

On the effect of IFRS 9 on credit risk management: a general assessment in the banking industry

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Abstract. The aim of this paper is to analyze the effects that the adoption of the new accounting principle IFRS 9, which in January 2018 will replace IAS 39, will produce on the financial reporting of banks and on the credit risk management activity. The study starts from the observation that regulation of the banking sector is characterized by a misalignment of aims between standard setters and bank regulation. While for the standard setters the disclosure aims to provide its stakeholders with clear, truthful and correct information regarding the economic and financial situation of the company, the objective of the bank regulations is to protect the financial system by trying to reduce the frequency and the costs of banking crises [1]. Such differences, coupled with the recent financial crisis, have generated a debate involving various institutions (EFRA). Basel Committee on Banking Supervision (BCBS) in response to which International Accounting Standards Board (IASB) has introduced the new standard IFRS 9 on impairment [2].

Keywords: Financial reporting, Accounting, Credit Risk Management

1 Introduction.

One of the main events involving banks in the last few decades was probably the adoption from 2005 of international accounting principles. The European Union, despite the considerable perplexity manifested by politicians and banks, endorsed, from January 2005, the IFRS standards for publicly listed financial institutions.

The main criticisms of the adoption of such principles were due to the transition from an accounting regime based on the prudence principle to a system centred on transparency and based on the logic of fair value. The main critique concentrated on the fact that fair value accounting would imply irrational bubbles in expanding periods amplifying downswing movements in contracting periods of the cycle [3, 4], because to disclose fair value results based on distorted market prices can lead to market overreaction and amplify contagion [1].

The financial crisis accentuated the negative effects of the adoption of such an accounting regime on banks to the extent that the IASB changed the accounting rules at the height of the crisis [5]. In October 2008 the IASB declared: “the IASB is committed to taking urgent action to ensure that transparency and confidence are restored to financial markets” emending IAS 39. As a consequence banks were allowed to reclassify assets from the fair value to the historical cost category.

A further weakness observed during the financial crisis of the late 2000s related to the use of the incurred loss method of loan loss provisioning. The main criticism of such a method refers to the moment in which the loan loss expenses are recognized in the balance sheet.

Consequently, the International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB) replaced the incurred loss methods of loan loss provisioning by a more forward-looking expected loss method introducing in July 2014 the IFRS 9 “Financial Instruments”. The current incurred loss models proposed in IFRS9 require banks to assess whether there is any objective evidence that a financial asset (or group) is impaired. If there is an objective evidence that an impairment loss on a loan has been incurred, the amount of the loss needs to be calculated.

The adoption of the new accounting principle will imply important change at level of information system. The main change is due to the complex implications across multiple dimensions of the Operating Model. It will determine an increase in the flows of information required for items evaluation. The passage from an incurred loss model to an expected loss one requires to consider both information regarding past events and forward-looking information. Such a change implies an improvement in the quantity and quality of information processed. Critical became the activity of standardization of all the internal information and the acquisition of external data so to implement sophisticated statistical model to assess the right level of risk to associate to each position [6, 7]. The whole process has to be automatized so to reduce subjectivity and the leading time.

2 Research questions, Sources and Structure

The present work can be considered a position paper of a wider research project aimed to assess the impact of the introduction of new accounting rules in the measurement, valuation and disclosure of information concerning non performing loans in banking industry. The research, in particular, focuses on the main effects that the adoption of the new principle IFRS 9, which in January 2018 will replace IAS 39, will produce on the financial reporting of banks and on the credit risk management activity.

The main objective of this work is to analyse the contribution of IFRS 9 to improving the quality of the loan portfolio (i.e. to preventing NPLs) of banks. The recording of losses in a forward-looking perspective, on which the new principle is based, is in fact a guarantee of a more balanced and prudent treatment of banks' credit

exposure, with the prudential provision obligation also for performing loan, although limited to default risk cover for only one year following provision of a loan.

The paper can be positioned within the body of financial accounting and accounting information systems studies [8]. According to Mancini [9] each change concerning the methods of evaluation of accounting items determine significant impact on the flows of information required and consequently on the structure of information systems. Corsi and Mancini [10] underline the role of IAS/IFRS because they act more directly on the balance sheet and on Accounting Information system with consequent impacts on the data processing, on the accounting procedures, on the skills and on technical tools.

Thanks to information technology it's possible to process big flows of data (internal and external) applying sophisticated statistical model so to achieve, in real time, complex elaboration based on multidimensional models.

