

New Developing Methodologies for Strategic and Operational Limits in the European and Romanian Banking System

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The most important recommendations of the de Larosièrè report and subsequently implemented in the Union were to create a single regulatory framework and a European framework for macro-prudential supervision, both elements conjugated are designed to ensure financial stability. The single regulatory framework ensures a uniform and robust regulatory framework that facilitates the functioning of the single market and prevents regulatory arbitrage opportunities. However, in the internal market for financial services, macro-prudential risks can exhibit several types of differences, with a number of national peculiarities that lead to variations that can be seen, for example, in terms of structure and size of the banking sector compared to economy and credit cycle in a wider sense.

Key words: methodologies, strategic, operative, banks

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1. Introduction

After the start of the 2008 global economic crisis, the European Parliament and the Council of Europe began studying the causes of the crisis in the EU banking sphere and initiate control and counter-attack measures. Starting with the year 2009, at the request of the European Commission, under the direction of Jacques de Larosièrè de Champfeu - former General Director of the International Monetary Fund and former president of the European Bank for Reconstruction and Development, specialists from EU member states have concluded that it is necessary to strengthen the framework of supervision of the financial and banking sector of the Union to reduce the risk and severity of future financial crises and recommended far-reaching reforms to the supervisory structure of the sector, including the creation of a European System of financial supervisors, comprising three new European supervisory authorities, one for banking, insurance and occupational pensions and the securities and markets, as well as a European systemic risk board. It all started in 2009, the group of developed countries, "G20" - wishing to strengthen the global financial system and minimizing the negative effects of the crisis, agreed on the need to act consistently on an international level in order to strengthen transparency, accountability and regulation by improving the quantity and quality of capital in the banking system once the economic recovery is ensured. Through agreements and joint statements, they formalized the introduction of additional measures independent of the risks to avoid buildup of leverage in the banking system, as well as developing a framework for stronger liquidity reserves. Both the EU central banks and the major banking groups in Europe, particularly the EU, have lined up new prudential and common legislation and implemented a comprehensive framework of risk management at credit institutions.

In Romania, most banks have adapted their own systems of limits combined with NBR Regulation no. 5 / December 20, 2013 on prudential requirements for credit institutions and Regulation (EU) no. 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms. The banks have created internal regulations - directly related with risk appetite (RAS), which defines the risk that banks are willing to assume strategically.

2. Governance of limits

A limit is defined as the highest exposure that the Bank is willing to assume and can be expressed either in absolute or percentage value.

The risk limit establishes thresholds to monitor whether the current risk exposure does not deviate too much from the desired optimum. Violation of risk limits will typically work as a trigger of a corrective action at the process level.

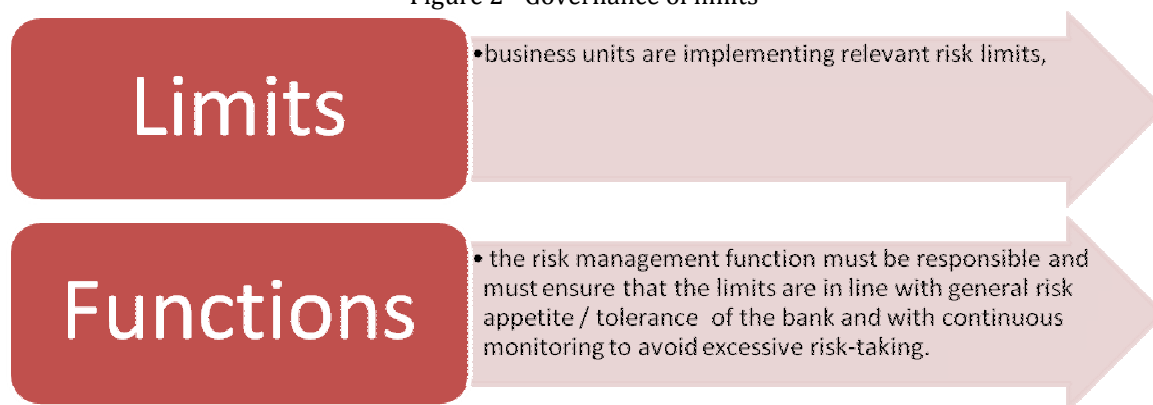
Risk limits are the most granular level used for carrying out the economic activity. They translate the tolerance and the risk appetite for each risk category in risk monitoring measures. The consistency between the risk limit and the risk tolerance supports the company to realize its risk objectives and maximize the risk / return ratio.

