Квасний М. Н.

Моделирование привлечения средств банком в условиях их эффективного размещения

Рассмотрено совершенствование депозитной политики банка как проблему моделирования привлечения средств.

Предложена динамическая модель на основе теории производственных функций и интегро-дифференциальных уравнений. Построено оптимизационную модель привлечения средств при обеспечении заданного уровня ликвидности, максимизации прибыли и эффективного их размещения. Сделан анализ и предложен алгоритм ее численной реализации.

Ключевые слова: *средства, привлечение, размещение, ликвидность, гудвилл, производственная функция, интегро-дифференциальное уравнение.*

Kvasniy M. M.

Simulation fundraising bank in terms of efficient allocation

We consider improving the bank deposit policy as a problem of modeling fundraising. A dynamic model based on the theory of production functions and integro-differential equations. We construct a model of optimization under the assumption of established liquidity, profit maximization and efficient placement. The analysis of the algorithm and its numerical implementation.

Key words: *resources, attracting, locating, liquidity, goodwill, production function, integro-differential equations, optimization problems.*

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M. Gospodarowicz

BANKING UNION AND ITS POTENTIAL IMPLICATIONS FOR THE BANKING SECTOR IN POLAND[1]

The article presents the assumptions of the current version of the banking union and potential benefits and risks of Polish participation in the organization.

Key words: *banking union, banking sector in Poland, benefits and risks.*

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Problem: Integrated financial framework proposal of banking union has been put forward in 2012 as a direct consequence of banking and debt crisis in the European Union. In the target setting it will comprise four constituent elements: single supervision mechanism (SSM), common deposit guarantee scheme (DGS), banking recovery and resolution plan (BRRP) and single rulebook – unified set of rules governing oversight of credit institutions. Currently, the final shape of the legislation has not yet been established, there is also no binding date of their introduction. Currently there it was decided to introduce a single financial supervisory contrary to initial assumptions its scope is limited only to the largest pan-European banks. Although Poland is not a member of a monetary union and is therefore not required to adopt the banking union immediately, the issue is vital to the stability of the banking system in Poland. The financial crisis of 2007-2011 showed profound weakness of supervisory authorities in the European Union, as well as the inappropriateness of systemic solutions to those challenges. In response, a number of initiatives have been undertaken to strengthen the supervisory bodies in the EU. Macro-prudential supervision has been created in accordance with the recommendations of the group de Larosiere (2009) and the technical (third level) committees now play a role of independent EU supervisory authorities for banking, investment and insurance sectors. These institutions, however have only powers limited to monitoring and development of general standards and recommendations for national supervision and only in very specific cases, are allowed to issue legally binding decisions for national regulators or individual financial institutions operating in the common market. Basic oversight rights remained by national supervision in the Member States[1]. It should be noted that despite the deteriorating financial condition of the Community financial system the idea of deeper financial integration has not been accepted without resistance. The governments of the major European countries were reluctant to increasing capital requirements for banks and eliminating the so-called hybrid capital in the calculation of shareholders' equity. They were also against limiting the leverage level or introducing the separation of i nstitutions involved in investment activities from the classic banking. They feared that this will lead to fragmentation of largest banks, and in consequence reduce the importance of national financial sectors. Prior to 2012 the European Union has therefore taken some limited legislative action. This measures were not enough, however to prevent the further development of the crisis.

Main assumptions of the European banking union

The integrated financial framework of the European Union, called the banking union has been regarded as a systemic response to the problems of the EU financial sector that threaten the stability of the common currency. One of the most severe dysfunction in this area is the excessive sovereign debt burden within the assets of banks.

[1] Dylematy unii bankowej / Tomasz Grzegorz Grosse – Analiza natolińska 2(60)2013 p. 3–4.