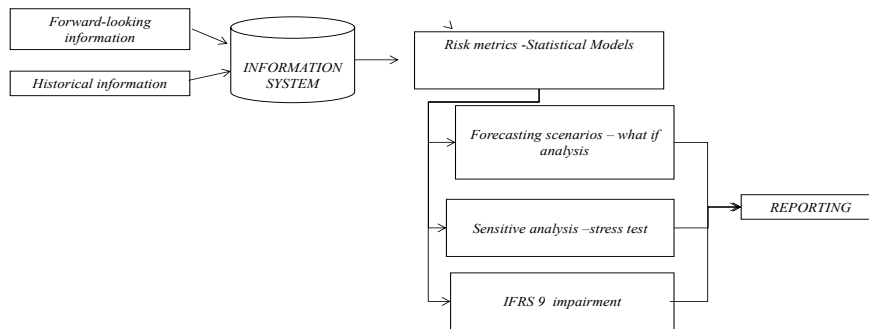


Fig. 1. The theoretical framework (Source: our data processing)

The choice of concentrating the analysis on the banking sector derives from the special nature of its activities. In such an industry lending, unlike what occurs in non-financial sectors, being considered a financial activity, falls within the sphere of application of IFRS 9. The issue is moreover particularly interesting in the light of the radical change in the logic underlying assessment (incurred versus expected loss).

The primary aim has been subdivided into three sub-aims each of which investigates the effects of the adoption of the new standard will have on one particular aspect of management.

The research questions that the study will try to answer are the following:

1. What will be the effects of the adoption of the new impairment model in the area of first time adoption?
2. What will be the effects of the adoption of the new impairment model in the area of measurement?
3. What will be the effects of the adoption of the new impairment model in the area of assessment?

The sources used are of a both primary and secondary type.

The primary sources used are the IFRS9 principle and the documents released by the Basel Committee. The secondary sources are the main national and international literature.

The remainder of the paper proceeds as follows. Section 3 provides an analytical literature review; Section 4. Identifies the nature of the context for the application of the IFRS 9 principle in banks; Section 5 identifies the main changes that will be determined by the adoption of the IFRS 9 principle in credit assessment; Section 6 analyses the effects that will be determined by the adoption of the accounting principle on recording, measurement and assessment activities. Our conclusions are presented in the last section.

3 Literature review

There is a renewed interest in the analysis of credit risk in the banking industry [11, 12, 13, 14] with a debate on the perceived weaknesses in accounting standards and practices that contributed to loss of confidence in the system during the recent financial crisis [1, 15, 16]. The interest goes beyond the mere academic literature involving accounting bodies and banking regulatory authorities. A critical subject under discussion is the delay under the incurred-loss approach in recognition of impairment arising from credit losses and, consequently, the various and possible changes in how expected credit losses might be reflected at the initiation of a loan [17].

The accounting representation of the assessments of loan loss provisions depends on several factors; 1) on the physiological risk of the various types of borrower; 2) on the “nature” of the accounting model adopted for identifying loss, point in time or forward looking deriving from credit position impairment.

The forward-looking models confer greater discretionary power on the evaluator, but require for the process of forecast determination more detailed information in particular with reference to the definition risk of the individual debt position and the entire loan portfolio [18]; with reference to the latter aspect, the quantification of provisions indicates, indirectly, the ability of management to price adequately the credit granted in relation to the degree of risk associated with it, on the assumption that the provisions must find the necessary cover in the spread on the rate applied on each type of borrower. The considerable attention paid to the forecast of provisions in the area of the accounting measurement of performance and of the assets of the bank depends on the use of elements of a judgemental nature, of evaluations and forecasts which management is required to carry out and which leave a wide margin of discretion that can distort the accounting representation of the enterprise, by virtue of earning management manoeuvres. Empirical evidence of how provisions on loans have been used for purposes of earnings management are provided by the studies of Greeawalt and Sinkey (1988), Wahlen (1994), Leaven and Majnoni (2003), Liu and Ryan (2006) [19, 20, 21, 22]. To limit such a phenomenon the IAS 39 accounting principle has taken on, at a fundamental level of the value loss forecast process, a logic of the “incurred” type, offering the possibility of identifying impairment

situations only when specific loss events occur. At the same time, however, several studies [23, 24] have shown how the “incurred” model leads to a structural delay in the identification of losses and therefore less prudence in the estimate of profits, given the existing asymmetry in the identification of credit economics. To this it should be added that such a model has proved to be characterised by a strong procyclical stimulus, given that considerable adjustments are required precisely in the phases of negative economic trend [25]. In this sense the new standard setter goes in the same direction as the Basel III rules, being suited to reducing the possible procyclicality of the system of impairment identification [26]. Many studies and much empirical research have drawn attention to the procyclical effects of the loan loss provision models [21, 27, 28]. In the Report of the Financial Stability Forum (FSF) “Addressing Procyclicality in the Financial System” [29], loan loss provisions are identified in the context of three elements that have contributed to intensifying the mechanism of propagation of the financial conditions in the real economy?

