaged by the IASB, as well as to the provision for reserves for future loan losses.

6. Conclusion

Developing and adopting common accounting rules at international level has been – over the last decade – a key issue of interest for legislators, governments, economic entities, investors and all stakeholders. Globalization and the development of international capital markets have highlighted the need to use common financial reporting rules, so that the information provided is comparable and comprehensible to stakeholders. Moreover, the limitation of the phenomenon of profit manipulation, which has been a widespread practice in recent years, has been a concern for competent bodies who tried – and still try to find ways to limit this phenomenon distorting the real financial condition of entities and provides inaccurate information to stakeholders – such as investors – leading them to wrong decisions. Besides, the recent economic crisis has been another reason to demonstrate the need to develop reliable accounting standards.

In this context, the International Accounting Standards, which are the subject of this literature review, represent the efforts of the International Accounting Standards Body to introduce and implement internationally accepted accounting standards. It is clear from the literature review that it is a painful process, which has been characterized by disagreements, discussions and constant modifications since its inception – several decades ago. The reasons are many. Often these standards are in contradiction with the arrangements in force in each country. Thus, it is not easy to move to a new regime. Also, as far as financial information is concerned, there are many stakeholders with conflicting interests. Moreover, market conditions are often those that show the suitability or not of the methods for recording financial instruments, therefore it is also necessary to test the various standards in practice in order to prove their effectiveness. What is important to understand is that will and desire are required for transparency in reporting the real sizes of economic entities in the financial statements as far as possible.

Moreover, from the literature review of studies dealing with IFRS implementation in the banking sector, important issues arise for future research. It will be important to explore how it will affect the information provided by the financial statements of the European Banks and the reclassification of their financial instruments, in order to harmonize them with the new classification introduced by the application of IFRS 9. An additional subject to be studied could be the empirical evaluation of the impact that the reclassification of financial instruments had, given the mixed accounting regime introduced by IFRS 9 through the business model assessment. Finally, it is important to see how the liquidity and, by extension, the volume of credit provided by the European banks after the adoption of IFRS 9 is affected.

Summary:

APPLICATION OF IFRS 39 IN COMPANIES			
Study	**Objectives**	**Methodology**	**Conclusions**
Morais & Fialho (2008)	Study of the degree to which European businesses are harmonized with IAS 39, when implemented, and whether this harmonization has been influenced by other operational factors.	JACC index, linear regression	A higher degree of compliance with the requirements of standard IAS 39 was observed in the case of financial institutions. The institutional factors affecting the use of standard IAS 39 are the country and the sector of activity.
Barth et al. (2008)	It is examined whether the application of IAS/IFRS is linked to a higher quality of accounting information.	Regression analysis	The researchers found that companies applying IAS/IFRS show less profit management, more timely loss recognition, and their financial statements provide more reliable accounting information.
Armstrong et al. (2009)	They explored investors' reactions to the adoption of IAS/IFRS, in particular IAS 39, recognizing 16 important relevant events and decisions between the years 2002 and 2005.	OLS regression	Investors associate the benefits of adopting IASs/IFRSs with increasing the quality of information, reducing asymmetry in information, enforcing the use of specific standards and convergence in the method of presentation of corporate financial statements.
Tahat & Alshbiel (2014)	They explored the use of financial derivatives, in accordance with the requirements of IAS 39, by companies listed on the Jordan Stock Exchange.	Descriptive Statistics	Companies use derivatives to hedge trading risks (35%), risks posed by exposure to competition, and economic conditions (18.6%) and to reduce financing costs (2.3%).
Capkun et al. (2016)	They explored whether the transition to IAS/IFRS (the standards examined include the effect of the application of IAS 39) after 2005 prevented or encouraged greater profit manipulation by the companies.	Pooled estimation models	Companies that adopted the new IAS/IFRS International Accounting Standards before 2005 showed lower profit manipulation rates than those when they used the national accounting systems. Also, an increase in profit manipulation was observed after 2005.

APPLICATION OF IFRS 39 IN BANKS

Study	Objectives	Methodology	Conclusions
Gebhatrdt et al. (2003)	They analyzed the effects of the modifications of IAS 39 on accounting records. The accounting standards used in the study analysis are IAS 39 before it was revised and the revised IAS 39.	Descriptive statistics	The full fair value valuation method provided better comparability. In this context, according to the researchers, the modified IAS 39 could be a good practice, since it gives banks an opportunity to gain experience in using fair value.
Walton (2004)	Argumentation regarding the implementation of IAS 39 for the preparation of bank financial statements.	Content analysis	Transparency, reliability and high quality of financial reporting are of primary importance and that new accounting standards are designed in the light of these principles. Any different opinion is related to private interests and does not meet the requirements for the qualitative presentation of accounting information through the financial statements.
Gebhardt & Novotny-Farkas (2011)	Implications of the mandatory application of IASs/IFRSs, in particular IAS 39, to the European banking sector, in the quality of accounting information.	Regression analysis	It is ascertained that the limitation of loss recognition due to the application of IAS 39 significantly reduces the normalization of the results. This conclusion is less intense in countries with stricter banking supervision. It was also found that, due to the application of the standard, the timely recognition of loan losses was limited, resulting in the delayed recognition of future expected losses.
Duh et al. (2012)	They explored how mandatory use of IAS 39 in the banking sector succeed in affecting the variation of profits and credit provision.	Tobit regression analysis	The variation of profits increases with the use of fair value. Also, variation of profits is an important factor affecting the credit rating of banks.

