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ASSESSING COMPETITION IN BANKING SECTOR OF MOLDOVA USING PANZAR - ROSSE APPROACH

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Abstract

It is well known that the role of competition is to stimulate rivalry among participants in order to enhance progress and welfare of population. Improving competition in the Moldovan banking sector will have a positive effect on the quality and prices of banking services, making the activity of the financial system more efficient, which in turn will contribute significantly to country's economic growth. In the context of the European integration objective and liberalization of financial services trade with the European Union, the analysis of the level of competition in the Moldovan banking sector is necessary in order to improve the activity of the banking sector. In addition, knowing the level of competition will facilitate the process of harmonization of the legislation in the field of financial system and competition. In this article, we used the Panzar-Rosse approach, a non-structural method, to measure competition in the banking industry. This model involves measuring competition based on a simplified income function, which aims to calculate the elasticity of bank incomes to the prices of factors of production: funds, labor and capital. This method focuses on the individual behavior of each commercial bank, which is an indicator of market power.

Keywords*: competition, banking sector, Panzar-Rosse approach, market structure*

1. Introduction

Competition in the banking sector is a matter of debate for economic experts. The banking sector has a direct link with economic growth due to the role in providing financial resources to real sector and households. When banks do not work well, there are premises for financial instability. Banks have been considered to be more vulnerable to instability that other industries. Nevertheless, economic literature argues that too much competition in the banking sector may cause financial instability due to the exit of market participants who do not satisfy the market conditions. On the other hand, competition could result in greater financial stability, because small number of banks, which hold a higher market power, would charge higher costs for its services, which would increase the customers' bankruptcy risks. In addition, less competition could lead to the creation of large banks, deepening the "too-big-to-fail" problem and difficulties in supervising large banks. What is the optimal competitive structure to promote efficiency and stability in the banking sector: perfect competition, monopoly or something in-between? Competitive environment is efficient, but market power is necessary for stability. Because of globalization, de-regulation and technological development, the trade-off between competition and financial

stability continues to be an important issue, especially due to the wave of economic concentration on the domestic and international financial market.

In the context of the European integration goal, the Republic of Moldova has the obligation to harmonize the financial and banking legislation with the acquis communautaire in order to ensure a sustainable development of the banking sector and a harmonious integration with the European single market. Regulating the banking sector in line with European rules will ensure the creation of a financial system able to cope with competitive pressure due to the liberalization of trade with the European Union in the field of financial services. Creating a competitive financial system will have beneficial effects on the country's economic sectors by providing cheap financial resources and will allow private sector to manage the European competitive pressure. In this context, analyzing the level of competition in the banking market becomes a necessity to ensure the creation of a healthy competitive environment.

In the last period, Moldovan banking sector could be characterized as vulnerable and unstable. The fragility is due to the lack of transparency about the owners of financial institutions, poor governance and weaknesses of the sector's regulatory supervisor, as well as in the implementation of banking legislation. However, multiple problems of the banking sector go beyond the scope of this article. In this article, we aim to examine to what extent the events which took place in the banking sector over the past 5 years have influenced the competitive environment in the market. The article also aims to determine the level of competition in the national banking industry.

We used the Panzar-Rosse methodology to measure the level of competition in the banking sector. The Panzar-Rosse model is built based on data for each individual bank, which is available in samples, allowing a precise estimate of competition in the sector. The purpose of the paper is to examine the competition in the Moldovan banking sector during 2012-2016.

2. The degree of investigation of the problem currently, and purpose of research

Competition in the banking market could be analyzed through three approaches: i) measuring competition based on the "Structure-Conduct-Performance" paradigm; ii) the efficacy hypothesis, promoted by Demsetz (1973) and Peltzman (1977); iii) direct measurement of prices or market power on the basis of the "New empirical industrial organization" [2, p. 406].