Because of the connections existing between provisions and regulatory capital, another perspective for which the loan loss provisions are relevant, is that of the stability of the bank, from a micro and macro-economic viewpoint. At microeconomic level, prudential regulation pursues the objective of ensuring that the bank operates with its own means capable of guaranteeing healthy and prudent management: adjustments on loans, by influencing the determination of regulatory capital, can determine a decrease of the liable equity capital through both the reduction of profits recorded in profit and loss account and the deduction of the shortfall of the adjustments with respect to the expected loss. From the macroeconomic point of view, the value adjustments play an important role in safeguarding financial stability, due to the close connections that exist between the banking and financial systems. The choices regarding provisions are affected by the trend of the economic cycle, determining a procyclical effect according to the accounting model used for the forecast “point in time” models that are also anchored to logic of an “incurred” type can require considerable adjustments at the worst moment of the economic cycle; in this way reducing asset levels and incentivizing a reduction in loans in order to guarantee capital adequacy [30]. Such a deleveraging mechanism, replicated at system level, can determine situations of credit crunch, thus exacerbating the adverse economic downturn. On the other hand, “forward-looking” accounting models, favouring the possibility of considering forecasting elements, allowing the creation of adjustment buffers in the phases of economic growth, to be used during economic downturn. The many exhortations by international bodies, including FASB, G20, Financial Stability Forum (FSF), Financial Stability Board (FSB), Basel Committee on Banking Supervision (BCBS), have led IASB to develop the international accounting principle IFRS 9 containing a new impairment model founded precisely on a “forward-looking” logic, for the determination of loss on loans, able to identify promptly losses in value of the credit portfolio without having to wait for loss events to manifest [31]. The new impairment model, which will be introduced from 2018, reflects requirements of both financial reporting disclosure [32] and of convergence with the prudential regulation to which banks are subject [33]. Indeed, the transition to an impairment model founded on the logic of “expected loss” was the aim openly

declared by the Basel Committee and contained in the recommendations that the same had communicated to the accounting standard setters during the phase of drafting and definition of the accounting principle IFRS 9 [33].

The realignment of accounting logic with regulatory logic appeals the activity of risk management, that has always been oriented towards the determination of risk parameters for the precise definition of asset requirements, the logic of which can be used also for accounting purposes for the implementation of the new impairment model.

4 The adoption of the IFRS 9 principle in banking industry

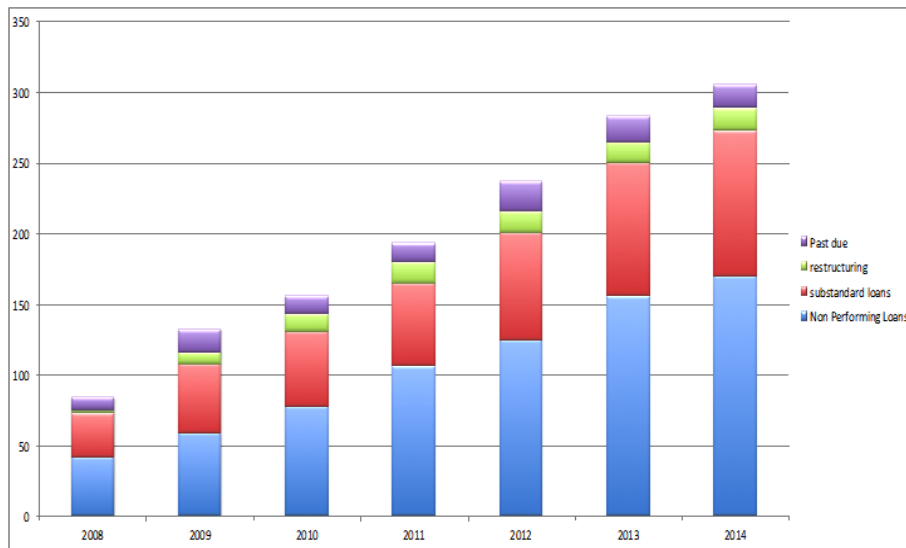
The change from an “incurred loss” impairment model to a model of an “expected loss” type provided for by the IFRS 9 represents an important point of convergence between accounting discipline in banks and the prudential discipline of the national and supranational supervisory authorities. What is clear is the trend towards a logic of application of the general criterion of prudence [34]. The Basel rules and those of international accounting principles, as is well known, pursue different aims, which can recognize respectively in the safeguarding of the stability of banks and of the financial system as a whole and in the definition of the criteria of correct and truthful representation of business efficiency. For this reason the objectives are different: the aim of the regulations produced by the Basel Commission is the definition of the minimum measure of asset resources that guarantee compliance with the principle of healthy and prudent management of supervised organizations; the aim of the IFRS 9 accounting principle, among other things, is the classification and evaluation oriented towards a correct and faithful representation of the financial position of the bank in relation to the losses that have occurred or are expected [35].

