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THE GENESIS OF THE FUNCTIONS OF GOVERNMENT DEBT SECURITIES

Government borrowings appear at a certain stage of development the economic system. Governments used loans many centuries ago because there are often occurred situations when borrowings were the only way to attract additional financial resources. The preconditions for government loans from the position of creditors are also important. These, in particular, include: the availability of subjects that have the temporarily available funds; investor confidence in the state, that stimulating their interest in buying government debt securities; state's ability to repay its obligations and so on. Thus, the article deals with the basic prerequisites of the government securities market and its function at different stages of development of economic relations.

So, it was found, that the main functions of local borrowing in XIV-XX centuries include the following: fiscal, public debt management, improved economic situation in some areas and repayment of previously issued loans. In modern conditions the functions of government securities have expanded and include: regulation of the money market and stock market, smoothing unevenness of funds flow to the budget, funding various programs, support the liquidity of financial institutions. The author also highlights that objective necessity of using government borrowing associated with the presence of contradictions between the existing needs of society and the state's capacity to satisfy them within existing financial resources. And in such situations government securities are a means of mobilizing additional financial resources to the state budget.

Keywords: public credit, government securities, the budget deficit, open market operations, mobilization of financial resources.

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IMPLEMENTATION OF BASEL III IN THE EUROPEAN BANKING SECTOR

***Abstract:** In this work, which is part of a larger research project aimed at the expected impact of Basel III on commercial banks in Romania, I decided to analyse the implementation and transposition of the new international prudential requirements into European regulations, which are of particular interest for the Romanian banking sector. I started this analysis by highlighting the peculiarities of the European banking sector at aggregate level, but also as a cross-country survey, to later highlight the views of European regulations on prudential supervision and differences to international regulations.*

***Key words:** CRD IV, capital requirements, liquidity ratios.*

Introduction. The crisis has highlighted the existence of problems in the banking sector not only in the USA but also in Europe. This prompted the G20 to discuss repeatedly between 2008 and 2010 on the need to review the capital requirements under Basel II, that came mainly with an enlargement of the areas covered by the risks to be taken in the calculation of the capital adequacy indicator but also with a diminishing of risks share related to the retail exposures and to those towards Investment Societies [1], materialized in a new agreement signed in 2010. The purpose of this agreement is to create a new regulatory framework needed to reduce the banks' possibility to cause economic damage by excessive risk-taking.

Basel III appeared after detecting deficiencies in Basel II, which focused on the following aspects:

- low quality of capital items taken into account in the solvency ratio and their inability to absorb losses
- capital requirements were more relaxed during economic growth, thus having a pronounced pro-cyclical nature
- poor management of liquidity and market risk
- lack of correlation between the elements taken into account in determining the capital and their risk
- lack of concern for systemic risk management in banking
- lack of assessing the rating companies' capacity to highlight and measure real risks assumed by banking companies, by excessive use of securitisation and modern derivatives [2].

In this context, Basel III aims at both consolidating the micro-prudential framework set out in Basel II and creating an appropriate macro-prudential framework for the ongoing changes in the banking sector. Regarding the micro-prudential framework, Basel III aims at improving the quality and quantity of capital, assessing and managing liquidity risk and appropriate risk coverage. The macro-prudential component of the agreement aims at countercyclical measures (creating an additional capital buffer in times of economic growth), specialised monitoring of systemic risk banks, introducing requirements regarding the leverage ratio, calculated as the ratio between quality capital (Tier 1) and total exposure (without adjusting the value of assets according to the degree of risk [3].

Therefore, since 2010, the international monetary authorities try to harmonize prudential regulations in line with Basel III. This also happens in Europe, where, in order to harmonize the bank capitalisation policy with international requirements, the European Parliament and the Council adopted in June 26, 2013 the 4th Capital Requirements Directive (CRD IV) and the Capital Requirements Regulation (CRR). CRR is a regulation directly applicable to banks and their supervisors in the EU. CRD IV is instead a directive which requires Member States to adopt the necessary legislation to comply with the requirements of the Directive. These laws are set forth in the spirit of Basel III but tailored for the European banking context, characterised by a high risk for the banking sector, this being due to the existence of the highest level of international banking intermediation.

