

The Impact of the Application of International Standard for Financial Reporting No "9" (IFRS 9) on the Performance of Big-5 Bank's Credit Portfolio in Egypt

Ahmed Salah Ahmed Sayed Noureldin*

Department of Business and Management Studies, Future University, Cairo, Egypt

Abstract

This study investigates the impact of International Financial Reporting Standard No. 9 (IFRS 9) on the credit portfolios of Egypt's Big-5 banks. Implemented to enhance transparency and financial stability, IFRS 9 introduces significant changes in financial reporting, particularly concerning the classification and measurement of financial instruments and Expected Credit Loss (ECL) provisioning. By analyzing financial data pre and post-implementation, this research evaluates how IFRS 9 has influenced credit risk management, financial performance and overall credit quality in Egypt's major banking institutions. The findings reveal that IFRS 9 has led to more accurate credit risk assessment and provisioning practices, impacting profitability and regulatory compliance. This study contributes to the understanding of IFRS 9's role in shaping financial stability and offers insights into its broader implications for financial reporting and banking performance in emerging markets.

Keywords: IFRS 9 • ECL • Portfolio • Investment

Abbreviations: IFRS: International Financial Reporting Standard; IAS: International Accounting Standards; EAS: Egyptian Accounting Standards; ECL: Expected Credit Loss; CBE: Central Bank of Egypt; ICL: Incurred Credit Loss; LLP: Loan Loss Provisions; NPL: Non-performing Loans; LLRT: Loan Loss Recognition Timeliness; CTA: Capital Transitional Arrangement; ILM: Incurred Loss Model; CG: Corporate Governance; NBE: National Bank of Egypt; BM: Banque Misr; AAIB: Arab African International Bank; CIB: Commercial International Bank; QNB: Qatar National Bank; IASB: International Accounting Standards Board; ILM: Incurred Loss Model; GMM: Generalized Method of Moments; HHI/SE: Herfindahl-Hirschman/Shannon Entropy; SPSS: Statistical Package for Social Sciences; OCI: Other Comprehensive Income; ESE: Egyptian Stock Exchange; GAAP: Generally Accepted Accounting Practices; IASC: International Accounting Standards Committee; EFRAG: European Financial Reporting Advisory Group; IAS: International Accounting Standards; FVPL: Fair Value through Profit or Loss; HTM: Held-to-Maturity; ED: Exposure Draft

Introduction

Contemporary developments in the financial markets have led to an increase in the volume of cross-border capital flows and foreign investments through mergers and acquisitions. This required the preparation of financial statements in accordance with a set of international standards around the world, including investors, developers of national standards, regulators, auditors, academics and others of those interesting in setting high-quality global standards [1].

Adherence to IFRS enables economic units to present their financial statements in accordance with a single set of high-quality international standards and can benefit from raising capital abroad and

improving cross-border investment by enhancing the comparability of financial statements prepared anywhere in the world.

Research began in the late seventies for an alternative to the concept of historical cost with another concept that would have the necessary qualities to meet the users' needs of financial statements and provide a better assessment of financial instruments. From this point of view, the international accounting standards board managed to set standards as a contribution to provide the appropriate information for users of financial statements, including the IAS 32, financial instruments (presentation and disclosure) in 1993 and in 1999 IAS 39 financial instruments (recognition and measurement)

*Address for Correspondence: Ahmed Salah Ahmed Sayed Noureldin, Department of Business and Management Studies, Future University, Cairo, Egypt, Tel: 1223009836; E-mail: ahmednoureldin2@gmail.com

Copyright: © 2025 Noureldin ASAS. This is an open-access article distributed under the terms of the creative commons attribution license which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited.

Received: 31 October, 2023, Manuscript No. JBMR-23-118951; Editor assigned: 03 November, 2023, PreQC No. JBMR-23-118951 (PQ); Reviewed: 17 November, 2023, QC No. JBMR-23-118951; Revised: 21 February, 2025, Manuscript No. JBMR-23-118951 (R); Published: 28 February, 2025, DOI: 10.37421/2223-5833.2025.15.607

and its successive amendments and in 2005 IFRS 7 was issued financial (disclosure) by transferring disclosure requirements from IAS 32 and then renaming it to financial instruments (presentation) and all efforts aimed to provide quality accounting information that serves the purposes of users in all their orientations [2].

Many users of accounting information in Egypt, as in most parts of the world, have faced difficulty in interpreting, understanding and applying IAS 39 (Financial instruments: Recognition and measurement). Therefore, the IASB has undertaken a project to replace the standard entirely in order to improve the accounting for financial instruments through the gradual issuance of the stages of ISRS (9): Financial Instruments. In addition, in July, it issued the final version of IFRS (9) that introduces new requirements for classification, measurement, impairment of financial instruments and hedge accounting. It was decided to set the mandatory date for implementation on the 1st of January, while allowing early application.

Banks and financial institutions have a special nature in terms of their operations and dealing largely with credit portfolios. Therefore, they are exposed to great returns and risks, which made it necessary to apply international accounting standards and international financial reporting standards to help access information that helps decision makers and credit managers on evaluating the financial position, business and achievements of these banks and financial institutions. Such information help understanding the special features of the nature of banks' business.

In the context of preparing for the implementation of IFRS 9, the central bank indicated that each bank needs to develop an action plan according to a specific timing to meet the requirements of IFRS 9. So, it issued a periodic book on January 28, 2018 that includes a set of instructions upon transition to apply the standard. These included that: Banks must prepare their financial statements in accordance with the IFRS 9 as of January 1, 2019 for banks that prepare their financial statements at the end of December every year and as of July 1 for banks whose financial statements are prepared in the end of June every year.

Based on the above considerations, this study examines the impact of the application of IFRS 9 on the performance of the bank credit portfolio. It aims to shed light on the potential effects of applying the financial instruments standard on the performance indicators of the bank credit portfolio and the quality of users of financial statements about their importance, which is beneficial to many parties related to the study subject, such as the management of banks and other related parties.

Literature Review

The researcher's efforts related to the research subject varied. These efforts included conducting preliminary survey to identify the most significant relevant previous studies in order to identify the research gap. Some of these studies addressed the standard IFRS 9 and there was only one study which shed a dim light on the linkage between the impact of implementing IFRS 9 on loan portfolio performance in commercial banks Egyptian.

Studies associated with the International Financial Reporting Standard No 9 (IFRS 9)

The study of Dong and Oberson: This study examines banks' option to adopt the Capital Transitional Arrangement (CTA) set out by the basel committee on banking supervision in response to (IFRS 9), which requires the use of an expected credit loss model instead of an incurred loss model to estimate the impairment of financial assets. Using a sample of European publicly listed banks from 2016 to 2019, it can be found that bank CTA adoption choice is associated with neutral factors captured by bank-specific fundamental factors and potential opportunistic factors related to regulatory constraints implied by the application of IFRS 9. It also examines the association between the CTA adoption choice and bank risk taking. The results show that banks that adopted the CTA (CTA adopters) decreased their exposure to systematic risk following the CTA adoption compared to the control group of CTA non-adopters. It is found that such a relationship varies with the power of the banking authority, being more significant when the banking authority holds more power. It is worth mentioning that this study is the first academic work to address banks' voluntary choice to adopt the CTA policy under the mandatory application of IFRS 9.

The study of Porretta, et al.: The purpose of this study is to investigate the ECL, its main impacts on coverage ratio of a loan's portfolio. The main findings are: The rules laid down for stage 1 of IFRS 9 do not reduce the excess coverage produced on a portfolio in bonis; in the presence of impaired loans IAS 39 generates a lack of funds; the lifetime ECL (stage 2 of IFRS 9) imposes excess of provisions because it does not consider the effect of coverage produced by expected premiums; for loan portfolios with short repayment times, the excess of provisions produced by IFRS 9 compensates the lack of coverage of the capital requirement. From the academic research perspective, this paper contributes to the literature on ECL model in several ways. First, it adds knowledge to the research on the relationship between credit risk management framework and accounting standard IFRS 9. Second, it also links our findings related to ECL approach with potential implications for the financial sector, policymakers and regulators.

The study of Farkas ZN: This study investigated the interaction of the IFRS 9 Expected Credit Loss (ECL) model with supervisory rules and discussed the potential implications for financial stability in the European Union. Compared to the incurred loss approach of IAS 39, the IFRS 9 ECL model incorporated earlier and larger impairment allowances and was more closely aligned with regulatory expected losses. The study found out that the earlier recognition of credit losses according to IFRS 9 would eliminate the build-up of loss-overhangs and the overstatements of the regulatory capital.

The study of Ginesti G, Onali E: This study indicated that although there was a strong academic and policy debate about the implications of the Incurred Loss Model (ILM) on financial stability, there was no empirical evidence as to whether the Expected Credit Loss Model (ECL) recently introduced by IASB benefited the International

investors. The researcher addressed this applicable issue by investigating the price reaction to announcements related to the new rules for Loan Loss Provisions (LLPs) incorporated in IFRS 9 on a sample of 137 European listed banks from 2009 to 2014. The study provided evidence that the abnormal returns related to those events are substantially uncorrelated with proxies of timely loss recognition, earnings management and capital management.

The study of Pederson and Linde: This study aimed at comparing the requirements of the International Accounting Standard No. 39 (IAS 39) and the requirements of the International Financial Reporting Standard No. 9 (IFRS 9) for banks that had the largest share of the loan facilities granted in Denmark according to the standards of the Danish Financial Supervisory Authority. The study reached that applying the IFRS 9 would have significant changes on the loan category as those loans were initially measured at amortized cost under the requirements of IFRS 9, but significant differences arising from changes in the impairment of financial assets were recognized when the loan impairment provision was applied. The expected and realized losses when there is an event that can be measured in the banks' loan portfolio.

