

The stress test - A new challenge for the banking union

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Abstract

Stress testing has become an essential and very prominent tool in the analysis of financial sector stability and development of financial sector policy. Starting with 2010 stress test led by the Committee of European Banking Supervisors (CEBS), and reinforced by 2011 stress test and the bank recapitalization exercise led by the European Banking Authority (EBA), the output of EU wide stress tests has been viewed as essential information on the health of the system. The purpose of this paper is to highlight the main elements considered by the EBA and European Central Bank (ECB) in creating the model of the stress test. At the same time it will highlight how the recent financial crisis has influenced the introduction of these decisions in order to stabilize the banking system. The vision of a future banking union will reshape and resize the entire European system profile. Applying stress test will lead to a healthy and robust banking system even if a new potential crises will come.

Keywords: Banking Union, Stress test, financial crisis, Challenge, Basel philosophy

JEL Classification: E6, F5

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1. Introduction

The stress test has become topic of interest in recent years, the literature being in a continuous development. The stress tests were perceived as a consistent model due to the recent worldwide crisis which generated bankruptcies in the bank field. Due to the fact that stress tests refer to adverse macroeconomic scenarios, gives them a special importance in the evaluation of a global, systemic risk. Their results may represent a foundation for the development of the norms and prudential control instruments, both for the supervision national authorities and for the international organisms, recently constituted.

The paper describes the main elements of a stress test applied to the most important bank groups from the Euro Zone. It identifies the main endogenous and exogenous factors considered in the creation of the adverse scenario and of the tested variables.

The result indicates the fact that the 124 banks considered systemic from the total of 8060 credit institutions of the European Union, are prepared to face the potential vulnerabilities. The paper proceeds as follows: 1) Literature review. 2) Procedural elements of a stress test. 3) Conclusions on the legal question regarding the possibility to draw up a stress test in order to highlight the philosophy of Third Basel Accord.

2. Literature review

Starting with the work of Thomas C. Wilson (Wilson 1997), which demonstrated the necessity to measure the credit risk, as additional support of the transactional control in adverse economic conditions, emerged scientific works treating the stress tests fee ability, in various different bank systems, in order to see the way in which they can absorb shocks and continue their activity in a sustainable and robust manner.

Marco Sorge (Sorge 2004, p.165) showed the methodological difference between the “single” and “integrated” approach of stress tests applied at macro level. Sorge illustrated a clear distinction between the evaluations of the system vulnerabilities, mainly based on a single indicator – capital adequacy ratio and the non performing credits and the probability of potential loss based on a stressing scenario, considering the multiple factors which can generate it.

Kimmo Virolainen (Virolainen 2004), analyzing the economy and the banking sector from Finland, showed the direct relation between the corporate credit rate in default and a series of key macroeconomic factors as the Gross Domestic Product (GDP), the company's indebtedness and the interest rate level.

In order to assure the financial and monetary stability, in European system, the Basel Committee established in 1974 as main objectives: the minimum capital requirements for banks in order to cover risks, as well as the qualitative improvement of the risk management. The First Basel Accord was implemented in the year 1998, establishing a minimal ratio of 8% equity vs. assets.

Consequently to Basel I, the Second Basel Accord from 2004 set the accent, in three clear and efficient directions based on: the minimum capital requirements of each bank according with its risk of economic loss, the necessity of effective supervisory review of banks internal assessments regarding their own risk and market discipline characterized by transparency in bank's public reporting. More precisely, the three main pillars have been the following:

1. "Minimum Capital Requirements"
2. "Supervisory Committee"
3. "Market Discipline".

The "Minimum Capital Requirements" pillar set two new bridges:

- ◆ The first bridge established a higher level of capital for those debtors with higher level of credit risk.

- ◆ The second bridge set up a capital charge for a bank exposure to risk of losses generated by internal and own events such as failures in process, system and staff, or by external events such as natural disasters.