I further propose to carry out an analysis on the European banking sector, highlighting the recorded particularities and later, pointing out the elements proposed by CRD IV/ CRR in terms of bank risk management at EU level, in order to harmonise with international prudential regulations.

Particular aspects of the European banking sector, examined at aggregate level. In the EU there is a heterogeneous set of approximately 8,000 monetary financial institutions (figure 1), including both money market funds and credit institutions ranging from some very small local banks to specialised banks, plus some of the biggest international banks of systemic importance. These institutions manage about 36 trillion Euros of the total international assets or 52% of global banking assets.

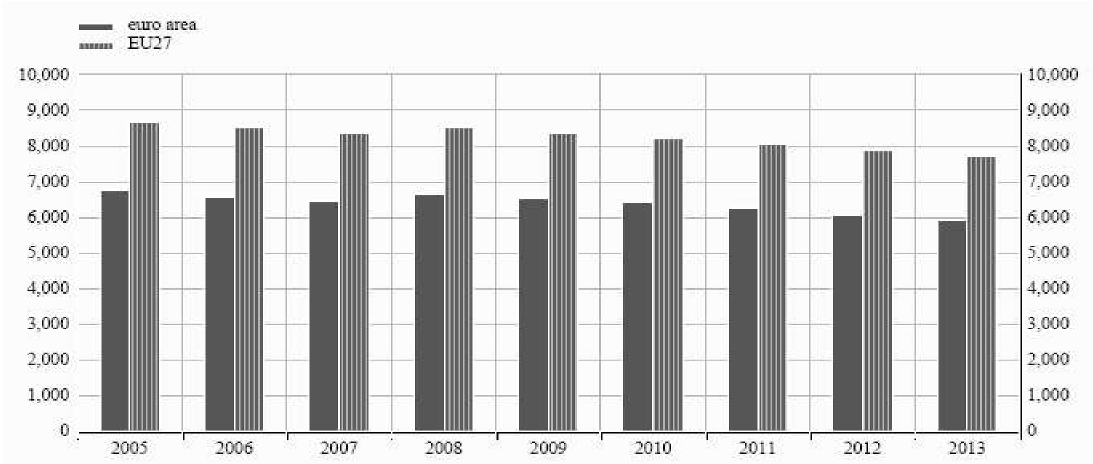

Fig. 1. The number of Monetary Financial Institutions (MFI*) at EU27 and euro area

Source: ECB – Banking Structures Report, October 2014, pp. 12

*MFI is the term used by the ECB that includes credit institutions as defined in Community law, and other financial institutions whose business is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credits and/or make investments in securities. Money market funds are also classified as MFIs.

European banking sector is of internationally systemic importance, and this is demonstrated by the high level of total bank assets and those held by the 5 largest banks in the system, compared to the level in the US and Japan banking systems (Figure 2).

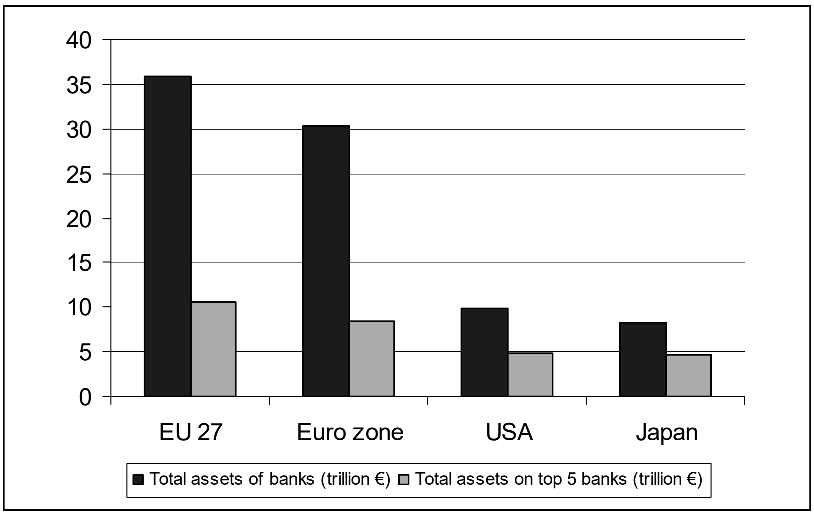

Fig. 2. Total assets of the banks and total assets in 5 top banks (trillion Euros) in 2011 – international comparison