Studies associated with the loan portfolio performance

The study of Huynh and Dang: The study examines how loan portfolio diversification drives bank returns, mainly focusing on the conditioning roles of business models and market power in this nexus. We employ a sample of Vietnamese commercial banks from 2008 to 2019 to perform regressions in the dynamic panel models with the two-step system Generalized Method of Moments (GMM) estimator. We find that increased sectoral loan portfolio diversification reduces bank returns, but not all banks are equally affected. Banks that adopted a business model towards non-interest activities are hurt less from loan portfolio diversification and bank market power may mitigate the detrimental effects of loan portfolio diversification on bank returns. When such asymmetric effects are sizeable, neglecting them could miscalculate the choice of loan portfolio diversification. Our findings are robust to a rich set of bank return indicators and alternative loan portfolio diversification measures based on the Herfindahl-Hirschman (HHI)/Shannon Entropy (SE) indexes with different sectoral exposure profiles. Thus, both regulators and commercial banks should take the disadvantage of portfolio diversification into account when encouraging/pursuing a diversified strategy, which must be accompanied by the crucial caveat that the damage is most pronounced for banks with lower shares of non-interest income and less market power.

The study of Mutesi: The main purpose of this study was to assess the extent to how credit portfolio management affecting the financial performance of Bank of Kigali-Rwanda. The study used qualitative and descriptive approaches, a sample size is 51 employees who have been selected using purposive sampling technique. Data were collected through questionnaire, interview guide and documentary while analysis was done using descriptive statistical method. The findings discovered that BK looks the credit-worthiness of the customer

base and business and the specific criteria that customer must meet before receiving the proposed credit arrangement. The influences of borrower-specific factors on financial performance of BK determined by credit period that refers to the period of time in which the credit is granted in BK; the interest rates charged by BK may affect the loan performance. The effects of selection risk analysis to financial performance of BK shown by how BK is shifting loans risks from their balance sheets to insurance companies to recover the loans, loan risk transfer enhance financial stability, collateralized debt obligation and assets backed securities help BK to proactively manage their portfolio and loan derivatives of BK that remain a small but rapidly growing market. Furthermore, the respondents confirmed that the financial performance achieved by Bank of Kigali depends on an effective loan portfolio management.

The study of Nyandoro and Kalui: The objective of the study was to establish portfolio quality determinants in investment groups financed by Sidian bank in Nairobi region. Specifically, the study sought to determine the effects of macroeconomic, group leverage, group capitalization and group characteristics on portfolio quality of investment groups. The study adopted a case study research design the target population being all the 56 investment groups in the 9 branches under Sidian bank within Nairobi region. The study employed secondary data, which was obtained from Sidian bank offices and investment groups within Nairobi region. Data analysis was conducted using descriptive statistics including percentages, frequencies, means and standard deviation as well as inferential analysis via correlation and multiple regression analysis. The study established that macroeconomic variables, group leverage level, group capitalization and group characteristics positively and significantly influences portfolio quality of investment groups financed by Sidian bank in Kenya. It was also established that group leverage had the greatest influence on portfolio quality of investment groups financed by Sidian bank in Kenya followed by macroeconomic variables while group capitalization level then group characteristics had the least effect on the portfolio quality of investment groups financed by Sidian bank in Kenya. The study recommends that Sidian bank should manage their portfolios by understanding risk exposure for each credit but also how the risks of individual loans and portfolios are interrelated. The study also recommended that, banks should be allowed to invest more in loans and advances as long as such banks have enough reserves to finance such investments and that banks should be allowed to scale up their operations so long as there is adequate capitalization to support their growth. The study further recommends that regulatory authority (CBK) and other stake holders should create an enabling environment that removes all these inefficiencies to the policy concern of high cost of credit.

The study of Adzobu, et al.: The purpose of this study is to test whether diversification of credit portfolios across economic sectors leads to improved profitability and reduced credit risks for Ghanaian banks that have been characterized by high non-performing loans in recent times [3]. Design/methodology/approach: Static and dynamic estimations, namely Prais-Winsten, fixed and random effect estimators, feasible generalized least squares as well as the system generalized methods of moments are employed on the annual data of 30 Ghanaian banks that operated between 2007 and 2014 to determine the effect of loan portfolio diversification on bank performance. Findings: The study shows that loan portfolio diversification does not improve banks' profitability nor does it reduce banks' credit risks. Research limitations/implications: The study focuses on a single banking system in Africa largely as a result of data limitation. Practical implications: The study emphasizes the need for banks to perform a careful assessment of the effects of their lending policies geared toward increased sectoral diversification on their monitoring efficiency and effectiveness. A further investment in loan screening and monitoring is necessary to minimize credit risks. Originality/value: This study is the first to present empirical evidence on the effects of loan portfolio diversification on bank performance in an emerging banking market in Africa.

The study of George et al.: The aim of this study was to close the gap in knowledge by investigating profitability determinants within commercial banks in Kenya. The determinants studied were loan portfolio, interest expense, and administration costs and assets value. A descriptive survey design was employed in this study. The population of the study was the management employees working for commercial banks in Kenya. The sample was accessed by use of both stratified and simple random sampling. A questionnaire was used to gather the primary information. The questionnaires were self-administered and were served to the respondents by self-introduction. Research assistants were used to follow up on duly completed questionnaires. Statistical Package for Social Sciences (SPSS) was used to analyses primary data while the SAS v.6 of 2009 was used to analyses the secondary data gathered from the banks. Findings of the study showed that public sector banks and private sector banks were not much affected by increasing or decreasing of interest margin. It can therefore be interpreted that the profitability growth of public and private sector banks are not dependent on fluctuation of interest rate although the foreign banks have the benefit of high return due to increase or decrease in interest margin.

After reviewing previous studies, it became clear to the researcher that the application of IFRS 9 to financial institutions introduced some changes, but the method for calculating loan loss provisions is the most important change, as it calculates the provisions for each loss apart and on a predictive basis, *i.e.*, predicting the loss before it occurs. Hence, the researcher believes that it is possible to identify the impact of applying (IFRS 9) on the performance of the credit portfolio by applying it to Egyptian commercial banks.

Research problem

International accounting and financial reporting standards related to financial instruments have witnessed many discussions and amendments, as their adoption is important to maintain the integrated application of IFRS. However, there are difficulties of application, especially after banks used to apply certain standards. As the Central Bank of Egypt is keen on keeping pace with the developments of IFRS, it issued instructions to take the necessary steps and procedures to implement IFRS 9. This stems from the importance of financial instruments and their impact on financial conditions and the results of banks' business. For the purposes of consistency with international banking requirements on the one hand and working to develop the Egyptian banking environment on the other, it was necessary to study the impact of the application of the standard on the performance of the credit portfolio of Egyptian banks. This sheds light on the study problem, that is the application of IFRS 9 has an impact on many items of the financial statements of Egyptian banks, which is reflected in the performance of the credit portfolio of Egyptian banks.

Hence, the study problem can be presented by asking the following questions: The main question: What is the impact of financial statements (income statement, statement of other comprehensive income, statement of financial position) on the performance indicators of the credit portfolio of Egyptian banks before and after the application of IFRS 9?

It can be divided into the following sub-questions:

- What is the impact of the financial statements (income statement, Other Comprehensive Income (OCI) statement, statement of financial position) on the allotments of loan losses in Egyptian banks before and after the application of IFRS 9?
- What is the impact of the financial statements (income statement, (OCI) statement, statement of financial position) on the return on the credit portfolio in Egyptian banks before and after the application of IFRS 9?
- What is the impact of the financial statements (income statement, (OCI) statement, statement of financial position) on the percentage of non-performing loans in Egyptian banks before and after the application of IFRS 9?
- What is the impact of the financial statements (income statement, (OCI) statement, financial position statement) on diversifying the credit portfolio in Egyptian banks before and after the application of IFRS 9?

Research objectives

- Statement of the impact of the examined financial statements on the performance indicators of the Egyptian banks' credit portfolio before and after the application of IFRS 9.
- Statement of the impact of the examined financial statements on the percentage designated for loan losses in Egyptian banks before and after the application of IFRS 9.
- What is the impact of the examined financial statements on the return on the credit portfolio in Egyptian banks before and after the application of IFRS 9?

- A statement of the impact of the examined financial statements on the percentage of non-performing loans in Egyptian banks before and after the application of IFRS 9.
- Statement of the impact of the examined financial statements on the percentage of credit portfolio concentration in Egyptian banks before and after the application of IFRS 9.

Research importance

The importance of the study stems from the following:

- The study deals with some recent variables in the theoretical, practical and analytical aspect. From the theoretical point of view, the study derives its importance from the importance of financial instruments and the recent application of accounting standards related to the recognition and measurement of financial instruments. It should be considered that the application of IAS 39 of measurement and recognition of financial instruments took a long period since the eighties before replacing it with IFRS 9. Thus, the study may be considered a new starting point for further studies on this subject.
- The banking sector is one of the economic sectors that has a direct impact on all other economic sectors, and the application of IFRS 9 and measuring its impact on the performance indicators of the credit portfolio of Egyptian banks is important in showing the credit performance of these banks through the different ratios. It allows banks to finance its clients, indicates the ability of banks to finance their projects of all kinds and to demonstrate the feasibility of the investment process in these banks by current and potential investors. It also helps the management of these banks to direct investment decisions towards better interest in the financial instruments and their repercussions on the performance of credit portfolio.
- This study is of importance to users of financial statements of Egyptian banks as it shows the ability of financial reports prepared in accordance with IFRS 9 to provide the useful financial indicators for making rational economic decisions.
- It is also of importance to the Central Bank of Egypt-the supervisory authority responsible for financial stability-as it enables developing mechanisms and special instructions for banks to ensure the extent of applying the standard and to oblige them to disclose all financial information to beneficiaries and stakeholders.

Research model

Research model involves forming an idea about the relationship between variables in the study and showing relationship graphically or diagrammatically [4]. The conceptual framework seeks to portray the linkages and relationship of the impact of application of IFRS 9 on performance of banks' credit portfolio in Egypt (Figure 1).

