

The Romanian Banking System - Evolution and Transition After the Crisis Generated by COVID 19 and the War in Ukraine

Roxana Daliana Schiop
West University of Timisoara,
The Doctoral School of Economics and Business Administration, Romania
roxana.schiop83@e-uvt.ro

Abstract

The period of the pandemic has shown that, in times of crisis generated by tensions and shortages, flexibility in decision-making and how to manage resources, It has had the consequence of counteracting the dysfunctions in terms of banks' policies in relations with clients and partners. At the same time, it has increased the effectiveness of bank management efforts in achieving the pre-established objectives. Of the other part, The very uncertain economic context generated by Russia's war against Ukraine and the risk of regional spillovers could affect the financial institutions in the euro area and especially those in Romania. The exclusion of a part of the russian banks in SWIFT and the financial sanctions imposed on the Russian Federation have It has forced banks to be more restrictive in terms of openness to customers who operate with Russia. The scientific research makes an analysis and a comparison of the financial indicators for the banking sector in Romania in the light of the major events that have taken place lately.

Key words: banking institution, the banking financial system, financial ratios, economic crisis, monetary policy

J.E.L. classification: E42, G21, G28, M41

1. Introduction

Commercial banks are financial intermediation companies and their essential function is to finance activities that economically require support in this regard (Bianchi & Melosi, 2018) . The COVID 19 pandemic, but also the war that is so close to Romania, have brought to light certain behaviors (Haapio & All, 2021) . At the European systemic risk Council (ESRB) meeting held in 2014, it was highlighted that systemic risks are generated by the own conduct of each bank institution.

The world we live in is characterized by disorder and lacks a vision that could order the conduct of the world's states, remarks Henry Kissinger (Daianu, 2015). The war taking place in our immediate vicinity has brought back to the attention of the states the care for stability in the region, the defense of the borders and the status of each nation. Extreme events, referred to by Nassim Taleb as "black swans", are challenging the robustness and resilience of socio-economic systems. The strong financial crisis equates to an economic impact as a war and has required direct intervention by states to limit the consequences (Guda, 2020). There is also a redistribution of economic power around the world, a redistribution that was unthinkable decades ago, when the supremacy of the West was undeniable and it was assumed that no one and nothing would dethrone it (Daianu, 2015). European countries are dealing with a very complicated geopolitical situation due to the conflict in Ukraine. The European continent is facing an extreme and complicated geopolitical situation due to the military conflict between Russia and Ukraine. Thus, the entire economy of Europe is faced with a conglomerate of circumstances that require effective external and internal measures and a very good cooperation between states. Responses to the threats facing the European economy involve means of intervention and protection that adapt to the conditions of conflict that can expand, thus endangering the whole of Europe.

In this economic-social and political context it is necessary to know in depth the economic phenomena, to follow with rigor the indicators that express the state of the economy in general and of the companies in particular.

2. Literature review

The literature deals with the current economic crisis from the perspective of the previous crises, so it can be said that in the current period the banking system has demonstrated its resilience, although it was in unprecedented situations of recent history (Hernandez de Cos, 2021). This is due to the measures taken and the implementation of the organizational transformation processes of financial institutions during previous crises (Anghel M.G., 2014). The unprecedented crisis and the uncertain economic situation of the countries of the world have shown how important the role of an operational risk management strategy is, applied before the shock wave preceding the crisis occurs (Pinzaru & Zbucnea, 2021). But in this context, we also find the right environment for cyber-attacks. The increase in these numbers, at the same time as the pandemic (Financial Stability Board, 2021), has developed at an accelerated pace, as uncertainty is a major problem for all sectors of activity. In this nebula, there are three trends that need to be taken into account: The stability of the banking system, systemic risks and the resistance to attacks of computer systems (Deloitte, 2021).

The current legislation is constantly changing, creating a structure with regulatory and supervisory functions "with basic standards that will cause banks to be more ambitious in terms of defense and risk resistance" (Deloitte, 2018).