The SCP paradigm assumes a causal connection between the structure of the financial sector, enterprise behavior and performance. The paradigm argues that high level of market concentration results in collusive and anti-competitive behavior among large firms. Thus, a small number of firms with a substantial market share are more likely to manifest anticompetitive behavior. According to this approach, concentration ratios (CR-3, CR-5) or Herfindahl-Hirschman Index measure the competition in the financial sector.

CR-3 indicator reflects the sum of market shares of three largest market operators, while *CR-5 indicator* reflects the cumulative market share of five largest companies from the market.

The *Herfindahl-Hirschman index* is used to establish the level of concentration and it is calculated by summing the squares of market shares of each individual company.

$$HHI = \sum_{i=1}^{n} q_i^2 \quad (1)$$

Where: HHI - Herfindahl-Hirschman Index*;*

q_i – market share of a company;

n – Number of market operators.

If HHI is 1.000, the authorities responsible for the protection of competition will not seize; if the index exceeds 2.000, the market will be considered as concentrated. Markets with an HHI between 1.000 and 2.000 are considered to be moderate concentration markets [5, p. 3].

The specialized literature identifies some shortcomings regarding the approximation of competition through the SCP paradigm. This method has the aim to calculate the concentration indicators based on relevant market, which is difficult to identify for the banking industry and may exceed the national border [2, p. 408]. Due to globalization and technological progress, market definition for the banking sector is experiencing increasing difficulties. Moreover, the causal link between structure and behavior is unclear. Measuring the market structure based on the number of institutions and concentration indicators is not necessarily linked to the level of competitiveness of the industry [10, p. 4].

The *efficiency hypothesis* argues that efficient firms increase their market share due to their ability to generate higher profits. According to the effective hypothesis, there is no causal relationship between competitors and concentration, and strong concentrated markets are the rational result of market forces [6, p. 9].

Over the years, experts have developed new methods of assessing competition in order to address the listed shortcomings. Thus, another approach to measure the competition is the "New Empirical Industrial Organization". This approach rejects the traditional measurement of market performance and aims to estimate market power using flexible models for analyzing company behavior in maximizing profits. An example is the Panzar-Rosse model, which is a non-structural method of measuring competition. Among the advantages of the Panzar-Rosse model is the lack of the relevant market specification, once the individual behavior of institutions is an indicator of market power. Other advantages of this method are the use of few variables; it is robust to market expansion and could be estimated using a simple linear equation.

Several studies have been conducted to assess competition in the banking sector based on the Panzar-Rosse approach. The P-R model has been applied to national and international banking industry analysis. For example, Gutierrez de Rozas (2007) applied the model for the analysis of the Spanish banking sector for the period 1986-2005 [6, p. 7], while Bikker et al. (2009) used data over 17,000 banks in 63 countries for 1994-2004 [3, p. 1]. Researchers Gelos and Roldos (2002) analyzed competition in emerging markets (Argentina, Brazil, Chile, Czech Republic, Hungary, Mexico, Poland, Turkey, Republic of Korea, Thailand, Malaysia) [4, p. 9]. Nathan and Neave (1989) applied the method for the banking sector in Canada, while Claessens and Laeven (2004) for banks in industrialized and developed countries. The latter concluded that banks in countries with a larger presence of foreign banks and few restrictions to enter the market tend to show a more competitive behavior. In the study for New York banks, Shaffer (1982) has identified that both the monopoly and the perfect competition hypothesis could be rejected. Studies conducted by Molyneux et al. (1994) or Bandt and Davis (2000) for European banks also rejected the

assumptions about the existence of perfect competition or monopoly in the European Union [2, p. 410]. All of these studies have concluded that the competitive environment for the banking sector could be described as monopolistic competition. This seems to be a reasonable conclusion in the context in which the banking market is characterized by an environment between perfect competition and monopoly.

3. Methods and materials applied

The Panzar-Rosse model (1987) assumes that change in input prices will affect the level of income differently, depending on the level of competition. It is built on the premise that firms will implement different pricing strategies because of changes in input prices depending on the competitive behavior of the participants. In other words, competition is determined to the extent that changes in input prices are reflected in the company's equilibrium revenue. Once the model has a static approach, it is recommended to perform the test on the bases of long-term observations.