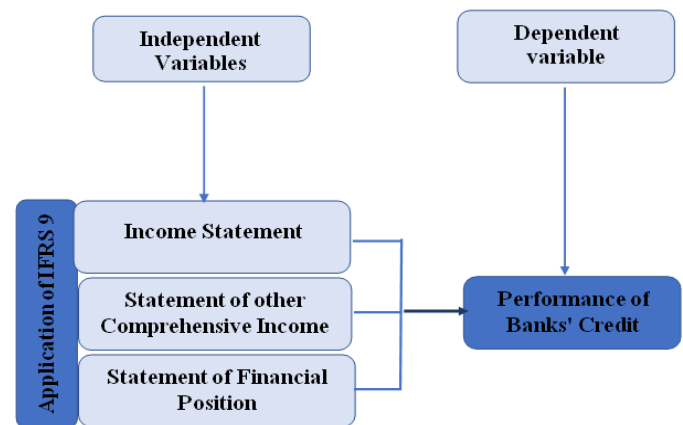


Figure 1. Research model.

Research hypotheses

In order to fulfill the previous objectives of the research and to handle the problem of the study, the fundamental assumption of the research is that: "There is a positive significant impact of financial statements (income statement, statement of other comprehensive income, statement of financial position) on the performance indicators of the credit portfolio of Egyptian banks before and after the application of IFRS 9".

The following sub-hypotheses are derived from that main hypothesis:

- There is a positive significant impact of the financial statements (income statement, Other Comprehensive Income (OCI) statement and statement of financial position) on the allotments of loan losses in Egyptian banks before and after the application of IFRS 9.
- There is a positive significant impact of the financial statements (income statement, (OCI) statement, statement of financial position) on the return on the credit portfolio in Egyptian banks before and after the application of IFRS 9.
- There is a positive significant the impact of the financial statements (income statement, (OCI) statement, statement of financial position) on the percentage of non-performing loans in Egyptian banks before and after the application of IFRS 9.
- There is a positive significant act of the financial statements (income statement, (OCI) statement, financial position statement) on diversifying the credit portfolio in Egyptian banks before and after the application of IFRS 9.

Research methodology

This research focuses on the banking sector in Egypt due to its special importance in supporting and growing the Egyptian economy, in addition to the increasing risks that banks face continuously compared to other sectors. The research population consists of 38 commercial banks operating in Egypt, based on the CBE report in 2018, I select this population because these banks are subject to CBE supervision and obligated to apply IFRS 9, this research was conducted using data extracted from the quarterly financial reports for a

sample of 5 banks (National Bank of Egypt, Banque Misr, Arab African International Bank, Commercial International Bank and Qatar National Bank) for 2015 and 2020 with total observations of 120, this sample represents 13.2% of the population and includes local Egyptian banks, Egyptian branches of international banks and Islamic banks, this sample also includes all the listed banks in the Egyptian Stock Exchange (ESE) which count for 13 banks, the research is limited to this sample for two reasons; first, I excluded the specialized banks such as agricultural, real estate and industrial banks due to their different nature from commercial banks, second, I excluded banks with missing data especially some international banks that have branches in Egypt not listed in ESE and prepare consolidated financial statements.

Egyptian banking sector

The sector of the Egyptian banking grew considerably since the mid 1970's due to the country's so-called open-door policy. For example, in 1975 the Egyptian parliament issued the banking law no. (120), which defined the nature and mode of operations for all banks, and in the 1990's the Egyptian authorities began influential banking reforms towards a more liberal system [5]. In 2004 as well the Central Bank of Egypt commenced a banking reform program which ended in December 2008 to strengthen the banking sector and help achieve economic growth. This program was interested mainly in addressing the issue of non-performing loans. In January 2009, the Central Bank of Egypt launched the second wave of its reform program scheduled to end by 2011 to continue upgrading banking supervision technical abilities and apply Basel II [6].

In the consequences of updating the IFRSs, the Central Bank of Egypt decided in its session held on January 17, 2018 that banks are obligated to prepare their financial statements per IFRS 9 as of 2019, following this decision. Hence, the instructions of IFRS 9 are applied to all banks and foreign banks branches operating in Egypt that are subject to the control and supervision of the central bank [7]. As for the Egyptian ministerial resolution no. 69 of 2019, some provisions of the Egyptian Accounting Standards (EAS)-issued by the Minister of Investment decree no. 110 of 2015 were amended by issuing three accounting standards. These included the EAS no. (47) for financial instruments, which goes along with IFRS 9 [8].

The new standard introduces a new methodology for recognizing expected losses under a new model based on past, current and expected events. Hence, this research seeks to provide early evidence about the effectiveness of applying ECL model under IFRS 9 in the Egyptian banks, which obliged firstly to apply this standard, by examining the impact of ECL model on LLRT as one of the important indicators of banks' stability and risks. This will help in developing recommendations on how to increase the effectiveness of future reform programs carried out by the CBE.

Discussion

Overview of IFRS 9 impairment requirements

Accounting standards are "a set of requirements followed by companies when they prepare their financial statements" [9]. The standards set by the International Accounting Standards Board (IASB) are called IFRS standards. The IASB is "an independent, privately funded body responsible for establishing and improving international accounting standards (...) to develop, in the public interest, a single set of high-quality, understandable and enforceable global accounting standards that require high-quality, transparent and comparable information in financial statements and other financial reporting" [10]. The IASB operates under direct oversight of the IFRS Foundation. The IFRS foundation's mission is similar to the IASB's and is to "bring transparency, accountability and efficiency to financial markets around the world by developing IFRS standards (and) by fostering truth, growth and long-term financial stability in the global economy" [11]. IFRS standards aren't legally binding when the IASB initially lays them out. They are rendered compulsory in different jurisdictions by national or extra-national authorities. In Europe, the European Commission has rendered these standards compulsory since 2002 for listed companies through regulation (EC) No 1606/2002. This regulation is made up of two parts: "a mandatory rule: All EU listed companies must use IFRS as adopted by the EU for their consolidated financial statements; (and) discretionary provisions: EU countries can opt to extend the use of IFRS to annual financial statements and non-listed companies as well". In addition, to the requirements for listed companies, the EU requires all non-EU companies listed on an EU regulated market to file financial statements either in IFRS (as adopted by the IASB or as adopted by the EU) or in GAAP (Generally Accepted Accounting Practices) "designated by the European Commission as equivalent to IFRSs".

The fact they aren't initially legally binding doesn't impair their widespread use. According to the IFRS Foundation, "144 of 166 jurisdictions (or 87%) require the use of IFRS standards for all or most publicly accountable companies (while) most of the remaining jurisdictions permit their use". The main exception to the widespread application of the IFRS standards is the US where the relevant standard is US GAAP (i.e., US Generally Accepted Accounting Principles).

The IASB was established in 2001 and replaced its predecessor, the International Accounting Standards Committee (IASC), which was established in 1973 and whose purpose was to harmonise financial reporting standards. The standards it produced were called International Accounting Standards (IAS) while the new standards produced by the IASB are called the International Financial Reporting Standards (IFRS). Both also produce interpretations which are respectively called SICs for the IASC and are called IFRICs for the IASB. In summary, the IASB's full set of requirements are comprised of the IASs, SICs, IFRSs and IFRICs which all have equal authority. Whenever the IASB produces a new standard, it offers a certain

transition period to allow stakeholders to adapt to the new accounting requirements (while allowing entities to apply it earlier if they wish to do so). An example of these transition periods could be the transition period for IFRS 9. IFRS 9's final version was issued on the July 24th, 2014 and its effective date/entry into force was the January 1st, 2018.

Over time there have been 41 different IAS standards of which 19 have either been (or will be) superseded by newer IFRS standards or withdrawn. There are 17 different IFRS standards of which the first issued was IFRS 2 share-based payment on February 19th, 2004.

The process for setting IFRS Standards is made up of 4 steps. The first step is to set, every five years, its agenda on its standard-setting priorities. The second step is to explore the issues and identify the possible solutions for which standard-setting may be required during which a public discussion paper is often set up. The IASB then develops, based on the research and the public comments collected, possible accounting solutions which it publishes in order to obtain the views of the IASB's stakeholders. Finally, the IASB analyses and refines proposals to obtain either the new Standard or an amendment version of a standard. The IASB then follows up by offering implementation assistance and maintains/updates the standards if necessary.

Once the IASB has set up a new standard, the standard must be endorsed by the EU to become legally binding. During this endorsement process, the EU has two choices: It can endorse IFRS 'as they are' in order to be fully compliant with the standards, make carve-outs or refuse to endorse the new standards. Non-endorsement and carve-outs imply the creation of 'EU-FRS' and EU firms will have to comply with the new EU-FRS standards but may also have to comply with the full IFRS (e.g. if they want to benefit from IFRS acceptance in the US).

The EU endorsement process heavily relies on the European Financial Reporting Advisory Group (EFRAG). The EFRAG is a non-profit organisation whose role is to "provide advice to the commission on all issues relating to the application of IFRS in the EU". The European commission asks for the EFRAG's endorsement advice while the EFRAG will check if the standards comply with community law.

IFRS standards must comply with IAS regulation no 1606/2006, which sets out three cumulative endorsement criteria:

- The standard respects the 'true and fair view' principle outlined in the EU accounting directives (*i.e.*, that the financial statements faithfully represent the entity).
- The standard is conducive to the European public good.
- The standards meet the criteria of understandability, relevance, reliability and comparability required of financial information.

These criteria are vague by nature. This vagueness allows the EU to interpret these standards as it sees fit and therefore influence, through funding and public consultations, the IASB's standard-setting process. As the IASB strives towards one set of global and unified accounting standards, they must take into account the EU's opinion on new standards.

Classification and measurement of financial assets (Loans)

Basics of classification and measurement: The International Accounting Standard No. 39 (IAS 39) is an accounting standard that is classified by a collection of multiple classification categories related to their impairment modeling, as financial assets at Fair Value through Profit or Loss (FVPL), Held-to-Maturity (HTM), available for sale and loans and receivables. This group has been one of the major topics debated among auditors, banks and institutions because more categories mean more dilemmas to select the right one.