Source: Processing data provided by European Banking Federation – Update data – International Comparison of Banking Sectors, for the EU, Euro Area, UK, USA and Japan (2011) http://www.ebf-fbe.eu/wp-content/uploads/2014/03/factsfiguresshort-3.pdf

After examining the share of the total banking assets to GDP we have seen the same position in the EU and euro area, superior to the US and Japan (Figure 3). The US banking sector assets thus represent only 90% of US GDP, given that the US economy is traded more on the capital market, and that much of mortgages loans are recorded in the government-funded entities' balance sheets (e.g. Fannie Mae and Freddie Mac). Besides differences arising between the levels of these indicators as a result of differences in financial reporting standards used in these countries, greater size of the banking sector in Europe partly reflects the greater dependence of the European economy on banking intermediation, as bank credit is the main source of EU funding for private sector (Final Report of the High-level Expert Group on reforming the structure of the EU banking sector, Brussels, 2 October 2012). This explains the motivation for prudential regulation of the banking sector in Europe to require increased attention from international and regional monetary authorities.

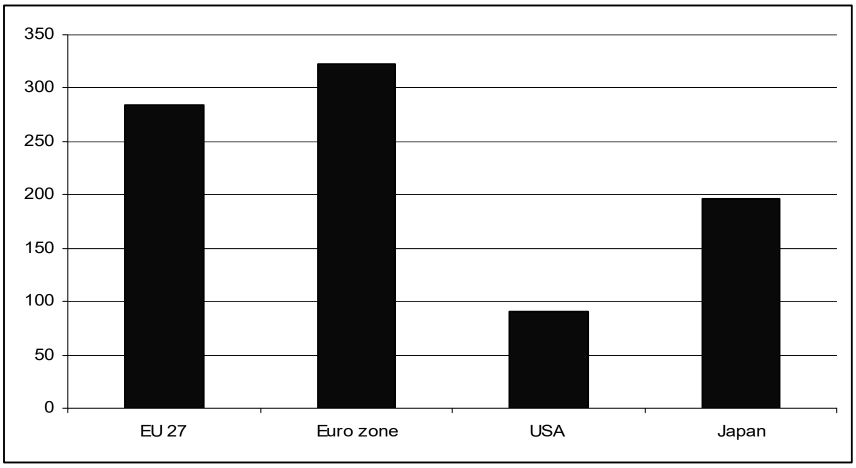

Fig. 3. Total bank assets (% of GDP) 2011 – international comparison

Source: Processing data provided by European Banking Federation – Update data – International Comparison of Banking Sectors, for the EU, Euro Area, UK, USA and Japan (2011) http://www.ebf-fbe.eu/wp-content/uploads/2014/03/factsfiguresshort-3.pdf

Another indicator reflecting the increased potential of credit risk in the European banking sector, with repercussions on banks' activity is the share of nonperforming loans to total gross loans. And, from this perspective, the EU and the euro area is on the top two positions, recording much higher levels compared to the US and Japan. This is mainly due to the very high level of lending in these areas, and thus the need for appropriate management of bank risk, since their production in the European area may have national and international negative economic repercussions (figure 4).

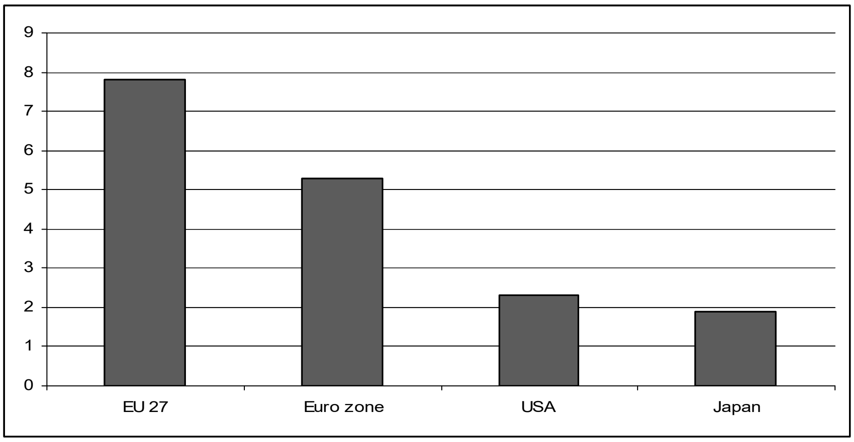

Fig. 4. Bank nonperforming loans to total gross loans (%) – 2013

Source: Processing World Bank Data, http://data.worldbank.org/indicator/FB.AST.NPER.ZS/countries