The "Supervisory Committee" pillar established the role of supervisors in the process of evaluating the risk profile of an individual bank, in order to determine the right level of capital according with the requirements in pillar one and to see when there is a need for remedial actions.

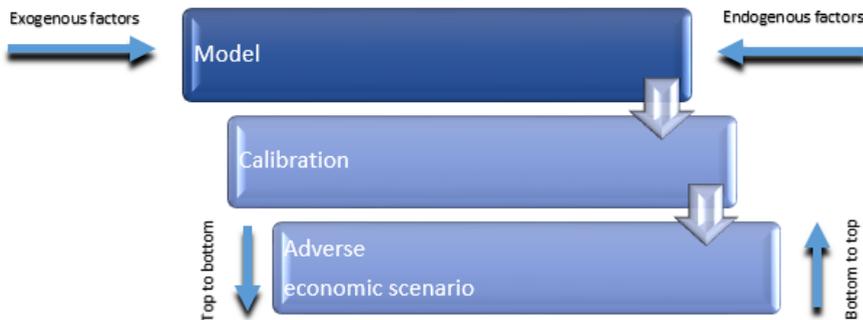
The "Market Discipline" pillar had set the transparency of public reporting made by banks in order to offer adequate information's for all the market participants and to allow them to reward those banks that is managing prudently their risk and to penalize those whit hazardous management.

The financial crisis that surrounded Europe highlighted the necessity to strengthen the risk management in banking sector and also the regulation and the supervisory mechanism. In this respect Basel III Accord had developed the framework of Basel I and Base II in order to strengthen the banking sector capacity to deal with economic and financial stress, to improve the banks risk management and assure a total transparency of this institutions till 31st March 2018.

In this respect in 2010 the literature has developed with Basel III Accord whose requirements will be treated in the next chapter as a part of procedural elements of a stress test.

3. Procedural elements of a stress testing

The national and international authorities which have a control and supervision role developed and continue to develop stress tests in order to adapt those to a real possible crisis situation, highlighting their concern in order to assure a financial stability at macro level.



The objective of these researches became an institutional one and consists in the identification and definition of the endogenous and exogenous factors which can generate sustainable solutions for maintenance of a healthy bank climate in adverse market conditions.

The existent stress tests approaches three major aspects.

1. The first aspect is related to the creation and development of the inter-relation model between certain economic and financial variables.

2. The second one is related to the calibration of macroeconomic and financial parameters with those of the credit parameters.

3. The third aspect refers to the creation of an adverse economic environment and its implications on the credits quality and of the entities solvability, which compose the bank system. The macroeconomic variables often encountered in the stress tests, in order to measure the economic activity type are: the GDP, the unemployment rate, the current account deficit, the exchange rate, the reference interest, the inflation, the value of immobile goods.

The manner in which these adverse scenarios can influence the portfolios quality and of the bank system solvability is done by the application of the two models: “top to bottom” and “bottom to top”.

1. “Top to bottom” model describes the simulation of the credit quality evolution in case of major distress, starting from a series of data taken from the economic system.

2. In case of the model “bottom to top”, the internal data supplied by each bank will be analyzed.

Following the financial crisis, in the Euro Zone member states were applied two stress tests - in 2010, 2011. Even if those stress tests represented a step forward in order to bond and consolidate the European banking system, they did not met the expectations, because it was not obtained the increase of the trust sentiment of investors, shareholders and of the population in this strategic system.

The next stress test that will be applied in the Euro Zone will take into consideration the financial results reported by 124 banks considered systemic, at the end of 2014 and shall create an adverse scenario afferent to three years' time interval.

The minimal rate for capital adequacy will be of 8% for the baseline scenario and of 5,5 % for the adverse scenario. The scenario will start from a static balance in which it will not be any type of increase for both scenarios. At the same time banks obligations and costs from

P&L point of view shall be analyzed in case these will not register an increase and have the same business model.