With the launch of the initial Exposure Draft (ED) and the final version of the International Financial Reporting Standard No. 9 (IFRS 9), it was found that it does not decrease the number of accounting methods for financial instruments in any great way, its principle-based approach to classifying assets does establish a tight concept which changes much of the complexity and unclear rules-based requirements that were in place earlier.

In contrast to IAS 39, IFRS 9 applies one classification approach for all kinds of financial assets. Financial assets should be classified and measured by the usage of a two-criteria approach that should be applied by entities. Entities have to first analyze both:

- Business model regarding their financial assets management and in a second time, they have to analyze.
- Contractual cash flow characteristic features of their financial assets.

The following figure illustrates the process for determining the classification and measurement of financial assets according to the characteristics of the financial instruments and the business model of the entity (Figure 2).

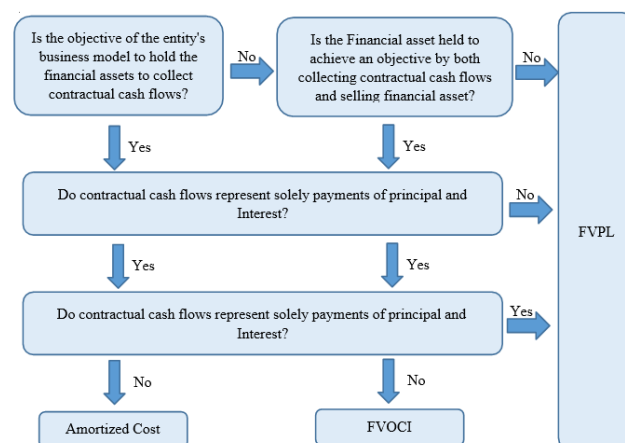


Figure 2. Process for determining the classification and measurement of financial assets.

The classification is essential to specify how financial assets are included in financial statements of entities and the board has decided to facilitate the classification by defining two master measurement categories instead of four which are inevitable for calculating financial instruments.

Financial instruments measured at amortized cost: In this category, the IASB board reflects financial assets and financial liabilities that undertake cash flows in a certain timeline like, for example, loans and receivables that banks want to keep up until their due date.

Financial instruments measured at fair value: In this category, on the contrary, it is treated as a set of financial assets and financial liabilities used for trading and that do not guarantee definite and stable cash flows and correspondingly, banks will not keep them until their due date.

A financial asset is measured Lejard, at amortized cost if both of the following criteria are achieved:

- The asset is held to collect its contractual cash flows.
- The assets' contractual cash flows represent Solely Payments of Principal and Interest (SPPI).

Financial assets listed within this type are primarily recognized at fair value and subsequently measured at amortized cost.

A financial asset is measured at Fair Value through Other Comprehensive Income (FVOCI), if both of the following criteria are fulfilled:

- The objective of the business model is accomplished by collecting contractual cash flows and selling financial assets.
- The assets' contractual cash flows represent (SPPI).

Financial assets included within FVOCI category are primarily recognized and subsequently measured at fair value.

Under the new model, FVPL is the remaining category. Financial asset should be classified as FVPL if they do not meet the criterion FVOCI on amortized cost.

Business models for managing financial assets

The concept of "Business model": As mentioned in IFRS 9 financial instruments, "(....) A business model refers to how an entity manages its financial assets in order to generate cash flows by collecting contractual cash flows, selling financial assets or both". These actions

are related to the assessment of banks or entities about the future scenario that allows them to collect contractual cash flows or to sell financial instrument. The first requirement related to the business model. Instead, has been affected by criticism due to the difficulty in the identification of the business model of entities or banks.

Different business models for managing financial assets: The IASB has defined particular different categories of business models for managing financial assets in IFRS 9. The models' characteristics are identified, among other things, on the basis of the aims of the business models.

- **Amortized cost (Held-to-collect):** In this measurement type, there are financial assets that are linear to the business model of the entity and are held to collect contractual cash flows. So, these assets are used to obtain cash flows by gathering contractual payments for maintaining cash flows, entities have to investigate the regularity, frequency and the amount of past sales in order to specify expectations about future cash flows.
- **Fair value through other comprehensive income (Held to collect and sell):** In this type, financial assets are used by banks for gathering cash flows or for selling them in more desirable future situation. As stated in IFRS 9, these financial assets are "held within the business model of the entity and are held to collect contractual cash flows and to sell the financial assets.
- **Fair value through profit or loss (Held for trading):** IFRS 9 characterizes these financial assets as instruments that are not held within the business model of the entity and held to gather contractual cash flows or held to both collect contractual cash flows and sell financial assets; these financial instruments are held for trading (Table 1).

Business model	Major elements	Category
Held-to-collect	The aim of the business model is to hold assets to collect contractual cash flows	AC
	Sales of the assets are identical to the aim	
	Usually lowest sales in frequency and volume	
	Sales are related to the credit risk management	
Held-to-collect and sell	Both collecting contractual cash flows and sales are necessary to fulfilling the objective of the business model	FVOCI
	Managing everyday liquidity needs	
	Maintaining a specific interest yield profile	
	Matching duration of financial instruments	

	Typically more sales in frequency and volume than with held-to-collect business model	
Other business models	Business model is neither defined as held to collect nor held to collect and sell	FVPL
	Collection of contractual cash flows is loosely associated to the aim of the business model	
	Such as: Trading (<i>i.e.</i> , hold to sell), managing assets on fair value basis, Maximizing cash flows through sales	

Table 1. Different types of business models.

Business model assessment: According to IFRS 9, the business model does not apply to an individual instrument level but it does apply to a more expansive level such as a business unit or portfolio level, furthermore, the model is not relied on the management's intention such as IAS 39 where financial instruments were moved to more rules-based reporting. The rest of the business model explanations, according to IASB, are that it is a matter of fact rather than a matter of choice. This criterion indicates that the entity may have more than one business model to manage its financial instruments.

The researcher believes that the classification has to be on an entity's level, but be more expansive to reach. For example, a portfolio level. Equally, assuming a banking case, the bank may have a retail portfolio where maturity dates along with an investment portfolio where its aim is to realize the fair value fluctuations, this means that an entity could have more than one business model.

Contractual cash flow assessment: IFRS 9 identifies the contractual cash flow assessment as the other fundamental stage for identifying the classification of financial assets. Therefore, it is needed to evaluate whether cash flows from the financial assets achieve the so-called SPPI criterion. That is, whether the contractual cash flows are solely payments of principal and interest. Financial assets achieving the criterion are allowed for AC or FVOCI measurement dependent on the business model in which they are held. Financial assets that do not fulfill the SPPI criterion are always measured at FVPL, other than equity instruments for which a company has determined to apply a particular OCI election. Management is responsible for assessing whether an entity's financial assets' contractual cash flows achieve the SPPI criterion.

As the baseline of the cash flow evaluation, IFRS 9 introduces the identification of "principal" and "interest" which should help management to conduct initial evaluation of the SPPI criterion. Principal is by definition the fair value of a financial asset at initial recognition. Yet, the principal amount may change over the life of the financial asset, for example, if there will be repayments of principal. Interest incorporates the time value of money (*i.e.*, compensation for the time value of money), for the credit risk, related to the principal amount outstanding during a specified period of time and for other basic lending risks and costs, besides a profit margin. Management will have to evaluate whether contractual cash flows achieve SPPI criterion in the currency in which the financial asset is entitled.

Reclassification of financial assets

When and only when, an entity alternates its business model for managing financial assets, it must reclassify all influenced financial assets.

Reclassification of financial assets between various types is permitted according to IFRS 9, though it is predicted to occur only in scarce conditions, when a company's business model for managing financial asset changes. This implies that the financial assets managed in particular business model will be reclassified in accordance with a different model. Thus, reclassification of financial assets is business model driven. The IASB has emphasized that the modification of a company's business model is a considerable event which is contemplated to be infrequent (Table 2).

• Financial assets (debt instruments) measured at amortized cost, loans, debt securities, bank balance, deposits and trade receivables
• Financial assets (debt instruments) measured at fair value through other comprehensive income FVOCI
• Lease receivables under IAS 17 Leases
• Contract assets under IFRS 15 "revenue from contracts with customers"
• Loan commitments and financial guarantee contracts that are not measured at fair value through profit or loss

Table 2. The scope of financial assets that will be subject to the new impairment model.

Impairment methodology according to IFRS 9

The reformed impairment modeling: The new impairment obligations of IFRS 9 are created to supply the financial statement users with more

information about a company's Expected Credit Losses (ECLs) on financial instruments that are not described at fair value through profit or loss (e.g., trading portfolios). The impairment approach obliges banks and other companies to recognize ECL and to update the

amount of expected credit losses recognized at every reporting date to express changes in the credit risk of financial assets. The IASB approach is forward-looking and reduces the threshold for the recognition of expected credit losses, so that it is no longer inevitable for a "triggering event" to have happened before credit losses are reported.

IFRS 9 enforces companies to base their measurement of ECL on reasonable and supportable information that is attainable without undue cost or effort and that contain historical, current and-for the first time forecast information. Consequently, the effects of probable future credit losses events on expected credit losses must be taken into consideration.

The researcher believes that all banks and other financial entities that hold financial assets or commitments to expand credit that are not accounted for at fair value through profit or loss (e.g., trading portfolios) would be influenced by IFRS 9's impairment regulations. This incorporates loans and other financial assets measured at "Amortized Cost" (AC) or that are reported at "Fair Value through Other Comprehensive Income" (FVOCI) (Like of today available-for-sale assets), trade receivables and lease receivables, loan commitments and financial guarantee contracts.

Expected credit loss model: IFRS 9 obliges a bank to determine an Expected Credit Loss (ECL) amount on a probability-weighted basis as the difference between the cash flows that are due to the bank with regard to the contractual terms of a financial instrument and the cash flows that the bank predicts to receive.

