

New capital requirements for financial institutions in the European Union

Нови капитални захтеви финансијских институција у Европској унији

Jitka Meluchová*

University of Economics in Bratislava, Faculty of Economic Informatics

Katarína Máziková**

University of Economics in Bratislava, Faculty of Economic Informatics

Martina Mateášová***

University of Economics in Bratislava, Faculty of Economic Informatics

Сажетак: Тренутна финансијска криза је специфична по својим глобалним оквирима. Примарни задатак банака и осигуравајућих друштава је да превазиђу утицаје кризе, стабилизују своју позицију на тржишту и ојачају адекватност капитала у складу са правилима које је поставила Европска Унија. Пројекти Базел II и Базел III треба да обезбеде транспарентност банкарског пословања, строжији надзор управљања ризицима и да ојачају сопствени капитал како би се повећала способност банака да се суоче са губицима у периоду кризе. Пројекат Солвентност II, развијен је за осигуравајуће компаније, с циљем да се обезбеди финансијска стабилност и заштита интереса клијената. У будућности, он треба да спречи понављање кризних ситуација. Циљ овог чланка је да се испита утицај глобалне рецесије на развој финансијског тржишта за одабране субјекте и да се анализира процес усвајања нових правила у Европској Унији, која у будућности треба да обезбеде економски просперитет.

Кључне речи: глобална економска рецесија, финансијска криза, регулација, регулаторни пројекат, финансијско тржиште, банка, финансијски ризици.

Abstract: The current financial crisis is specific due to its global extent. Primary task of banks and insurance companies is to overcome the impacts of the crisis, stabilize their position on the market and strengthen their capital adequacy according to the rules set by the European Union. Projects Basel II and Basel III should ensure transparency of bank enterprising, closer supervision of risk management and fortify own capital to improve ability of banks to face losses in the times of crisis. Project Solvency II is made up for insurance companies with an ambition to set up rules that ensure their financial stability and protection of insured customers' interests. In the future it should serve as a protection in the case of repeated crisis situations. The aim of the article is to investigate the impact of the global recession on actual development of the financial market in selected entities and analyze the process of accepting new rules in the European Union, which are to ensure their economic prosperity in the future.

Keywords: global economic crisis, financial crisis, regulation, regulatory project, financial market, insurance market, bank, financial risks.

* ✉ jitka.meluchova@euba.sk

** ✉ katarina.mazikova@euba.sk

*** ✉ mateasova.martina@gmail.com

Introduction

This report examines the consequences of the global recession for the development of the financial market in selected entities (banks and insurance companies) and analyzes the factors that affect their achieved economic outcomes. It deals with the risks that affect the implementation of financial activities in banks and insurance companies in relation to the new rules of capital requirements. For this purpose we have used methods of analysis of general trends of selected indicators in Slovak banks and insurance companies, legislative materials and documents, knowledge of scientific and technical literature, statistical data and materials published by the *National Bank of Slovakia - NBS*, *European Central Bank – ECB*, *Statistical Office* and *Eurostat*. Main problem areas are analyzed, providing a basis for an economic debate within the methodology paper. This is the analysis of the integrated supervision of the European financial market, examining the strengths and weaknesses of both current and upcoming regulatory rules. Another analysis included refers to the implementation of Basel II rules, Solvency II and the approach of banks and insurance companies towards meeting the requirements of solvency and risk measurement in carrying out their activities, assessment of the impact effects of *Basel II*, *Basel III* and *Solvency II* on financial stability in the EU.

1. Analysis of the situation on the EU financial market

EU financial market entities, such as banks and insurance companies, carry out their activities under a single license¹, which allows them to operate in any EU Member State. Liberalization of financial services has been introduced by EU Directives and aimed to create a common market for financial services throughout the EU (Directive 2009/138/EC Solvency II). This trend, however, has the consequence that large financial institutions carrying out their activities globally transmit favorable and unfavorable effects of their activities on the global economy. Local regulation of banks and insurance companies has proved to be insufficient. Therefore, the need arose to create a new global authority to regulate financial markets that timely capture and assess the risks and implement effective measures to mitigate the impact of risk on all financial market actors. Implemented measures meant reform of the regulation and supervision of various sectors of the financial market.

