

Impact of the application of IFRS 9 on listed Spanish credit institutions: implications from the regulatory, supervisory and auditing point of view

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Abstract

Purpose: At the European level, on January 1st 2018, the accounting standard IFRS 9, on the principles for the accounting information of financial instruments entered into force. The objective of this research paper is to analyse the impact of the first application of IFRS 9 on the credit institutions listed in Spain, specifically, its effects on their financial statements and the corresponding audit reports.

Design/methodology/approach: In order to achieve research purpose, a descriptive analysis of the analysed entities has been carried out, through the financial and economic indicators, and through the review of the corresponding audit reports.

Findings: The results show that the application of IFRS 9 had a significant effect (both, positive and negative) on the results of the subject companies. Based on the audit reports, the application of this new standard increased the degree of complexity and that of accounting estimates in the financial statements.

Originality: This research is an important contribution to the literature on this topic because it analyses the impact of IFRS 9 under the main points of view that allow for a more complete understanding of the standard. Thus, addressing the regulatory-accounting standpoint, the economic-financial impact and the consequences on the implementation process.

Key Words: IFRS 9; credit institutions; audit; financial impact; regulatory; supervisory.

JEL classification codes: G21, M4

1. INTRODUCTION

Since 2005 all listed European companies have had to issue their annual accounts in accordance with International Financial Reporting Standards (IFRS), elaborated by the International Accounting Standards Board (IASB). One of the newest standards issued by the IASB is IFRS 9. At the European level, it entered into force on January 1st, 2018 and replaced the recognition criteria established by International Accounting Standard 39 (IAS 39) on the principles for the accounting information of financial instruments. More specifically, a new approach of classifying and presenting financial assets and liabilities is introduced; in addition, IFRS 9 introduces the possibility of assigning certain purchase and sale contracts of non-financial parties as for "own use" and also introduces certain financial guarantee contracts and loan commitments (Deloitte, 2016).

The implementation of this controversial standard has not been easy. After several drafts, it was circulated in July 2014 with the aim of establishing the accounting principles for the initial valuation of financial instruments and especially for their subsequent valuation. Since then, some studies have tried to analyse its potential impact on the financial situation of companies or on capital markets (Onali and Ginesti, 2014; Beerbaum, 2015; Bischof and Daske, 2016; Bholat et al., 2018; Engelmann, 2021; Gubareva, 2021). Overall however, literature on IFRS 9 remains scarce. Bischof and Daske (2016) argue that the new standard does not fundamentally change the accounting treatment of financial instruments, but its application will generate gains for some entities, and significant losses for others. Another study elaborated by Onali and Ginesti (2014) points out that the investors are expected to react positively to the new accounting regulation. However, a study carried out by Rocamora et al. (2017) forecasts that the application of IFRS 9 could portray some Spanish financial institutions as nearly insolvent from an accounting point of view. However, financial

Journal of Risk Finance

institutions have strict government control to avoid the bankruptcy since their financial distress cause social and economic problems (Paule-Vianez et al., 2019).

Taking into account the contradictory statements of previous studies, this paper analyses the impact that IFRS 9, based on the Spanish listed credit institutions, providing a reference framework for understanding the standard from an accounting or regulatory, supervisory and auditing point of view. Additionally, to give more visibility of the impact of IFRS 9 on the economic and financial situation of these organizations, the audit reports will also be examined.

In order to achieve these objectives, a descriptive and comparative analysis was carried out by applying a range of previously defined economic and financial indicators before and after the application of IFRS 9. The indicators are an important measurement tool to monitoring and provide useful information about the company (Lorain et al., 2015).

It is important to highlight the contribution of this work to the academic literature. Although there has been a lot of theoretical studies on the implementation of IFRS 9 and its impact on companies, there is still a lack of quantitative studies to corroborate with the theoretical ones. Therefore, the lack of literature on the subject makes this paper highly relevant both for the academic literature and for the different users of financial information.

This research is structured in the following way: first, this brief introduction presents the topic of discussion. Then, a review of the IFRS 9 accounting standard's literature follows. Thirdly, the population under investigation is studied and the sample selection is justified. The fourth part includes the analysis of the impact on the financial statements of the sampled entities and a discussion of the results obtained. The following part analyzes the current implementation

of the standard and the enforcement mechanism. The work finishes with the relevant conclusions and the implications of the study.

2. LITERATURE REVIEW

Accounting harmonization at European level started with the implantation of the IFRS accounting standards for listed companies (Alexander et al., 2018). Since the implementation, Spanish listed companies must report their consolidated annual accounts in accordance with these international standards (Sanabria-García and Garrido-Miralles, 2020). The implementation of IFRS standards in Spain has had a positive impact on the non-cross-listed companies, since earnings forecasts were more accurate, data interpreting costs had decreased and investor confidence has grown (Sanabria-García and Garrido-Miralles, 2020).

According to the IASB (2014), an organization must account for the initial recognition of a financial asset or liability when the company becomes part of the contractual clauses of that instrument. To de-recognize financial liabilities, entities must debit them when they have been extinguished. In other words, when they have been satisfied, cancelled, or have expired. Similarly, financial assets should be credited when the contractual rights to its cash flows expire or the financial asset is transferred and the transfer meets the relevant accounting de-recognition requirements.