Although IFRS 9 sets up these objectives, it typically does not stipulate specific comprehensive method or procedures for attaining it. In defining the cash flows that the bank predicts to collect, plenty of banks are arranging to adopt a sum of marginal loss approach whereas ECLs are computed as the sum of the marginal losses occurring in every time period from the balance sheet date. The marginal losses are obtained from individual parameters that estimate exposures and losses in the case of default and the marginal probability of default for every period (the probability of default in time period X conditional upon an exposure having survived to time period X). ECLs are a probability-weighted approximation of the present value of cash shortfalls (i.e., weighted average of credit losses, with the relevant risk of a default occurring in a given time period used as the weights). ECL measurements are unbiased (i.e., neutral, not conservative and not biased towards optimism or pessimism) and are defined by evaluating a range of possible findings.

ECLs are typically measured depending on the risk of default over one of the two different time horizons based on whether the credit risk of the borrower has risen significantly since the initial exposure was first recognized. The loss allowance for those exposures that have not increased significantly in credit risk ("Stage 1" exposures) is based on 12-month ECLs. The allowances for these exposures that have experienced a significant increase in credit risk ("stage 2" and "stage 3" exposures) are depending on a lifetime ECL.

12-month ECLs are the portion of the lifetime ECLs that constitute the ECLs that stem from default events on a financial instrument that are possible within 12 months after the reporting date (or a shorter period if the expected life of the financial instrument is less than 12 months).

12-month ECLs are weighted by the probability of such a default occurring. Lifetime ECLs are the losses that stem from all possible default events over the expected life of the financial instruments.

Recognition of Expected Credit Losses (ECLs): In accordance with IFRS 9, ECLs are recognized properly from origination which would directly solve the problem of late recognition of "trigger" loss events. Consequently, for all financial assets that are liable to impairment even if they are of high quality, recognition will begin with 12-month ECLs at initial recognition. On the subsequent periods, with the exception of purchased or originated credit-impaired financial assets, the entities are then obliged to assess the credit quality of their assets according to the probability of default and based on the change in credit quality, they are obliged to measure the loss allowance at an amount equivalent to 12-month or lifetime expected credit losses.

The researcher finds out that the recognition of expected credit losses is related to the subsequent measurement of financial assets, where the standard IFRS 9 stipulated that the entity must recognize those losses on financial assets that are measured at amortized cost and on financial assets that are measured at fair value through other comprehensive income and therefore the requirements of impairment will not apply to financial assets that are subsequently measured at fair value through profit or loss.

Approaches for recognizing the expected credit losses

The general approach: IFRS 9 sets up a three-stage approach for impairment of financial assets, depending on whether there has been a significant deterioration in the credit risk of a financial asset. These three buckets (bucket 1, bucket 2 and bucket 3), then, establish the amount of impairment to be recognized (12-month ECL or lifetime ECL).

Stages of measuring the expected credit losses according to the general approach: The IFRS 9 categorizes the measurement of expected credit losses according to the general approach into three stages

Stage 1: Performing

Initially, all performing debt instruments are assigned to stage 1 and remain there as long as the risk of a default occurring has not changed considerably in comparison to the date of initial recognition. One can notice that IFRS 9 is not clear about when a credit risk has considerably increased. There is a "rebuttable presumption" that the credit risk on a financial asset has increased significantly since initial recognition when contractual payments are more than 30 days past due.

In this stage, 12-month ECLs are recognized as an expense and a loss allowance is established. The 12-month ECL is identified as a

portion of lifetime expected credit losses and reflect the lifetime cash shortfalls that stem from default events which are possible within 12 months after the reporting date (2).

Stage 2: Under-performing

Involves financial instruments with 'significant deterioration in credit quality' since initial recognition, but with no objective indicator of impairment. For stage 2, assets lifetime ECLs are recognized. This accounting treatment depends on the rationale that an economic loss arises when ECLs considerably exceed the initial expectations. By recognizing lifetime ECLs following a significant increase in credit risk, this economic loss is reflected in the financial statements.

Stage 3: Non-performing

Involves financial instruments for Gornijak, which an objective evidence reflects impairment at the reporting date. For stage 3, assets' lifetime expected credit losses are recognized. Stage 3 credit exposures are just like those considered to be individually impaired under IAS 39, while stage 1 and 2 credit exposures will necessarily replace those exposures that are collectively evaluated for impairment under IAS 39. For example, financial assets that are disclosed under the label 'Financial assets past due' but not impaired in bank financial statements would largely fall into stage 2 under IFRS 9. Hence force, the recognition of lifetime ECLs will occur earlier than under IAS 39, *i.e.*, when there is a considerable increase in credit risk (stage 2), but before actual default (stage 3).

Write-offs: IFRS 9 requires that once a loss allowance account be maintained, the gross carrying amount of a financial asset is eliminated directly (*i.e.*, written off). Concerning IFRS 9, when the entity has no reasonable expectations of recovering the entire financial asset or a portion of it, it should be written off. The information regarded may include:

- Whether the efforts to collect the debt has stopped.
- A particular situation of the debtor (whether he is bankrupted or his business is liquidated).
- Days overdue of the debt.

The write-off is a derecognition event. This is in contrary to the loss allowance for ECLs, which is maintained and may be offset against the carrying amount of the financial asset.

Writing-up among the three stages: The standard IFRS 9 allows the writing-up among stages but according to specific determinants as shown below:

Writing-up from stage 2 to stage 1: The financial asset should not be transferred from the second stage to the initial stage, unless:

- All the quantitative and qualitative elements of the first stage have been met.
- All the arrears of the financial asset and its proceeds have been paid.

Writing-up from stage 3 to stage 2: The financial asset should not be transferred from the third stage to the second stage unless the following conditions are fulfilled:

- To fulfill the quantitative and qualitative elements of the second stage.
- Regular payments of at least 12 months.

The difference between stage 2 and stage 3

Associated with the recognition of interest revenue. In stage 1 and stage 2, interest recognition and impairment are decoupled. Interest revenue is computed on the gross carrying amount. In stage 3, the interest revenue is computed on the adjusted amortized cost *i.e.*, the gross carrying amount net of the impairment allowance (similar to IAS 39) (Table 3).

Increase in credit risk since initial recognition		
Stage 1	Stage 2	Stage 3
As soon as a financial instrument is purchased, 12-month expected credit losses are recognized in P and L and a loss allowance is established	If the credit risk grows notably and the resulting credit quality is not observed to be low credit risk, full lifetime expected credit losses are recognized	If the credit risk of financial asset grows to the limit that it is observed credit-impaired, Interest rev. is computed based on the amortized cost (<i>i.e.</i> , gross carrying amount adjusted for the loss allowance)
Serves as a proxy for the initial expectations of credit losses	Only recognized if the credit risk grows considerably from the event when the entity purchases the Financial Instrument (FI)	Financial assets in the stage 3 are individually evaluated
For financial assets, interest revenue is computed on the gross carrying amount (<i>i.e.</i> , without adjustments for ECLs)	Interest revenue on financial assets is computed as in the stage 1	Lifetime expected credit losses are still recognized on those financial assets
Effective interest on gross carrying amount	Effective interest on gross carrying amount	Effective interest on amortized cost

Table 3. Three-stage model for impairment.

The simplified approach

Identifying the stage of a financial asset is not required in this simplified approach. Indeed, this model does not oblige entities to track changes in credit risk; it requires entities to recognize a loss

allowance but, the loss should always be recognized at a lifetime expected credit loss on every reporting date directly from initiation. Entities are obliged to utilize the simplified approach for trade receivables or contract assets that do not include a significant financial component or include financial component that stated in IFRS 15 and/or

lease receivables that resulted from transactions included in IFRS 17.

The researcher believes that granting such policy will reduce the comparison of financial statements over the financial periods, but she believes that this also shall reduce the reservations in practice regarding the tracking of changes in credit risk by entities that do not have advanced systems for managing risks.

Purchased-credit impaired approach

That is applicable to loans that are credit impaired at initial recognition (e.g., loans acquired at a deep discount due to their credit risk).

"Purchased or originated credit impaired financial assets are not treated under the general approach because they are impaired right from origination and their losses are already reflected in their amortized cost by using credit-adjusted Effective Interest Rate (EIR) at initial recognition. Therefore, in order to avoid double counting, no further 12-month ECL allowance is recognized. In the subsequent periods, the cumulative changes in lifetime expected credit losses are recognized. Also, for the interest revenue, credit-adjusted EIR is used for those types of instruments".

Default: The IASB determined not to define default in IFRS 9, as it might lead to a specification for financial reporting that is in compatible with that applied internally for credit risk management. Instead, entities should apply a definition of default that is consistent with the definition of default for internal credit risk management purposes. Consistently from one period to another even through, IFRS 9 presents a rebuttable presumption that default takes place when a financial asset is more than 90 days past due. This presumption performs as a "backstop" to ensure that entities do not identify default later than 90 days without reasonable and supportable information. In addition, appendix A to IFRS 9 supports a list of indicators providing evidence that a financial asset is credit impaired.

Both quantitative and qualitative indicators of default, are fundamentally alike in the accounting and regulatory framework. Even though, in practice there are vast variations in the definition of default across member states that partly originate from various supervisory practices and national regulations in different EU jurisdictions.

Probability of Default (PD): The probability of default is considered one of the critical risk parameter required for the assessment of credit risk. It is identified in the Capital Regulation Requirement document (CRR) as the probability of default of a counterparty over one year period or over the residual time to maturity based on either we are performing respectively the 1-year PD or the lifetime PD. In other words, this is the possibility that a loan will not be repaid completely and will fall into default. Entities should compute the probability of default for every borrower by taking into account the credit history of the borrower and the nature of the investment. PD can be obtained by the usage of external rating agencies such as Standard and Poor's (S and P) or Moody's, even though, banks are still proposed to use internal rating methodologies.