The prudential distinction between expected and unexpected loss and the assumption that the expected loss must be covered by balance sheet adjustments is difficult to reconcile with the current impairment model provided for by IAS 39 which, as is well known, is based on an incurred loss approach. The incurred loss approach prohibits accounting for expected losses and leaves considerable discretionary power of manoeuvre in the use of trigger events that identify a situation of impairment. This translates into the possibility of implementing opportunistic manoeuvres aimed at postponing the identification of credit value losses. The IAS 39 therefore has the effect of deferring accounting for expected balance sheet losses [36]. The new IFRS 9 will make possible, on the other hand, an identification of impairment that is more rapid and based on forward –looking evaluations. In this way banks will be able to allocate allowances in the face of expected losses and create capital buffers to be used at times of downturn in the economic cycle. In this sense the new standard achieves the same goals as the Basel III reforms: to reduce possible procyclicality of the impairment identification system [37].

The idea that future profit margins were always sufficient to cover the intrinsic risk of performing credit exposure, unless a trigger event occurs, has determined a “cliff-effect” in bank balance sheets, that has led to strongly procyclical movements, not

adequately anticipated in terms of provisioning for covering financial risks. Consequently the considerable increase of non-performing loans (NpLs) occurring in the last decade, accompanied by an upward movement in problematic loans, as shown in table 1 [38].

Table 1. Trend of non performing loans in Italian banks 2008-2014 (Source: Abi Financial Outlook, 2015)



The loan loss provisions models, in the presence of economic downturn factors, can have a negative impact on asset levels, bringing about, among other things, the reduction in loans, a necessary condition for maintaining adequate asset coefficients.

Regarding credit, the IFRS 9 brought about a quantum quality leap with respect to the past. Adapting the credit portfolio to the new schema of devaluations at three levels (cfr. Section 5) requires both the development of new measures of risk and their calibration/validation on the basis of increasingly extensive and robust data.

In this way the risk parameters already present in a bank for purposes of risk management (RM) will be enhanced and the dialogue between the areas of financial reporting and of risk management will resume. Such areas, despite both being engaged in the definition of risk parameters for predicting unexpected losses, pursue different objectives. Accounting is oriented towards the need to defer the identification and recording of incurred loss in the balance sheet. Risk management, on the other hand, is concerned with the definition of risk parameters able to identify promptly the downgrading elements of the debtor for the constitution of adequate provisions in the face of the occurrence of unexpected losses. The Credit area develops scoring matrix or acquires solutions from external providers aiming for

decisions reached by resolution that cannot be reconciled with expected loss measurement needs. The same indicators used are different: cost of risk, time to approval, time to cash and operational costs for the Credit Area; algorithms and deviations between forecasts and financial statement for Risk Management. The introduction of the IFRS 9 that envisages the forward-looking determination of losses actually defines a reconciliation between accounting efficiency and RM efficiency and a necessary coordination between the areas.

From the point of view of the organisation and management of the processes it will be necessary to establish a relationship of collaboration in order to identify in advance the anomalous behaviours of the debtor such that they impact on the economic risk of the loan but also on the provisioning modes to be used in the financial statement. Risk management will be engaged in the development of "lifetime" parameters for the probability of Default (PD), for the Loss given default (LGD) and for Exposure at Default (EAD), for the identification of which a link-up between the capital measurement tools already present in banks and other tools for evaluating the impact of the economic cycle on credit risk. Equally the accounting function will have to take responsibility for the definition of first adoption criteria simulating and managing the relative economic and asset repercussions.

5 On the effect of IFRS 9 on credit risk management

The new standard IFRS 9 was introduced to reduce income smoothing by adopting a more prudential approach [39]. The new standard answers to the IASB's objective to reflect the economic substance of lending and loan losses through an approach that proposes recognition over time [17]. Expected-loss-based accounting for the impairment of financial instruments: the FASB and IASB IFRS 9 Approaches.). It replaces the incurred impairment model applied in IAS 39 with a new one based on the expected loss method.

Such a perspective implies for the International Accounting Standard Board (IASB) a change in the logic inspiring evaluations. The principle of prudence that constitutes a cornerstone in the traditional Italian financial statement approach and has been pushed into second place with the introduction of international accounting principles, today takes on new life and importance.

In the international framework the principle of prudence characterizes the reliability of accounting information, without a result having an autonomous value as happens in our system. The principle of prudence has been severely criticised by the Anglo-Saxon doctrine [40, 41] considering it in some cases to be restrictive of other fundamental principles such as accrual.

The IASB accounting system in fact admits the recording of profits and costs at moments preceding the traditional one of final realization for entering them in the balance sheet. As a consequence the fair value evaluation method has become, above all internationally, the reference evaluative criterion in place of the more traditional historic cost.