However, the European banking sector should not be analysed only at an aggregate level, because the disparities existing between countries in terms of economic development in general and the development of the banking sector in particular, continues to be significant. Thus, the largest banking sector in terms of total amount of assets is the UK (€ 9.93 trillion), followed by Germany (€ 8.52 trillion) and France (€ 8.45 trillion). If we compare the total assets to GDP, however, the highest level is recorded in Luxembourg, Ireland, Malta and Cyprus, these being recognized offshore financial centres. I have illustrated in Figure 5 the differences between the percentages of total assets held by MFIs in several EU countries. These differences have led to the new approach on overall legislative framework for all banking systems in Europe, and particularly for the systemic ones.

We must also note that nine EU countries (Belgium, Germany, Spain, France, Britain, Italy, Luxembourg, the Netherlands and Sweden) host 4000 banks holding 86% of the total assets of banks in the EU and 45% of global banking assets. In addition, in these nine countries there are all 14 EU banking groups, classified by the Basel Committee as systemically important banks at international level. We also have to take into account differences in the distribution of bank capital in the EU countries. The developed countries are generally exporters of banking services, large banks being located here characterised by a majority of domestic capital, while in the EU 13 (the last countries that joined the European Union), the situation is exactly reversed, with majority foreign capital shareholdings.

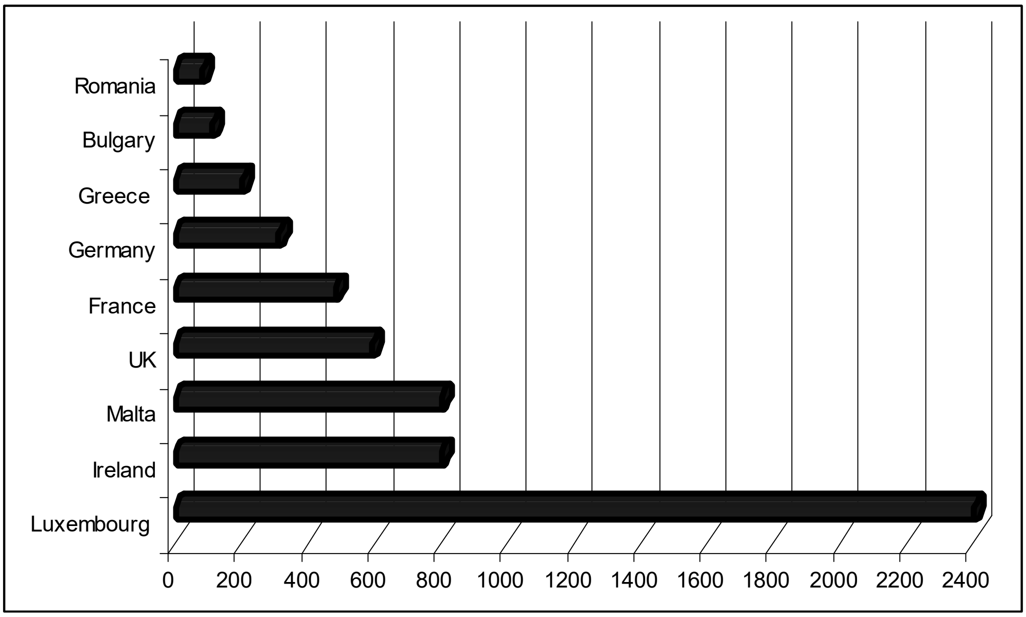

Fig. 5. Total assets of MFIs (% of GDP) in some of the EU countries in 2011

Source: Processing on Erkki Liikanen – Final Report of the High-level Expert Group on reforming the structure of the EU banking sector, Brussels, October2, 2012, pp. 13