Banks and insurance companies played different roles during the financial crisis because they operate on different business principles. Banks and insurance companies also have different risk profiles on the micro level (the stability of the financial institutions) as well as on the macro level (the stability of the financial system as a whole and its impact on the economy). The business model of insurance companies is risk diversification in the portfolio and in time for the next financial transactions, while

¹The principle of a single license allows banks and insurance companies to carry out their activities throughout the EU if they have been authorized to practice in their home country.

in the case of banks, it is the collection of deposits and lending. On the micro level, insurance companies are regular and long-financed, they have a simpler structure of the balance sheet and are less vulnerable to liquidity risk. Assets and liabilities in insurance companies are linked (assets are tied to the reserves to cover future obligations to policy holders). Conversely, banks often have to deal with structural imbalances between assets and liabilities, which significantly increases the risk of speculation while liquidity risk is more significant. Interconnectedness among banks is another distinctive feature of the banking business model (especially for interbank loans), while the insurance connectivity is low.

The investment strategy of banks is rather short, focused primarily on yield. The investment policy of insurance companies is usually long-term, set by the *Asset Liability Management – ALM* system, and i.e. risk management methods designed to ensure return on investment to cover the contractual obligations of insurance. Risk profiles of banks and insurance companies are different and this requires the surveillance system to take into account the specificities of their activities and not to apply the same measures to the banking and insurance. EU efforts to create a single market for financial services in the past focused on increasing the responsibilities of so called home supervisory authorities in the Member States. The model of single financial market supervision has been created in SR under this concept. Integrated supervision is conducted by the *National Bank of Slovakia – NBS* from January 2006 of the bodies of banking, insurance, capital market and pension savings.

This system of integrated supervision is based on the idea of creating a single European financial market, which has been approved as the *Action Plan for Financial Services* (1999). The document contained a timetable and specific measures aimed at the integration of national financial markets into a single European market. Efforts to achieve these objectives led to the *Committee of Wise Men*. The result of the committee's work was to develop so called *Lamfalussy report* (2001) about a new approach to the regulation of European markets for securities. Directives have been adopted (especially 2003/6/ES, 2003/124/ES, 2003/125/ES, 2004/72/ES, 2003/71/ES, 2004/39/ES, 2006/73/ES, 2004/109/ES, 2007/14/ES) referred to as the "*Lamfalussy Directives*". The organizational structure of the new committees for financial services has been established by Directive (2005/1/EC) – the objective is to create a new organizational structure for financial services committees. The reason was to change the way of functioning of markets in the EU for efficient and flexible model that can be adapted to development in the financial markets. Other document, which reviewed five years of operation of the *Action plan for financial services*, was the Green Paper on Financial Services Policy (2005–2010). The results of the actions have been published in White Paper (2005), which presented the financial services policy for the next five years (until 2010). The main objective was to achieve free movement of capital at the lowest cost, but to

ensure effective supervision of the conduct of all stakeholders. This development, however, has been hit by the financial crisis. The Commission established in November 2008, the expert group, which was tasked with making recommendations on how to strengthen cooperation and convergence of supervisory authorities in each EU country in order to restore confidence in the financial system. The result of the published de Larosièr report (De Larosiere, J. Group, 2009) were recommendations for the creation of a new integrated model of supervision of financial institutions and markets to strengthen overall financial stability in the EU. This report followed upon the Lamfaluss process and became a basis for the preparation of a new concept of pan-European financial supervision. The European Council subsequently approved in November 2010, five regulations and directives, which became the legislative basis for the emergence of the *European system of financial supervision - ESFS*, which entered into force on 1 January 2011.

The aim of the newly adopted concept ESFS is to ensure proper application of the rules applicable to the financial market and thus protect the stability and confidence in the financial system for all consumers of financial services throughout the EU. Exercising supervision is carried out on *micro-prudential* level, i.e. prudent supervision of financial institutions, which deals with (ESMA, EBA and EIOPA, 2011)² and *macro-prudential* supervision of the financial system throughout the EU, which is covered by the *European Systemic Risk Board- ESRB*. The basic condition for the creation of a single market is to minimize differences in terms of performance between domestic and cross-border entities and to increase the transparency of reported information.