O'Hanlon (2013)	It is examined whether provisions for losses from UK bank loans became less timely following the use of IAS 39 standard, in relation to the previous accounting standardization regime, where the requirements were less strict.	Regression analysis	The provisions for loan losses, in accordance with the clauses of IAS 39, were formed more timely than the previous accounting standardization regime.
Manganaris et al. (2015)	They studied the relevance degree of the banks financial statements from 15 European countries before and after the mandatory adoption of IASs/IFRSs and examined the relationship of relevance with the voluntary conservative way of preparing the financial statements.	Regression analysis	Smaller, developing banks with a low level of leverage show more relevance than larger banks. In countries with strict legal frameworks, the level of relevance of the financial statements before and after the application of the new standards is associated with greater emphasis on the conservative way of preparing the financial statements.
Alexandre & Clavier (2016)	They explored whether the adoption of IASs/IFRSs, which contribute to the provision of high-quality financial information, has resulted in an increase in credit provided by banks facing liquidity constraints.	Regression analysis	The adoption of International Accounting Standards by small banks has led to a significant increase in credit provision, increased transparency and encouraged investors. For large banking institutions, the adoption of new standards does not seem to have any significant impact on their lending capacity.

RECLASSIFICATION OF FINANCIAL ASSETS

Study	Objectives	Methodology	Conclusions
Bischof & Wustemann (2007)	Analysis of the different practices used by banks to prepare the accounting statements using the IFRSs.	Regression analysis	Most European banks have displayed their assets in accordance with International Accounting Standards (IAS 39). Presentation of financial instruments by type was the second preferred method. A key selection criterion was the current regulatory framework. It was a common occurrence for banks to decide based on the image they wanted to show, so as to attract investors. The more they used the

			valuation in book value, the less their financial data were analyzed.
Andre et al. (2009)	They explored the implications of the 2008 economic crisis and efforts to “blame” standard IAS 39, and IASB in general, for creating the crisis, rather than the banks and their wrong investment decisions.	Content analysis	The use of fair value in the valuation of financial assets and the financial crisis gave the opportunity to those opposed to the adoption of IAS 39 to insist on its abolition. On the other hand, the European Union supported the IASB and the application of International Accounting Standards.
Fiechter (2010)	It is examined whether the use of fair value for the valuation of financial assets actually reduces the volatility of profits.	OLS regression analysis	It turns out that valuation at fair value reduces the variation in earnings.
Quagli & Ricciardi (2010)	They explored whether reclassification capabilities provided for by the modification of IAS39 carried the risk of being adopted for the purpose of profit manipulation.	Logit and Linear regression analysis	The study confirms the possibility of using the modifications of standard IAS 39 for opportunistic reasons.
Kholmy & Ernstberger (2010)	They explored factors related to the decision of European banks to reclassify their financial assets, making use of the possibilities offered by the modifications of IAS 39.	Probit and OLS regression analysis	Banks with low profitability as well as large banks were more likely to use the reclassification option. The use of the reclassification led to an increase in information asymmetry, and therefore, according to the researchers, it was preferable to be avoided.
Bischof et al. (2010)	They investigated the reclassification capabilities offered by IAS 39, emphasizing on the economic implications of suspending the use of the classification in the fair value of financial assets of banks during the period of the financial crisis 2008.	Probit and panel regression analysis	The capabilities to reclassify financial assets in the short term helped banks that faced a problem due to fair value. On a long-term basis, the transparency of financial reporting is reduced when the use of valuation at fair value is limited.
Fiechter (2011)	He investigated the degree of use of the reclassification by banks, as well as the effect of the reclassification on the financial statements of the banks, by comparing	Descriptive statistics	Banks used the reclassification to a large extent and this had a positive impact on key financial indicators. The reclassification option only affected the accounting data and thus did not change the bank’s exposure to