This model estimates a simple equation that reflects the elasticity of bank incomes to input prices and calculates the H-statistic value. H-statistic is designed to differentiate between perfect competition, monopolistic competition and monopoly. The estimated H-statistic will vary between $-\infty < H \leq 1$. If the H-statistic equals 1, the market has a perfect competition. Under perfect competition conditions, an increase in input prices and, therefore, an increase in average costs should lead to a proportional increase in prices and income of the enterprise. If the market is a monopoly, an increase in input prices will increase marginal costs, reduce steady production, and will reduce revenues of the company. In this case, the H-statistic is negative or equals to 0. If the H-statistic is in the range $0 < H \leq 1$, the market is with a monopolistic competition.

Table 1. Interpretation of the H-statistical indicator of the Panzar-Rosse model

Parameter	Competition Test
$H \leq 0$	Monopoly
$0 < H \leq 1$	Monopolistic competition
$H=1$	Perfect competition or natural monopoly on a perfectly disputable market

Source: Kashi, F, Beynabadi, J., Mosavi, Y. Competition in Iran's Banking Sector: Panzar-Rosse Approach. Iranian Economic Review [online]. 2015, Volume 19, Issue 1, pp. 29-39. Available: https://ier.ut.ac.ir/article_55158_21f2614c9f37509d152855bad4148813.pdf [7, p. 7].

The Panzar-Rosse model measures the impact of the input price on an observed equilibrium value of interest income (IR). The H-statistic represents the sum of the elasticity of the interest income related to the price of inputs. H-statistic is calculated based on the following equations:

$$Ln(IRTA_{it}) = \beta_0 + \beta_1 Ln(Pl_{it}) + \beta_2 Ln(Pf_{it}) + \beta_3 Ln(Pk_{it}) + \beta_4 Ln(ETA_{it}) + \beta_5 Ln(TA_{it}) + ei + \mu_{it} \quad (2)$$

$$H_t = \beta_{1t} + \beta_{2t} + \beta_{3t} \quad (3)$$

The dependent variable *IRTA* is the ratio of interest income and total assets. *Pl* is a proxy for labor cost and represents the ratio of personal expenses and total assets. *Pk* represents the ratio of expenditure on the management of fixed assets and fixed assets and is considered a proxy for the cost of capital. *Pf* is the proxy for the cost of funds and represents the ratio of interest expenses to total deposits. *ETA* and *TA* are bank specific factors. *ETA* represents the ratio of equity to total assets and is included to control differences in the capital structure. *TA* or total assets are a proxy for scale economies [1, p. 23].

Potential shortcomings of the approach are that pure competition, when H=1, will occur only in long-term equilibrium or imbalance, not in the case of short-term equilibrium. In addition, H<1 could be obtained in other scenarios than monopoly. Another problem could be the inability to identify accurately the input prices.

4. Results and discussions

4.1. Description of Moldovan banking sector

The financial sector is dominated by the banking sector, whose assets account for 91.6% of total assets of the financial system in 2015. Government and national experts are concerned about ensuring the stability of the banking sector. Failure to identify, assess the integrity and competence of final owners of the commercial banks could underestimate the level of concentration, which could undervalue the risk of contagion within the financial system. According to the IMF report, in 2014, five banks of the top 6 market leaders were owned de facto by two groups, which held 60-70% of the banking system's assets, giving rise to the "too-big-to-fail" problem [8, p 9]. In many cases, there are unjustified schemes for bank owners, which use shell companies or offshore zones to hide the identity of the final beneficiaries. In addition, difficulties in identifying ultimate beneficiaries of the banks suggest about the emergence of risks concerning the massive exposures to affiliated persons, which, in case of default, could cause insolvency of commercial banks. Moreover, shortcomings in the coverage and reliability of statistical data indicate the likelihood that the stability indicators of the banking system may be exaggerated. In recent years, the banking system is threatened by the risk of financial instability because of bank fraud, followed by the liquidation of three commercial banks.