Figure no. 1: The structure of the Romanian banking sector according to the country of origin of the main shareholder (December 2021)



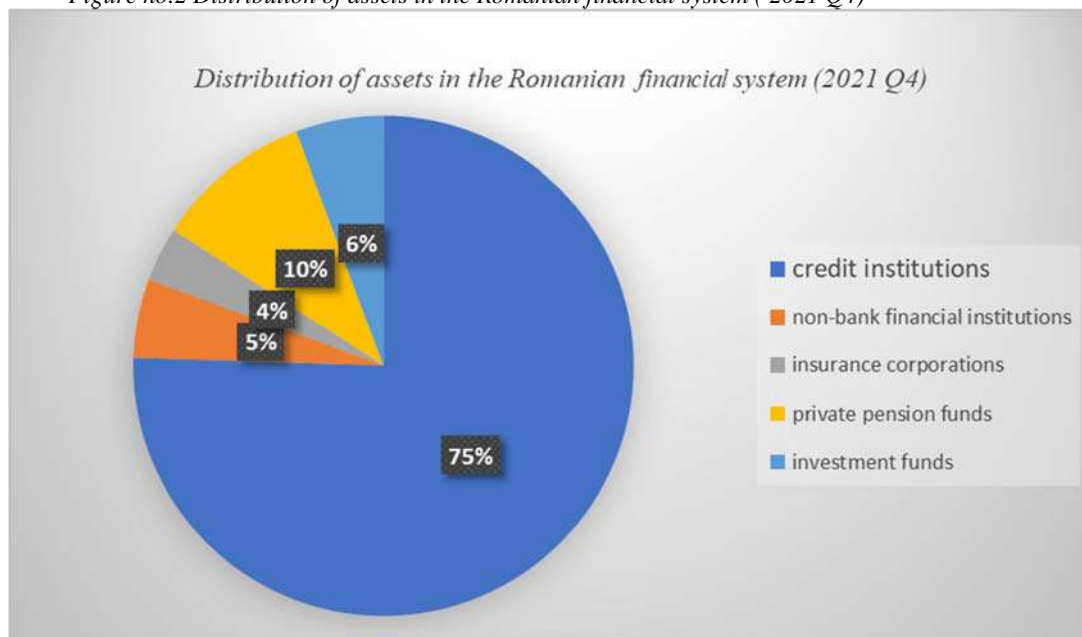
Note: others are Greece, Hungary, Cyprus, Ireland, Luxembourg, Germany, Bulgaria, Poland and United Kingdom (each country has under 3 percent of total net assets).

Source: NBR- screening of the author, 2022

The features of the Romanian banking financial system are determined by a number of factors related to the evolution in time of the banking sector, by those who participate in the rotation of the wheels of the mechanism in this sector, by the country of origin of the majority shareholder, the distribution of assets (EY, 2020). A projection of the distribution of the market share according to the country from which the majority shareholder in the financial sector comes as of December 2021 shows that the largest share is held by the Romanian shareholder, with a market share of 32%, followed by Austria 24%, The Netherlands was third with 12%, followed by France 11% and Italy 9%. A market share of 12% is held by other banks that have shareholders in Greece, Hungary, Cyprus, Ireland, Luxembourg, Romania and Romania. The data used to make the graphic distribution were taken from the statistical data sources of the National Bank of Romania and are highlighted in December 2021.

Another feature of the Romanian financial sector is determined by the distribution of assets within the financial system (Anghelache & All, 2009, 2017). On the Romanian financial market, it evolves in addition to commercial banks (credit institutions), non-bank financial institutions, insurance companies, private pension funds and investment funds (Georgescu, 2009). The present scientific research has graphically described the placing on the market of these components in the fourth quarter of 2021. Thus, credit institutions have a majority share in the system 75%, the rest of the participants sharing the market in much smaller shares: Private pension funds 10%, investment funds 6%, non-bank financial institutions 5%, insurance companies 4%.