The financial crisis meant that there has been a turn to the domestic markets, where financial institutions focus more on business operations in their home markets and do not expand, thereby reducing the degree of integration. If the concept of centralized regulation includes supervision of financial institutions throughout the EU, it should also assume fiscal responsibility. Sufficient powers and responsibilities should form a synergistic whole. *ECB report on financial integration*, however, acknowledges that a tax for high degree of integration is faster spread of the crisis to the entire financial system of the EU. Therefore, it is necessary to focus on the creation of crisis management, which would cooperate in crisis, and ensure regular monitoring and risk assessment in relation to their overall impact on the financial system of the EU. One of the steps, by which this vision has been implemented, was the banking capital requirements directive (EU Directive 2009/111/ES, 2009). They introduced the obligation as supervisory authorities,

²European System of Financial Supervisors shall consist of authorities: the European Banking Authority (EBA), the European Insurance and Occupational Pensions Authority (EIOPA), European Banking Securities and Markets Authority (ESMA), the European Systemic Risk Board (ESRB).

when deciding in crisis situations, to take into account the potential impact of their decisions on

the stability of the financial system in other Member States and provide as soon as possible competent authorities with all information relevant to the performance of their activities. The original surveillance system based primarily on a national basis did not monitor what was the impact of measures on one state to other EU countries; its role was primarily to ensure national financial stability. The flow of information must be bi-directional. ESFS shall have an access to all necessary information from national supervisors to effectively carry out its tasks. It must also have sufficient powers to timely and effectively intervene in the event of any adverse development. For the purposes of implementing the macro-prudential supervision (EU Regulation 1092/2010, 2010) a macro-prudential analysis of the financial market shall be produced, which will have the task of identifying potential risks and their impact on the financial stability of the EU, then evaluate the likelihood of threats risk with an estimate of potential losses caused by the risk. This task has been entrusted to the ESRB, which is based on the monitoring of systemic risks and implements measures eliminating the identified risks. Another objective is to monitor the measures against the risks so as they are carried out in a coordinated manner throughout the EU or globally. The financial crisis has shown that the failure of one element resulted in a chain reaction that has infected the other entities. The key criteria for determining systemic importance of markets and institutions should be size, substitutability and interconnectedness with the rest of the system. This monitoring should be accompanied by information about weaknesses of the financial system and take into account national specificities of their countries, and also able to detect systemic risks and prevent its consequences.

To solve these problems, we just need to choose the right path, so that the new rules actually bring the desired effect and contribute to the prudence of the financial market of the EU, not to complicate the situation by complex and time-consuming procedures, which ultimately will not improve the situation, and will not produce the desired effect for the stakeholders.

2. Capital requirements for financial institutions- expected changes and additions

Other documents have been prepared, which aim to strengthen financial stability in addition to the new architecture of financial supervision of the EU. For banks, it is an application of the principles of *The Capital Requirements Directive –CRD*, (EU Directive 2006/49/ES and EU Directive 2006/48/ES, 2006), introducing EU Basel Capital Accord, so called *Basel II*. Directive CRD, unlike the rules set by the Basel Convention are binding for all credit institutions and investment firms operating in the EU. Their aim is to ensure that the banking system can flexibly respond to

changes in financial markets and the use of new technology and knowledge converge towards highly sensitive risk assessment techniques. The Basel framework has been designed to apply to internationally active banks and its expanded scope, as defined by the EU Commission in the CRD, is in the interests of both depositors and borrowers.

For insurance companies, it is a preparation to adopt rules conceived in Directive 2009/138/ES on the taking up and pursuit of insurance and reinsurance referred to as *Solvency II*, which will become binding for EU Member States from 1 January 2015 (but not excluded to shift up to 1 January 2016). The common feature of both projects is a concept based on three pillars, which establish quantitative requirements, quality requirements and supervision to set the transparency of transactions conducted and disclosure rules in the last pillar, also a protection of clients in the financial market and an effective system of internal control and risk management on the micro level of insurance companies. All these measures aim to create the conditions for the provision of financial products and services that ensure safe and reliable international environment, which will be a basis of financial stability in the EU. The relevant European authorities should ensure effective functioning of the internal market to contribute to the consistent application of these Directives and to the convergence of supervisory practices and techniques within the EU, where ESFS takes its role.

3. Capital adequacy of banks

The main function of effective supervision is to protect the interests of clients (depositors) and to ensure the safety of entrusted financial assets. This role can be filled only if the supervisor has tools that in case of threat to the financial health of banks allow intervention at the cost of restrictions on the rights of shareholders. The aim is to set rules, so that the height and structure of the equity of the bank is always able to protect customer deposits and guarantee their return given the risks that the bank is exposed to due to the management of these assets. Capital regulation only acts as a capital silencer, which has a mitigating impact of potential losses and their impact on the solvency and financial stability of the bank. Other regulatory capital manifests itself when risks already occurred. For example, in mismanagement of credit risk or market risk, sufficient amount of equity can absorb more losses without jeopardizing the bank's clients.