The current situation in the banking system of the Republic of Moldova reflects its fragility. At the end of 2016, the banking system was composed of 11 commercial banks, including four branches of foreign financial groups. The total number of banks' subdivisions was 804, of which 288 branches and 516 agencies, and the total number of employees was 7868 people. The share of total assets of the top five banks was equal to 83.45%.

Commercial banks play a significant role in converting savings into investment, due to the intermediation function, namely the transfer of financial resources from those who have a surplus to those with deficits. In the Republic of Moldova, the share of loans and deposits in GDP is low compared to countries in the regions. Thus, according to data published by the World Bank in 2015, the share of credits in GDP in the Republic of Moldova was 37.1%, Romania - 37.5%,

Ukraine - 85.6%, Georgia - 52.6%, Armenia - 48.4%, Estonia – 77.3% [11]. The country's position on the share of deposits to GDP is a little more favorable than in the selected countries. In 2015, the share of deposits to GDP was equal to 40.1% in the Republic of Moldova, Romania - 32.5%, Ukraine - 39.2%, Georgia - 32.5%, Armenia - 28.1%, Estonia - 57.6% [11]. The results for Moldova reveal about difficulties regarding the access of enterprises and population to bank loans, limited level of confidence in the banking sector, as well as the relatively low level of the revenues of the private sector. A central problem is lack of mutual trust between banks and consumers. The lack of confidence between banks and population is due to macroeconomic uncertainty and it is characteristic for transition periods. Simultaneously, the problem of expensive loans is one of the most important topics debated by the business community. One of the causes of high credit price is the profit margin of commercial banks, which is influenced by the degree of competition in the sector. Comparing to the bank margin of the countries in the region, which is calculated by the difference between interest rates on loans and deposits, we conclude that in 2015 Moldova was closed to the average in the region (3.6%). Thus, the bank margin for Ukraine was 7.8%, Bulgaria - 6.2%, Azerbaijan - 8.6%, Armenia - 5.7%, Estonia - 3.8%, Georgia - 2.7% [11]. The value of the bank margin reveals the existence of similarities in the competitive environment in the selected countries.

We will use the concentration indicators in order to create a complete picture of competition in the banking sector. According to the "Structure-Conduct-Performance" paradigm, the concentration ratios (CR-3, CR-5) and the Herfindahl-Hirschman Index (HHI) could measure competition. The results of the calculations for the banking sector are presented in Table 2. From a financial point of view, market power is measured by the size of assets, deposits or credits. The dominant position on the financial market depends on the size of the assets. Thus, according to the legal provisions in the banking sector, the ratio of the bank total assets to the total assets of the banking sector must be less or equal to 30%. From a competition point of view, the share of bank turnover in the total banking sector turnover is a criterion in determining the dominant position and according to the Moldovan legislation a market share of less than 40% is unlikely to identify a dominant position.

Table 2. Level of concentration in the Moldovan banking market

Name	2014			2015			2016		
	CR-3	CR-5	HHI	CR-3	CR-5	HHI	CR-3	CR-5	HHI
1	2	3	4	5	6	7	8	9	10
Deposit market	52.6	78.1	1355.2	69.8	86.3	1789.3	66.9	85.9	1858.2
Commercial credit market	59.5	76.5	1535.3	66.7	86.2	1839.3	62.9	84.1	1716.7
Mortgage loan market	62.7	89.2	1748.8	63.5	89.1	1753.5	65.6	89.2	1794.7
Consumer credit market	83.1	93.9	3022.4	86.9	96.4	3130.9	86.2	95.7	2895.9
Total assets	48.8	75.8	1255.3	66.6	83.9	1733.3	64.2	83.4	1681.2

Source: developed by the author based on the reports of the National Bank of Moldova for 2014-2016 [9]

