

**IFRS 9 APPROACH WITHIN THE
„REGULATORY-ACCOUNTING” MIX**

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The actuality of the present article is argued that once with the global financial crisis a serious problem in the process of managing risks in the banking sector appeared. This paper focuses on the main innovative elements introduced by IFRS 9. The key element is represented through the model based on expected credit losses, which replaced the incurred loss model of IAS 39. The model was designed to counteract one of the shortcomings revealed by the financial crisis – risk of impairment losses on loans. The purpose of the article is to familiarize stakeholders with major milestones and concepts related to IFRS 9. In the article the following research methods were used: the logical method of analysis and systemic synthesis, comparative method, classification method, the method of deduction, etc. The paper pointed out the technical details under which banks should consider the significant increase of credit risk. The paper stressed the need for an innovative model which could forecast potential losses from credit risks.

Keywords: IFRS 9, impairment, credit risk expected loss, provision.

Actualitatea prezentului articol este argumentată de faptul că odată cu criza financiară mondială a apărut o problemă stringentă în gestiunea riscurilor în sectorul bancar. Această lucrare se concentrează pe principalele elemente inovatoare aduse de IFRS 9. Elementul cheie este reprezentat de modelul bazat pe pierderile așteptate a creditului, care a înlocuit modelul de pierderi suportate IAS 39. Modelul a fost conceput pentru a contracara unul din neajunsurile relevate de criză financiară – riscul pierderilor din deprecierea creditelor. Scopul articolului este familiarizarea celor interesați cu principalele repere și concepte ce țin de IFRS 9. În articol au fost utilizate următoarele metode de cercetare: metoda logică de analiză și sinteză sistemică, metoda comparativă, metoda clasificării, deducției etc. Lucrarea a subliniat detaliile tehnice în baza cărora băncile ar putea evalua creșterea semnificativă a riscului de credit. Articolul a arătat necesitatea utilizării unui model inovativ care ar putea prognoza eventualele pierderi cauzate de riscuri de credit.

Cuvinte-cheie: IFRS 9, depreciere, pierderea riscului de credit de așteptat, provizionare.

Актуальность данной статьи аргументировано тем, что всемирный финансовый кризис выявил проблему связанную с управлением риска в банковском секторе. В данной статье рассматриваются основные инновационные элементы, принесенные моделью МСФО 9. Ключевой элемент представлен этой моделью основанной на ожидаемых потерь кредита, которая заменила модель понесенных потерь IAS 39. Модель была задумана для того, чтобы противодействовать одному из недостатков, выявленных в результате финансового кризиса – риск убытков после обесценения кредитов. Целью данной статьи является ознакомление заинтересованных лиц с основными этапами и концепциями, связанных с МСФО 9. В статье автор использовал следующие методы исследования: логический метод анализа и синтеза, сравнительный, метод классификации, дедукции и т.д. В работе подчеркнуты технические детали, в соответствии с которыми банки могут учитывать значительное увеличение кредитного риска. В статье показана необходимость использования инновационной модели, которая могла бы прогнозировать возможные потери от кредитных рисков.

Ключевые слова: МСФО 9, ухудшение, кредитный риск, ожидаемый убыток, предоставление.

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Introduction. The new IFRS 9 framework brought material changes in the area of impairment. The key element is represented by the expected credit loss model that replaced the IAS 39 incurred loss model. The model was conceived in order to counteract one of the drawbacks revealed by the financial crisis; the incurred loss model determined a delayed recognition of credit risk losses since no loss was recognized until a loss event occurred. The new expected credit loss model applies in principle to debt instruments recorded at amortized cost or at fair value through other comprehensive income. This model envisages to ensure a timely recognition of expected losses and a better distinction of the financial instruments that have significantly deteriorated in credit quality.

The model was conceived in order to counteract one of the drawbacks revealed by the financial crisis; the incurred loss model determined a delayed recognition of credit risk losses since no loss was recognized until a loss event occurred.