	indexes.		risk.
Bischof et al. (2012)	They investigated the implications of the possibilities to reclassify the financial assets of the banks, provided by IAS 39, during the 2008 economic crisis.	Probit and multivariable regression analysis	More than one third of the sample banks used the reclassification. The capital market only responded favorably to the reclassification if the benefits for the bank were sufficiently significant. Some banks also used the reclassification option in order not to disclose some accounting information. Banks reporting full information on fair value did not show changes in information asymmetry.
Guo & Matovu (2012)	They examined how 189 European banks used the reclassification capabilities of IAS 39 as a management strategy for their troubled financial assets and how the use of this strategy is related to the different characteristics of the sample banks.	Logit regression analysis	The banks in Western Europe applied the reclassification to a greater extent than the banks in Northern and Eastern Europe. The banks that applied the reclassification had a positive effect on profits, while the positive effects on Equity were not as important. Banks that did not apply the reclassification option showed a higher Return on Equity (ROE). Bank sectors of activity did not affect the decision to use the reclassification of financial assets.
Lim et al. (2013)	They examined how the reclassification of financial assets of banks (due to the modifications of IAS 39) in 2008-2009 affected the analysts' ability to forecast profits during a period of high market volatility.	Probit regression analysis	The reclassification option reduced the accuracy of the analysts' forecasts and increased the spread of the forecasts. Moreover, the reduction of the analysts' forecasting capability is only limited to the year when the modification was adopted, a period during which the economic environment was particularly unstable.
Bischof et al. (2017)	They studied the contribution of the reclassification of financial assets of banks, through the use of IAS 39 both to the banks' recapitalization, which was a matter of political will, and to the reduction of the alternative cost from its use.	Probit, OLS, Time-series, cross-sectional regression analysis	Reclassification was a measure that is complementary to other measures in times of crisis, such as 2008. Changes to the accounting standardization regime are less effective than actual corrective actions, such as the reduction of risk-bearing assets or capital injections, in times where there are significant liquidity problems.

APPLICATION OF IFRS 9			
Study	**Objectives**	**Methodology**	**Conclusions**
Cipullo & Vinciguerra (2014)	They focus on the Liquidity Risk and the application of the provisions of Basel III and IFRS 9, given that the liquidity of banks is affected by the financial assets used.	Content analysis	The choice of how to calculate the liquidity risk depends on the banking institution concerned and on the rules adopted by the regulatory authorities. The standards being developed have advantages but also weaknesses and the effort to converge Basel III and IFRS 9 regulations requires both will and continuous empirical study.
Onali & Ginesti (2014)	They studied the reaction of the market to the announcements about the adoption of IFRS 9.	Panel data analysis	The general reaction of the market was positive, indicating that investors believe that the new standard will have a positive effect on stock prices. The possibility to compare financial statements among countries is important and, with the introduction of the new standard, this is expected to be achieved to a greater extent.
Cipullo & Rosa (2014)	They explore the issues of liquidity and liquidity risk in the banking sector, and how IASB standards, in particular IFRS 9 and IFRS 7, address these issues.	Content analysis	International accounting standards need to define the concept of Liquidity and then to provide information on forecasting the future cash flows of the banks. Banking activity is reflected in the concept of the “Business Model” included in IFRS 9, and the values of assets and liabilities need to forecast future cash flows. The IASB needs to issue a standard exclusively for banks
Lackmann et al. (2015)	They explore whether the presentation of the effects of credit risk on “Other Comprehensive Income” instead of “Net Income”, in accordance with IFRS 9, affects non-professional investors and if that influence depends on the profitability of the financial institution.	Logistic regression	Individuals are more likely to receive information from the “Other Comprehensive Income” account. The risk of variation of the profits, when using the fair value method, is not affected by the method of presentation. The overall assessment of the company’s profitability is less discriminatory when the profits from exposure to credit risk are presented in

			the "Other Comprehensive Income" account. When a company reports profits and losses in terms of credit risk, the differences between the display mode are reduced
Bischof & Daske (2016)	They investigate whether IFRS 9 satisfies the True & Faire Value (TFV) criterion, the qualitative criteria for the preparation of financial statements and the criterion of "European Public Good".	Content analysis	These criteria are satisfied in the context of the implementation of IFRS 9.
Novotny-Farkas (2016)	They studied the interaction between the clauses of IFRS 9 about provisions for loan losses with the rules on bank guardianship, and the expected relative implications for financial stability.	Content analysis	The use of the new standard can only have the desired positive results if its rules are applied correctly and consistently. The above can be achieved with the concerted effort of all stakeholders.
Le Quang (2018)	It explores the effects of the new classification mode of the financial assets proposed IFRS 9.	Content analysis	The use of the mixed classification system of the assets, proposed by IFRS 9, gives better results in terms of financing investments for assets whose expected value is not very high. Taking into account the "business model" of each financial institution, liquidity crises are more effectively prevented, which contributes to maintaining financial stability.
Gaffney & McCann (2018)	Investigating the method of provisioning for losses on non-performing loans of banks in the context of the application of IFRS 9.	Markov Multi-State Model	The use of the new template seems to better calculate the provisions, depending on the current economic situation.
Seitz et al. (2018)	Impact study of the implementation of IFRS 9. In particular, a three-stage simulation model is used, to calculate the three components of the account "expected credit losses": the probability of default, exposure to default, and established default.	Time series analysis	The reserves provided for in the clauses of IFRS 9 do not appear to be able to contribute to the increase in anti-cyclical nature envisaged by the IASB, as well as to the provision for reserves for future loan losses.

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