Analyzing the concentration indicators, the Moldovan banking market has a moderate level of concentration. According to the data in the table, we could formulate two basic conclusions. The calculation results show an increase in concentration in 2016 compared to 2014. In addition, the consumer credit market has the highest concentration level. The high value of HHI, CR-3 and CR-5 in the consumer credit market indicates the concentration of market power and outline an uncompetitive environment. Three commercial banks hold 86.2% of the market (Moldova - Agroindbank, Mobiasbanca - Groupe Societe Generale and Moldindconbank). The largest market shares in the consumer credit market and mortgage market are held by Moldova – Agroindbank, Mobiasbanca - Groupe Societe Generale, Moldindconbank. In 2016, Moldova - Agroindbank had the highest market share in the deposit market (28.1%), consumer credit market (44%), mortgage loan market (24.7%), commercial credit market (27.2%).

4.2. Results of Panzar-Rosse model in banking sector

In order to apply the Panazar-Rosse model and determine the level of competition in the banking industry, based on the non-structural approach, we use equation (2) and the statistical data for 2012-2016.

The dataset used for H-statistic calculation includes statistical data for 11 banks for the period 2012-2016. The information was collected from the banking supervision reports of the National Bank of Moldova. The descriptive statistics for the variables are reflected in Table 3.

Table 3. Descriptive statistics of variables

Indicator	2012	2013	2014	2015	2016
1	2	3	4	5	6
IRTA (Interest income / total assets)					
Min	0.059	0.052	0.057	0.062	0.061
Max	0.111	0.115	0.105	0.103	0.111
Medium	0.077	0.071	0.068	0.078	0.083
Standard Deviation	0.014	0.016	0.013	0.011	0.015
Pl (Personnel expenses / Total assets)					
Min	0.012	0.010	0.008	0.009	0.010
Max	0.062	0.069	0.067	0.053	0.054
Medium	0.025	0.024	0.023	0.020	0.020
Standard Deviation	0.014	0.016	0.016	0.012	0.012
Pf (Interest expenses / Total deposits)					
Min	0.026	0.024	0.009	0.017	0.013
Max	0.117	0.098	0.081	0.082	0.108
Medium	0.059	0.055	0.046	0.045	0.053
Standard Deviation	0.024	0.021	0.019	0.017	0.023

1	2	3	4	5	6
Pc (Expenses related to fixed assets / Fixed assets)					
Min	0.071	0.039	0.035	0.040	0.041
Max	0.379	0.421	0.351	0.438	0.372
Medium	0.171	0.148	0.131	0.132	0.131
Standard Deviation	0.106	0.134	0.111	0.117	0.110
ETA (Equity / Total assets)					
Min	0.018	0.015	0.014	0.011	0.011
Max	0.563	0.639	0.675	0.643	0.522
Medium	0.145	0.156	0.172	0.146	0.125
Standard Deviation	0.161	0.190	0.211	0.190	0.155
TA – Total assets					
Min	369749186	320521453	348378912	514871832	646514902
Max	11445400251	13414212350	15341423755	18230936232	19744383802
Medium	4238168054	5088085554	5449701701	6253654125	6631561946
Standard Deviation	3944423560	5042414526	5483499115	6245038333	6413835500

Source: elaborated by the author based on reports on the banking supervision of the National Bank of Moldova [9].

In order to assess the level of competition in the Moldovan banking sector, we used the equation (2) and (3) of the P-R model. To exploit the time series size and the cross-sectional dimension we used the pooled estimates in the E-views program. In addition, in order to determine the impact of individual banks' features on market competition, the level of competition was measured using the pooled GLS, fixed effects method. In the P-R model, the dependent variable is IRTA, and Pf, Pc and Pl represent the factors of production. The results of P-R model using fixed effects are shown below.