In addition, companies must recognize impairments due to expected credit losses during the useful life of the asset, taking into account the credit risk considering all reasonable and well-founded information, including prospective information. A study conducted by Gebhardt (2016) has suggested that calculating the impairment in accordance with IFRS 9, under the "expected loss" model, will raise problems because of lack of the required data, and lack of

Page 5 of 92

Journal of Risk Finance

previous experience in prepping the necessary models. This is because IFRS 9 requires very precise answers related to credit quality. Therefore, it has been argued that the additional information required to calculate the impairment of the loans will be complex and will take companies time to calculate. Even so, it is likely that additional disclosure requirements contribute to a more effective market discipline, which should improve financial stability (Novotny-Farkas, 2016). On the other hand, it's expected that under this model, credit losses increase and become more volatile (Novotny-Farkas, 2016; Frykström and Jieying, 2018). Some research (Cohen and Edwards, 2017; Bholat et al., 2018) suggest that, in the short term, it will be possible to estimate more provisions than before; which will likely affect the conduct of banks when drafting new loan contracts.

A study by Deloitte (2016) suggests that many banks will suffer impairment and decreases in regulatory capital once IFRS 9 is applied. In addition to the material impact on the company's net worth or loan impairments, it is expected that this standard also has a restrictive effect on the management of profits (Beerbaum, 2015). In this sense, it is necessary to point out the potential "cliff effect" under the IFRS 9 implementation, the increase in provisions associated with expected credit losses can be foreseen, which may have undesired procyclical effects via banks' profits and regulatory capital. As proposed by Sánchez (2018), "the paradigm shift in accounting for credit losses may call for a policy reflection on: i) the importance of supervisory stress tests; ii) a call for simplicity in models; iii) the need for better and harmonised disclosures; iv) the expectations on the use of cyclical capital buffers, and v) the interaction with the current regulatory framework". The analysis of these points will lead to a control over the delay or anticipate the increase of credit risk.

As a consequence, and as a sector particularly affected by the application of this standard, credit institutions play a vital role in the economy because they facilitate the distribution of

credit to the rest of the production sectors and citizens. This makes it essential to have effective and flexible procedures that guarantee the stability of the financial system at an affordable cost to society. The complexity of the financial system and the systemic importance of some entities due to their size and interrelations, requires that any supervisory or regulatory measure must provide security to individual depositors and preserve the stability of the financial system (Law 9/2012, of November 14th).

Given the complexity and importance of this standard for the credit institution sector, different studies and authors have addressed the effect of the implementation of IFRS 9. Löw et al. (2019) and Orbán and Tamimi (2020) study the impact on the main European banks. Ntaikou et al. (2018) study the effect on Greek banks and Szigel (2021) simulates the early implementation of IFRS 9 in Hungarian banks. At this point, it is necessary to highlight the particularities of the Spanish context, as far as accounting regulations for credit institutions are concerned. Several studies have tried to analyse the evolution of the regulations issued by the Bank of Spain in its various Circulars and the changes that have been made in order to adopt international standards (Torre, 2010; Fernández, 2011). Moreover, with the outbreak of the financial crisis, which significantly affected the banking sector, it was questioned whether the efforts of regulators, supervisors and auditors were in the right direction. Some studies have tried to analyse where the accounting model may or may not contribute to the worsening of the financial situation or be used as a solution (Cañibano and Herranz, 2008; Mora, 2009; García and Herranz, 2009; Cañibano and Herranz, 2016). Although IFRS 9 arose as a response to precisely these requirements in the accounting model, in Spain, prudential criteria have historically prevailed over accounting criteria. For this reason, it is necessary as a starting point to analyse the Spanish context that preceded this regulation. According to Mora (2012), Bank of Spain Circular 4/2004 and its impairment model was not compatible with the

incurred loss model of IAS 39, which led to adjustments in the preparation of the consolidated accounts. In this impairment model, the Bank of Spain provided a provisioning schedule for assets in default for more than 3 months, which could be more similar to the IAS39 model. However, it envisaged cases of impairment that were not directly associated with non-payment. A provision was required for what were called "subjective" doubtful assets, which, despite not having defaulted so far, could present situations such as insolvency proceedings or negative equity, among others, which generated an obligation to make a provision. In addition, it contemplated a "substandard" category, for which the supervisor himself would dictate a percentage of provision according to the sector with difficulties to which it belonged, and even the fact that a file was not correctly documented was already cause for provision. An example of this was the Decrees of 2012¹, which required additional provisions for loan portfolio exposures to the real estate sector. In its impairment model, the Bank of Spain also envisaged a generic provision on the entire risk portfolio in a normal situation, as the main prudential criterion.

All of the above leads to consider the Spanish case as a special case of relevant importance in the estimation of impairment losses in the banking sector. Taking into account the literature review over the implementation of the new accounting standard, this paper aims to analyse the impact of IFRS 9 on listed Spanish credit institutions. Consequently, the following research questions are raised:

Q1: What have been the main impacts of the IFRS 9 implementation on Spanish credit institutions?

¹ Of particular note are Royal Decree-Law 2/2012 of 3 February on the reorganisation of the financial sector and Bank of Spain Circular 2/2012 of 29 February, which incorporated the new requirements of the aforementioned RDL.

Q2: Has the IFRS 9 implementation been reflected in the risks identified by auditors in their reports?

Through the research questions, we expect to show the direct impact of IFRS 9 on the economic and financial situation of each company, analysing how this will affect their net worth and, in general, it's various users. To do this, the audit reports of the sampled companies will also be analysed, as well as their financial statements before and after their adoption of IFRS 9.

