

IS ADEQUATE THE METHOD OF LOAN LOSS PROVISIONING? – EVIDENCE FROM ROMANIA

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Abstract: *The importance of banking system within the financial system requires a special attention in order to secure its stability. Thus, with the occurrence of the financial crisis, in the context of integration of the financial system and creation of unique financial market, became more stringent the need for the existence of specific tools to prevent financial crises and to guarantee the continuity of normal economic activity. In this category are the macro-prudential supervision tools whose role is to reduce the ability of banks to damage the economy by taking on excess risk. Among them is registered the dynamic provisions intended to be used for enhancing bank soundness and to help mitigate part of the pro-cyclicality of the banking system. The current study addresses the methodology for establishing specific provisions for credit risk at the level of the Romanian banking system, highlighting the direct implications over the credit institutions, and indirect implications over the economy as a whole. The study presents as well the possible course of actions in order to remedy the weaknesses in the recognition of loan losses. Thus, while listing the specialty literature, study presents the regulatory framework applicable to loan loss provisioning, underlining the weaknesses of the static provisioning model and the need to look forward to the dynamic model along with the accounting methodology. In this regard it was considered the worsening of a loan portfolio in macroeconomic context and a hypothetical comparative study between the static and dynamic model has been realized. The results of the study revealed that the current provisioning model has a procycle character without considering the influence of macroeconomic factors over the future worsening of the loan portfolio without allowing recognition of future loan losses due to failure to identify future risks generating events and their credible assessment. Therefore it is required the need to establish reserves during the economic growth periods to cover losses from loans in order to prevent disruption of the banking activity and to limit the risk of insolvency. To achieve this goal it is necessary that all the parties involved, namely the banks, the regulatory authority and accounting organizations, to realize the importance of loan loss provisioning and act accordingly.*

Keywords: *loan loss provisioning, static provisioning, dynamic provisioning, macro-prudential tool, procyclicality*

JEL classification: *G21, G28*

1. Introduction

The occurrence and manifestation of financial crisis has surprised unprepared the banking system generating negative effects on the stability of the entire financial system and the economy as a whole. One of the weaknesses was the lack of capital and liquidity reserves to be used during the decline phase of the economic cycle in order to limit its negative effects. To prevent and reduce the negative effects of financial crises, respectively to limit losses, liquidity constraints and possibly a credit

crunch, the Basel Committee on Banking Supervision (BCBS) is promoting stronger provisioning practices and establish the set-up of capital buffers and liquidity resources by the credit institutions (BCBS, Basel III: a global Regulatory Framework for Banks and banking systems more resilient, 2011). The capital reserves refers to a capital conservation buffer of 2.5%, comprised of Common Equity Tier 1, is established above the regulatory minimum capital requirement, and a countercyclical capital buffer designed for the periods when excessive credit growth is associated with construction of the systemic risk (Borio, Furfine and Lowe, 2001). As regards the liquidity risk the Committee developed the Liquidity Coverage Ratio in order to provide liquidity for at least one month and the Net Stable Funding Ratio for a time horizon of one year.

The purpose of this article is to analyse in the Romanian banking system, the necessity for application of the dynamic provisioning method for the credit losses, highlighting potential factors influencing the credit risk.

The remaining of the paper is organized as follows. Section 2 deals with Regulatory framework applicable to provisioning for loan losses. Section 3 deals with deterioration of loan portfolio in macroeconomic context. Section 4 deals with the effects of dynamic provisioning model application. Section 5 concludes.

2. Regulatory framework for loan loss provisions

The importance of specific provisions for credit risk or impairment adjustments states in the scope of their own set up, namely in creating a reserve used to cover expected loan losses while own funds serves to absorb unexpected losses. Thus to determine these provisions this requirement must be met. Moreover the specific provisions for credit risk are considered to determine some prudential indicators used as a base for assessment of soundness of credit institutions (the solvency ratio, large exposures, establishing the total amount to be deducted from own funds to determine their total level).

The relationship between accounting and prudential norms should not be underestimated. The differences in assessment methodologies may affect the values of various elements impacting on risk management. There is a fairly broad consensus that more forward-looking provisioning could help to bring accounting valuations closer into line with economic valuations and could eliminate a source of artificial pro-cyclicality (Borio, 2003).

According to NBR Regulation no.16/2012 in the Romanian banking system are used two methods of adjustment: prudential and impairment adjustments. Positive difference between the total prudential adjustments value and the total impairment adjustments is allocated as a prudential filter for determining the own funds and prudential bank indicators.