Table 4. Results of Panzar-Rosse model on the level of competition in the Moldovan banking sector

Dependent variable: IRTA			
Variable	**Coefficient**	**T-statistic**	**Prob.**
Pf	0.093009	3.362504	0.0017
Pl	0.397729	14.64121	0.0000
Pc	0.067164	2.123992	0.0401
ETA	-0.076596	-1.93303	0.0605
TA	0.35092	3.459571	0.0013
Constant	-8.487535	-4.15169	0.0002
Number of observations	55		
R^2	0.806222		
Wald chi^2	78.43172		
Prob chi^2	0.0000		
H-statistic	0.557901		

Source: Developed by the author based on banking supervision reports of the National Bank for 2012-2016 [9]

According to the model's results, the dependent variable "Interest income" (IRTA) is positively correlated with the variables of factors of production (Pf, Pl, Pc). The positive sign of Pf variable

could be explained that more deposit funds are collected, more money will be provided by the bank and more interest income gained. The inversely proportional link between IRTA and ETA was predictable because lower capital ratios should generate higher bank incomes. In addition, all model coefficients are statistically significant. The cost of funds, labor cost and total assets are significant at 1%, capital cost - 5%, and ETA - 10%.

The Wald test rejects the hypothesis regarding the monopolistic structure of the Moldovan banking market (H = 0) at a significance level of 1%. At the same time, it rejects the hypothesis of perfect competition in the market (H = 1). According to the calculations, H-statistical value is equal to 0.5579, suggesting a market structure of monopolistic competition.

5. Conclusions

Competition is the promoter of the progress, innovation and well-being of the population. The banking sector has a special contribution to the development of economic growth. Competition in the banking sector ensures innovations and efficiency, reduces the interest rate on loans and increases consumer satisfaction.

In the last period, the Moldovan banking sector has been influenced by a series of events that have damaged the level of concentration and financial stability. Concentration indicators (CR-3, CR-5 and HHI) reflect an increase in concentration in 2016 as compared to 2014. However, with the exception for consumer credit market where the level of concentration is equal to 2895.9, exceeding the limit of 2000, deposit market, commercial credit market and mortgage loan market reveal a moderate level of competition. In 2016, Moldova – Agroindbank held 28.1% of deposit market, 44% of consumer credit market, 24.7% of mortgage loan market and 27.2% commercial credit market.

Assessment of the level of competition based on the concentration indicators of the "Structure-Conduct-Performance" paradigm will not reflect a complete picture of the degree of competition in the banking market. One of the problems identified by international experts is the lack of transparency of commercial banks' shareholders, which hides the reality about the level of concentration in the sector. For these reasons, we used the non-structured Panzar-Rosse model for competition assessment in the banking sector. This econometric model is based on a reduced income function and aims to observe the impact of input price changes to the bank income.

Following the use of annual statistical data for 11 commercial banks for the period 2012-2016, the H-statistic value is 0.56. If the H-statistic value is in the range of $0 < H \leq 1$, there is a monopolistic competition on the market. The result is in line with the results obtained by other researchers who applied the Panzar-Rosse model in the banking industry.

REFERENCES

1. ACIKALIN S., SAKINC, I. Assessing competition with the Panzar-Rosse Model in Turkish Banking Sector. Journal pf Economics Bibliography [online]. 2015, Vol 2, No 1, pp. 18-28. ISSN: 2149-2387 (IF: 0.16). Available: http://www.kspjournals.org/index.php/JEB/article/view/212
2. BERGER A. N., MOLYNEUX P., WILSON J. The Oxford handbook of banking. –New York: Oxford University Press, 2010. 944 p. ISBN 978-0-19-923661-9