The logic on which the expected loss model envisaged by IFRS9 is based is, on the other hand, forward looking the adoption which requires banks to use a wide range of internal and external data and information, including macroeconomic factors, in the process of credit evaluation [42]. Unlike IAS 39, with IFRS 9 we have an impairment model common to all assets. This involves the elimination of the complexity derived from the use of multiple impairment approaches. The intention of IFRS 9 is to offer stakeholders relevant information regarding the sum total, time and degree of probability of future cash flows. The model, unlike that required by IAS 39 needs recognition of the expected credit losses at all times without deferment until there is evidence of a credit event.

IFRS 9 envisages an impairment model based on accounting for expected loss in the sense of difference between contractual and discounted expected cash flows, for performing and under-performing loans at the original effective interest rate, for default loans at an effective interest rate adjusted for risk. IFRS 9 envisages a three stages approach (three buckets) considering changes in credit quality from initial recognition. While in IAS 39 loans were divided into two categories (in bonis and in default) with the possibility of segmenting the portfolio for purposes of collective devaluations, with the new model an intermediate category was introduced (stage 2). The transition from one stage to another is made possible in both directions (downgrading and up-grading). In the impairment model envisaged by IFRS 9 the three categories (stages) correspond to distinct methods for the calculation of losses and interest.

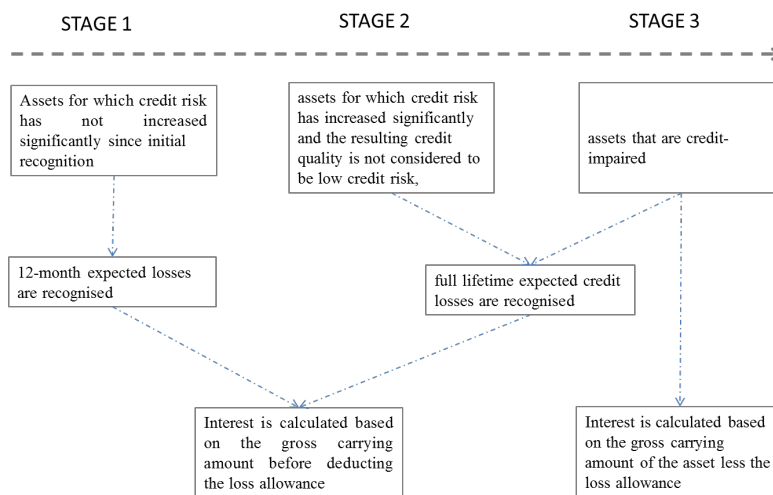


Fig. 2. The three-bucket model (source: our data processing)

The first stage category refers to the class of performing loans constituted by credit in the initial state and by those values not subject to an increase in credit risk with respect to the initial evaluation. Indeed IFRS 9 states that if “at the reporting date, the

credit risk on a financial instrument has not increased significantly since initial recognition, an entity shall measure the loss allowance for that financial instrument at an amount equal to 12-month expected credit losses” Banks have always to measure the Expected Credit Loss (ECL), based on robust methodology and management’s experience in credit judgment, for all their lending exposures so as to identify, promptly, changes in the credit risk [43]. The Expected Credit Loss estimate, as defined by IFRS 9, is the probability-weighted amount that should reflect the possibility that a credit loss will occur. The accounting principle defines the Expected credit losses as values which “shall reflect the time value of money. In particular, they shall be discounted to the reporting date using the effective interest rate (EIR), except for purchased or originated credit-impaired financial assets, in which case the credit-adjusted EIR is applied (IFRS 9 par. 5.5.17, B5.5.44–B5.5.48).

It’s also specified that the maximum period to consider when measuring expected credit losses is the “maximum contractual period (including extension options) over which the entity is exposed to credit risk and not a longer period, even if that longer period is consistent with business practice (IFRS 9 par. 5.5.19, B5.5.38 – B5.5.40)

For the assets belonging to the first bucket the value adjustments are, consequently, based on the calculation of the expected credit loss due to default events that are possible within 12 months after the reporting date (ECL – 12 month). For performing loans, unlike what is laid down in IAS 39, a prudential fund limited to the risk of expected loss in the following twelve months. The interest revenues are calculated on the basis of on gross carrying amount.