Figure no.2 Distribution of assets in the Romanian financial system (2021 Q4)



Source: NBR – screening of the author, 2022

3. Research methodology

In order to have an overview of the evolution of the Romanian banking sector and to see what is the impact of the economic crisis generated by the COVID-19 pandemic, but also what are the influences of the Russian-Ukrainian war on banks in Romania, we have conducted analyzes and comparisons of the main financial indicators in the banking system. These analyzes include a centralization of the information contained in the statistical and monetary reports of the National Bank of Romania for the period between 2012 and 2022, taking as the reference month September of each year, this reference is due to the fact that September 2022 is the last month of reporting financial indicators until the moment of this study. The aim was thus to analyze the period of 10 years in which there were periods of economic collapse, periods in which economic growth was recorded on different sectors of activity, as at the end of the analyzed period the strong economic crisis faced by Europe in general and Romania in particular, as well as the war so close to us, to cause distortions in all environments, generating unprecedented reactions from all participants in the economic process.

The sample consists of aggregated indicators on credit institutions, indicators that refer to all credit institutions (banks, foreign banks branches, credit cooperatives). For foreign banks there is an exception, they do not report solvency, own funds and credit classification. The indicators were calculated using the financial reporting of FINREP and COREP of credit institutions. In the calculation of leverage, total assets and equity were used. The ROA and ROE indicators were at average value. The indicators were taken from the statistical data series of the National Bank of Romania. This makes some clarifications on how the indicators were calculated: "Since 2012, the indicators have been calculated according to the reports prepared in accordance with IFRS (for the

indicators having the position "impaired receivables" as numerator, the values of December 2011 were calculated based on the data from the accounting records for the day of 1 Jan. 2012). As of June 2014, the indicators are based on information submitted by banks under Commission Implementing Regulation (EU) No 680/2014 laying down implementing technical standards with regard to supervisory reporting of institutions in accordance with Regulation (EU) No 575/2013 Of the European Parliament and of the Council. With the entry into force of Implementing Regulation (EU) No 680/2014, the leverage ratio is part of the reporting package according to those technical standards and is reported as such by credit institutions. In June 2015, the methodological norms regarding the preparation of FINREP individual situations were amended and they consisted in the inclusion in the reports of non-performing exposures of cash balances and other deposits take into account credit institutions." (European Central Bank, Monetary and financial statistics - aggregated credit institution indicators, data series, 2022).

At the same time, the information regarding the number of credit institutions, the number of foreign branches on the market during the analyzed period was centralized, as well. As well as the total net assets in million lei, these data were presented from the statistical data series of the National Bank of Romania and the analysis was made for a period of ten years (years 2012-2022), in order to highlight the evolution on the Romanian financial market of credit institutions.

The research methodology was qualitative and consisted in synthesizing reports on the evolution of aggregated indices, The study had as a research topic the evolution in time of the banking sector in conditions of deep economic crisis by comparing the data obtained with the data from the pre-crisis periods.

The selection had as basic principles four criteria for approaching the analysis. The scientific research started with a thorough scientific documentation that consisted in studying the reports of the National Bank of Romania and identifying information of interest regarding the evolution in time of the banking sector in a table that reflects the structure and evolution of the banking sector over a period of 10 years (*Table no.1 Structure and evolution of the financial sector*).

At a first analysis of the data, it is noted that during the research period the number of credit institutions oscillated, but not significantly, at the beginning of the research period (September 2012) their number being 41, reaching the end of the research period (September 2022) to 34 operational units. The number of foreign branches operating in Romania during the period under investigation did not have significant oscillations, a higher number, respectively 10 branches being registered in September 2013, so that at the end of the analysis period their number would reach 8.

If in September 2012 the total net assets were 373,540.20 million lei, in September 2022 the total assets reached 679,289.5 million lei, which almost doubled in the ten years analyzed, the total assets reached million lei. this leads us to conclude that financial institutions in the banking sector have strengthened their status, having a robust position in the market at the end of September 2022, even though they are in the midst of the economic crisis. The second criterion of the research approach was the identification of the principal aggregate indicators included in the reports of credit institutions. In this respect, the series of data found in the monetary and financial statistics of the National Bank of Romania were studied and those that were not the object of the study period were eliminated. This made it possible to select the 10-year, centrally reported data to analyze and compare.