Problems in a particular bank in global economy are rapidly transferred to other financial institutions and may cause serious problems to the whole financial market. The role of setting bank capital adequacy rules is to establish requirements for capital equipment so that any potential future losses are associated with today's risks and are covered by their own resources and at the same time to reflect existing losses in profit or loss, thereby reducing the bank's own capital, which will feel the owners of capital and not depositors. The structure of bank capital under *Basel II* rules (incorporated

into CRD) includes equity, which forms an essential component of the highest quality and regulatory capital of the bank (paid-up capital, share premium, reserves and retained earnings from previous years). The calculated value is then adjusted for unpaid losses from previous years, significant losses of the current year, the value of goodwill and other intangible assets, the value of own shares held by the bank, shares and instruments in other companies and subordinated claims. The second component is additional capital, which represents less quality component of capital. Likely to affect the amount of own funds as collateral against credit risk and, consequently, other risks that threaten business investment of banks, is evident from the outset activities of the *Basel Committee on Banking Supervision*.

The Committee issued in 1988 for internationally active banks with capital adequacy rules- *Basel Capital Accord*, so called *Basel I*. These first rules have become a part of the EU legislation. Development and increasing complexity of banking transactions necessitated a revision of the original agreement and the establishment of new rules of supervision of banks, also taking into account modern approaches to risk management. The result was the adoption of the rules of *New Basel Capital Accord*, so called *Basel II*, which have been gradually implemented in the legislation of the EU Member State through Directives CRD. Their aim is to ensure that the banking system in Europe is very sensitive to the risks and converge towards highly sensitive risk assessment techniques using internal models and modeling processes, introducing stress testing procedures of their assets against credit, market and operational risks, etc., of which the nun folds requirement for the amount of equity that must be available to the bank.

Therefore, banks should establish methods and procedures for assessing and maintaining the adequacy of capital, which can flexibly respond to changes in risk due to for example financial crisis. Responsibility of the regulator is to make sure that banks have good organization and adequate own funds, having regard to the risks to which they are or may be exposed to, and see that the disclosures are truthful, understandable and comparable. Calculation of capital adequacy determines the relationship between the equity of the bank, which is useful for calculating the capital requirements, regulators imposed capital requirements based on an estimated risk to the activity according to the relationship:

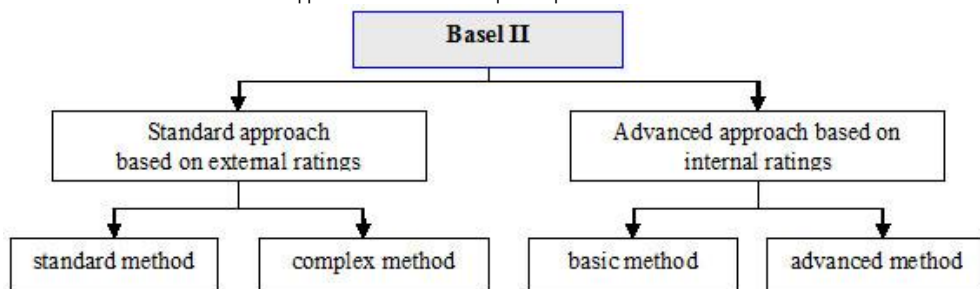
$$KP = \frac{K}{KP_{UR} + KP_{TR} + KP_{OR}} \times 0,08 \geq 0,08$$

KP – represents the capital requirement set by the rules of Basel II

K – capital, which are bank's own funds for the purposes of examined capital adequacy

KP_{UR} – capital requirements to cover credit risk
 KP_{TR} – capital requirements to cover market risk
 KP_{OR} – capital requirements to cover operational risk
 0,08 – factor, which allows to put into proportion by the bank held and needed capital to the value of 8% as required by Basel II. It regards the assessment of all risk-weighted assets in respect of credit, market and operational risk.

Scheme1: Approaches to calculate capital requirements under Basel II rules



Source: author's own processing according to the rules of Basel II.