A critical point is understanding of the meaning to be attributed to the concept of “12-month expected credit loss”. IFRS 9 defines it as the “portion of lifetime expected credit losses that represent the expected credit losses that result from default events on a financial instrument that are possible within the 12 months after the reporting date”. Other more prudential positions [43] consider it more appropriate, on the other hand, to extend the concept to “the expected cash shortfalls over the life of the lending exposure or group of lending exposures, due to loss events that could occur in the next 12 months” [43]. The same concept of expected credit loss can generate misunderstandings. It is defined by IFRS 9 as the total loss weighted by the probability that it will occur in the next 12 months, while others link the concept to the expected cash shortfalls [43]. The notion of 12-month expected credit losses cannot in any case be associated with positions that are expected actually to default in the next 12 months. For assets that are expected to have increased their credit risk lifetime credit losses (LCL) are recognized and they are downgraded. If the increase in risk is circumscribed to a particular category of loans and attributable to factors of a political-economic nature, these should be dealt with in stage 2.

The second stage (stage 2) includes assets exposed to a significant increase in credit risk since initial recognition (under-performing), even if no objective evidence of impairment is provided. To evaluate the significant increases in credit risk internal rating models or external sources are used or the rebuttable presumption is adopted that the credit risk has increased significantly (since initial recognition) when contractual payments are more than 30 days past due. For this kind assets a reserve fund is envisaged the sum of which corresponds to the expected losses lifetime

resulting from possible default events over the expected life. Although ECL is recognized, interest revenue is still calculated on the gross carrying amount of the asset. When credit is first extended the initial creditworthiness of the borrower and initial expectations of credit losses are taken into account in determining acceptable pricing and other terms and conditions. The lifetime expected credit losses are recognized only after a significant increase in credit risk (complying with initial recognition) because in the initial stage the variable risk is included in the policy of pricing. To recognize lifetime expected credit losses only after a significant increase in credit risk better reflects the impact of an economic loss in the financial statement. If the level of risk of loans increases further and there is concern over the risk of default, these should be downgraded to stage 3.

The third bucket (stage 3) deals with financial activities that present objective evidence of impairment (default). For such assets the adjustments in value are determined by using the concept of lifetime- expected credit loss and the net accounting of the interest.

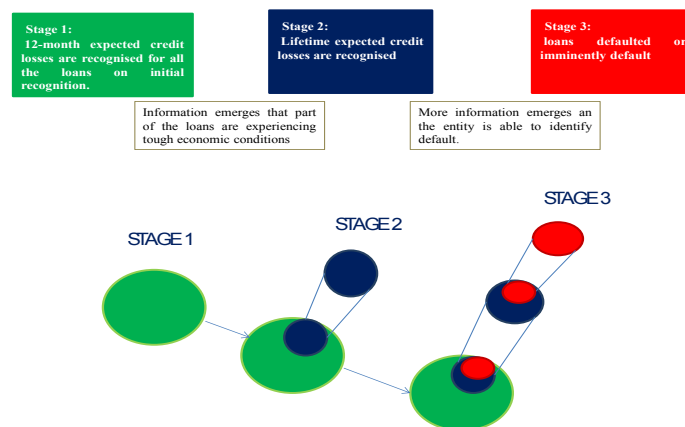


Fig. 3. The Expected Losses Model (source: Our data processing)

With respect to the default positions the IFRS 9 principle does not provide a definition entrusting each entity with the definition of default coherently with that used for internal credit risk management, specifying in paragraph B5.5.37 the rebuttable presumption that the default does not occur later than 90 days past due. The Basel Committee assumes a sceptical position towards what is established in the accounting principle regarding the rebuttable presumption, assuming a more prudential position. The Committee recommends that the definition of default adopted for accounting purposes are guided by the definition used for regulatory purposes provided in paragraph 452 of the Basel capital framework [43]. According to the Basel framework a default event is linked to the occurrence of one or both the following criteria:

1) A criterion of a qualitative kind linked to the unlikelihood to pay: “The bank considers that the obligor is unlikely to pay its credit obligations to the banking group in full, without recourse by the bank to actions such as realising security”.

2) An objective criterion corresponding to the rebuttable presumption of the IFRS 9 principle “the obligor is past due more than 90 days on any material credit obligation to the banking group”.

According to the approach of the Basel Committee the criterion of “unlikelihood to pay” would make it possible to identify default before the exposure becomes delinquent with the 90-days-past-due criterion acting as a backstop [43].

With respect to the problem of the measurement of ECL the IFRS 9 principle emphasises that an entity should reflect:

(1) the probability-weighted outcome. The expected credit losses should be relate to the probability that a credit loss occurs and to the possibility that no credit loss occurs.

(2) the time value of money principle. The expected credit losses should be discounted to the reporting date.

(3) a reasonable and supportable information available without excessive cost or effort including information about past events, current conditions and forecasts of future conditions. Even if the model proposed by IASB is based on a forward-looking approach, the adoption of an historical perspective is considered basic to measure expected credit losses. Historical data should be read on the basis of current information to reflect the effects of present events to forecast future conditions. Also if not specified by IFRS 9 an entity may use various sources of data: internal or entity-specific and external.