The prudential provisions are recorded in extra-balance accounts while the impairment adjustments are recorded in balance sheet accounts. Prudential adjustments are determined by applying the provisioning coefficient on gross exposure adjusted with value of collateral accepted as decreased risk factor. Provisioning coefficients are different on classification categories according to perceived risk. Classification of loans are made in five categories (standard, observation, substandard, doubtful and loss) based on debt service, financial performance and judicial proceedings. In assessing financial performance are considered both quantitative indicators (return on assets, return on equity, etc.) and qualitative (ability of manager, business, etc.). Under the framework of global

monitoring of the banks activity on the procedure set out in the Regulation (EC) No.1606/2002, starting with January 1, 2012 (NBR Order no.9/2010), the banking regulatory authority in Romania adopted the International Financial Reporting Standards (IFRS). With the adoption of IFRS, besides determining the prudential adjustments are determined also the impairment adjustments, both individually, for significant exposures which records impairments and collectively, for significant exposures which do not record impairments on one hand and insignificant exposures on the other hand. For impairment recognition must be applied IAS39 according to which *"A financial asset or group of financial assets is depreciated if there are objective evidences of impairment as a result of one or more events that occurred after the initial recognition of the asset and respective generating losses events have an impact that can reliable estimate the future cash flows "*. Among the indices for loan impairment may be mentioned: significant deterioration of the financial situation, the probability for opening the bankruptcy procedure or similar protection procedure, infringement of contractual terms, significant decreases in estimated cash flows for a portfolio of loans.

This modality to admit the credit losses allow to a bank to consider only past events and current conditions. The effects of future credit loss events cannot be considered. Thus, this recognition modality is perceived to have caused delay in the recognition of credit losses, the BCBS promoting and supporting the International Accounting Standards Board for change in the accounting standards towards an expected loss including use of information more forward-looking (BCBS, 2011) (IAS 39 will be replaced by IFRS 9 with annual applicability beginning on or after 1 January 2015 - IFRS).

This involves changes in the modality of determining the expected credit losses, including improvement of internal rating based approach for credit risk implemented by Basel II. Thus a credit institution would consider quantitative and qualitative factors that are specific to the borrower, including the entity's current evaluation of the borrower's creditworthiness. It will also consider general economic conditions and an evaluation of both in the present time and in future periods of the economic cycle. In the Greek banking system Dimitrios, Angelos and Vasilios (2012) find that non-performing loans can be explained mainly by macroeconomic variables (GDP, unemployment, interest rates, public debt) and management quality.

Raducanescu and Dima (2011), after the time of recognition of loss based on the economic cycle are considered two types of model for provisioning: static provisioning models and dynamic provisioning models. In case of static provisioning model, the provisions are determined considering the expected losses (regularly on yearly bases) on a certain moment in time. Dynamic provisioning is a statistical method for loan loss provisioning which uses historical data about estimate level of lending and average ratio of expected losses according to economical cycle phases (Raducanescu & Dima). Also states that applicability of static model to Romanian banking system is moreover motivated by determination of the capital requirements on a short term horizon.

3. The deterioration of loan portfolio in context macroeconomic

Within the specialty literature, the cycle character of banking activity is address in many studies (Drehmann, Borio and Tsatsaronis, 2011, Borio, 2012, Borio, Disyatat and Juselius, 2013). Asea and Blomberg (1998) showed that banks change their lending standards, from tightness to laxity, systematically over the cycle. Majnoni

and Laeven (2002), found that many banks tend to delay provisioning for bad loans until too late, when cyclical downturns have already set in, possibly magnifying the impact of the economic cycle on banks' income and capital.

To understand and argue how the modality of provisioning for credit losses within the Romanian banking system may have a pro-cyclic character, we take the approach of deterioration of credit portfolio relative to GDP. Using the consolidated data to the Romanian banking system from the NBR website, figure 1 shows the loan loss provisions (LLP) and the loan loss (LL), both scaled by total loans, between 2004 and 2012.

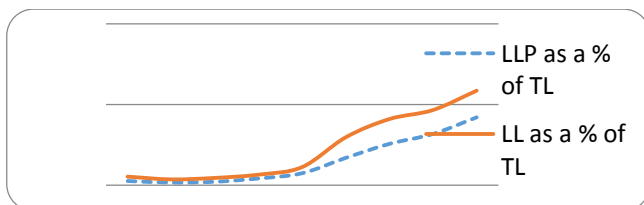


Figure 1: Loan loss provisions versus loan loss ratios

Source: own processing

It is to be observed that provisions are lower than loans loss. Until the end of 2008, under economic growth premises, we have a similar trend for both elements. Starting to 2009 under the financial crisis premises and due to economic decline (according to NBR data, real GDP decrease from 7.3 in 2008 to -6.6 in 2009, reaching 1.1 at the end of 2012), both loans classified as “losses” and related provisions recording a rapid increase. Until 2010 the growing rhythm of the credits classified as “loss” was more dynamic than the related provisions. After 2010 the related provisions knew a more rapid increase. The ascending trend of provisioning for losses and degree of their coverage on credits classified as “loss” showed that their level has been under evaluated.

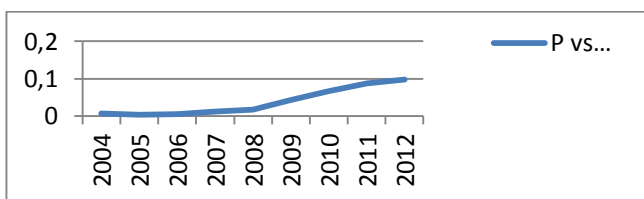


Figure 2: Loan loss provisions on operating income and operating expenses ratio

Source: own processing

Figure 2 illustrates the importance of provision expenses relative to bank return on system level, an inverse relationship being observed between earnings and provisions in a recession (beginning with 2009).