3. THE PROCESS OF BANKING RESTRUCTURING IN SPAIN AND THE POSITIONING OF THE SELECTED ENTITIES

In the Spanish banking system, credit institutions that also operate as depositors or provide third party entity fund-raising services, answer to three traditional types of agents or intermediaries: *banks, savings banks and credit cooperatives*². These three agents have historically pursued different missions, strategies and objectives. Whilst commercial banks have aimed to promote industrial development and have traditionally focused on providing resources to companies of a certain size; the aim of savings banks and cooperatives has had a more social angle, focusing on aspects like promotion of savings, consumer financing, SME support, and guarantee financial inclusion (Fuentelsaz et al., 2016).

In order to obtain an understanding of the population, it is necessary to take a brief tour of the substantial restructuring process that the banking system has experienced in the past ten years, being the origin of this process the outbreak of the financial crisis in 2008 (Rodríguez, 2017; Maudos, 2015).

 $^{^{2}}$ In Spain, there is also an official body, the Official Credit Institute, which due to its particular characteristics and functions being different from the rest, we have considered for the purposes of this study to exclude it from our sample population.

Journal of Risk Finance

According to Kickert and Ysa (2014), the significant recession suffered by our economy led the Spanish financial system to be rescued by the European Union and a radical change of the sector's map. In the period between 2010 and 2014, there was a wave of mergers, savings bank transformations, and the creation of Institutional Protection Systems (IPS).

The number of credit institutions has gradually decreased since 2008, falling by 36.41% in 2017, with almost all savings banks disappearing. The number of savings banks has undergone a sharp decrease until almost disappearing (Climent, 2013). On the other hand, although the credit cooperatives were also subject to the restructuring process, they have been the least affected in the sector because of their lower exposure to real estate (Alda et al., 2017). According to Cruz-García et al. (2018), the extensive restructuring that the Spanish banking sector has undergone is a consequence of the imbalances accumulated in the years prior to the outbreak of the crisis in 2008. This has given rise to a scenario in which the number of competitors has been reduced intensely and market concentration has increased (Table 1).

Table 1 here

After the restructuring process and the progressive disappearance of savings banks, it is understandable that the market share in recent years has been dominated by commercial banks. If we analyse data by type of loans and deposits, in 2014, savings accounts collected in credit cooperatives reach 12% and banks and saving banks the remaining 88% (Bank of Spain, 2015).

As of December 31st, 2017, there are 13 significant Bank Groups in Spain. They hold 94.3% of the total assets of the banking system (Bank of Spain, 2018). From this group, we have selected the 8 entities that are listed on the Stock Exchange, without including investment banking. These entities are: Banco Santander, BBVA, Caixabank, Bankia, Banco Sabadell,

Bankinter, Liberbank and Unicaja. The companies analysed are big companies based on their number of employees or turnover; specifically, the company with the fewest employees has 3,280 employees and the company with the largest number of workers has more than 200,000 employees. All these companies are Spanish companies with headquarters in Spain and created with Spanish capital. In terms of total assets, the banks with the highest volume of total assets are Santander and BBVA, followed by Caixabank. The company with the lowest volume of assets is Liberbank. The study was based on all the institutions that present their annual accounts on a consolidated basis and that are also listed on the stock exchange, since only in this case, they apply IFRS in Spain. Bank of Spain has carried out a process of convergence between its accounting Circular and IFRS and has even aligned itself with IFRS 9 after its implementation. However, prior to the entry into force of IFRS 9, Bank of Spain Circular and its impairment model were not compatible with the previous international standard, IAS 39 (Giner and Mora, 2019; Jiménez et al., 2017; Mora, 2012). For this reason, only those institutions that apply international standards and not local standards can be chosen.

4. DATA ANALYSIS AND DISCUSSION

4.1. Descriptive analysis of the implementation done by the analysed financial entities

We can say that the implementation carried out has gone through the following phases:

A) Evaluation of the Business Model and SPPI (Solely Payments of Principal and Interest) test to determine the accounting classification of financial instruments.

The Business Model test involves determining if the objective is to keep financial instruments in order to obtain contractually agreed cash flows or to sell them. The three possible Business Models are: holding the financial instruments to collect the contractual cash flows, selling the financial instruments, or a hybrid of these two. Meanwhile, the SPPI test consists of

evaluating whether contractual cash flows follow the "only payment of principal and interest" criterion. To carry out the test, entities must have segmented their financial instruments portfolio. This first phase presents high implementation costs for entities, who need to develop tools that allow them to facilitate the aforementioned segmentation and require additional effort to perform the analysis on those transactions.

B) Determine when there a significant increase in credit risk, objective evidence of impairment, and payment failures are.

Financial entities have had to define the three possible stages in order to classify the risk of transactions and subsequently estimate impairments (Table 2).

Table 2 here

The objective of the new impairment estimation model is to try to anticipate possible losses and prevent them from materialising late when the situation is irrevocable. In this sense, observing that there is a great difference between stage 1 and stages 2 and 3 in the time horizon when estimating the expected loss. It is necessary to point out that once the transfer criteria between one stage and another have been applied, there could be a possible "gap" of losses without estimating as long as the significant increase in risk is not properly identified and the operations that continue to be classified in stage 1 continue with an expected loss of 12 months. Therefore, it would be interesting for credit institutions to compare the result of the calculation of the expected loss for 12-month performing risks with the former generic provision of the Bank of Spain, which was based on a statistical calculation without a time horizon.

C) Expected loss calculation.