The key point of the new model is represented by the dual loss measurement: banks are obliged to recognize:

- a 12 months Expected Credit Loss (Stage 1) that applies to all financial instruments from the initial recognition in the context where there is no significant deterioration in credit quality;
- a lifetime Expected Credit Loss (Stage 2 and 3) that applies in case a severe intensification of credit risk intervenes either on an individual or collective basis.

There is an important difference concerning the recognition of interest rate revenue corresponding to Stage 2 and Stage 3; in case of stage 2, there is a total separation between interest recognition and impairment while interest revenue is computed based on the gross carrying amount.

Stage 3 determines the calculation of interest revenue based on amortized cost¹.

The new framework eliminates the obligation for a credit event to have occurred before the credit losses are recognized. The new expected credit loss is based on three key concepts: probability weighted outcome, time-value of money and reasonable information that is available without triggering any effort or cost.

The new framework must be adopted from 1 January 2018 with early application permitted if the other IFRS 9 requirements are adopted at the same time.

1. Overview on IFRS 9

1.1 Scope of IFRS 9 framework

IFRS 9 applies to the following financial instruments:

- financial instruments representing debt instruments (loans, debt securities, bank deposits, trade receivables) that are valued at amortized cost;
- financial assets that are debt instruments valued at fair value through other comprehensive income;
- lease receivables²;
- contract assets³;
- loan commitments and financial guarantee contracts that are not measured at fair value through profit and loss.

Calculation of expected credit losses: presentation of key variables

According to IFRS 9, credit loss is the difference between all contractual due cash-flows and all the cash-flows that an entity expects to receive, discounted based on the Effective Interest Rate. The calculation of expected credit losses is underpinned by a series of key variables:

- all contractual terms of the financial instrument over the expected life of the financial instrument⁴;
- cash-flows determined by the sale of the collateral or by other credit enhancement that is foreseen in the contractual terms;
- probability weighted amount that is determined based on a range of possible outcomes;

¹ Gross carrying amount net of impairment allowance

² As per IAS 17

³ As per IFRS 15 (Revenue from contracts with customers)

⁴ In case the expected life of the financial instrument cannot be reliably estimated, the entity is required to use the remaining contractual term of the financial instrument.

- time value of money;
- reasonable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

The expected credit loss is computed as a weighted average of credit losses where default risks represent the relative weights. In essence, the expected credit loss set forth by IFRS 9 is similar to the concept of „expected loss” promoted by Basel framework. The major difference in comparison with the Basel prudential framework is represented by the fact that the IFRS 9 expected credit loss is a ”point in time” loss while the regulatory expected loss is a „through the cycle loss”.

Actually the 12 month expected credit loss is a part of the lifetime expected credit loss that will be generated if a default occurs within the 12 months after the reporting date (or a shorter period if the expected life of the financial instrument is shorter than 12 months), weighted by the default probability.

In order to compute a probability weighted expected credit loss, banks are required to estimate a range of possible scenarios, with the corresponding losses and the relative probabilities.

Banks are required to compute the expected credit losses based on discounted amounts. The discount rate must approximate the **Effective Interest Rate** of the asset. There is a series of principles that govern the Effective Interest Rate:

- in case of fixed rate financial assets, banks must use the Effective Interest Rate corresponding to the initial recognition of the instrument;
- in case of floating rate financial assets, banks must use the current interest rate;
- for a purchased or originated credit-impaired financial assets, banks must compute any changes in the expected credit losses using the credit adjusted Effective Interest Rate determined on the initial recognition of the financial asset;
- for loan commitments, banks must use the Effective Interest Rate of the asset that will result once the commitment is drawn down¹;
- for financial guarantee contracts, banks are required to use the risk free rate;
- in case of lease receivables, banks must discount the expected credit losses based on the same discount rate used in the measurement of the lease receivable.

In order to compute the expected credit loss, banks have the flexibility to use a model according to their discretion. The main challenge is represented by the balance between historical information and forecasts of economic environment. As an example, banks have the optionality to implement a quantitative model linking economic fundamentals (GDP growth, inflation rate, interest rate, unemployment rate, real estate prices) to loss rate. In addition, it is mandatory for banks to review on a permanent basis the evolution of macroeconomic fundamentals in close correlation with the level of expected credit losses. This implies inclusively the recalibration of the expected credit losses based on back-testing methodologies and the review of estimation methodology.

