



# TESTIRANJE STRESA KAO KLJUČNI INSTRUMENT U MENADŽMENTU RIZIKA

## STRESS TESTING AS A KEY TOOL IN RISK MANAGEMENT

Svetlana Eshugova <sup>1</sup>

### Summary

Stress testing is more and more widely used to assess the stability of financial institutions at both the individual and systemic levels. It allows to estimate potential losses that financial institutions may suffer due to various kinds of stressful events.

Stress testing is carried out in most of the banks mainly as an isolated risk management function, which has little to do with the rest of activities. For example, major decisions in regard to costs, risks, and the scale of additional capital build-up were taken in difficult times without regard to the results of the stress tests, which led to significant uncovered losses. The banks where management board paid due attention to the practices of stress testing and the use of the results of stress tests in the development of strategic decisions overcame the crisis more successfully. / 4, p.15- 16/

For Russian banks stress testing is a regulation of The Bank of Russia and is mandatory under the Capital Adequacy Directive (CAD II), based on the recommendations of the Basel Committee, using internal models to determine the amount of risk capital reserved against market risks (an internal model-based approach). / 6/

Turning to the value of stress testing in the banking practice, S. Solov'ev believes that stress testing is the evaluation of the potential effects on a credit institution's financial condition, of a set of specified number of risk factors, corresponding to exceptional but plausible events. / 1, p.4 /

Economist A. Vinogradov and his co-authors note that the stress testing is a complex process that must take into account many factors. Despite the use of a number of universal approaches, as a rule, the process is individual, depending on the historical, political and economic backgrounds.

The Bank of Russia in its letter dated 20.06.2011 № 96 T "Regarding guidelines on the organization of internal capital adequacy assessment procedures by credit institutions" recommends the use of stress testing (including scenario analysis and sensitivity analysis) within internal procedures of the evaluation of capital adequacy. It is necessary for both evaluating the size of each risk type significant to a credit institution, and determining the credit institution's total demand for capital. It is also a part of the set of procedures for determining the correctness (accuracy) of the results of risk assessment, obtained with the help of internal models used by the credit institution. / 2/

As previously noted banks can develop their own scenarios of stress testing or use the ones proposed by IMF or the Basel Committee on Banking Supervision. The latter published general requirements for stress-testing procedures for the banks in "G20" countries. /5/

The Bank of Russia recommends that credit institutions should develop hypothetical scenarios, along with historical ones, the first of the above two characterized by the highest possible risk and

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<sup>1</sup> Finance and Credit Department of Maikop state technological university, Russia

potential losses for the credit institution. It is recommended that banks carry out stress testing quarterly. / 3 /

Management board of a credit institution must pay continuous attention to the relevance of stress testing and control the process of its ongoing refinement and modifications to better reflect the current state and development prospects of a credit institution. Particular attention should be paid to measures aimed at protecting the interests of a bank in the event of occurrence of one of the factors referred to as a deviation from the normal situation. / 4, p.21/

#### References

- 1.S. Solov'ev Stress - testing of a financial institution's market risks in time of crisis / / Finance and credit. - 2010. - №17.
- 2 .Regarding guidelines for validation of accuracy of calculation of a market risk size carried out by credit institutions: a letter from the Bank of Russia 14.11.2006 № 85 -T .
- 3.[http://www.cbr.ru/search/print.asp?File=/analytics/bank\\_system/stress\\_recom.htm](http://www.cbr.ru/search/print.asp?File=/analytics/bank_system/stress_recom.htm). –Regarding recommendations for conducting stress testing of credit institutions , prepared by international organizations , taking into account the lessons of the global crisis. The Bank of Russia.2010.
- 4 . L.Ushvitsky,A. Maleeva ,O. Klimova Stress testing as a method for improving the management of market risks / / Finance and credit. - 2013 .- № 28.s. 15-21.
- 5.<http://www.bis.org>. — Principles for sound stress testing practices and supervision.
6. <http://www.bis.org/publ/bcbs158.htm>. — Revisions to the Basel II market risk framework. Basel committee on Banking Supervision. July 2009.

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