One of the most important differences when comparing IFRS 9 to its predecessor is the introduction of the expected loss compared the incurred loss concept of IAS 39. This new model puts a previously absent focus on the future of the transaction and, therefore, anticipates impairments.

4.2. Analytical review of the main variations identified in the financial statements and descriptive analysis of results

Because of the implementation of IFRS 9, three new unique classifications are defined: "assets and liabilities at amortized cost", "assets and liabilities at fair value through profit and loss" and "assets at fair value through other comprehensive income". To determine this classification, companies need to perform two types of tests, the Business Model assessment and the SPPI test, which have already been explained in the previous section. It has generated significant variations between the different classifications of financial instruments.

Generally, there is a greater volume of assets held at fair value. According to Löw et al. (2019), in their study about 78 credit entities in Europe, on average 6.5% of the financial instruments were reclassified with the largest movement from amortized cost to fair value through profit or loss. The increase reflects the result of failed SPPI tests.

There has also been a significant decrease of "Financial assets at fair value through other comprehensive income". In our opinion, this situation and the increase in the 'held for trading' portfolios may lead to greater volatility in the income statement, as the results are recorded directly in the profit and loss account.

In relation with financial assets at fair value through other comprehensive income, there is an important change to indicate, impairment gains and losses are recognized in an "accumulated other comprehensive income" (revaluation reserve) but charged against profit or loss. In this

category of financial assets³, the impairment method is the same as for financial assets at amortised cost, therefore IFRS 9 establishes a single impairment model. Even so, if an impairment loss or reversal occurs, it is recognised in profit or loss with a charge or credit to other comprehensive income, without reducing or increasing the value of the asset in the balance sheet. Interest income, exchange differences and value impairment are recognised in profit or loss and any change in value that arises for another reason⁴ is recorded in other comprehensive income. All in all, these assets are measured in the balance sheet at fair value but the information is recognised in profit or loss as if the financial asset were measured at amortised cost.

This new accounting mechanism may seem somewhat complex. In our opinion, since this is an asset whose valuation is at fair value through other comprehensive income, it contributes to the fact that the imputations to Profit and Loss do not have a net impact. On the other hand, it has an impact on the calculation of the effective interest rate, once the impairment has been recorded, this will be reflected in the profit or loss for the year. In short, it is a way of maintaining the valuation criterion by providing detailed information on transactions.

The most significant impact observed, derived from the first implementation of IFRS 9, is a decrease in equity of sum almost 4,300. Consolidating the effect on the eight entities analysed, there is an increase in the accumulated impairment provisions of 6,000 million euros, mainly due to the expected loss estimate, when compared to the previous model.

4.3. Analysis of the result through indicators such as measuring tools

³ Except in the option of FA with changes in OCI for equity instruments, where there is no impairment since the changes in fair value recorded in equity are permanent and will never be taken to income.

⁴ Any change that has no relation to credit risk, e.g. let's say changes in market credit default swap spreads or changes in liquidity or interest rate.

Below are some of the most significant ratios commonly used to gage the banking industry activity (Beck et al., 2013; Gutiérrez and Abad, 2014; Trad et al., 2017), which are related to the areas most affected by the implementation of the new accounting standard, the classification of financial instruments, and the calculation of the expected loss. These indicators have been calculated as the average of the indicators individually obtained for each of the analysed entities, the results obtained are shown in the table 3.

Table 3 here

The decrease in the number of write-downs in the income statement offsets the lower contribution of gains on financial transactions (GFT) compared to the same period in the previous year.

In relation ROA, the new standard had a lower impact in the profit and loss account because of impairments; however, the growth in the coverage of risk provisions has reduced the valuation of these assets which could lead to the conclusion that the impact as a result of the first implementation of the standard has contributed, through these two parameters, to the increased profitability of these assets. In case of ROE, something similar happens, the impact of the new standard contributes to a smaller allocation of impairments in profit and loss, but reduces the equity of entities, which has again contributed to increased profitability of equity.

Likewise, equity is impacted by the initial application of IFRS 9 through a significant reduction in reserves which affects the result of the indicators related to equity, as is the case with the CET1 phased-in which decreased by three percent against 2017 and the book value of the shares which decreased by one percent. According to Fatouh et al. (2022), the implementation of IFRS 9 caused capital resources to be lower than they would be under IAS 39. Löw et al. (2019) affirm the new impairment methodology resulted in a negative equity

effect for most analysed institutions in Europe. According to the authors, the effect on single institutions was consistent throughout the sample. In their study, the authors identify a similar decline to Spain, in percentage terms, for German and French banks and a much higher decline for Italian banks. In the Greek case, Ntaikou et al. (2018) note that in the first months of 2018, credit risk coverage increased from 50% to 55%, which had a direct impact on CET 1 and contributed to its reduction in 2018. On the other hand, in the simulation of the implementation of IFRS 9 in Hungarian banks before the 2008 crisis, Szigel (2021) finds that there would have been a generalised increase in provisions in anticipation of the losses reflected after the outbreak of the crisis. In addition, capital would have been significantly impacted and bank owners would have had to make capital injections amounting to 2% of

Hungarian GDP.

In relation with economic solvency, Financial Leverage ratio indicate an improvement for the period analysed, which could derive from an increase in the quality of the assets of these entities, as explained below. In terms of liquidity and financing, entities comply with prudential regulation with a significant margin, which could indicate that it is a fundamental objective for this type of entities. The analysis related to efficiency suggests that there is a trend towards improvement in the management of their operating costs.