In order to streamline the practical dimension of the current research, we consider a numerical example highlighting the specific case of a bank; this bank is characterized by the following statistics regarding the potential defaults:

Table 1

Computation of provision for credit risk according to IFRS9

Reference date	Default risk over the next 12 months %	Default risk over the next 16/36 months %	Loss in case of default (in monetary units)
01- Jun-14	5%	7%	150
31- Dec-15	7%	9%	230
31- Dec-16	2%	3%	19

Source: Author's research.

On the first reference date, the bank should recognize a credit loss provision reflecting 12 months expected losses corresponding to Stage 1: $5\% \times 150 = 7.5$ monetary units.

On the second reference date, the bank assesses whether the credit risk has increased significantly in

¹ In case the Effective Interest Rate of the asset cannot be determined, banks must use the current risk free rate.

comparison with the first reference date. On the first reference date, the total credit risk as reflected in the total default risk amounted to 12% while on the second reference date it amounted to 16%. This upsurge proves that credit risk increase was significant. This triggers the recognition of a Stage 2 loss provision based on lifetime expected loss: $16\% \times 230 = 36.8$ monetary units

On the third reference date, the credit risk has decreased in intensity since the total default risk amounts to 5%. In this context, the credit risk provision should reflect again the expected loss corresponding to Stage 1: $5\% \times 19 = 0.95$ monetary units

This numerical example illustrates the dynamic computation of expected losses credit provisions, based on the evolution of default risk. The main challenge for the bank consists of applying a consistent set of criteria underpinning the assessment of the significant credit risk increase.

Assessment of significant increases in credit risk

An important aspect of the new impairment framework as per IFRS 9 is represented by the assessment of a potential increase of the credit risk since the initial recognition of the financial instrument. This is equivalent with a more severe credit risk profile, determining the obligation to estimate the expected credit loss over the lifetime of the financial instrument. The standard brings forward the necessity to estimate the lifetime expected credit loss before the item is impaired or defaulted.

The key variables underpinning the assessment of credit risk increase consist of:

- default risk specific to the financial instrument as at the reporting date;
- default risk specific to the financial instrument as at the initial recognition;
- expected life of the financial instrument;
- reasonable and supportable information that is available without undue cost or effort that might impact credit risk.

The standard does not bring forward a prescriptive approach/methodology concerning the assessment of credit risk increase. The assessment implies a holistic approach, focusing on various qualitative and quantitative factors. The standard brings forward an indicative list of factors/indicators based on which the assessment process can be conducted:

- significant changes in internal price indicators such as credit spreads;
- changes in the rates or terms of the financial instrument that would be significantly different if the instrument was newly originated or issued (i.e. more stringent covenants, more collateral, higher coverage ratio);
- important changes in the external market indicators of credit risk for a particular financial instrument or similar financial instruments with the same expected life (i.e. credit spread, credit default swap prices, changes in the price of a borrower's debt and equity instruments);
- actual or expected material change in the financial instrument external or internal credit rating;
- actual or potential adverse changes in business, financial or economic conditions that might trigger important changes in the borrower's capacity to satisfy the debt obligations (i.e. increase in the interest rate, increase of the unemployment rate);
- actual or potential adverse changes in the operating results of the borrower (i.e. decrease of operational revenues, upsurge in the financial leverage, liquidity shortfall);
- credit risk increase of other financial instruments of the borrower;
- actual or potential adverse changes in the regulatory, economic or technological environment of the borrower (i.e. this might trigger a decline in the customers' demand for company's products and implicitly a worsening of the company's operational performance);
- decline/important volatility in the collateral or guarantee value;
- significant changes in the expected performance and behavior of the borrower (i.e. increase of delayed contractual payments, significant increases in the number of credit card borrowers who are expected to exceed their credit limit).