This problem is a result of the rescue measures in times of crisis, as well as insufficient willingness to carry out an organized bankruptcy of the banks that are in the most difficult financial situation. Another reason is the excessive purchase of sovereign debt by financial institutions, which contributed not only to the growth of public debt, but also to increase in the size of financial institutions which later become «too big to fail». Compared to the U.S. banking sector, where sovereign debt make in average only 2 percent of assets, the Euro-area banks have around 15 to 20 percent of government bonds on their balance sheets. In the worst situation, are Greek, Portuguese and Spanish banks. There are also other local problems of banking sector in Europe. These include very large scale of financial speculation and low level of lending business as compared to loans for consumption purposes. This may be a source of instability in the banking sector, and an incentive for creation of excessive investment bubbles on certain assets (eg., real estate)[1]. The assumptions of banking union has been presented for the first time in May 2012 at an informal meeting of the European Council, and remains currently under intensive work on its implementation in the euro area. It assumes the existence of four pillars on which the regulatory and institutional reform of European financial supervision would base. These are: a single (unified) bank supervisor (Single Supervisory Mechanism, SSM); a common bank crisis management and resolution system; a uniform system for protecting depositors savings and single rule book, establishing materially uniform rules. All of these elements are linked and should be seen as complementary parts of a comprehensive system.

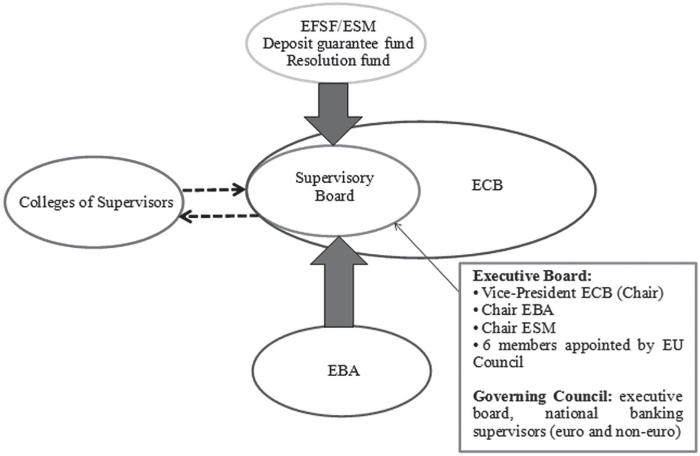

Fig. 1. **The institutional architecture of the European banking union**

Source: Banking union: A federal model for the European Union with prompt corrective action / Jacopo Carmassi, Carmine Di Noia, Stefano Micossi // www.voxeu.org

[1] Unia bankowa / ed. Małgorzata Zaleska, Difin Warszawa 2013 p. 30–34.

The European Central Bank would serve as the common banking supervision. Long-term goal is to create a more rigorous and integrated supervision of the banking system, which, in contrast to national regulators will be more efficient and pragmatic, and especially resistant to indigenous political pressure. The aim of new surveillance is to detect and correct irregularities in the national banking sectors, well in advance before they become a threat to the entire euro area. The basic objectives of the project assume that the ECB will exercise supervision of banks in the euro area with the support of existing national supervision that will prepare the draft supervisory decisions for governing bodies of the ECB and then implement them. In addition, the project also includes partial transfer of micro- and macroprudential supervisory powers to the ECB. The SSM will be mandatory for countries of the euro area, however, this mechanism is also open to countries outside the eurozone. The ECB will be directly responsible for the entities, with total assets exceeding 30 billion or over 20% of the GDP of the country. At least three major banks in each country must remain under the EU supervision regardless whether they meet the criteria. Instead of about 6000 banks, the ECB will therefore supervise a maximum of 200 institutions. This solution is a compromise, which in the long run has the disadvantage that smaller, regional and savings and loan banks will only be indirectly influenced by the ECB. The establishment of a SSM allows the future use of the European Stabilization Mechanism (ESM) funds of about 500 billion euros to support troubled banks[1]. The fund will be able to subsidize the banks of the euro area without a government involvement, and without increasing the national debt level of countries. The SSM is about to start in 2014 as the first step towards the establishment of a banking union[2]. As for the other elements the single rule book seemed to be achievable most easily at first glance. Over recent years, the EU already made considerable progress in establishing a harmonized framework for banking regulation and supervision. However, this trend was reversed during the negotiations for the adoption of the regulations of Basel III. The European Commission legislative proposal (package CRD IV / CRR) deviated far from the original arrangements of

Table 1

Main differences between the CRD IV and Basel III

Difference	Remarks
Recognition of instruments including silent partnerships as Common Equity Tier 1	Silent partnership' has been especially used in Germany. It is a form of ownership without the rights usually connected to shareholding. It is a term covering instruments with widely varying characteristics in terms of e.g. ability to participate in profit and absorb losses. Whether or not silent partnerships would qualify as CET1 depend on these characteristics.