In relation to the main risk metrics, the exposure of doubtful risk was reduced moderately and the coverage ratio increased as a result of the increase in insolvency funds. Arguably, the reduction in the default rate is not directly linked to the implementation of the new standard, but is instead the result of the growth of the banking sector after a period of crisis where restructuring, refinancing and adjudications played a leading role. This reduction can be justified by the active management of the portfolio of problematic assets, supported by a framework of greater control and demand for credit standards in the new operations granted. The study carried out by Löw et al. (2019) on 78 institutions supervised by the ECB (European Central Bank) found that, on average, cumulative provisions have been reduced by 18%. According to these authors, banks and consulting firms generally expected loan loss provisions to increase by around 20% and that, over time, the total amount of loan loss reserves would also increase. Part of the decrease can be explained by the reduction they observe in total loans, but they conclude that the impact of the expected loss is not as significant as expected. However, regarding the level of provisions reached after the implementation of IFRS 9, Orbán and Tamimi (2020) point out that Italy, France and Spain had the highest, while the UK, Germany and Norway were in the medium level and Switzerland was the lowest.

IFRS 9 would contribute to reducing large unexpected impacts and reduce fluctuation to some extent in the income statement as a result of the new expected loss model, by making a lifetime estimate of the transaction based on factors instead of just historical default rates. This would mean that the only impact on results would be as a result of updates in the available information in each year. According to Orbán and Tamimi (2020), the IFRS 9 model requires an increase in loan provisions more than in previous years in order to increase banks' efficiency in managing default risk despite the possibility of lower net profits. At the same time, however, this will contribute to the stability of the banking sector, increase shareholder confidence and boost their long-term profits.

5. THE ACTUAL IMPLEMENTATION OF THE STANDARD AND THE ENFORCEMENT MECHANISMS

The application of this new standard implies to carry out specific procedures that will impact many stakeholders including accounting regulators, prudential supervisors and auditors. Banks must complete a large multi-disciplinary project combining the skills of finance, risk and IT.

Accounting regulators will need to implement continuous review and feedback procedures and to check whether the implementation of the standard has led to an appropriate cost-benefit balance. Circular 04/2017 of Bank of Spain includes in the application of the principle of proportionality, risk parameters (so-called "alternative solutions") that could be used by less complex institutions for collective estimations (Pallarés and Rodríguez, 2019).

On the other hand, prudential supervisors effort will be required to identify good practices with the aim of proposing improvements and recommendations in the inspection processes, to converge to a more homogeneous application. Gebhardt and Novotny-Farkas (2018) examine the role of supervisors in the financial reporting quality of banks. Furthermore, most significantly, Nicoletti (2017) finds that supervisory scrutiny and external audits are positively associated with credit loss provision timeliness.

With regard to auditing, if we analyse the key audit matters included in the audit reports as of December 2018, we can see that at least one of these is related to the implementation and first application of IFRS 9. According to these reports, the application of this new standard increases the degree of complexity and accounting estimations in the financial statements, which has led to the creation of additional specific procedures to assess the impact of these estimates, including collaboration in some cases with modelling and valuation specialist

teams. The implementation of IFRS 9 has practical implications for banks and auditors. These main implications are proposed in the table below.

Table 4 here

Thus arguably, the implementation of the new standard, has not only had an accounting cost, firstly, because of the internal cost of implementing the new standard, in terms of consumption of resources and time through the development of policies and models; and secondly, because of the likely increase in the audit cost that they have had to cover (Khlif and Achek, 2016).

If we analyse the audit reports for the 2019 financial year, the inclusion of a key audit matter related to IFRS 9 is maintained. In the consolidated accounts of all the entities analysed, there is at least one key question on IFRS 9. The risk expressed by the auditor refers to the model for estimating impairment of assets at amortised cost established by this standard. The auditor considers the degree of judgement and complexity to be high. The auditor also highlights the technical difficulty of the standard in terms of the identification of stages, the review of the variables considered in the model, the need to perform backtesting, the estimation of probabilities of occurrence, the consideration of different scenarios, as well as the way in which the entity determines the individual and collective estimates. In the 2018 financial year these issues appeared in the reports but the focus of the risk was on the first-time impact. In 2019 the issue is the maintenance and monitoring of the implemented model and its validity over time.

In minor cases the auditor highlights the valuation of assets and liabilities at fair value and the valuation of foreclosed assets. The first is a consequence of IFRS 9 on the proposed

classification of financial instruments. The second case is more indirectly related as the value of the foreclosed asset may depend on the value of the previously defaulted transaction.

The global financial crisis brought to light that the incurred loss model delayed the recording of losses for too long and reflected the problem late (Cohen and Edwards, 2017; Sánchez, 2018). The recognition of credit losses was generally lower and less timely than it should have been, with additional evidence suggesting that delay in recognition was positively related to excessive risk taking (Vyas, 2011; Huizinga and Laeven, 2012). IFRS 9 leads to much faster recording of credit losses and this should have a preventive effect and contribute to improving credit quality control systems in the banking system. In addition, this timely recognition of losses should limit the inadequate distribution of dividends and remuneration policies. On the other hand, there seems to be some concern that the effect of IFRS 9 could be procyclical and cause a somewhat more aggressive reaction and emphasize the economic cycle in recessionary phases.