Table no. 1 Structure and evolution of the financial sector 2012-2022

Period	Number of credit institution	Branches of foreign banks	Total net assets
September			
2012	41	8	373.540,20
2013	40	10	353.571,40
2014	39	9	351.442,70
2015	37	8	359.597,10
2016	36	8	378.097,10
2017	35	8	406.427,69
2018	34	8	445.198,55
2019	34	7	472.861,88
2020	34	7	533.137,43
2021	34	8	602.675,98
2022	34	8	679.289,58

Source: NBR – screening of the author, 2022

Analyzing the data from the sample, it was observed that in terms of assets of private equity institutions steadily decrease, insignificant, each year with values between one and two percent, at the beginning of the analyzed period (September 2012) they are 90.70%, and in September 2022, reaching 88, 60%, as opposed to the assets of institutions with foreign capital that decrease in a higher proportion, so that since September 2012, when they had a percentage of 81.30%, they reach in September 2022 a percentage of 68%, registering a decrease of 13.3%.

The solvency indicator intersigns an increase of 6.55 percent at the end of the period, compared to the end of the analyzed period, reaching in September 2022 a percentage of 21.52 percent. Solvency in the banking sector registering insignificant variations compared to the last two years analyzed (September 2020 and September 2021 during the pandemic period) even though the economy is facing great difficulties due to the crisis. In 2021, the financing of real economies, especially of non-financial companies, was resumed, thus registering an increase compared to pandemic values.

The leverage ratio did not show significant variations, standing at 8.07% in September 2022.

The rate of return on the core activity recorded an increase from 173.04 at the beginning of the analysis period to 191.23 at the end of the period, as opposed to loans granted/deposits attracted from the client that registered a decrease from 129.69 at the beginning of the period, At 73.40 to September 2022. At the same time impaired receivables/total client portfolio (from 11.66 to 1.06), impaired receivables/total assets (from 6.94 to 0.58), impaired receivables/total liabilities register (from 7.77 to 0.64) The rate of non-performing loans according to the EBA definition has decreased significantly since 2014 from 21.47 to 2.82 in September 2022.