[1] Banking union in Europe, Risk and Challenges / Thorsten Beck, Centre for Economic Policy Research (CEPR), A VoxEu.org Book, 2012, p. 98.

[2] A roadmap towards a banking union / Communication from the Commission to the European Parliament and the Council, European Commission, Brussels, 12.09.2012 COM(2012) 510 final p. 7.

End of table 1

Difference	Remarks
Recognition of minority interests	Minority interests are capital in a subsidiary that is owned by other shareholders from outside the group. EU banking groups often have subsidiaries that are not fully owned by the parent company but have several other owners.
Recognition of hedging when calculating amounts to be deducted for investments in unconsolidated financial entities	Basel III allows banks to use hedging to reduce the amount of deductions they have to make from capital for investments in instruments issued by other financial institutions. The CRD limits recognition of such hedging to the trading book only.
Allow significant holdings in other financial entities like insurance companies to be exempt from deduction	Basel III requires banks to deduct significant investments in unconsolidated financial entities, including insurance entities, from the highest quality form of capital (CET1). In the EU the Financial Conglomerates Directive (FICOD), addresses the risk of double counting of capital across the banking and insurance sectors and CRD allows it to be used as an alternative to a Basel III deduction approach.
Issue of Deferred Tax Assets (DTAs)	Deferred Tax Assets (DTAs) are assets that may be used to reduce the amount of future tax obligations. Basel III treats DTAs differently depending on how much they can be relied upon when needed to help a bank to absorb losses. CRD is more particular about this issue

Source: Comparison between Capital Requirements Directive IV and Basel III / Benedict James and Andrew Forde, Linklaters 12.August 2011

Basel principles[1]. For example, the EC has eased the way of defining various types of bank capital and risk evaluation. It also liberalized capital requirements and the level of reserves, including liquidity reserves to ensure the solvency of the banking institutions in the event of a systemic crisis. In contrast to the agreement of the Basel Committee legislative proposals under discussion in the EU make it possible to double counting of capital reserves. This liberal approach was the result of strong pressure from the financial lobby and the major countries, especially France and Germany. These countries were concerned that overly restrictive approach of the Basel Committee may reduce the market power of the major banks, as well as reduce the possibility of granting loans to companies[2]. This example demonstrates the competition between countries over the shape of financial regulation in Europe. However, the banking union, to meet every expectation, should cover all four pillars. Only full four-dimensional banking union model, carrying not only the decision-making powers, but also fiscal responsibility for the stability of the financial system at the central level, gives a chance for the coherence of European financial safety

[1] The differences are among others caused by the fact that 13% of the European banking sector is made up of mutual or cooperative banks, and that bank and insurance groups are significant players (the bancassurance model).

[2] It has been however also argued that while the Basel capital adequacy agreements apply to 'internationally active banks', in the EU a Directive has always applied to all banks (more than 6000) as well as investment firms, which brings the need for a more compromised approach.

net At this stage the proposals and timetable for the past two pillars of the banking union have not yet been formulated.