To conclude the analysis of the impact on the implementation of this recently applied standard, it is necessary to analyse the Spanish framework. Bank of Spain has generally been at the forefront as regards the adoption of international accounting standards. The Circulars of the Bank of Spain have been adopted in a way, that is somewhat anticipated, the premises of the new rules preparing the banking system to comply with them. However, although it has always been within the framework of compliance, the regulator has always taken a more prudential approach in its Circulars to foster financial stability (Marín et al., 2019).

Annex IX of the traditional Circular 4/2004 as indicated above, it did not follow the incurred loss model of IAS 39, and reinforced the provisions with a calendar that ensured 100% coverage of the risk 12 months after the default and only allowed the discounting of the value of the guarantees in those risks in which default had already occurred. This system of

Journal of Risk Finance

provisions was reinforced by the generic or statistical provision for risks where in principle there was no indication of increased risk, a fact that seems to be more related to an expected loss approach and with a purely prudential objective. The following update comes from Circular 4/2016, already includes in its Annex IX certain mechanisms that lead banks to prepare for the expected loss model. So, banks contemplating the estimation of value impairment for significant risks by discounting expected cash flows and discounting guarantees in operations.

Finally, with the entry into force on 1 January 2018 of Circular 4/2017, the process of adapting IFRS 9 concludes with the application of collective and individualised models for estimating the recoverable value of the operation for a period of 12 months for performing risks and for the entire life of the operation for the rest of the risks.

According to Cruz-García and Maudos (2016), data from the European Central Bank in 2016 put Spain at a coverage rate of 59.5% of its doubtful assets, above the Eurozone average of 50.9%. The model of loss incurred has been defined as a "Too little too late" model, however, it could be said that in Spain the provisions under the regulatory framework of the Circulars and the extraordinary provisions dictated by the supervisor such as those that took place in Spain in 2012 to clean up the exposure to real estate risk, trying to ensure the stability of the Spanish financial system.

6. CONCLUSIONS AND FUTURE RESEARCH LINES

The results obtained from the analysis of the economic and financial information of analysed entities, shows that the application of IFRS 9 has had a significant effect on the economic and financial situation of credit institutions. Specifically, its application reduced analysed companies regulatory solvency (Fatouh, 2022; Löw et al., 2019; Ntaikou et al., 2018; Szigel,

Page 21 of 92

Journal of Risk Finance

2021), as a result of the impact on reserves of the increase in provisions with the new model. Also it has contributed to increase the coverage of provisions for credit risk and to reduce the cost of such risk of these companies. Therefore, we could say that this impairment model tends to provide greater stability in the bank's income statement, avoiding significant unexpected impacts from credit risk (Orbán and Tamimi, 2019). The effects on the result for the period will be materialised exclusively by the new operations granted, the change from Stage 1 to Stage 2, due to a significant increase in risk, and the effect of the updating of the information for operations already in force. Even so, more experience with this new model is needed to test whether it can indeed produce the pro-cyclical effect discussed above. In addition, although there has been an increase in provisions in Spanish banks, with this new model, the Bank of Spain has always followed a prudential approach with a strict and reinforced provisioning schedule, which could limit part of the effects of unexpected credit risk shocks. In view of the above, we have answered the first research question in this study.

In addition, the corresponding audit reports were analysed. Based on these reports, the application of this new standard increased the degree of complexity and that of accounting estimates in the financial statements. This has forced the analyses entities to spend more resources in the correct implementation of IFRS 9. In this sense, we can answer the second research question, the implementation of IFRS 9 has been reflected in the audit reports, not only in the year of first application, but given its complexity it is likely to be part of the audit risks for a prolonged period. We have moved from an audit heavily conditioned by the exhaustive calculation of provisions according to the Bank of Spain's calendars and its statistical provisions, to an audit where the control environment of the institution, the validation of external information and inputs into models, as well as the support of judgements and estimates, have acquired a fundamental role.

Journal of Risk Finance

Collaboration and continuous communication between credit institutions, accounting regulators, prudential supervisors and auditors will be necessary and key in order to achieve greater uniformity in the application and continuous development of the standard, identifying benchmarks of good practices together with an appropriate cost-benefit balance for the institutions. Although the objective of the standard is to achieve a preventive effect and contribute to improving credit quality control systems, the work of supervisors in stress tests will be essential to control the possible "cliff effect" and avoid a reaction of the financial system that could accentuate the economic cycle in stages of recession. After the economic crisis of 2008, it became clear that the previous "incurred loss" model had not been so useful. The "expected loss" model attempts to make up for deficiencies of its predecessor, however, with the arrival of the pandemic caused by Covid19, the model is once again put to the test. In the 2020 financial year, according to data from their annual reports, the large Spanish banks made a significant increase in their impairment estimates, even though the NPL ratio had not soared, which demonstrates the ability to anticipate losses with the new model. This is why more attention needs to be paid to the pro-cyclical effects of banks' loss recognition, as signs of this can already be seen in the current Covid-19 crisis (Szigel, 2021). In this respect, and because of this possible "cliff effect", some supervisors and regulators have expressed their views (European Central Bank, 2020; European Securities and Markets Authority, 2020; IASB, 2020). Pastiranová and Witzany (2021) recommend issuing regulatory guidance documents that mitigate it.

With this manuscript we want to support the need to continue working on the improvement and convergence of criteria through the new Single Supervisory Mechanisms, whose structure, in terms of competences and powers, is still under debate (García et al., 2019).