The procedure of the limits system uses two main types of indicators to assist the bank in the interpretation of monitoring data - limits and warning levels.

The limits are levels which, if exceeded, present an unacceptable risk and determine immediate action. Setting limits is important, but not sufficient for good management. To ensure that the limits are not exceeded, the Bank needs warning levels.

Warning levels are factors that inform that the limits are approaching their maximum level and represent early warning signals. In general, the warning levels support the Bank in taking corrective actions before the exceeding of the limits:

Figure 2 - Governance of limits



Source: Own contribution

The limit framework

The bank must have policies and processes that provide a suitable and controlled environment for the limit framework, which include:

- Prudent and appropriate credit risk limits, in accordance with the risk appetite, risk profile and capital soundness of the credit institution, which shall be communicated regularly to relevant staff, and therefore fully understood by them
- Appropriate market risk limits in accordance with the risk appetite of the institution, the credit risk profile and capital soundness, as well as management's ability to manage market risk and which are understood and communicated regularly to relevant staff.

The bank must consider various instruments to mitigate liquidity risk, including a system of risk limits and liquidity reserves to be able to support a number of different events of stress and a financing structure appropriately diversified and access to funding sources.

The bank must also have limits on operational risk. This is achieved by considering the observed operational risk losses or by setting limits based on key risk indicators, scoring systems, alert levels etc. Objectives and limits must be in accordance with the risk strategy and the Bank's global risk profile.

Strategic limits are determined by risk appetite, while operational limits must support compliance with strategic limits.

Compliance with SAR limits must be ensured in case of a crisis scenario (in the stress scenarios), in which all strategic limits should be monitored. Banks are extremely careful about the solvency ratio. Solvency ratio is defined as the percentage ratio between equity and total risk exposure. Solvency ratio takes into account all forms of capital: Tier 1 capital (CET1) capital, Additional Level 1

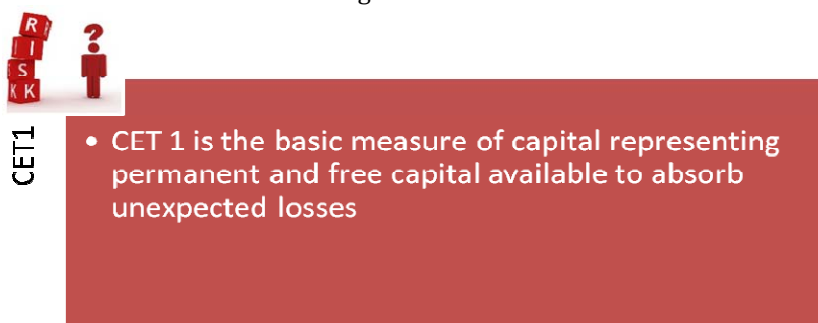
(such as contingent capital and hybrid) and Capital Level 2. Most European banking groups used as the solvency ratio limits IFRS figures with prudential filters, standard method for credit risk.

As for development and evaluation methods, European banks are guided by the red solvency ratio is set as the minimum solvency rate plus silencer regulated to preserve capital, systemic risk and countercyclical.

The indicator Capital Tier 1 (CET 1) is defined as a percentage ratio between Tier 1 core funds and total risk exposure value.

Red Level of CET 1 is set as the minimum requirement for capital preservation CET1 plus silencer, systemic risk and cyclical. Yellow warning level (Amber) is established as an intermediate step towards the red to prevent exceeding the limit Repo market participants are grouped into categories, namely:

Figure 3-CET1



Source: Own contribution

3. Liquidity coverage rate (LCR)

LCR is a regulated indicator and addresses the maintenance a stock of high quality liquid assets to meet short-term liquidity needs within a specific severe stress scenario. LCR is calculated as the ratio of liquid assets of high quality and net outflows under stress (on a 30 day horizon).