To reach the capital adequacy is more than just fixing the amount and structure of equity as it also includes procedures and methods of risk measurement. Basel II provides three methods for calculating capital adequacy to cover credit risk. Firstly, it is a standard method *Standardized Approach - SA*, which is based on sensitive and objective evaluation of credit risk based on external rating of bank customers. The essence of this method is to divide all receivables from loans into categories according to the degree of risk. To each category divided by the following claims are assigned a risk weight from zero to one hundred percent and thus value assets of banks ranging from risk-free to the most risky. Basel II explicitly provides risk weights for the calculation of capital adequacy of individual types of claims under the assigned rating by external rating agencies. Individual loan claims are divided into risk categories based on external rating, which is assigned to the relevant risk weight. Calculation of risk-weighted assets is the sum of multiples of the volume of claims in the individual risk classes and their associated risk weights. The actual amount of the capital requirement for credit risk is calculated as the coefficient of 0.08 and the risk-weighted assets.

In Slovakia, there are few businesses that have an external credit rating by the international rating agency. The bank assigns such borrower, who does not have an external rating evaluation, a uniform risk weight of 100 %, which corresponds to a capital requirement of 8% of the loan amount. This fact is the biggest shortcomings of this approach. Insufficient determination of the creditworthiness of the loan recipient does not allow calculating capital adequacy, which would correspond to

the real risk profile of the bank. There are exclusively ratings of the renowned rating agencies, such as *Standard & Poor's*, *Moody's*, *Fitch Rating's* used in the standard approach.

There is already more sophisticated approach based on internal ratings (*scoring models*) of the bank, which gives the option in measuring credit risk, to use statistical and mathematical techniques. The application of basic approach *Foundation Internal Rating Based Approach – FIRB*, resp. advanced approach *Advanced Internal Rating Based Approach – AIRB* allows banks, which are able to quantify the risk of certain specific funding to adjust its capital equipment in proportion to the risks taken. Assuming quality of a built-loan portfolio (segmentation creditworthiness, sufficient collateral loans), allow this approach lower demands for equity. Banks' equity is used to enhance the stability of banks in crisis situations, constitutes a resource for possible future losses. The more own resources the bank must keep, the greater the risks undergoes its participation in credit transactions. To achieve adequate facilities equity banks must be able to estimate their risk as accurately as possible, to assess what risk is a loan, which allows internal rating methods developed by the banks themselves. The primary prerequisite for assigning internal ratings for calculating risk-weighted assets is that the bank has to develop a rating system that meets the requirements of the CRD for assessing credit risk, the assignment of claims in classes and quantification of estimated failure and loss in certain high-risk types of claims. At the same time, banks must place appropriate procedures of stress testing to assess capital requirements, which allow assessing the bank's ability to withstand changes in economic conditions. Market risk reflects the volatility of market prices of financial instruments or interest rates, exchange rates and so on. The capital requirements to cover *market risk* are that each bank is required to develop methods and procedures for the measurement and management of all significant effects of market risks.

The bank according to the CDR methodology can choose a *standard*, resp. *simplified approach* or the *internal model* for market risk calculation. Capital requirement to cover market risk is based on detection of partial capital requirements for interest rate, equity, foreign exchange and commodity risks. For determining capital requirements to cover *operational risk*, the bank examines possible hazards arising from improper internal procedures, human error, and system failures or due to external events. Diversity of business models of banks requires different approaches to calculate capital requirements for operational risk provision, from the simplest to more complex, risk-sensitive approaches and developing their own models to measure and regular review of operational risk. According to the rules of Basel II, also legal risk of imminent enforce contracts, unsuccessful legal proceedings or judgments with a negative impact on the bank shall be assigned to operational risk. It also includes risk of the bank failure to meet regulatory requirements,

and successfully adapt to changes in regulatory legislation. The bank may use three methods for measuring operational risk, resp. their combination, and apply the *Basic Indicator Approach – BIA*, *Standardized Approach – SA*, *Advanced Measurement Approaches – AMA*.

There are also views that the bank's own capital is sufficient instrument representing financial strength of banks and prescribe capital adequacy is useless regulatory tool. However, even in a fair presentation of the state of financial situation in the accounting, equity reflects the current status, without indicating possible negative economic development in the future. The essence of the capital adequacy concept is to measure risks to the bank in case of any adverse development of external economic environment and to determine the relevant minimum capital requirement. At the same time it should encourage banks to develop internal models and processes for the accurate measurement of risk, which establishes capital requirements in an optimal way without having unnecessarily high equity.