The main challenge for banks would be represented by the assessment of the significance degree of the change in the various indicators that reflect the credit risk. The standard brings forward two criteria that underpin the assessment:

- original credit risk at initial recognition a certain percentage change in the default probability of a financial instrument with a lower credit risk will be more significant than for instruments with a higher credit risk;
- the expected life or term structure.

Default risk for a financial instrument with similar credit risk increases with the expected life of the financial instrument. An example in this regard is represented by a financial instrument with an initial maturity of 10 years that has the same credit risk after 5 years. In this case, banks should consider that credit risk has increased.

On the other hand, in case of a financial instrument that involves significant payment obligations close to its maturity, credit risk has not necessarily decreased.

IFRS 9 sets forth an important simplification according to which, if a financial instrument has a low credit risk, then the bank might consider at the reporting date that no significant increase of credit risk has occurred. This simplification was designed especially for financial instruments of high quality that do not require a periodic tracking of credit risk.

The standard provides three complementary indications based on which the low credit risk can be assessed:

- low default risk of the financial instrument;
- strong capacity of the borrower to meet the contractual cash-flows obligations in the short term;
- adverse change in economic and business conditions on a long term basis that will not significantly impact borrower's ability to satisfy its payment obligations.

A further indication concerning the assessment of a low credit risk is represented by the „investment grade” rating assigned to financial instruments. This implies a rating equivalent with/better than BBB- of Standard and Poor's/Baa3 of Moody's/BBB - of Fitch. Banks might map their internal rating to the external rating based on the application of similar credit assessment criteria.

The second operational simplification provided by the standard consists of the rebuttable presumption that credit risk has increased significantly when contractual payments are more than 30 days overdue. This is equivalent with a past due status that might be combined with forward looking information in order to identify a potential material increase in the credit risk. However, the bank has the optionality not to apply in a mechanical manner the 30 days overdue rebuttable presumption but mere to judge on the grounds of detailed information if the default status is relevant.

It might be the case that the 30 days overdue status does not reflect an effective but merely a technical default.

Bushman and Williams (2015) revealed that the main challenge would consist of the development of an extensive expert judgement. This expert judgement might be based on a discretionary set of criteria reconciling the need for expert flexibility in conjunction with the need to apply a conservative assessment approach. In addition, Bouvatier and Lepetit (2015) highlighted that the estimation of credit risk losses should still be governed by conservative assumptions.

The impact of IFRS 9 on banking system

The implementation of IFRS 9 will exercise an important impact on banking system that will have to readapt several components of their systems and controls in order to ensure compliance with the new accounting framework.

The most significant impact will be exerted at the level of the governance framework. Banks will be in the position to readjust their internal controls – audit, oversight, compliance – in order to properly exert supervisory activities at the level of the IFRS implementation. The organizational framework will be significantly impacted especially in the light of the internal systems that need to be restructured in order to enable the appropriate flow of relevant information, capturing key data specific to expected credit losses, at all the organizational levels.

The internal controls will be essential in the exercise of an appropriate oversight activity taking into account the important role played by the qualitative expert judgment in the computation and internal management of expected credit losses. Internal controls will ensure an adequate re-balancing, taking into account the strong subjective component of the expert judgment and the potential human error risk.

From a governance perspective, an important impact will derive also from the obligation to ensure an appropriate management information system that will allow the adequate reporting of expected credit losses parameters to senior and middle management.

However, the challenge will consist in the development of internal models specifically designed for the computation of expected credit loss. This will imply an important investment cost for banks as well as an intensive internalization process of new parameters that influence internal governance and risk management.

Due to the new components implied by the IFRS 9 framework, a very important aspect will consist in the validation of new internal models; in this regard, the set-up of an especially designated validation unit

is considered to be essential.

In this context, risk awareness strategy of the banks will automatically be impacted, generating new risk responsibilities within the organization. In addition, risk knowledge will have to be enlarged at all hierarchical levels. Management will extend its risk accountability implying additional risk expertise/knowledge.

Apart from the impact at the governance and risk strategy level, banks might have the opportunity to still leverage on some components of their activity that interfere to a significant extent with IFRS 9 framework.