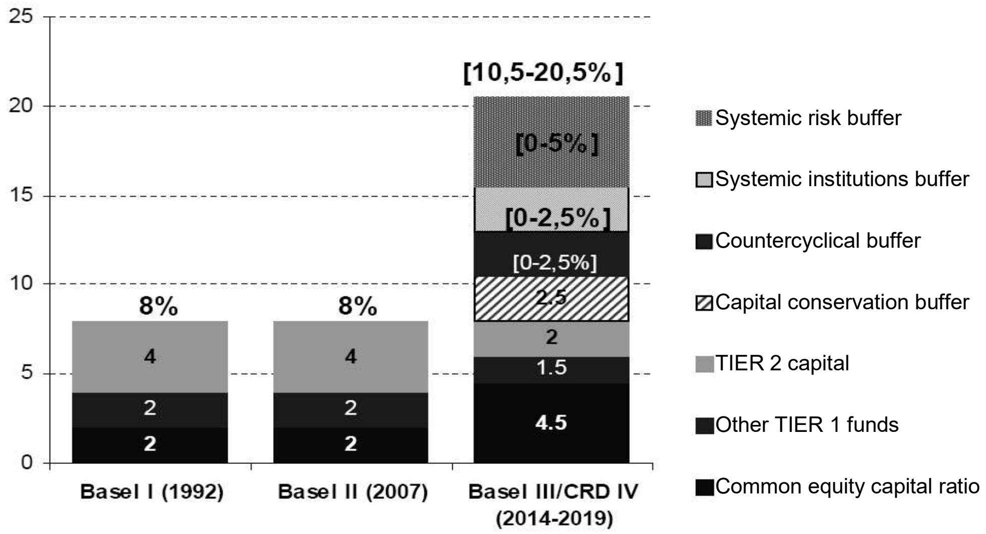

Fig. 6. Quantitative changes on capital requirements proposed by CRD IV

Source: NBR – Bogdan Olteanu – "European construction. Banking and financial dimension", Constanța 5 September 2013

Current prudential regulation at European level – CRD IV and CRR. New regulations concerning minimum capital requirements (CRD IV and CRR) entered into force on January 1, 2014, with implementation period 2014-2019 and cover all banks and most EU investment companies. The period for eliminating previous requirements is 2014-2019 and uniform application of the rules will be carried out by the European Banking Authority (EBA). EBA's goal is to create "a single rule book", so that the regulations cover all banking institutions, regardless of size in all EU countries, whether or not Members of the Basel Committee.

European regulations follow the main elements set by Basel III but not a literal transposition of them. However, Basel III is not a law, but rather a set of internationally agreed principles covering banking, whereas CRR is a regulation to be applied not only by banks, but also by investment companies [8].

The main items covered by CRD IV by which the transposition of Basel III provisions adapted to the characteristics of the EU banking sector are: capital requirements (for both capital structure and leverage), liquidity standards and corporate governance and remuneration policies.

Capital requirements refer primarily to an increase in both quantity and quality of capital taken into account in determining minimum solvency indicator in the European banking sector. The capital adequacy indicator that takes into account only Tier 1 instruments (only common shares are considered) increases from 2% to date at 4.5%. The total capital requirement that takes into account both Tier 1 and the level 2 remains unchanged at 8%. Also, new European regulations establish additional capital, which include, according to Basel III: a capital conservation buffer of 2.5% of assets weighted by degree of risk applicable to all permanent EU banks and also a countercyclical buffer applicable to each member country depending on the economic cycle in which it is [9]. In addition to the Basel III directions, CRD IV attempts to provide hedging directions made by systemic institutions, which is, as we have shown above, a feature of the European banking sector. Thus, it additionally provides a buffer for systemic risk established for the entire financial sector or only for a subset of institutions and a buffer for systemically important institutions (i.e. global systemically important institutions and national systemically important institutions). [10, p 159]. These additional requirements are added to the requirements of capital conservation and countercyclical capital buffer, and should also consist of Tier 1. Systemic risk buffer will have a level between 0-5% and that for systemically important institutions between 0-2.5%. There will not be both buffers, only the one having a higher level, this being established at national level according to each situation in which the banking institution is. Comparing these elements one grasps important differences to previous prudential regulations (Figure 6), which will produce the following effects:

- for all banks, if we refer to countercyclical buffer and capital conservation buffer
- for banks owning higher Tier 2 funds (this level will decrease)

for large systemically important banks, which will have to build up additional capital buffers.