3. BIKKER, J. A., SHAFFER, S., SPIERDIJK, L. Assessing competition with the Panzar-Rosse model: The role of scale, costs, and equilibrium. Tjalling C. Koopmans Institute Discussion Paper Series [online]. 2010, no. 9(27), 1–39. Available: http://www.otago.ac.nz/otago078405111111111111111111111111.pdf
4. GELOS, G., ROLDOS, J. Consolidation and market structure in emerging market banking systems. International Monetary Fund Working Paper [online]. 2002, nr. 02/186. Available: https://www.imf.org/external/pubs/ft/wp/2002/wp02186.pdf
5. Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings. Published in Official Journal C 031 on 5 February 2004, P 0005-0018. Available: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52004XC0205(02)&from=EN
6. GUTIÉRREZ DE ROZAS, L. Testing for competition in the Spanish banking industry: The Panzar-Rosse approach revisited. Banco de España Research Paper [online]. 2007, No. WP-0726. Available: http://www.bde.es/f/webbde/SES/Secciones/Publicaciones/PublicacionesSeriadas/DocumentosTrabajo/07/Fic/dt0726e.pdf.
7. KASHI, F, BEYNABADI, J., MOSAVI, Y. Competition in Iran's Banking Sector: Panzar-Rosse Approach. Iranian Economic Review [online]. 2015, Volume 19, Issue 1, pp. 29-39. ISSN: 1026-6542. Available: https://ier.ut.ac.ir/article_55158_21f2614c9f37509d152855bad4148813.pdf.
8. MORSINK, J., HUSAIN, A. M. Republic of Moldova: Financial System Stability Assessment. IMF Country Report [online]. 2016, no. 16/74. Available: http://www.imf.org/en/Publications/CR/Issues/2016/12/31/Republic-of-Moldova-Financial-System-Stability-Assessment-43745
9. Report on banking supervision provided by National Bank of Moldova for 2012-2016. Avaliable: http://bnm.md/bdi/?lang=ro (Visited 26.06.2017)
10. SCHAECK, K., CIHAK, M. Banking competition and Capital Ratio. IMF Working Paper [online]. 2007, WP/07/216. Available: https://www.imf.org/external/pubs/ft/wp/2007/wp07216.pdf.
11. World Bank Database. Available: http://data.worldbank.org/indicator (Visited 28.06.2017).

Rezumat

Este binecunoscut că rolul concurenței este de a stimula rivalitatea între participanți pentru a spori progresul și bunăstarea populației. Îmbunătățirea concurenței în sectorul bancar moldovenesc va avea un efect pozitiv asupra calității și prețurilor serviciilor bancare, eficientizînd activitatea sistemului financiar care va contribui semnificativ la creșterea economică a țării. În contextul obiectivului de integrare europeană și liberalizarea comerțului de servicii financiare cu Uniunea Europeană, analiza nivelului concurenței în sectorul bancar este o necesitate în vederea îmbunătățirii activității sectorului și facilitării procesului de armonizare a legislației în domeniul sectorului financiar-bancar și concurențial. În articolul dat am utilizat o metodă nestructurală de măsurare a concurenței în industria bancară, abordarea Panzar-Rosse. Acest model presupune măsurarea concurenței în baza unei funcții reduse a veniturilor care are scopul de a calcula elasticitatea veniturilor bancare la prețurile factorilor de producție: capital, muncă și active fixe. Această metodă pune accent pe comportamentul individual al băncilor comerciale, care este un indicator al puterii de piață.

***Cuvinte-cheie**: concurență, sector bancar, abordarea Panzar-Rosse, structura pieții*

Аннотация

Хорошо известно, что роль конкуренции заключается в том, чтобы стимулировать соперничество между участниками для поддержания прогресса и благосостояния населения. Улучшение конкуренции в банковском секторе Молдовы окажет положительное влияние на качество и цены банковских услуг, повысит эффективность деятельности финансовой системы, что внесет значительный вклад в экономический рост страны. В контексте цели европейской интеграции и либерализации финансовых услуг с Европейским Союзом анализ уровня конкуренции в банковском секторе является необходимостью в улучшении деятельности сектора и облегчении процесса гармонизации законодательства в банковской сфере и конкуренции. В этой статье мы использовали неструктурный метод измерения конкуренции в банковской отрасли, подход Панзар-Россе. Эта модель включает измерение конкуренции на основе сокращенной функции дохода, предназначенной для расчета эластичности банковских доходов по ценам на ресурсы: капитал, труд и основные средства. Этот метод фокусируется на индивидуальном поведении коммерческих банков, что является показателем рыночной власти.

***Ключевые слова**: конкуренция, банковский сектор, подход Панзар-Россе, структура рынка*

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