6 Analysis of the main impacts resulting from the adoption of IFRS 9

The effects of the adoption of the new impairment model can be divided into three main categories:

- a) classification (first time adoption)
- b) measurement
- c) evaluation/financial reporting

The effects are, in general, transversal with respect to the various business functions, involving several areas such as risk management, accounting, processes and organization and information systems (cfr. Figure 4)

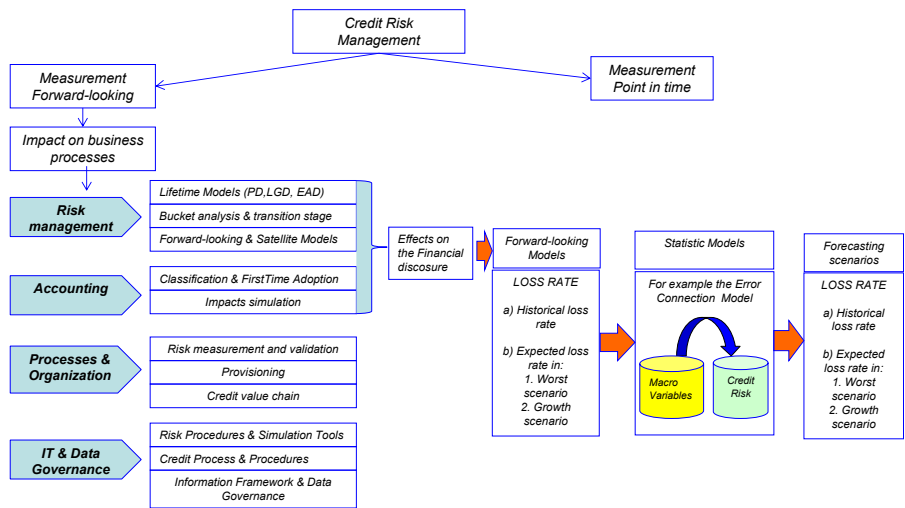


Fig. 4. The macro roadmap illustrative of the areas involved by implementation of IFRS 9 (source: our data processing)

One initial problem can arise at first time adoption. The entities will have to be able to determine the credit risk of all exposures at initial recognition in order to compare it with the present one. The entity might find itself dealing with incomplete information, especially regarding less recent assets making the activity of evaluation non-immediate. In such a case alternative indicators could be employed, including the ratios used as triggers in the context of asset quality review for purposes of supervision. Should the quantification of the initial risk value be impossible or excessively difficult, the entity will be able to avail itself of the principle of low risk exemption envisaged by IFRS 9 by demonstrating that the credit risk is modest. Otherwise the entity could hypothesize a significant risk by observing immediately a reserve fund equal to the expected lifetime loss. One or other of the options determine significant impacts on the profit and loss account.

With respect to the possibility of recourse to low risk exemption envisaged by IFRS9 the Basel Committee assumed a particularly sceptical position, hoping for a minimum recourse to it [43].

With respect to the activity of measurement the transition to a lifetime risk evaluation system represents a transition charged with implications. Scholars [44, 45, 46] have highlighted the need to develop models for calculating the ECL based on publicly available data linked to banks' credit risk.

The IFRS 9 principle envisages that an entity “when measuring expected credit losses, [...] need not necessarily identify every possible scenario. However, it shall consider the risk or probability that a credit loss occurs by reflecting the possibility that a credit loss occurs and the possibility that no credit loss occurs, even if the possibility of a credit loss occurring is very low” [IFRS9 par. 5.5.18].

The Basel Committee, in accordance with Basel Core Principle 17, expects banks to evaluate and, if necessary, modify, during the transition period, their existing

processes and systems to collect and analyze relevant information affecting the assessment and measurement of ECL.

The internal rating systems and the stress tests created for purposes for management, as initial implementation of the agreement on credit (Basel II) and of directive 2006/48/CE, and then developed with Basel III, can therefore represent the natural point of departure for the calculation of expected credit life. Such systems can today be of three types:

Standardized, that is, external rating systems certified by the supervisory authorities (Standard Methodology).

Basic internal systems constructed by individual banks where the Probability of default (PD), the Loss Given Default (LGD) and the Exposure at Default (EAD) are measured with parameters established by the authorities (IRB Foundation – FIRB).

Advanced internal systems where both the PD, and the LGD and the EAD are estimated internally – forecast (IRB Advanced – AIRB).

In terms of impacts on financial disclosure the application of the new accounting principle will involve particularly clear effects for assets included in stages 1 and 2.