Also in the capital requirements set by CRD IV, through a European Commission report shall be required that until 31 December 2016 levels for ***leverage ratio***, calculated as the ratio between TIER 1 and total bank assets (not adjusted according to the degree of risk). Since 1 January 2015, banks will be required to report the indicator. Regulation will require different minimum threshold levels set according to banks' business models, a minimum estimated being 3% [3]. The importance of this indicator is justified by the fact that capital indicators proposed by the previous regulations allow significant acquisitions of assets at risk 0 without this additional capital to impose costs. The accuracy of the compilation of risk weights was questioned with the international crisis and, by the pursuit of leverage ratio, this deficiency is removed.

Liquidity Standards are introduced at European level through the CRR and refers to the obligation of credit institutions to calculate and report two indicators:

- *Liquidity Coverage Ratio* – LCR is an indicator that reflects short-term liquidity up to 30 days, calculated as the ratio between liquid assets of high quality and net cash outflows; according to LCR, credit institutions shall have a sufficient stock of liquid assets to enable them to cope with the potential imbalances between inflows and outflows of cash within 30 days in severe crisis.
- *Net Stable Funding Ratio* – NSFR is an indicator that reflects the medium-term liquidity for 1 year, calculated as the ratio between the elements providing stable funding and requiring stable funding; NSFR aims at stimulating credit institutions to use stable resources to finance their activities.

According to CRR, since 1 January 2014 credit institutions only requires reporting these indicators, and in the next period the European Commission is to submit documents showing LCR and NSFR minimum level required. The CRR provides a minimum level of indicators starting with 1 January 2015 of 60%, followed by no later than 2019 these indicators to reach a minimum of 100%. [13]

With regard to ***corporate governance***, CRD IV aims at introducing measures to induce excessive risk-taking reduced by banks. The proposed measures aimed at clearly defining management structures, promoting diversity and ongoing training requirements. In addition to Basel III, the CRD IV includes requirements relating to the number of seats for the heads that a person may hold. These measures are complemented by provisions on ***remuneration policy***, this being another factor for excessive risk-taking before downgrading crisis. Thus, by the CRD IV, variable salary component is limited to a maximum of 100% of the fixed component, it is necessary to establish clear criteria for fixed and variable remuneration and increase transparency by requiring the publication of personal details of people earning more than 1 million € per year. The new regulations also establish common minimum standards which should require sanctions, types of penalties, level of financial penalties and advertising these sanctions. All these elements aim at greater accountability of credit institutions' top management in order to reduce excessive exposure to risk, which may contribute to the emergence of a crisis with significant impact.

Conclusions. The analysis of how Basel III regulations are transposed into European legislation allowed me to point out some peculiarities of the European banking system and secondly to synthesize the main elements of prudential regulation proposed by CRD IV and CRR.

After analysing these factors, I believe that the new regulations contain some sensitive items which may affect the European banking sector, and therefore the one in Romania. The Basel rules are thus generally addressed to credit institutions active internationally, whereas CRD IV regulations, aimed at the entire banking system in Europe. In my work, I highlighted its heterogeneity and how big the differences between the nine countries hosting 4,000 banks are, with 86% of total banking assets and the other 19 European countries hosting 4,000 other banks holding 14% of the banking assets in Europe. The requirements imposed by Basel III need additional capital and liquidity costs (according to a 2010 study, implementing regulations without taking mitigation measures will determine a deficit of 1.1 trillion Euros of capital, liquidity short run 1.3 trillion Euros and long-term liquidity of 2.3 trillion Euros) and significant implementation costs. This will cause a reduction return on equity (ROE) of approximately 4% compared to pre-crisis levels by 15% [14]. This increased costs and reduced profitability will significantly affect the local banking institutions. The most viable solution for this would be most likely acceptance to merge with or to be absorbed by an institution with a high financial potential. I think therefore that a future trend in the banking sector will be represented by the increasing number of mergers and acquisitions. This leads me to think however, that a consequence of the crisis in 2008 was a significant infusion of public financial resources in banks "too big to fall", and I wonder if the way proposed by CRD IV will not result in the medium-term towards the same result.