4. Capital equipment of insurance companies

Insurance companies as well as banks provide financial services to their commercial and competitive principles in financial markets. To carry out the tasks that form the subject of its activities, insurance company must set an effective protection of resources received from insurance and which will be used to cover future liabilities from insurance claims. To ensure the ability to have at any moment sufficient resources to cover these obligations it creates reserves (foreign sources) of the premiums received from policyholders. The principle of solvency, however, sets the requirement for insurance company to demonstrate that in addition to created reserves would ever be able to pay all its insurance liabilities also from own capital (own funds). For these purposes initiatives have been developed at the EU level since 70s of the last century that resulted in the adoption of directives of the first generation, subsequently amended and supplemented by other directives of the second and third generation. Development and needs of the insurance market over time necessitated a review of the requirements for the capital endowment insurance. The result of these initiatives was the adoption of directives known as *Solvency I*, whose implementation into national legislation became binding for Member States starting in 2004. Current development in financial markets affected by consequences of the crisis has accelerated the need to set up effective mechanisms for the protection of insured clients. It is necessary to ensure financial stability of insurance companies especially in the long-term for expected liabilities, whose performance can occur in ten, twenty and thirty years.

The current system of regulation ensured through Solvency I does not respond to the new trends of development of information and communication technologies, sophisticated mathematical and statistical methods and new approaches to risk simulation scenarios for solvency reporting needs. It sets only minimum capital requirement in a simple factorial calculation so called *required solvency margin*.

Member State decides itself whether to proceed to more stringent national regulations, thus creating a non-uniform regulatory environment for the insurance market in the EU. The forthcoming *Solvency II* project should consolidate 13 existing directives into a single unit and establish risk-based supervisory regime, which will be applied uniformly in all Member States. The project aims is to create a financially sound insurance market environment, which protects the interests of insured persons - beneficiaries, ensuring a higher quality of risk management in the management of financial assets and the efficient allocation of capital needed to demonstrate the financial strength of insurance companies. New solvency rules are based on four-level structure of the *Lamfalussy financial services architecture*. Lamfalussy approach has allowed the new solvency regime to flexibly respond to development and changes in the financial market and be in line with development in international financial reporting IFRS (International Financial Reporting Standards) of the insurance and reinsurance. On the first level it was necessary to set the system principles to adopt directives and regulations, which formed a basis for the exercise of implementing measures on the second level and set a proposition to establish a uniform supervisory convergence and cooperation in the implementation of the new system on the third level, the whole process is finished on the fourth level aimed at ensuring the application of uniform rules for the entire insurance market in the EU.

The EU Commission carried out a review of the *Lamfalussy process* (2007) based on analysis and feedback from stakeholders and issued a report (Review of the Lamfalussy process, Strengthening Supervisory, 2007), which assesses the progress and achievement of the objectives of the project. It confirms the correctness of the approach in establishing solvency rules, which is consistent with the capital requirements established in the banking sector under Basel II rules, but respecting the specificities of the insurance sector. Solvency II project is also based on three pillars. In addition to the *quantitative requirements* of capital requirements (Pillar 1) in relation to the undertaken risks (insurance, credit, market and operational) insurance and reinsurance will be required to meet *quality requirements* for the system of risk management, internal control and supervision scheme (Pillar 2). Market discipline rules that impose *requirements on reporting and disclosure of information* not only for the need for regulation, but also for other users will be set as well (Pillar 3).

The demonstration of solvency of the insurance is based on performance of two assumptions, namely *Solvency Capital Requirement – SCR* and *Minimum Capital Requirement – MCR*, each of which is calculated for other purposes. SCR value should reflect the overall level of capital that reflects the risk profile of the insurance company calculated according to standard formula or the internal risk model. The insurance company will continuously monitor the SCR and maintain own

funds in required structure to ensure its coverage. Decrease of the own funds under the SCR will signal problems in the capital equipment of the insurance company, which will entitle the supervisory authority to take corrective action. While the requirement of the MCR will reflect a minimum level of capital, which fall below this value would represent a serious threat to the interests of insured and beneficiaries designated to take insurance benefits. Decrease of the own funds under the MCR will initiate surveillance to take extreme measures, for example, suspend or revoke a license. Calculations of both requirements should be closely linked and based on approach taking into account the risks. The central idea is to involve the insurance company to effectively manage their risks, because if they manage the quality and use appropriate methods of mitigation, they will be exposed to lower capital requirements, which will work in reverse. To calculate the SCR *Value at Risk* method will be used, and a standard formula for the calculation of the Solvency Capital or internal model.