Exposure at Default (EAD): The Exposure at Default (EAD) is the latter parameter for the evaluation of credit risk and introduces the total amount that a bank or another financial institution is exposed to at the time of a loan's default, especially, the outstanding amount. It is also identified as the estimation of the exposure at a future default date, considering the expected variations in the exposure after the reporting date, containing repayments of principal and interest and expected drawdowns on committed facilities.

Loss Given Default (LGD) Daniil: The crucial part of the sum of marginal loss approach is loss given default, which is the third key element for the evaluation of credit risk and reflects the percentage of a financial exposure that a bank or other financial institutions could lose if a borrower goes into a default on a loan.

For banks that are directly computing expected cash flows, a combination of PD and LGD is utilized in order to compute the expected cash flows from the preceding of contractual cash flows. The bank uses cash flow methodology to compute the approximated exposure at each future month end. This cash flow model further expresses movements in the EAD in the months before default. For example, three months (90 days) of interest payments could be involved in the EAD to reflect an expectation that these settlements might be lost in advance of default.

Measurement of expected credit losses

IFRS 9 describes ECLs as the weighted average of expected credit losses with the corresponding risks of a default occurring as the weightings. Credit losses are cash shortfalls reflecting the difference between the present value of all contractual cash flows due to an entity and the present value of all cash flows expected to be received by the entity. The standard IFRS 9 does not offer a single methodology of measuring the expected credit losses on condition that it might vary depending on the category of instrument and the availability of information but it obliges that any measurement of ECLs should consider the followings:

- An unbiased assessment of a range of possible results and their likelihood to occur (probability-weighted amount).
- The time value of money.
- Reasonable and supportable information that is attainable without undue cost or effort about past events, current conditions and reasonable and supportable forecasts of future economic conditions.

The above mentioned components might be derived by assessing a range of potential scenarios taking into account the timing of cash flows for specified outcomes and the estimated probability of these outcomes through their credit risk management systems.

$$\text{Expected Credit Losses (ECLs)} = \text{PD\%} \times \text{EAD} \times \text{LGD\%}$$

- Probability of Default (PD)
- Exposure at Default (EAD): Loans and credit facilities at default.
- Loss Given Default (LGD): Percentage of credit losses at default.

Under IAS 39, the entities were using the best estimate of the eventual outcome even though as seen in IFRS 9, it is the probability-weighted outcome. For the time value of money, Effective Interest Rate (EIR) is the input that discounts the cash shortfalls where the standard IFRS 9 supports EIR to be used for different categories of financial instruments. Eventually, it is very obvious that, considerable judgment will be used by the entities for specifying them and the degree of judgment is based on the attainability of detailed supportable information which should involve elements that are specific to the borrower, general economic conditions and an assessment of both the current and future conditions.

The researcher concludes that although every possible scenario is not necessary to determine, the estimation should always have a reflection of at least two scenarios:

- The possibility that a credit loss occurs.
- The possibility that no credit loss occurs.

The researcher finds that the ECL is not required to reflect the worst or best scenarios.

The alignment between the supervisory regulations issued by the CBE concerning the IFRS 9's ECLs and the credit risk management

According to the Central Bank of Egypt and on the date of all financial statements (annually or periodically), the following instructions should be followed when calculating and recognizing the provision for credit losses:

Financial indicators (size, quality and cash flow trends)	Other items	Industry-specific factors
• The quality of earnings and strong cash flow from continuing operations • Funding needs (depends to a small degree on external financing for growth and continuity) • The quality of the financial position (liquidity, turnover of assets, quality and diversity of assets and decrease in intangible assets) • Liquidity indicators • Financial and operating leverage and financing flexibility • The ability to access markets • Rate of return cover • Future due dates • The purpose and structure of the facility • Classification by the international rating agencies	• Internal control • The environment and the domestic or international legal system • Possible commitments, guarantees, lawsuits and external sources for services • Management integrity and experience • Financial supervision • Marketing skills • The financial structure of the entity • The risk management of the entity • The relationship of the entity with the bank	• Commitment to the environment requirements • The company's position in the markets • Supply risks, number of suppliers, their sources and their geographical locations • Explosion to technological changes • Flexibility in pricing and price sensitivity to decline

Table 4. Guidance on the classification of loans.

- With regard to the provisions for expected credit losses for individuals; the evaluation is done on the basis of groups, provided that groups are formed at the very least according to the type of product as follows:
 - Credit cards
 - Personal loans
 - Mortgage loans
 - Debit current accounts
- Dividing the financial instrument into groups with homogeneous credit risks and in this context, the following bases can be guided:
 - Product type: For retail bank loans and debts, micro and small business loans.
 - Type of loans and credit facilities : For large and medium-sized companies and institutions.
 - Countries: For sovereign debt instruments (domestic or foreign).
 - Geographical region: In relation to balances with banks, financing and investment institutions.
 - Guarantee due date industry.
- For each group with similar credit risk, the debt instruments that the group includes are classified according to the bank's internal rating system, and the credit rating issued by the international rating agencies (Capital Intelligence-Fitch S and P Moody's) is used for country-specific debt instrument or for balances with banks and investment financing institutions.
- The following items can be guided as a minimum for the classification of loans and facilities for medium-sized enterprises and projects (Table 4)

Debit current accounts

- When calculating the expected credit losses in the first and second stages, the credit risk must be calculated at the time of default (EAD), on the basis of the used amount plus the value expected to be used from the authorized limits.
- All loans and credit facilities/debt instruments that are subject to the measurement and calculation of the expected credit loss must be classified within one of the three phrases shown below (Figure 3):

(Noting that this process must be fully updated on every interim or annual financial report).

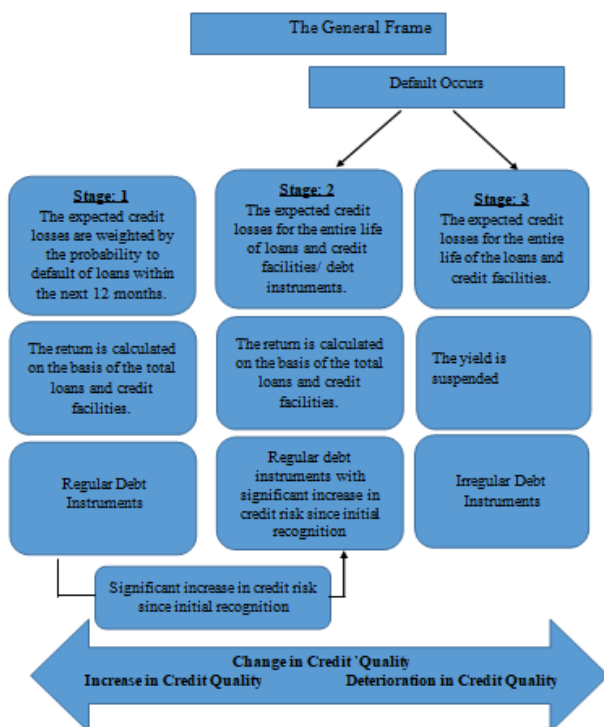


Figure 3. Credit facilities applicable to the expected credit losses.

Stage 1:

- Includes loans and credit facilities/debt instruments for which there has been no significant increase in its credit risk since its initial recognition, and credit risk is considered low if the following conditions are met.
- Low risk of default.
- The debtor has a high ability in the short term to fulfill its obligations.
- Adverse changes in the economy and the work environment are not expected in the long term that would negatively affect the debtor's ability to fulfill its obligations (macroeconomic indicators and stress tests).
- The expected credit loss represents the expected loss resulting from default events that may occur during the next 12 months from the date of the financial reporting.

Stage 2:

- Includes loans and credit facilities/debt instruments for which there has been a significant increase in credit risk since their initial recognition, but they have not reached the default stage yet, due to the absence of objective evidence confirming the occurrence of default.
- Includes loans and credit facilities that the bank has identified as high risk upon initial recognition.
- The expected credit loss for the entire lifetime of loans and credit facilities/debt instruments is calculated and it represents the expected credit loss for all probabilities of default during the remaining period of the life of the loans and credit facilities, so that the three variables which are the Probability of Default (PD), Exposure at Default (EAD), and the percentage of loss are calculated. Assuming default for the entire lifetime of loans and credit facilities/debt instruments.
- The standard included some indicators that are appropriate to assess the occurrence of an increase in the level of credit risk (indicators of the occurrence of significant changes in credit risk):
 - Reducing the actual or expected internal credit rating of the borrower or loans and credit facilities for a debt instrument, according to the internal evaluation system applied by the bank.
 - The actual or expected significant decrease in the external credit rating of loans and credit facilities/debt instruments.
 - Significant negative changes in the performance and behavior of the borrower, such as late payments of installments or unwillingness to respond to the bank.
 - The need to recognize the obligations of the debtor (structuring the obligations) due to the weak ability to pay or the decline in cash flows or the need to amend the contractual terms with the debtor or cancel some contractual terms due to the existence of actual/expected violations of the current conditions due to the inability of the debtor to continue with the bank within the existing contractual framework, for example the debtor has given grace period, whether for the return or for the original instrument/exposure that was not originally contracted for or raising the rates of return/return for future periods.
 - The availability of information to the bank about the existence of dues on the debtor, whether with the bank or with any other creditor party that affects its ability to pay.
 - An increase in the rates of return on loans and credit facilities due to the increase in credit risk for the debtor in the current stage (high risk prices) compared to prices when acquiring the loans/debt instruments.
 - Actual or expected negative changes in the borrower's operating activities such as (low revenues/actual or expected profit margin, high operating risks, deficit in working capital, decreased asset quality, increased leverage, weak and declining liquidity, administrative problems, interruption of part of the client's activities and others) that may fundamentally affect the borrower's ability to pay.