Apart from auditors and banks, this study has implications for different stakeholders. Among these stakeholders are the accounting regulators who, through the results of this study, can verify the effect of the implementation of IFRS 9 and apply it to other companies in different sectors. For other users such as customers of the banks or investors might find this study interesting because the aim of the regulation is to establish principles for financial reporting of financial assets and financial liabilities, increase the quality and control system of the information what is useful and relevant for decision making.

Finally, this paper is not short of limitations. Most of the studies published on the subject are from auditing firms. Therefore, our main limitation was lack of academic literature on IFRS 9 and its impact on companies. In addition to this, the sample of credit institutions in Spain is limited. In this respect, as a continuation of the study, it would be interesting to analyse the impact on a larger sample of institutions in Spain but analysing it from the point of view of the convergence process of the Bank of Spain Circulars towards IFRS. In this way, it would be possible to analyse a large sample based on local regulations.

On the other hand, as proposed by Barnoussi et al. (2020), it will also be necessary to quantify the impact of IFRS 9 in a period updated to the new context of health crisis generated by COVID-19. In the words of Orbán and Tamimi (2019), the financial sector and most sectors are witnessing an unprecedented exceptional situation due to the Covid-19 pandemic, we do not know how long it will continue and what its impact will be on loss provisions, on the banking sector and on the economy as a whole, so this kind of systematic risks deserve future studies.

Consequently, another limitation of this study was the inability to use more statistical techniques or provide more robustness in the results.

Related to future research on this topic, it would be interesting to carry out studies that analyse the impact of the standard on companies in different sectors. Furthermore, a comparative study about the impact of the standard on credit institutions and non-financial entities, with the aim to analyse the possible differences/similarities in the application of IFRS 9 would be interesting.

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| Merged source | e entities | Resulting entities | |
|---|---|--------------------|--|
| BBVA | | _ | |
| Caixa Sabadell; Caixa Terrasa; Caixa Manlleu | Banco Unim | BBVA | |
| Catalunya I | Banc | _ | |
| Banco Santander | r; Banesto | BANCO SANTANDER | |
| Caja de Ahorros y Monte de Piedad de Madri Canarias; Caixa d'Estalvis Laietana; Caja de Caja de Ahorros y Monte de Piedad de Seg Caja Murcia; Caixa Penedès; Caja Granada; Caja de Ahorros y Monte de Piedad de Las Baleares | d; Bancaja; Caja Insular de Ahorros de Ahorros y Monte de Piedad de Ávila; govia; Caja de Ahorros de La Rioja; Banco Marenostrum | - BANKIA | |
| Bankinte | er | BANKINTER | |
| La Caixa | Caixabank | | |
| Caja Navarra; Caja de Burgos; Caja Canarias; Cajasol | Banca Cívica | CAIXABANK | |
| Banco de Va | lencia | _ | |
| Barclays Bank | , S.A.U. | | |
| Caja de Ahorros de Asturias; Caja de Ahorro Caja de Ahorros de Santander y Canta | os y Monte de Piedad de Extremadura; bria; Banco Castilla La Mancha | LIBERBANK | |
| Banco Sabadell; Banco G | uipuzcoano; CAM | SABADELL | |
| Unicaja; Caja Jaén | Unicaja Banco | UNICAJA | |
| Caja Duero; Caja España | Banco CEISS | BANCO | |
| Source: Self-made based on the consolidated an resulting entities | inual accounts and the corporate informa | tion of the | |
| | | | |
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Table 1: Merger operations in some of the main Spanish credit institutions

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Table 2: Stage definitions for the classification of transactions

| 6 | | STAGE 1 | STAGE 2 | STAGE 3 |
|--|--|--|---|---|
| 7 8 9 10 11 12 | Description and recognition | Initial recognition of transactions. It is understood that at the time of entering into a transaction there are no impairment signs | Significant increase in risk since recognition (based on probabilities) but without objective evidence of impairment | Impaired transaction with objective evidence of impairment |
| 13 14 15 16 17 18 19 20 | Rebuttable presumption | This is if an adequate procedure has been followed from the initial request of the transaction until its approval | Quantitative criteria: according to the criteria defined in the entity's Risk Appetite Policy. Qualitative criteria: based on the activation of "triggers" embedded in the system, such as adverse changes in the debtor's financial situation | Non-payment over 90 days. Doubt over the recovery of the whole instrument. Non-compliance with contractual clauses. Refinanced or restructured transactions. Increased probability the bankrupt |
| 20 - 21 22 23 24 25 26 27 | Interest income | Are calculated on the gross amount of the operation (gross method) | Are calculated on the gross amount of the operation (gross method) | If the transaction has already generated credit impairment, an adjusted effective interest rate is calculated. If the impairment is subsequently generated, interest is calculated on the amortised cost (net method) |
| 27 28 29 | Loss recognition | 12 month expected credit loss. Colective estimate | Lifetime expected credit loss. Colective and individualized estimate | Lifetime expected credit loss. Colective and individualized estimate |
| 30 ⁻ 31 32 33 | Corresponding nomenclature with the Bank of Spain | Performing | Underperfoming | Non-performing |
| 35 36 37 38 39 41 42 43 44 45 46 47 48 50 51 52 53 54 55 57 58 | Source: Self December 20 | Fmade based on the consol | idated financial statements of | the analysed entities at 31 of |
| 59 60 | | | | |