Banks will valorize credit risk parameters – ratings, default history, past due status – for the purpose of the new standard as well. Ratings will be used in order to assess a potential increase of credit risk while default/overdue status serves as a back-stop measure for the significant intensification of credit risk, specific to Stage 2 and Stage 3.

Another important aspect is represented by the potential valorization of internal regulatory models for the purpose of the new standard as well; internal models used in order to compute regulatory internal risk parameters (Probability of default, Loss given default, Credit conversion factor) in case of institutions that valorize Foundation/Advanced Internal Ratings Based Approach might be reviewed for the purpose of IFRS 9. This will generate an important synergy effect since banks have the opportunity to align accounting and prudential regulatory frameworks.

However, important adjustments are needed since regulatory models have to be further reviewed in order to satisfy IFRS 9 requirements.

Basel Committee principles on expected credit losses: a mixture between prudential and accounting framework

Basel Committee issued recently a set of guiding principles concerning the expected credit losses. The principles reflect a potential bridge between regulatory and accounting expectations in the area of expected credit loss computation. A key variable is represented by the forward looking approach, including macroeconomic factors.

Basel Committee expects banks to develop macroeconomic forecasts in order to recognize in a timely manner expected credit losses. Development of macroeconomic scenarios will be performed in line with proportionality principle; banks that are significant in terms of size and complexity will be in the position to refine their macroeconomic scenarios in order to derive the impact of the most appropriate macroeconomic factors on expected credit losses.

The same expectation is incurred for banks of lower size but the complexity degree of methodological approaches is not similar to the most significant banks.

The key aspect is represented by the identification of potential and real macroeconomic events that might impact the expected credit losses. Banks should pay attention to the build-up of an appropriate set of economic hypothesis underpinning the most relevant macroeconomic factors exerting an important impact on the level and the manner of computing expected credit loss.

The documentation process is fundamental; banks should formalize the reasons justifying the set of appropriate macroeconomic scenarios selected for the purpose of expected credit losses computation.

Basel Committee brings forth 11 principles related to the infrastructure of expected credit loss computation, inclusive from the perspective of corporate governance and internal control mechanisms. More specifically, principles are structured on four main axes:

- board and management accountability in ensuring an adequate credit risk policy and provisioning;
- technical infrastructure of expected credit losses (i.e. computational methodology, rating assignment process, adequacy of allowances, robust processes and systems);
- oversight of modelling process (i.e. validation of expected credit losses models, role played by experienced credit risk expert judgment, appropriate disclosure framework concerning the relevant information relative to credit risk expected loss);
- expectations imposed on bank' supervisors responsibilities as for the assessment of banks' credit risk practices and adequacy of credit risk provisions.

Concerning the accountability of board and senior management, Basel Committee brings forward their responsibility to ensure an adequate credit risk policy and provisioning; the key focus is placed on ensuring a level of provisioning in line with three pillars: bank's policies and procedures, applicable accounting framework and relevant supervisory guidance. Basically, board and senior management

responsibility is concentrated mainly on internal control system.

Meanwhile, principles cover extensively the methodology used by banks in order to compute appropriate allowances for credit losses. The principle related to the methodological infrastructure places a special emphasis on robustness; the key aspect is represented by the assessment and quantification of credit risk in a comprehensive manner, covering all lending exposures.

Another important aspect is represented by the development of appropriate methodologies, in measure to ensure not only an adequate computation of expected credit losses but also a timely recognition.

The principle related to the assignment of an adequate rating envisages a grouping of exposures based on similar credit risk characteristics; this ensures the appropriate grounds for the computation of an adequate collective provisioning. This aspect has been highlighted extensively in the literature (Novotny-Farkas, 2011, Laurin, Majnoni, 2005). The authors brought forward that clustering of exposures based on homogenous features conditions upon the correctness of provisions.