- Change in the methodology of the bank's management of loans/debt instruments due to the emergence of negative indicators and changes in loan risks so that it is expected that the risk management of loans will become more focused and vigorous and keep it under supervision or that the intervention of the bank with the debtor to manage loans.
- Significant (substantial) changes in the terms of loans which would have been placed differently if loans were issued recently or on the date of the preparation of financial statements (such as tightening conditions and increasing guarantees), due to the increase in the risk of loans since the initial recognition.
- Significant rise in credit risk for loans belonging to the same borrower from other lenders.
- Negative changes in the value of any of the guarantees provided by a third party and provided against the obligations, which may lead to a reduced incentive for the borrower to fulfill his obligations or have a negative impact on the Probability of Default (PD).
- Negative changes resulting from reduction of financial support from the parent company or sister agencies, which are expected to negatively affect the borrower's ability to fulfill its contractual credit obligations.
- Substantial negative changes in the external market indicators of credit risk for the performance of a loans and certain credit facilities or similar exposures and have the same terms, or a decline in the prices of financial instruments issued by the borrower such as bonds, stocks, and other negative information in the market about the borrower.

Stop paying: Loans and facilities for institutions, small and micro enterprises, and retail banking are included within this stage if the non-payment period exceeds (60) days at most and less than (90) days. Noting that this period (60) days will decrease at a rate of (10) days annually to become (30) days during (3) years from the date of application.

Stage 3:

- It includes debt instruments that have evidence/evidences that they have become bad (irregular) and in this case the expected credit loss is calculated for the entire life of the loans and credit facilities.
- The returns on the accounts included in this stage are marginalized and the bank continues to be marginalized as long as the accounts remain within this stage.
- The standard indicated a set of factors that affect and provide evidence of credit default, including but not limited to the following:
 - The debtor faces significant financial difficulties (severe weakness in the financial indicators).
 - Failure to comply with contractual terms such as having dues equal to or greater than (90) days.
 - The bank has prepared part of the obligations incurred by the debtor for reasons related to financial difficulties facing the debtor and its inability to pay the full obligations on time.

- There are clear indications indicating that bankruptcy is expected near the debtor.
- The acquisition of a debt instrument with a large discount represents a credit loss.

General rules

- The bank shall study, evaluate and estimate the credit risks of all client accounts and related parties that have included any of its loans within the third stage that the bank is sufficiently aware if the size of those risks increased.
- The audit committee shall verify the adequacy of the expected credit loss (impairment loss) specified by the bank and ensure its adequacy when issuing all periods or annual financial statements.

Final instructions issued by the CBE concerning the standard IFRS 9 and in the light of the ramifications of the emerging Coronavirus pandemic: Referring to the Central Bank's letter dated February 26, 2019 regarding the final instructions for preparing the financial statements for banks in accordance with the International Financial Reporting Standard No. 9 (IFRS 9) for preparing the financial reports and given the current conditions and the implications of the emerging corona virus and its impact on the banking sector and the economy as a whole and in line with the international best practices and measures taken to mitigate the banking sector, the board of the CBE, in its session held in May 3, 2020, decided the following:

- Allowing the banks to issue financial statements—quarterly—in brief in accordance with the Egyptian accounting standard no. 30 amended for the year 2015 (periodic financial statements), provided that the commitments to prepare full annual financial statements at the end of December 2020 for banks whose annual financial statements are at the end of December of each year, and at the end of June 2021 for banks whose financial statements are prepared in late June of each year.
- With regard to the periods of postponing the credit entitlements of clients for a period of 6 months issued in accordance with the periodic book of March 15, 2020 and the subsequent periodic books thereof, this period is excluded when calculating the period of non-payment and is not considered an indicator of a significant increase in credit risk, without prejudice to the responsibility of the bank on the evaluation of its credit portfolio to maintain its quality and assess the ability of its customers to pay.

Exceptions approved by the standard IFRS 9

Low-credit risk exemption: The IASB permits a discretionary exception from the requirement to evaluate whether a significant increase took place if the credit risk of a financial instrument is assessed to be low at the reporting date (1).

If the entity selects this simplicity (2), the financial instrument may stay in stage 1 (which contains the recognition of allowances depending on 12-month ECLs). So far as it is considered to bear low credit risk. The IASB implies that a financial instrument externally

rated as 'investment grade' may be assessed as a low credit risk example, even though, an entity may also use its internal credit risk ratings to specify a low credit risk if those are consistent with a globally understood definition of low credit risk (*i.e.*, investment grade).

The use of external ratings as an indication for low credit risk can be challenging during particular market conditions; the latest financial crisis that began in 2008 identified that many (home-loan rated) financial instruments missed a large part of their market value even though being rated as 'investment grade' by the major rating agencies.

Furthermore, it is essential to remark that the increase of the Probability of Default (PD) associated with the credit ratings of agencies does not follow-up in a linear way. On contrary, the PD of a BBB-rated loan is about three times higher than the PD of an A-rated loan as both of these credit ratings belong to "investment grade" category. The simplicity option supplied by the IASB is not straight forward, as there is no basis to say that the financial instrument has low credit risk.

The researcher believes that according to this exception, measuring the change in the risk of default over the expected life of the financial instrument compared to the risks upon initial recognition will not be required. This exception raised a problem in the accounting thought, as questions arose about the basis on which it is said that the financial instrument has low credit risk. To simplify the problem, the researcher suggests some indicators to be taken into account when depending on such exception:

- The financial instrument has low risk of default; this is assessed through looking at the risk of default of the instrument itself without comparing the risk of default of other instruments.
- The client has a strong ability to fulfill its obligations in the date of the debt.

The entity incurs an undue cost or effort to obtain reasonable future information: While the standard IFRS 9 asserts that, as a general rule, if reasonable and supportable future information is available without undue cost or effort, the entity cannot rely solely on historical information on the amounts due and not paid in determining that the risks have increased significantly compared to the risks in initial recognition. However, in the event that the entity incurs an undue cost or effort to access such future and supporting information, the entity may use the information on the amounts due but not paid, which it has identified with a period of 30 days to consider the credit risk has increased significantly since the initial recognition, noting that this does not represent a base for granted as long as there are reasonable and supportable information to prove otherwise.

Basel committee accords concerning IFRS 9

Basel committee issued a study entitled guidelines on credit risk and accounting for Expected Credit Losses (ECLs). BCBS, 2015, including principles and supervisory guidelines and supervisory directives on the application of the standard IFRS 9, the researcher deals with the following visuals of basel committee, which stated these guidelines about the standard IFRS 9:

- The committee expects that banks will measure the expected credit losses for all credit exposures and that non-provisioning will be rare, since the estimated credit losses are estimated by the probability of the amount that consistently reflects the probability of credit losses.
- The committee expects that banks will develop an active approach to assess and measure expected credit losses over 12-month period, which enables them to identify changes in credit risk in a timely manner and that the estimate of such losses should reflect credit management estimates based on their experience, and reflect weighted probability estimates which is unbiased against the expected credit losses taking into account the extent of the potential results. The methodology used to estimate expected credit losses for 12 months should be robust at all times and should allow for timely recognition of expected credit losses.
- The committee recommends that the definition of default contained in the Basel III, capital adequacy standard be used, which requires the occurrence of a qualitative standard that the bank should consider, this is its conviction that the client will not fully meet his credit obligations towards the banking system until after taking measures by the bank, such as implementing the collateral and an objective indication that the debtor has stopped paying for 90 days or increase a substantial part of its indebtedness to the banking system. The Basel committee also considers that regulatory authorities may set a period of up to 180 days for certain categories of credit such as retail credit or public sector debt, in accordance with the circumstances of the state. However, this probability should not be considered as an exception to the 90-day norm. As an indicator of default stated in IFRS 9.
- The committee considers that the standard IFRS 9 requires the availability of data, analysis and use of credit estimates based on experience, particularly with respect to exposures experiencing a substantial increase in credit risk, as well as, required measurement of the expected credit risk for a 12-month period and the recording of changes through the allowance account. The bank should closely follow these exposures to ensure timely transfer of measurement over a 12-month period to measurement based on the instrument's life Span. As high-risk exposures are expected to be more volatile and are characterized by a rapid decline in creditworthiness. Therefore, there must be governance. Banks will need to apply systems that are able to systematically handle the assessment of the large amount of information that will be required to judge whether there are exposures or exposures that have substantially increased the expected credit losses and it is important to ensure consistency in application.
- There is a wide range of information that the bank will need to meet the requirements of the standard IFRS 9. In general, it will include information on the macroeconomic forecasts, sector-wide economy and regional risk for a particular borrower or group of borrowers with credit characteristics, as well as, the borrowers' optional and strategic characteristics.