LCR measures the adequacy stock of unencumbered high quality liquid assets (HQLA) that can be converted into cash without incurring losses, or with reduced losses for the meeting of liquidity needs for a liquidity stress scenario for 30 days.

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LCR reflected minimum regulated expectations and the public perception of a sustainable liquidity profile. LCR provides adequate funding to cover short-term highly liquid assets. Starting from the liquidity profile of the bank and given the minimum regulated ratio of 100%, the Bank decided to establish a damper of 20% until the attaining of the level yellow alert (Amber) and a damper of 10% above the regulated limit to denote the red level.

Table No. 1- Indicators of banking risk - Payments Incidents

Date	Residents amounts refused to be paid with debit instruments (thousands lei)	Residents number of refusals to pay with debit instruments (number)	Residents number of people at risk (number)	Residents number of people in banking prohibition (number)	Total amounts refused to be paid with debit instruments (thousands lei)
	CIPL_R_SRT	CIPL_R_NRT	CIPL_R_NPRT	CIPL_R_NPIBT	CIPL_SRT
May. 2015	2.597.953,1	6.907	1.655	134	2.597.953,1
Apr. 2015	363.524,4	6.768	1.676	102	363.609,1
Mar. 2015	949.582,8	7.638	1.809	113	949.582,8
Feb. 2015	1.050.638,5	6.978	1.667	112	1.050.760,0
Jan. 2015	298.355,3	7.296	1.654	133	298.366,8
Dec. 2014	557.402,0	10.690	2.194	189	557.402,0
Nov. 2014	807.050,9	9.634	1.945	154	807.050,9
Oct. 2014	773.689,0	9.487	2.112	169	773.689,0
Sep. 2014	648.105,2	8.977	2.050	151	648.105,2
Aug. 2014	566.570,5	8.219	1.941	149	566.570,5
Jul. 2014	1.049.013,9	10.067	2.278	181	1.049.024,0
Jun. 2014	510.693,2	9.586	2.191	154	510.693,2

May. 2014	469.189,8	9.763	2.170	168	469.189,8
Apr. 2014	934.354,9	9.687	2.121	153	934.354,9
Mar. 2014	440.655,5	9.958	2.146	152	440.655,5
Feb. 2014	684.377,0	9.569	2.113	140	684.377,0
Jan. 2014	497.599,5	9.456	2.148	169	497.630,4

Source: BNR

Net stable funding rate (NSFR)

NSFR is defined as the amount of available stable funding based on need of stable funding. It reflects the minimum regulated expectations regarding the structural liquidity on a one-year horizon and addresses structural liquidity mismatches on a long term basis. NSFR aims at long term financing and serves to define the minimum acceptable stable funding based on the liquidity characteristics of the bank, on the assets and activities for a one-year horizon.

The aim of this indicator is to limit the use of short-term funding and to limit funding mismatch, so NSFR is a tool for measuring liquidity risk in the long term.

The methodological framework on this limit consists of two parts. The first part concerns inputs that are based on balance sheet items and the extra balance sheet under stress, taken from stress testing. In the second part, the NSFR is calculated by using parameters that links these accounting positions to the positions components of the NSFR. Red Level is based on regulated minimum limit imposed by the regulator in the medium term. Yellow warning level (Amber) is established as an intermediate step towards the red to prevent exceeding the limit.

Risk earning ratio/ RER

RER is defined as credit risk absorption losses through net interest income.

Net loan loss provisions include all provisions in the balance sheet and off balance sheet, regardless of the type of portfolios (ie loans & receivables balance sheet and off balance sheet, Afs, HtM other). Net interest income include all balance sheet and off balance sheet exposures related to net interest income. It is calculated as the ratio between net loan loss provisions and net interest income.