Standard formula SCR = basic SCR + capital requirement for operational risk + + treatment capacity of technical provisions to absorb losses and deferred taxes

The new regulatory regime of the insurance market has shifted into force throughout the EU, thus also in Slovakia. To the start date of the project there have been various analyzes, surveys and studies to verify the effectiveness and efficiency of the forthcoming single regulatory environment at the EU level. In addition to the above mentioned review of the Lamfalussy process a number of studies have been carried out, for example, The fourth quantitative impact study – QIS 4 and The fifth quantitative impact study– QIS 5, which have mapped readiness for new insurance rules, as well as quantitative effects consisting in setting the calibration of standard SCR and MCR formula and the methods used to determine the value of the individual balance sheet items. The new approach will claim the valuation of assets, own resources and liabilities, including technical provisions. Assets will be valued at the value at which they could be sold, resp. exchanged in an arm's length transaction, and liabilities in the price in which they could be transferred to another entity. Recognition of assets and liabilities in the balance sheet at fair value, which corresponds to the conditions of trade, ensures that the valuation will be mutually consistent and objective oriented toward the future, which is seen as the best defense against potential threats to the rights of the insured. The own funds of insurance companies provide protection against risks, which aim to absorb its financial losses if they were not covered by technical reserves.

Determination of the amount of eligible own funds to cover two capital requirements SCR and MCR is based on three-step process. It consists of determining the own funds (sum of basic and ancillary own funds), classification of own funds (classified into three classes according to quality and different loss absorption) and eligibility of own funds (for their recognition for the purpose of fulfilling the capital requirements of the SCR and MCR). The Directive lays down specific

requirements for calculating the various items that are necessary to determine solvency. Particular attention is given to determination of technical provisions. Their real assessment will be based on determination of the best estimate, which represents the expected cash flows taking into account the time value of money, including the risk margin. This approach should ensure that the total value of technical provisions shall at any time correspond to the amount requested by a third party on receipt of the portfolio of insurance contracts, required to meet the related rights and obligations. The calculation must be based on information provided by financial markets and the available data on insurance and investment risks to determine the assumptions that best fit the characteristics of the portfolio managed by insurance and investment contracts (Report CEIOPS QIS 4 for Solvency II, 2008). Solvency II has the ambition to significantly change the regulatory oversight of the European insurance market. QIS4 has shown good readiness of Slovak insurance companies for acceptance Solvency II rules. Slovak insurance companies have been preparing their financial statements according to IFRS since 2006 and they already measure technical provisions as well as the assets at fair value.

References

Basel committee on banking supervision (2004), *International Convergence of Capital Measurement and Capital Standards. A Revised Framework*. Bank for International Settlements. ISBN 92-9131-669-5.

CEIOPS. (2008), *Ceioms' Report on its fourth Quantitative Impact Study (QIS4) for Solvency II*. Available at:

<https://eiopa.europa.eu/fileadmin/tx_dam/files/consultations/QIS/CEIOPS-SEC-82-08%20QIS4%20Report.pdf>.

De Larosiere, J. Group. (2009), *The high-level group on financial supervision in the EU*. Report. Available at:

<http://ec.europa.eu/internal_market/finances/docs/de_larosiere_report_en.pdf>, 9. 10. 2011.

EU. (2005), *Directive No 2005/1/EC- objective is to create a new organizational structure for financial services committees*. Available at:

<http://www.esma.europa.eu/system/files/Dir_05_01.pdf>.

EU. (2010), *Regulation. No 1092/2010 Of the European parliament and of the council of 24 November 2010 on European Union macro-prudential oversight of the financial system and establishing a European Systemic Risk Board*. Available at:

<http://www.esma.europa.eu/system/files/Reg_1092_2010_ESRB.pdf>.