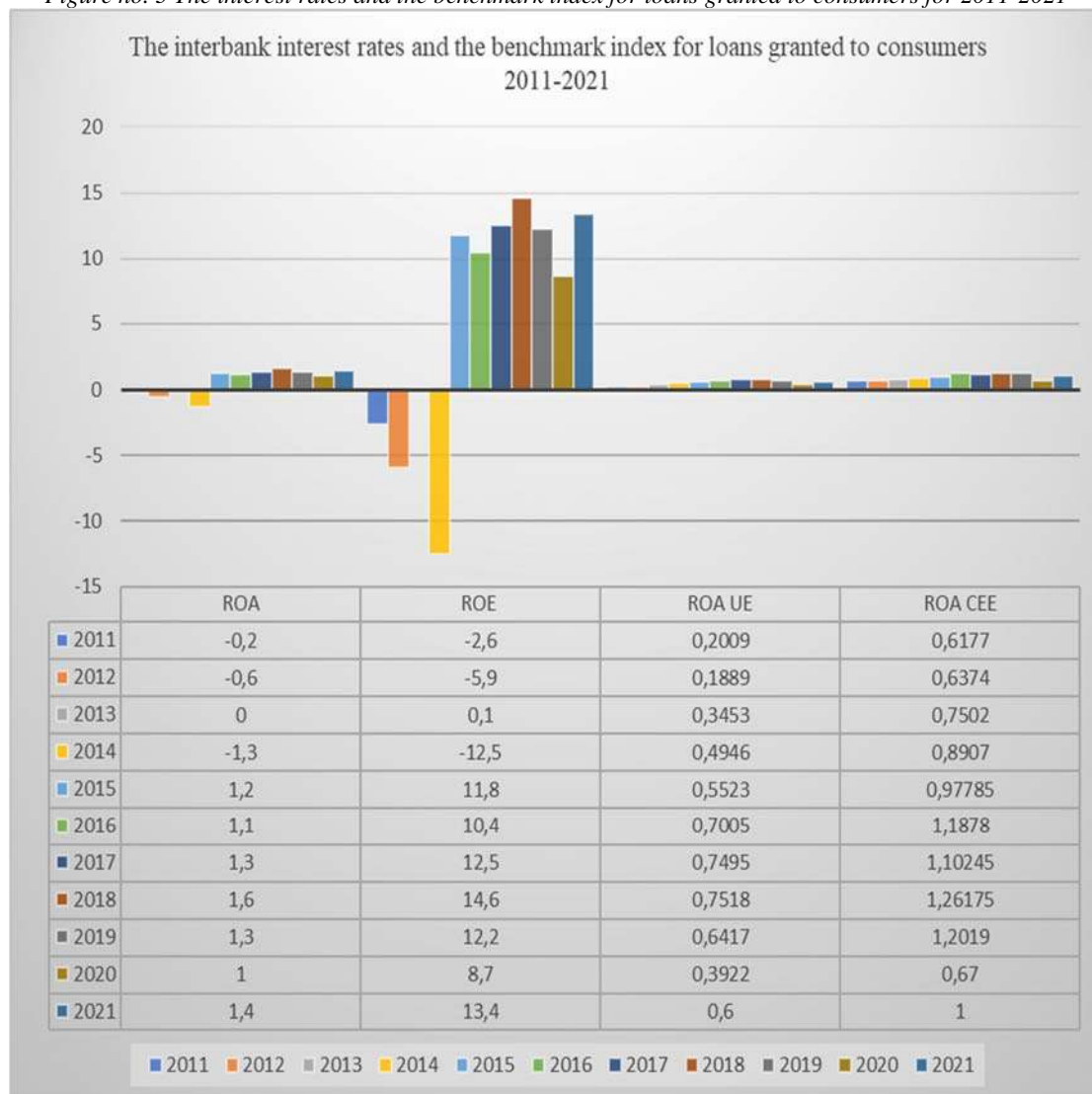
Table no. 2 Aggregate credit institution indicators

Data	Number of credit institutions	Branches of foreign banks	Total net assets	Assets of private equity institutions	Assets of foreign-owned institutions	Solvency Ratio (>8%)	Leverage	ROA	ROE	The rate of return on the core business	Loans granted/deposits attracted from clients	Impaired receivables/total loan portfolio	Impaired /total assets	Impaired /total liabilities	The non performing credit rate as defined EBA
	(nr.)	(nr.)	(mil. lei)	(% in total active)	(% in total active)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Sep. 2022	34	8	679,289.58	88.60	68.00	21.52	8.07	1.54	16.56	191.23	73.40	1.06	0.58	0.64	2.82
Sep. 2021	34	8	602,675.98	88.90	69.70	23.07	9.45	1.47	13.59	185.76	68.55	1.21	0.63	0.71	3.65
Sep. 2020	34	8	533,137.43	90.00	71.60	22.76	9.76	1.17	10.48	185.58	68.88	1.40	0.73	0.82	4.06
Sep. 2019	34	7	472,861.88	92.00	74.10	19.73	9.40	1.45	13.18	192.64	74.76	1.89	1.06	1.19	4.58
Sep. 2018	35	7	445,198.55	91.90	74.80	19.96	9.05	1.76	16.35	188.33	76.43	2.30	1.28	1.43	5.56
Sep. 2017	36	8	406,427.69	91.60	91.10	18.98	8.90	1.36	12.90	181.20	80.30	3.60	2.04	2.29	7.96
Sep. 2016	37	8	378,097.10	91.60	90.40	18.76	8.61	1.30	12.32	195.86	82.87	5.16	2.90	3.25	10.00
Sep. 2015	39	8	359,597.10	91.40	76.80	18.69	8.34	0.83	7.98	168.05	92.67	7.93	4.46	5.00	15.73
Sep. 2014	40	9	351,442.70	91.70	80.50	17.06	7.63	-0.60	-5.58	181.16	99.65	10.15	5.77	6.44	21.47
Sep. 2013	41	10	353,571.40	92.00	90.60	13.92	7.49	0.55	5.04	177.66	111.50	12.42	7.32	8.21	-
Sep. 2012	41	8	373,540.20	90.70	81.30	14.67	8.30	-0.04	-0.34	173.04	120.69	11.66	6.94	7.77	-