Given the real challenge incurred by banks to develop or to readjust internal models in order to compute expected credit losses, an essential aspect will be represented by the validation activity. Basel Committee imposes to the bank the obligation to dispose from policies and procedures especially designed for the validation of internal models. In addition, the experienced expert credit judgement is specifically mentioned as a mandatory element in the context of mechanisms ensuring a proper reflection of all relevant risk components. In other terms, application of experienced credit risk judgement ensures that expected credit losses integrate relevant macroeconomic factors, following the development of macroeconomic scenarios.

The methodology shall be supported by an appropriate technical infrastructure; Basel Committee recommends banks to implement systems and processes that have the potential to streamline the effective computation of expected credit losses.

In addition, an adequate disclosure policy should be implemented by banks, enabling third parties to assess to what extent banks satisfy IFRS 9 requirements.

Apart from accountability requirements addressed to board and senior management, Basel Committee principles on expected credit losses demand bank supervisors to assess the adequacy of credit risk policies and credit risk allowances. In line with this, a special emphasis is placed on the supervisors' assessment of credit risk practices in correlation with capital adequacy. In this context, banks that practice riskier lending strategies are incentivized to capitalize adequately for the higher credit risk incurred. This need for enhanced capitalization is extremely important in the context where capital charges are designed to cover unexpected losses whereas credit risk allowances cover only expected losses. This aspect is extremely important in the light of IFRS 9 implementation: even if the switch from an incurred to an expected credit loss approach brings forward a more conservative approach in terms of provisioning, supervisors should pay attention to the manner in which capital charges are commensurate with the risks generated by lending practices (i.e. unexpected losses).

In this manner supervisors will benefit from a forecasting perspective as well; the expected losses will enable supervisors to assess future trends of credit risk. In line with these aspects, supervisors will be in the position to create a link between Point in Time and Through the Cycle losses.

Conclusions

This paper elaborated on the new material changes brought by IFRS 9 framework in the area of impairment. The research pointed out the key element of the new standard – expected credit loss model that replaced the IAS 39 incurred loss model. The model was conceived in order to counteract one of the drawbacks revealed by the financial crisis; the incurred loss model determined a delayed recognition of credit risk losses since no loss was recognized until a loss event occurred.

The paper presented IFRS 9 scope of application as well as the key variables based on which calculation of expected losses is made (probability of default, loss given default, time value of money). The research concluded on the dual measurement approach introduced by IFRS 9; the conceptual differences between Stage 1 and Stage 2/Stage 3 expected credit loss models, with a special emphasis on the different calculation of interest rate revenue are brought forward.

The paper highlighted the technical details based on which banks might assess the significant credit risk increase. This is equivalent with a more severe credit risk profile, determining the obligation to estimate the expected credit loss over the lifetime of the financial instrument. The paper underlined the necessity to estimate the lifetime expected credit loss before the item is impaired or defaulted.

The paper revealed a series of challenges that banks might face in the implementation of IFRS 9.

Banks will be in the position to readjust their internal controls – audit, oversight, compliance – in order to properly exert supervisory activities at the level of the IFRS implementation.

However, the real challenge will consist in the development of internal models specifically designed for the computation of expected credit loss. This will imply an important investment cost for banks as well as an intensive internalization process of new parameters that influence internal governance and risk management.

The paper highlighted that banks might still leverage on the existing internal models used for regulatory purposes in the context of IFRS 9 implementation; the challenge will consist in the revision of the existing models in line with the methodology imposed by expected credit losses.

The paper brought forward also the mixture between regulatory and accounting framework in the context of IFRS implementation. For this purpose, a special emphasis is placed on the Basel Committee principles on expected credit losses. The research highlighted that the principles in question are structured on fourth main axis: board and management accountability, technical infrastructure of expected credit losses, oversight of modelling process and expectations imposed on bank' supervisors responsibilities as for the assessment of banks' credit risk practices and adequacy of credit risk provisions.

The paper concluded that the new standard will ensure the premises for a more risk driven approach of impairment process. This might streamline banks' risk assessment and risk management process. However, the real challenge for banks will be represented by the development of robust expected credit loss models that have the potential to ensure a proper capturing of relevant risk factors. Indeed, this will imply additional investment costs but on a long term basis banks might achieve an enhancement of their provisioning policy.

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