- ECB.** (2010), *Financial integration in Europe – ECB*. Available at: <<http://www.ecb.int/pub/pdf/other/financialintegrationineurope201004en.pdf>>, 19. 9. 2011.
- EIOPA.** (2011), *Report on the fifth Quantitative Impact Study (QIS 5) for Solvency II*. Available at: <https://eiopa.europa.eu/fileadmin/tx_dam/files/publications/reports/QIS5_Report_Final.pdf>, 8. 10. 2011.
- EK.** (2009b), *Directive of the European Parliament and of the Council 2009/138/EC on the taking up and pursuit of the business of Insurance and Reinsurance (Solvency II - recast)*. Official Journal of the European Union L 335/1. 17. 12. 2009.
- EK.** (2008), *Opinion of the European Economic and Social Committee*. Proposal for a Directive of the European Parliament and of the Council on the taking-up and pursuit of the business of Insurance and Reinsurance - Solvency II KOM(2007) 361–2007/0143 (COD). Official Journal of the European Union C 224, S. 0011 – 0017. 30. 8. 2008.
- EK.** (2007), *Review of the Lamfalussy process*. Strengthening supervisory. Available at: <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0727:FIN:SK:PDF>>, 31. 9. 2011.
- EK.** (2006a), *Directive of the European Parliament and of the Council 2006/48/EC on the taking up and pursuit of the business of credit institutions (recast)*. Official Journal of the European Union. L 177/1. 30. 6. 2006.
- EK.** (2006b), *Directive of the European Parliament and of the Council 2006/49/EC on the capital adequacy of investment firms and credit institutions (recast)*. Official Journal of the European Union. L 177/201. 30. 6. 2006.
- EK.** (1999), *The Financial Services Action Plan*, zverejnenie Komisie KOM (1999) 232, Brusel 11. 5. 1999.
- Global risks 2011.** (2011), *World Economic Forum. Sixth Edition. Geneva*. Available at: <<http://www.weforum.org/issues/global-risks>>, 8. 9. 2011.
- Green paper.** (2005), *Financial Services Policy 2005-2010*, KOM (2005) 177, Brusel 3. 5. 2005.
- IMF.** (2009), *Global Financial Stability Report: Responding to the Financial Crisis and Measuring Systemic Risks*, International Monetary Fund, April 2009.
- Lamfalussy, A. et al.** (2001), *Final report of the Committee of Wise men on the Regulation of European Securities markets*. Brusel. Dostupné na internete: <http://ec.europa.eu/internal_market/securities/docs/lamfalussy/wisemen/final-report-wise-men_en.pdf>, 5. 9. 2011.

NBS. (2010), *Analysis readiness insurance companies for Solvency II*. Available at: <http://www.nbs.sk/_img/Dokumenty/Dohlad ORM/Poist'ovnictvo/Analiza_pripravenosti_poistovni_na_Solventnost_II.pdf>, 23. 8. 2011.

NBS. (2007-2011), *Analysis of the Slovak financial sector*. Available at: <<http://www.nbs.sk/sk/publikacie/publikacie-nbs/analyzy-slovenskeho-financneho-sektora>>, 5. 9. 2011.

Nebeský, Š., Paluš, P., Pénzeš, P., Šesták, L. (2011), *Brief overview of the powers and organizational structure of the new European supervisory bodies*. Biatec. NBS, 19, no. 1, p. 19-30.0

Paluš, P., Gondová, A. (2009), *The fourth quantitative impact study of the new regulation in the insurance sector*. Biatec. NBS, 17, č. 11, p. 28-32.

White paper. *Financial Services Policy (2005-2010)*, KOM (2005) 629, Brusel 1. 12. 2005.

Resume

Insurance companies are awaiting changes in setting new levels of capital requirements imposed by *Solvency II*, from about 2015. Various studies and stress testing have been made for the purposes of the impact of quantitative requirements of the new regulation on Slovak insurance companies. Results published by the NBS processed for the EIOPA have shown that Slovak insurance companies will be ready to adopt new rules. Similarly, banks are preparing for the new regulatory principles in order to face future crises. The role of the forthcoming *Basel III* project is to strengthen the monitoring of the banking sector and increase transparency behavior of banks. It sets a stricter control of risk management in relation to capital adequacy in order to improve their ability to absorb losses in times of crisis. *Basel III* rules will be implemented in stages, from about 2019. Among other measures, the bank should introduce higher capital adequacy ratio of 9 % of the share capital and create more bank capital and silencers, which will eliminate the negative effects of volatility in financial markets.

The financial crisis has triggered the need to recruit radical socially beneficial reforms that would be otherwise in boom conditions at the time of economic optimism hardly passable. It has adjusted challenges for the recovery of the financial system, economies and adoption of changes, which, if they are implemented wisely, will contribute to the restoration of economic growth and lost confidence in financial markets.