Implementation of Basel III or CRD IV at European level is a process in its initial phase. Now banks are trying to make practical tests on how they fit in certain indicators and they only report other indicators. Depending on the test results, these rules might be adjusted – an aspect that will remain of interest up to completing CRD IV and CRR implementations

Discussion block. This work is part of a research project in which I intend to analyze the impact of the implementation of Basel III Agreement in commercial banks in Romania. Basel III is an international regulation, but was adapted by each central bank, as is the case of the European Central Bank. Regulations issued by the ECB has a direct impact on the activity of the commercial banks in

Romania, because, once we adopt euro, this regulations will the ones implemented in our banking sector. That is why in this paper I propose to analyze the implementation of Basel III in the European banking sector, in order to observe the potential impact on the Romanian banking sector.

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РЕАЛІЗАЦІЯ БАЗЕЛЬ III У БАНКІВСЬКОМУ СЕКТОРІ ЄВРОПИ

У цій роботі, яка є частиною більш великого дослідницького проекту, метою якого є очікування впливу Базель III на комерційні банки в Румунії. Я вирішила проаналізувати реалізацію і перетворення нових міжнародних розсудливих вимог в європейські норми, які становлять особливий інтерес для Румунського банківського сектора. Я почала цей аналіз, виділяючи особливості європейського банківського сектора як в агрегованому вигляді, так і за допомогою прямого опитування, щоб пізніше виділити погляди європейських правил щодо розсудливого нагляду та відмінності з міжнародними правилами.

Ключові слова: CRD IV, вимоги до капіталу, нормативи ліквідності.

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РЕАЛИЗАЦИЯ БАЗЕЛЬ III В БАНКОВСКОМ СЕКТОРЕ ЕВРОПЫ

В этой работе, которая является частью более крупного исследовательского проекта, целью которого является ожидание воздействия Базель III на коммерческие банки в Румынии. Я решила проанализировать реализацию и преобразование новых международных благоразумных требований в европейские нормы, которые представляют особый интерес для Румынского банковского сектора. Я начала этот анализ, выделяя особенности европейского банковского сектора как в агрегированном виде, так и с помощью прямого опроса, чтобы позже выделить взгляды европейских правил касательно благоразумного надзора и различия с международными правилами.

Ключевые слова: CRD IV, требования к капиталу, нормативы ликвидности.

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ОЦІНКА СТУПЕНЮ ГЛОБАЛІЗОВАНОСТІ КРАЇНИ В АСПЕКТІ ПРОЦЕСІВ КОНВЕРГЕНЦІЇ ТА ІНТЕГРАЦІЇ У СВІТІ

Аналіз підходів та оцінок процесів інтеграції та конвергенції, скоригував мету дослідження у напрям спроби оцінити ступень глобалізованості кран за альтернативним (авторським) підходом з урахуванням поточних властивостей і тенденцій цього процесу. Базуючись на прикладах оцінки ступеню глобалізації за індексами "European Integration Index for Eastern Partnership Countries" та "KOF Index of Globalization", нами було розширено наявну методику й розроблено альтернативний індекс ступеню глобалізованості країни, який базується на моделі досконало глобалізованої та неглобалізованої країн. Альтернативний індекс глобалізації та KOF Index of Globalization були порівняні між собою з метою аналізу практичності використання кожного з них.

Ключові слова: глобалізація, індекс, інтеграція, конвергенція, European Integration Index for Eastern Partnership Countries, KOF Index of Globalization.

Вступ. За популярністю обговорень глобалізація могла б конкурувати лише з парниковим ефектом чи кінцем світу в 2012 році. У будь-якому журналі, в кожній статті присутнє це слово. Проте, чи розуміють люди, що означає цей термін? Глобалізація як явище непомітно набирає сили в найнеочікуваніших формах: поступове "розмивання" державних кордонів (шенгенська віза в закордонному паспорті), iPhone в кишені, постійний доступ до мережі Інтернет на персональному комп'ютері, ми кажемо "менеджер" замість "керівника" і т.п.

Постановка проблеми. Глобалізація як тенденція до міждержавної інтеграції – хоча й нове явище, проте його швидкість вражає. Усього 200 років тому 14% населення планети проживало в містах – наразі ж неможливо уявити світ без елементарних умов розвитку інфраструктури міського рівня. Поряд з цим в світі помітна неоднозначність ставлення щодо наслідків глобалізації. До того ж, розробки щодо оцінки даного процесу з'явилися відносно нещодавно.