| | | 2018 | (after IF | RS 9) | 2017 (| before II | FRS9) | Relative | |
|------------------|---|-------|-----------|-------|--------|-----------|-------|-------------------|--|
| Group | INDICATOR | Min. | Max. | Mean | Min. | Max. | Mean | variation Mean | |
| D. (* 1.11) | Net Profit Margin (NPM) | .0015 | .0090 | .0048 | 0082 | .0072 | .0031 | 0.0054 | |
| Profitability | Return on Assets (ROA) | .0019 | .0125 | .0065 | 0128 | .0100 | .0037 | 0.0076 | |
| Recurrence | Return on Equity (ROE) | .03 | .18 | .10 | 17 | .16 | .06 | 0.63 | |
| of Earnings | Gain on Financial Transactions (GFT) | 33 | 1,797 | 522 | 61 | 1,968 | 645 | -0.19 | |
| | Economic Solvency | 1.06 | 1.08 | 1.07 | 1.06 | 1.08 | 1.07 | 0.00 | |
| Stability | CET1 phased-in | 0.11 | 0.15 | 0.128 | 0.12 | 0.15 | 0.132 | -0.03 | |
| Stability | Book Value of Shares | .93 | 7.07 | 3.98 | .92 | 6.98 | 4.02 | -0.01 | |
| | Financial Leverage | 12.80 | 18.35 | 15.24 | 12.94 | 16.74 | 14.81 | 0.03 | |
| Liquidity | Liquidity ratio | .64 | 1.03 | .87 | .63 | 1.03 | .87 | 0.00 | |
| and Financing | Liquidity Coverage Ratio (LCR) | 1.27 | 4.75 | 2.22 | 1.28 | 5.79 | 2.41 | -0.08 | |
| | Overhead Costs | .02 | .05 | .027 | .01 | .05 | .029 | -0.07 | |
| Efficiency | Cost Income Ratio | .82 | 1.00 | .88 | .85 | 1.25 | .95 | -0.07 | |
| | Efficiency Ratio | .47 | .65 | .56 | .48 | .66 | .57 | -0.02 | |
| | Default Rate | .03 | .06 | .05 | .04 | .09 | .06 | -0.17 | |
| Credit Risk | Coverage Ratio | .41 | .73 | .56 | .31 | .66 | .51 | 0.10 | |
| | Risk Cost | .00 | .01 | .004 | .002 | .01 | .006 | -0.34 | |

Table 3: Indicators calculated to measure impact

ial staten... Source: Self-made based on the consolidated financial statements of the analysed entities at 31 of

December 2018.

Table 4: IFRS 9 Implications for the Financial Institutions and Auditors

| IFRS 9 implications | BANKS | AUDITORS | | |
|--|--|--|--|--|
| Classification and measurement | How a bank classifies its financial assets could affect how its capital resources and capital requirements are calculated, and create volatility in profit or loss or equity. | Carry out test over financial assets and accounting systems to ensure they have been classified and measured appropriately. | | |
| Estimates of expected credit losses (ECLs) | Establishing and maintaining an effective IT environment to ensure the completeness and accuracy of data. Ensuring the judgments and assumptions in the ECL estimation process are consistent with IFRS 9. Calculation of the impact for the first application and its registration in equity. | The auditors will take the approach of auditing the bank's ECL estimation process, focusing on elements that could contribute to the risk of material misstatement and make an assessment of the impact recorded in equity as a result of the first application of the standard. | | |
| Accounting policies | Ensure that its accounting policies are in accordance with IFRS 9, reflective of the bank's learning and experience gained over time and reflect their actual provisioning practices as implemented. | Understand whether the accounting policies adopted by the bank are appropriate for its portfolios, compliant with IFRS9, and consistently applied. | | |
| Information systems | A defined process in place over the testing of any parts of the information systems before they form part of the live environment. The completeness and accuracy of data transfers. The reliability of the information systems' processing logic. | Determine the nature and quality of the Information Produced by the Entity ("IPE") and how the auditor plans to obtain audit evidence of its completeness and accuracy. The auditor will need to plan and direct the work of IT experts. | | |
| Models development | Model inputs must be relevant, reliable and appropriate in the context of the applicable financial reporting framework. Specifically, entities must estimate the probability of default for all counterparties. There are several means of obtaining the corresponding PD, banks and other large companies have developed internal methodologies. In other cases, however, entities face difficulties in assigning a PD (Delgado- Vaquero, Morales- Diaz y Zamora- Ramírez, 2020). | The auditor will carry out an approach over model design, build and validation, ongoing model review, forward-looking data and model adjustments. The auditor will test the bank's models, including examining the completeness, accuracy and relevance of inputs and assessing the reasonableness of assumptions. | | |
| Reasonable and supportable judgements | Including judgments related to inputs into the model, the use of different macroeconomic scenarios, expected life of the operation, segmentation criteria and the identification and classification by staging of assets. | Evaluate the reasonableness of related judgments made by the bank, including how the bank has appropriately supported their judgments. The adjustments can be brought forward especially for judgmental and difficult areas. | | |
| Financial statement disclosures | Ensure that its financial statement disclosures for IFRS 9 are complete, reliable and clearly presented and ensure that their disclosures will meet the needs | Then, the auditors will ask to provide enough information in financial statements for the users understanding, and test to ensure that disclosures are | | |

| aurce: self-made based on Global Public Policy Committee (2017) and audit reports of the analysed trities at 31/12/2018. | of users. | complete and accurate. |
|--|---|---|
| uities at 31/12/2018. | Source: self-made based on Global Public Policy Com | nittee (2017) and audit reports of the analysed |
| nities at 31/12/2018. | 5 | |
| | entities at 31/12/2018. | |
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