- It is important that banks take into consideration that the determination of debt losses is a starting point to identify the impairment in a timely manner (several months or in some cases years), before the objective evidence shows the delay in credit exposures, for example, in retail credit as the income generating sector) will lead to increased credit risk before data on late payments are reached. Therefore, the committee believes that for the requirement of the standard IFRS 9 to be met appropriately, banks must have supportive analysis linking the macroeconomic indicators and the borrower's behavior to the credit risk portfolio. This is done by analyzing data in the past and making expert estimates based on historical, current and future information.
- The committee considers that banks should consider the following when assessing the extent of a significant increase in credit risk:
 - The bank has raised the interest rate on the new loan granted to the same customer or the same class of customers at the date of the financial statements compared to the interest rate previously determined by the bank when granting credit to them previously, as a result of increase in credit risk.
 - Management decides to increase the guarantee or new requirement for new exposures that are similar to the exposures already granted due to changes in credit risk.
 - Low creditworthiness of the customer issued by credit rating institutions, or produced by the bank's internal evaluation system.
 - That regular credit faced weaknesses that were not present at the initial recognition.
 - Deterioration in related elements (future cash flows) relating to the debtor or group of debtors.
 - Grant exceptions to the customer under settlement or rest restriction.
- In addition to the indicators used to determine the specific increase in credit exposure risk, banks should also consider the following general elements:
 - The deterioration in macroeconomic indicators that is relevant to a particular borrower or group of borrowers. The assessment of macroeconomic indicators should be based on adequate information on risks of countries, enterprises and other borrowers.
- Small changes in credit worthiness can significantly increase the probability of default, and therefore it is possible to achieve a substantial increase in credit risk even before exposure is reduced to one credit worthiness.
- There may be statistically rare cases in which deterioration can occur in specific conditions or there may be some elements moving in the opposite direction while other elements improve, here, the committee stresses that banks must control the procedures and have the ability to logically balance between positive and negative elements.
- The IASB model is a relative model in that the assessment of a significant increase in credit risk is based on a comparison of the credit risk exposure at the reporting date compared to the initial recognition of whether the credit risk has increased substantially. Paragraphs 40 to 42 of the implementation guidelines of the standard IFRS 9 stipulate that banks should set a maximum credit risk for specific portfolios from the date of initial recognition. For specific portfolios from the date of initial recognition, The Basel committee has confirmed that in the case of risk overruns, this limit is converted to the assessment of expected credit losses.
- The committee expects that banks will develop a quality audit method to assess the significant increase in credit risk. This includes some forms of the treatment exposures in a timely manner.
- The committee considers that the facilities allowed by the standard IFRS 9, to facilitate the implementation and reduce the burden on a wide range of enterprises in recognition are inappropriate to be used at the international level for active banks and banks with a history of activity and lending. Therefore, the cost of obtaining such information will not be considered as before the committee the cost and time is unnecessary. The committee also expects that if banks benefit from these exceptions, they must provide clear and supported reasons with documents and clarifications.
- The entity should identify the supporting and logical information without undue cost and effort. The committee expects banks to apply this to the maximum extent, as the model of the standard IFRS 9 provides fundamental improvements in the measurement of credit losses. Therefore, the committee expects banks to develop systems and procedures to use and support the information required to achieve the highest quality for strong and consistent implementation of this approach. This may require the cost of investing in new systems and procedures, but the committee considers that the long-term advantages of high quality implementation for outweigh the cash associated with them and therefore cannot be considered unjustified.
- The standard IFRS 9 gave an exception to the general model for exposures with low credit risk, so that parties have the option of not assessing whether there has been a significant increase in credit risk since the initial recognition to reduce the operating costs of recognizing the expected credit loss of financial instrument with a low credit risk at the reporting date. The committee expects that banks will assess a substantial increase in the credit risk of all credit exposures and therefore, the use of this exception may reflect a low quality in the implementation of the expected credit loss model. The committee considers that this exception is used by banks only if there is clear evidence that their application will have limited impact on the date of recognition of the expected credit losses and the composition of provisions.
- The committee agrees with the standard IFRS 9 that late payments are an indicator of a substantial increase in credit risk. The committee considers that banks should assess the credit risk and management procedures to assess the increase in credit risk in case of default. The committee expects banks to base more than 30 days on late payments as an indicator of the transition to measuring expected credit losses for the life of the instrument and that this should be based on future and supportive information.

The researcher finally concludes that the standard IFRS 9 was intended to simplify the recognition and measurement of financial assets, eliminating both the category of held-to-maturity financial investment and available-for-sale financial investments, linking directly the classification of financial assets with their subsequent measurement and recognition of expected credit losses. Financial assets are subsequently measured at amortized cost and financial assets at fair value through other comprehensive income and the entity is required to recognize the expected credit losses for them. This will facilitate the work of comparisons and understanding of financial information by users of financial statements.

The standard IAS 39 requires an objective evidence of historical events that have already occurred and no future events are considered as a condition for recognition of impairment provisions. Therefore, it is necessary to wait for objective evidence to recognize the impairment losses and make the necessary provisions. While according to the standard IFRS 9, the entity is required to rely on future data and information, based on which expected credit losses are identified and recognized as a provision for impairment, with more than one model for subsequent measurement of credit losses based on the significant increase in credit risk or not.

The relationship between IFRS 9 and LLRT

LLR is a main accrual process whereby banks recognize predictable loan losses in the existing period, these results in a decrease in the bank's profits and regulatory capital, which, in turn, can notify the stakeholders to problems that the bank is facing, so the quality of the LLP has a salient impact for banks and their stakeholders, the delay in recognizing the expected losses affects the capability of loan loss reserves to meet credit losses during economic downturns. When the reserves are inadequate to cover credit losses, banks are required to recognize more provisions and decrease capital adequacy Beatty and Liao, also, van den Heuvel confirms that the ability of lending during the downturn is low for banks that delay the recognition of expected losses.

When LLR is timelier, the profitability and regulatory capital of the bank will be affected negatively and in an early manner, which in turn is likely to cause an earlier inspection of the bank by different stakeholders, including external and internal checkers, this inspection improves the chances of earlier detection of fraud in lending, and lower officers' ability to exploit the corruption.

Based on the ICL model under the preceding IAS 39, a financial asset is impaired when there are events of impairment, examples of these events are the significant financial difficulty of the obligator; a breach of contract; granting a concession to the borrower; and the probability of borrower bankruptcy, one of the most important problems of the ICL model is the delay in recognizing credit losses and waiting until they occur and this was considered as one of the main reasons for the aggravation of the recent global financial crisis.

In April 2009, The IASB declared a timetable for substituting IAS 39 in response to the recommendations of the G20 leaders and the international bodies, the replacing project included three main phases, in July 2014, the IASB implemented the second phase which was related to the accounting for ECL on an entity's financial assets, ECL model allows the credit losses to be recognized regardless of the occurrence of the credit event, the new model provides more well-timed information because it updates the ECL since initial recognition to better reflect the modifications in credit risk.

According to the ECL model, the financial assets must be categorized into three phases; the first phase is applied when the credit risk of the financial assets does not increase significantly and when the credit quality deteriorates significantly the second phase is applied, while the third phase is applied in case of default, the loan loss allowance is recognized in the first phase based on 12-month ECL, while in the second and third phases, the allowance is recognized depend on lifetime ECL.

Under IAS 39, LLP is only recorded for impaired exposures, whereas ECL requires the LLP to be recorded for all credit exposures based on past, current and forecasted events, Albani confirms that banks that apply IFRS 9 do not count more on the incurred loss elements of LLP and there may be other factors that influence these provisions, the shift to the ECL model will probably affect the LLRT positively, as entities are required to consider reasonable and supportable future forecasts of economic conditions, which will result in providing the users with timelier and forward-looking information, using experimental data, found that the introduction of the ECL model increases the adequacy of loan loss reserves over the economic cycle.

Kim et al., expected that banks that have an accurate expectation of the future economic conditions will recognize the loan losses in a timelier manner in the period after applying IFRS 9 and that based on the limitations of the ICL model, the regulatory intention behind the shift to ECL, and the information signalling role of accounting, their study investigated the impact of the move to the ECL model on LLRT, using a sample of banks from 33 countries, the results showed that this move affects LLRT positively and also this effect is more noticeable for banks exposed to high risk and banks that have inadequate loan losses before the move.

However, the ECL model demands extensive endeavour to aggregate and process data and unavoidably allows subjective judgments which may offer a path to manipulate earnings, the ECL model allows more discretion to facilitate the incorporation of more information regarding expected losses into LLP, the allowed accounting discretion may increase the opportunistic accounting behaviour that can reduce bank reporting transparency the potential allowed discretion as well may affect the comparability of earnings.

Conclusion

Also, the calculation of ECL requires the application of automated systems, statistical models, and databases, and therefore the systems must be of high quality whether, in terms of inputs, operations, control, or the results extracted from them CBE, 2019, these requirements could contain complexity and thus considered as challenges for banks, based on the potential discretion and complexity, the ECL model may attenuate LLRT.

References

1. Adzobu, Lydia Dzidzor, Elipkimi Komla Agbloyor, and Anthony Aboagye. "The effect of loan portfolio diversification on banks' risks and return: Evidence from an emerging market." *Manag Finance* 43 (2017): 1274-1291.
2. Bushman, Robert M, and Christopher D. Williams. "Accounting discretion, loan loss provisioning, and discipline of banks' risk-taking." *J Account Econ* 54 (2012): 1-18.
3. Dong, Minyue, and Romain Oberson. "Moving toward the expected credit loss model under IFRS 9: Capital transitional arrangement and bank systematic risk." *Account Bus Res* 52 (2022): 641-679.
4. Gebhardt, Günther. "Impairments of Greek government bonds under IAS 39 and IFRS 9: A case study." *Accounting Europe* 13 (2016): 169-196.
5. Gomaa, Mohamed, Kiridaran Kanagaretnam, Stuart Mestelman, and Mohamed Shehata. "Testing the efficacy of replacing the incurred credit loss model with the expected credit loss model." *European Accounting Rev* 28 (2019): 309-334.
6. Huynh, Japan, and van Dan Dang. "Loan portfolio diversification and bank returns: Do business models and market power matter?." *Cogent Econ Finance* 9 (2021): 1891709.
7. Mutesi, Sarah. "Contribution of Loan Portfolio Management on Financial Performance of Commercial Banks in Rwanda." *Int J Sci Res Public* 10 (2020): 356-365.
8. Novotny-Farkas, Zoltan. "The interaction of the IFRS 9 expected loss approach with supervisory rules and implications for financial stability." *Account Europe* 13 (2016): 197-227.
9. Nyandoro EB, and Kalui FM. "Determinants of loan portfolio quality in investments groups: A case study of Sidian Bank". *Inter Academic J Econ Int Finance* 3 (2019): 1- 15.
10. Porretta, Pasqualina, Aldo Letizia, and Fabrizio Santoboni. "Credit risk management in bank. Impacts of IFRS 9 and Basel 3." *Risk Governance Control: Financial Markets Institutions* 10 (2020): 29-44.
11. Wingard, Christa, Jan Bosman, and Bright Amisi. "The legitimacy of IFRS: An assessment of the influences on the due process of standard-setting." *Meditari Account Res* 24 (2016): 134-156.

How to cite this article: Noureldin, Ahmed Salah Ahmed Sayed. "The Impact of the Application of International Standard for Financial Reporting No "9" (IFRS 9) on the Performance of Big-5 Bank's Credit Portfolio in Egypt." *Arabian J Bus Manag Review* 15 (2025): 607.