Similar to Bikker and Metzmakers (2005) is observed that provisioning is substantially higher when GDP growth is lower, reflecting increased riskiness of the credit portfolio when the business cycle turns downwards. The findings are consistent with the call for the implementation of a dynamic provisioning system, similar to other authors. Thus Bouvatier and Lepeti (2008, 2012) found that loan loss provisions made in order to cover expected loan losses amplify credit fluctuations,

in contrast to forward-looking provisioning system which do not affect credit fluctuations.

4. Effects of applying the dynamic provisioning model

The dynamic provisions are a macro-prudential tool for enhancing bank soundness, with an anti-cycle character that allows to establish provisions higher during the economic growth periods and to use them in order to cover the losses within the economic decline phases. The strongly pro-cyclical nature of bank lending in Spain has led to the implementation of dynamic provisioning system in 2000 (Fernandez de Lis et al., 2001). The working of the Spain dynamic provisioning model and its theoretical mechanism is presented by Saurina (2009_a, 2009_b).

The current study does not present in details how to determine provisions for credit losses using the dynamic provisioning method due to lack of data, this being one of the reasons for inapplicability at the level of the Romanian banking system, so a simplified model is presented in exchange showing the influence of implementation of this method over the prudential situation of a credit institution (Table no.1).

The construction of the model is made for a period of three years based on the following hypothesis: the total value of credits to adjusted value of the gross profit and equity remains constant on the entire period; exposure on credits is expressed in lei and in the first two years is framed under prudential classification category "in observation" which provisioning coefficient is 0.02, and in the third year is framed under category "substandard", which provisioning coefficient is 0.05; total value of credits is equal to total value of assets; the provisions determined based on dynamic model are fiscal deductible; the risk level of the portfolio at the end of three years period is 21.33%; to determine solvency are used level I own funds (Tier I), considering that they meet the requirements for recognition.

Is to be noted that the total level of credit risk provisioning at the end of the third year is the same for both models: static and dynamic. Even so the static model does not allows recognition of future credit losses due to lack of identification of risks generating events and its credible assessment. This allows during economic growth recording of some comfortable prudential indicators and allocation of the profits as dividend to shareholders or amplification of lending activity. Instead estimating losses based on some macroeconomic indicators the dynamic provisioning model allows setting up provisions reserves by allocating current earnings in order to cover the future losses.

Thus, as noted from the recorded value of the solvency ratio at the end of the third year, banks that does not establish during the economic growth period reserves to cover future credits losses, records disruption of business activity and are more exposed to the risk of insolvency.

Table no. 1: Provisioning models

	Static model			Dynamic model		
	Year1	Year2	Year3	Year1	Year2	Year3
Assets						
Total loans to the value adjusted	1500	1500	1500	1500	1500	1500
Stock of prudential adjustments	75	75	300	75	75	300
Stock of impairment adjustments	30	35	320	30	35	320
Stock of statistical provisions				140	285	0
Total loans to the net value	1470	1465	1180	1330	1180	1180
Income Statement						
Gross profit	150	150	150	150	150	150
Expense provisions	30	5	285	170	150	0
Deductible expenses of prudential filters	45	40	0	0	0	0
Taxable profit	75	105	0	0	0	150
Tax (16%)	12	16.8	0	0	0	24
Net profit	108	128.2	-135	-20	0	126
Shareholders' Equity						
Equity	150	150	150	150	150	150
Net profit	108	128.2	-135	-20	0	126
Total own funds	258	278.2	15	130	150	276
Prudential filters	45	40	0	0	0	0
Total adjusted own funds (Tier I)	213	238.2	15	130	150	276
Equity to Asset	14.49	16.26	1.27	9.77	12.71	23.39
Solvency: Equity to Assets \geq 4%	Solvent	Solvent	Insolvent	Solvent	Solvent	Solvent

Source – own processing

Notes: Total loans to the value adjusted represent gross exposure reduced by related guarantees. Prudential adjustments are determinate according NBR Regulation no.16/2012. Impairment adjustments are those identified as probable and estimable. Statistical provisions are those taken under the dynamic provisioning model.

4. CONCLUSIONS

Given the direct influence of provisions for credit losses over the profit, and indirectly over the capital of a credit institution, the methodology for establishing them is rather important. The current study presents in the Romanian banking system the regulatory framework for establishing specific credit risk provisions and the effects of its application on the prudential situation of credit institutions. The study highlights that the current model used, respectively the static model, is permissible in recognition of future losses, with a pro-cyclical character with a negatively influence on the financial stability of banks. To address this issue it is necessary the early identification of risks to the loan portfolio quality and the early recognition of losses. Consequently it is required the need for changing the accounting methodology and risk recognition by using information that is more forward-looking in order to avoid oscillations in activity and disturbances in the financial statements. This will allow the capture of asset quality deterioration and better asset quality assessments and supervisory reporting. More accurate identification of the factors and their influence on the loan portfolio remains an open issue and will continuing to be the subject of the future researchs.

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