Potential implications of the banking union for the Polish banking sector

The issue of joining the banking union sparked a lively debate in Poland, as although the Polish banking sector has survived the crisis in good shape, a banking union would not remain without influence on Polish banks (most of which are subsidiary of major European banks) or the Polish economy. More than 57 percent of the sector's assets belong to foreign groups. This means that regardless of whether Poland will join the banking union or not, more than 50 percent of the domestic banking sector will be supervised by the ECB. It is therefore necessary to consider all possible benefits and costs of joining the banking union in order to be able to make an informed decision to enter banking union. It is to be noted that the final shape of the legislation is not yet known, so that any conclusions can only be based on assumptions. From a legal point of view, Poland is unable to join the union and become a full member. It can at best remain an associate member. This raises a very serious consequence as Poland would not have voting rights within the supervisory bodies in the new ECB supervision authority. Poland can thus only closely cooperate with the union. In addition, the ECB's powers outside the euro area are not sufficiently established to effectively supervise all banks operating in Poland. As a consequence Poland, being a member of the banking union would not have a major impact on its functioning even although the final terms of accession have not yet been developed. One should also take into account the role of Polish financial supervision, especially regarding its responsibilities. The problem arises of who and how would control subsidiaries and branches of credit institutions from euro-zone countries operating in Poland. If they were placed solely under the European supervision it might be associated with the loss of full control of the Polish banking sector by the Polish supervisory authority (KNF – Komisja Nadzoru Finansowego). In addition, the KNF, being limited by the principles of supervision in the banking union would be restricted in full utilization of own instruments, even if they were to serve the stabilization of the Polish banking sector. Banking union may limit the powers of local supervision, especially in countries hosting pan-European banking groups. The ECB will obtain several executive competencies on local markets especially with respect to license process and sanctioning of mergers and acquisitions. This may bolster the sustained expansion of large banking groups in peripheral countries. With respect to the union benefits, the single supervisor could be beneficial for KNF given the fact that it would have to cooperate with one supervisory body rather than national supervisors from all EU countries. Though it is still impossible to determine exactly how banking union will affect the competitiveness of the Polish banking sector, potential consequences of being outside can be detrimental not only for the banking system, but also for the whole economy. Refraining from involvement, can be seen as an exemption from the special supervision of the ECB and, consequently, result in loss of market confidence in the Polish banking system. It may possible cause a reduction of the inflow of foreign banks cross-border activities, which will be reflected in a less beneficial offer for customers and decreased competition between banks. This argument is particularly important and decisive. The discussion thus should be rather centered around the specific conditions under which Poland would join the banking union, rather than considering the participation itself. Unfavorable to Poland may be the fact that the project does not take into account differences in level of financial and economic development between the «old» and «new» EU countries. These differ still in terms of macroeconomic conditions in which banks must operate eg. inflation, GDP level and growth, the wealth of society etc. A danger arises that integrated supervision may favor the stability of major banks or financial groups at the expense of local markets, especially those outside the Euro-area. Another threat may also be the consolidated supervision of financial groups. Credit institutions will seek to raise capital ratios at the expense of branches in the peripheral countries, eg. by draining funds from Polish banks to parent companies. The advantage would definitely be Poland's access to the ESM as well as the LTRO[1] funds. Banking union could also increase the stability of the Polish banking sector, as all EU banks would be subject to common supervision and could not move between countries because of better (i.e. less stringent) regulation[2]. This would exclude so called regulatory arbitrage that destabilizes banking sectors. Besides, joining the union would give Poland the opportunity to discuss issues of the Polish banking sector and the its stability and security with a single partner who would (at least theoretically) represent «transnational» point of view. In conclusion, although the idea of banking union may have many faults, Polish accession to it seems beneficial, and is indeed probably inevitable in view of the accession to the euro zone. Polish banks are better capitalized and are far less leveraged than their European competitors. For this reason, the participation in the joint supervision should not be a solely aim. The presence of Polish representatives in the European supervision will allow greater access to information and provide a influence in decision-making. On the contrary side, participation in the banking union will increase the dependence of the Polish financial sector and economy upon the economic situation and the decisions taken in the euro area. In worst case scenario it could also increase the risk of shifting the cost of rescuing the banks in the euro zone to domestic financial institutions, and consequently to Polish taxpayers.

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Господаровіч М.

Банківський союз і його потенційні наслідки для банківського сектору в Польщі

Представлено бачення сучасної версії банківського союзу та потенційні переваги і недоліки польської участі в цій організації.

Ключові слова: *банківський союз, банківський сектор у Польщі, переваги і ризики.*

Господарович М.

Банковский союз и его потенциальные последствия для банковского сектора в Польше

Представлены видение современной версии банковского союза и потенциальные преимущества и недостатки польского участия в этой организации.

Ключевые слова: *банковский союз, банковский сектор в Польше, преимущества и риски.*

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ЧИННИКИ ФОРМУВАННЯ ІНВЕСТИЦІЙНОЇ ПОЛІТИКИ ВІТЧИЗНЯНИХ БАНКІВ У СФЕРІ КРЕДИТУВАННЯ

Визначено і систематизовано основні чинники зовнішнього і внутрішнього середовища, що впливають на діяльність банків у сфері інвестиційного кредитування та визначають рівень прибутковості банківських установ від цих операцій.