Basel III accord reinforced the Basel II pillars by aligning more deep their features into the market, and also increased the role of the banks liquidity.

The main differences between Basel II and Basel III philosophy regarding the “Minimum capital requirements” is:

- ◆ Establishing at 10.5 %, from 8 % the minimum ratio, when is combined with the conservation buffer.

- ◆ Setting at 4, 5% from 2 % the minimum ratio of equity.

- ◆ The overall Tier 1 capital requirement - consisting of not only common equity but also other qualifying financial instruments, will also be raised from 4% to 6%.

- ◆ Banks are required to conduct more rigorous test of externally rated securitisation exposures.

- ◆ The trading book – “considerably higher capital for trading and derivatives activities”;

- ◆ Counterparty credit risk – “substantial strengthening of the counterparty credit risk framework”;

- ◆ “Trade exposures to a qualifying CCP will receive a 2% risk weight and default fund exposures to a qualifying CCP will be capitalized according to a risk-based method that consistently and simply estimates risk arising from such default fund” (Bank for International Settlements, 2010);

- ◆ the containing leverage, it will set a non-risk leverage ratio that includes off balance sheet exposure as a backstop to the risk-based capital requirement.

The main differences between Basel II and Basel III philosophy regarding the “Supervisory Committee” is that Basel III brings in addition wide governance, incentives for banks in order to better manage risk and returns over long term, valuation practices, accounting standards, corporate governance and supervisory institutions.

In the content of the “Market Discipline” pillar the requirements introduced, refers to exposures and sponsorship of off-balance sheet vehicles.

Starting from Basel III philosophy the national surveillance authority from every UE member state in close cooperation with the European Commission, European Central Bank and International Monetary Fund successfully managed to assure a sustainable, well

capitalized and robust banking system able to sustain further the European economy. It was and it is possible because each bank under the surveillance of the national authority follows similar approaches.

1. It is created a delayed economic recovery scenario by powerfully stressing the following macroeconomic key indicators: a declining GDP, income, residential house prices, commercial real estate prices and the increasing of unemployment rate and inflation.

2. With the implementation of the Assets Quality Review process, starting from dynamic definition of troubled assets, the systemic banks were or will be soon properly capitalized. It is a great step forward because the credit loss policy is at maximum level of stress by considering troubled assets also the modified loans, even if they are current.

3. The CLP's calculations encompass the entire loan book of banking groups, from resident country and abroad. This approach considers the loans –secured by collateral located in the residence country, carrying the national risk and also the loans carrying the foreign risk, from their subsidiaries in other countries.

4. The capital assessment need is a model conducted for each bank starting from their internal reports on the basis of their restructuring plans. In this respect by making a credit loss projection and internal capital generation starting from the 2013 balance sheet's over a three or four year period, with conservative adjustments, will allow banks time to properly fill this resort till the ECB 2014 stress test.

In the next chapter I will present a few comments regarding the expectations on the 2014 stress test results in order to highlight the philosophy of Third Basel Accord.

4. Conclusions

The 2014 ECB stress test model will regain the confidence and trust of the population, investors and as well the bank shareholder's future commitment in the European banking system.

Applying the Basel III philosophy, the systemic banks from Euro Zone acquire a minimum comfort capital adequacy rate, reaching the two minimal requirements (5.5% stressed scenario or 8% baseline scenario).

This is possible because of the close cooperation between the national and European supervisory authorities. The national authorities

are committed to prepare banks to successfully pass the EBA's 2014 stress test by considering all the identified risks, by stressing at the maximum the potential variables and to implement the measures, in a short time.

The results reported by the national surveillance authorities will be different from EBA's 2014 stress test only if the EBA test will start applying it from a static balance point of view, having in mind that all the banks commitments in front of Directorate General Competition have been developed under the assumption of a dynamic balance.

The topic needs further discussions based on the results of 2014 the stress test results.

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