With respect to stage one there will be a change from an approach of collective devaluation based on the creation of a doubtful debts provision for values that have already undergone a loss event even if not yet identified by the internal monitoring system, because of delays in the procedure, to an approach based on the preventive identification of risk. This will involve estimating loss risk in the following twelve months entering in the annual financial statement a doubtful debts provision with the relative provision entered in the statement of assets and liabilities. Such a devaluation, in accordance with IFRS 9 and Basel Committee [43], requires the preventive identification of transfer criteria constructed on the basis of the information set internal and external to the bank able to capture the downgrading of the debtor or to identify other indicators linked to the PD of the counterparty. The table below shows some examples of transfer criteria.

Table 2. Possible transfer criteria (source: our data processing)

	Macro classes	Criteria
Information set of data external to the bank	Market indicators	<ol style="list-style-type: none"> Variations in the rate of unemployment Variations in the rate of inflation
	Level of market rates	<ol style="list-style-type: none"> Variations in the market interest rates
Information set of data internal to the bank	Economic and financial indicators of the debtor	<ol style="list-style-type: none"> Reduction of sales revenue Contraction of profit Contraction of assets Increase in degree of leverage
	Other information on the debtor	<ol style="list-style-type: none"> Request for extraordinary financing Drastic reduction in the value of collaterals Drastic reduction in the value of annual turnover Drastic reduction in the estimates of future cash flows
	Rating of the debtor	<ol style="list-style-type: none"> Downgrading Default (according to regulatory definition) Reduction in a year of 50% of the equity of the debtor following losses
	Trigger AQR	<ol style="list-style-type: none"> Change in DSCR (Debt Service Coverage Ratio) DSCR < 1
	Forbearance events	<ol style="list-style-type: none"> Events that involve the need to modify the terms and conditions of the loan
	Trend and composition of the credit exposure	<ol style="list-style-type: none"> Indicators of regularity in payments The trend and composition of the credit exposure External ratings

For the information flows regarding the debtor and the macroeconomic and sector data to be integrated automatically and efficiently and for the construction of the transfer criteria it is necessary for them to be made available through IT solutions. Such solutions must balance data quality, updating rapidity and control of costs. In any case the transfer criteria system must be set up in such a way as to avoid the application of the impairment method being influenced by elements of excessive volatility, in order to contain as far as possible any unexpected effects on the bank's balance sheet.

7 Conclusions

This work contributes to the debate over the new model of impairment introduced by IFRS 9 in the banking industry. The emphasis of work in progress paper is on the novelty of the work, not completeness.

We have focused on three main issues:

the relevance and importance of the process of adaptation of accounting rules to a prudential approach for which an information set is necessary to be able to support the impairment process;

the general assessment of implementation methods of impairment IFRS 9;

the potential benefits of introduction of the IFRS 9 principle as well as the main key risk indicators that the RM uses to promptly identify the impairment of asset quality.

This work concludes that the change from an “incurred loss” impairment model to a model of an “expected loss” type represents an important point of convergence between the discipline of the banks' balance sheet and prudential regulations of the supervisory authorities.

The new standard setter will reinforce the effective enforcement capacity of the supervisory authorities to monitor the correctness of the application of the accounting criteria. The use of properly designated proportionate approaches should enable the banks to adopt sound allowance methodologies commensurate with the size, complexity, structure, economic and financial significance and risk profile. Secondly, this work has attempted to contribute towards the understanding and use of a methodological approach that aims to exploit the synergic relationship between Accounting functions and RM, the latter engaged in the definition of risk indicators, for the implementation of the new impairment model more in keeping with the business model adopted by the intermediary. The Basel Committee of Banking Supervision (BCBS) expects that a bank's consideration of forward-looking information will be supported by a sufficient set of data. In the BCBS's view the information used shall include an unbiased consideration of relevant factors and their impact on creditworthiness and cash shortfalls. Relevant factors include those intrinsic to the bank and its business or derived from external market conditions. In the BCBS's view, consideration of forward-looking information is essential to the proper implementation of an ECL accounting model, and should not be avoided on the grounds that a bank considers the cost of incorporating forward-looking information to be excessive or unnecessary or because there is uncertainty in formulating forward-looking scenarios.

Although this work contributes to the debate over the new model of impairment, it could be further developed in a number of ways:

empirical analysis of how the activity of supervision of the evaluation of the quality of banking assets in a bank considered “significant” or “less significant” can contribute to the verification of the accounting correctness of the value adjustments of expected loss;

qualitative and quantitative enquiry, aimed at analysing the managerial impacts and the state of implementation of the principle in “significant” or in “less significant” banks;

empirical analysis aimed at highlighting levels of criticality and limits of smaller sized banks and for credit consortia, considering that such categories of intermediaries present to date difficulties of know-how, of adequacy of the information systems and of budget, restricted temporal margins of implementation.

This paper reports on a study which aims to add to theoretical understanding of how and why banks use IFRS in their strategies. The material from this paper can be used as the basis for future research as long as there are "significant" revisions from the original.

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