Level Red Indicator RER is determined based on the maximum target of rate of risk costs. Yellow warning level (Amber) is established as an intermediate step towards the red to prevent exceeding the limit.

Indicator CET 1 under stress (pessimistic scenario)

CET1 indicator under stress (S- CET 1) is defined as the quotient between Tier 1 basic funds under stress and the total risk exposure under stress. It ensures adequacy of capital to absorb unexpected capital losses in terms of stress scenarios.

The red level of the indicator S- CET 1 is set as minimum regulated CET 1 plus the capital preservation damper and damper for systemic risk. Anticyclical capital buffer is not required in a macroeconomic crisis situation. The macroeconomic crisis situation is included in the hypotheses of stress tests. Yellow warning level (Amber) is established as an intermediate step towards the red to prevent exceeding the limit.

Level 1 Basic funds under stress are calculated as the difference between Tier 1 basic funds in the pessimistic and baseline scenario of the stress test, which is then used to impact the Tier 1 current basic funds. Similarly for the counter, one uses the difference between the value of the pessimistic scenario and the basic scenario concerning risk-weighted assets which impact the current value of risk-weighted assets.

Economic capital adequacy indicator (ECA) under stress (pessimistic scenario)

Economic Capital Adequacy (ECA) under stress is defined as the ratio between stressed economic capital and the potential for capital cover.

It ensures capital adequacy to absorb unexpected losses of capital in conditions of stress scenarios. Red Level of ECA Indicator under stress is set to mean 100% of the potential of coverage divided by (CET 1 plus the minimum regulated dampers for capital preservation, systemic risk and cyclical, plus adjustments for Pillar II). Yellow warning level (Amber) is established as an intermediate step towards the red to prevent exceeding the limit.

It ensures alignment between Pillar I and Pillar II. Anticyclical capital buffer is not required in a macroeconomic crisis situation. The macroeconomic crisis situation is included in the hypotheses of stress tests. The coverage potential is similar to the coverage potential impacted with the difference between the coverage potential of the pessimistic scenario and baseline scenario of the stress test.

Similarly, economic capital is calculated as the current economic capital impacted with the difference between its value from the pessimistic scenario and the basic one of the stress test.

4. Conclusions

The establishing of limits on industries starts from the structure and balance of the existing portfolio for the last available quarterly data and the utilization of the limits received from parent banks. Generally banks set warning threshold to 95% of the suggested limit. Also, for setting limits, there will be operated redirections between industries so that total consumption of capital does not exceed the limit of economic capital Pillar II established in RAS. In case of exceeding a limit, measures will be taken to return to the limit within 3 months after the detection of exceeding the limit.

Limit monitoring is done monthly, in the first 15 days of the end of the reporting month. If there are business opportunities in attractive sectors in macroeconomic terms, potential customers with rating at least equal to the industry average or there is unanticipated macroeconomic danger, there can be made quarterly adjustments of limits on industries. The output of the scoring model can be adjusted to account for the prospect of business according to the input provided by the EU statistics or the general evolution of certain industries in the macroeconomic environment in every European country.

References

1. Georgescu Cristina Elena, Radu Riana Iren - *The Provisions for the Risk of Loss in the Case of the Loans Granted by the European Banks, "Ovidius" University Annals, Economic Sciences Series Volume XV, Issue 1 /2015.*
2. Riana Iren Radu, Violeta Isai, *Study on the application of the prudence principle in accounting of credit institutions, Annals of Dunarea de Jos University of Galati. Fascicle I. Economics and Applied Informatics, Year XX, no. 1/2014, ISSN 1584-9409, pp. 69-74.*
3. Moraru D., Nabi M. (2013) *"Banking products and services in 2013", Publisher Universitaria Pro, Bucharest, pp. 61*
4. Radu Riana Iren, Isai Violeta, *The Applicability Of The Prudence Principle To Bank Companies In The Vision Of Ias 37, International Conference "Risk in Contemporary Economy" ISSN online 2344-5386, ISSN print 2067-0532, XIVth Edition, 2013, pp. 3*

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