Source: NBR – screening of the author, 2022

The third criterion of approach to the scientific approach carried out a thorough analysis of the ROA and ROE indicators, compare them in evolution with the EU ROA and CEE ROA, where the EU ROA is average from the consolidated data and the CEE ROA is the ROA indicator from Bulgaria, Croatia, Czech Republic, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia, Hungary, Countries of the former communist bloc with a different economic development than other European Union states. The analysis was carried out over a period of 10 years, including 2011 to 2021. The analyzed data were extracted from the data sets of the National Bank of Romania, which in turn took the indicators of the other countries from the statistical data of the European Central Bank. The graphics show the evolution of the ROA for the period described, increasing from -0.2 in 2011, the data of the National Bank of Romania at 1.4. compared to the ROA, the other two EU ROA and CEE ROA indicators show insignificant increases. Instead, the ROE indicator is highlighted by a significant increase, evolving from -2.6 in 2011 to 13.04 in 2021.

Figure no. 3 The interest rates and the benchmark index for loans granted to consumers for 2011-2021

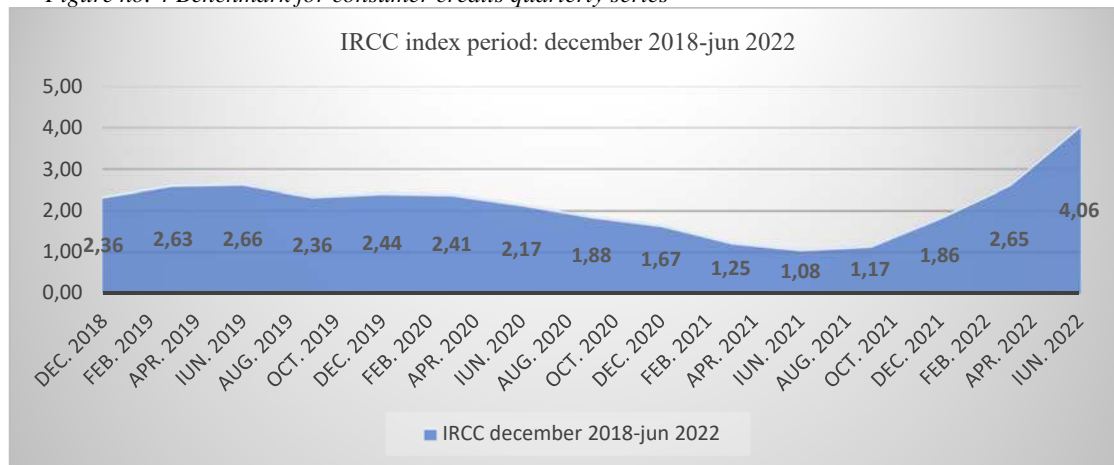


Note: ROA, ROE for the Romanian banking sector (individual data) median EU, CEE (consolidated data), 2021 - annualized data CEE-Bulgaria, Croatia, Czech Republic, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia, Hungary

Source: NBR – screening of the author, 2022

The last criterion of the scientific research conducted an analysis of the evolution of the IRCC and ROBOR indices for a period that started in December 2018 and until June 2022, the reference months being February, June, August, October, December of each year, except for the beginning year 2018 where the December data was used and the final year of the research, which includes data until June 2022. For this, data obtained from the data series of the National Bank of Romania were used, the graphics show an evolution of the IRCC over the given period, which recorded a decrease in 2021, but having a steep increase in 2022, recording the highest value since the beginning of the analysis in June 2022. This increase is determined by the economic crisis in which Romania is and which has seriously disrupted all economic activity.

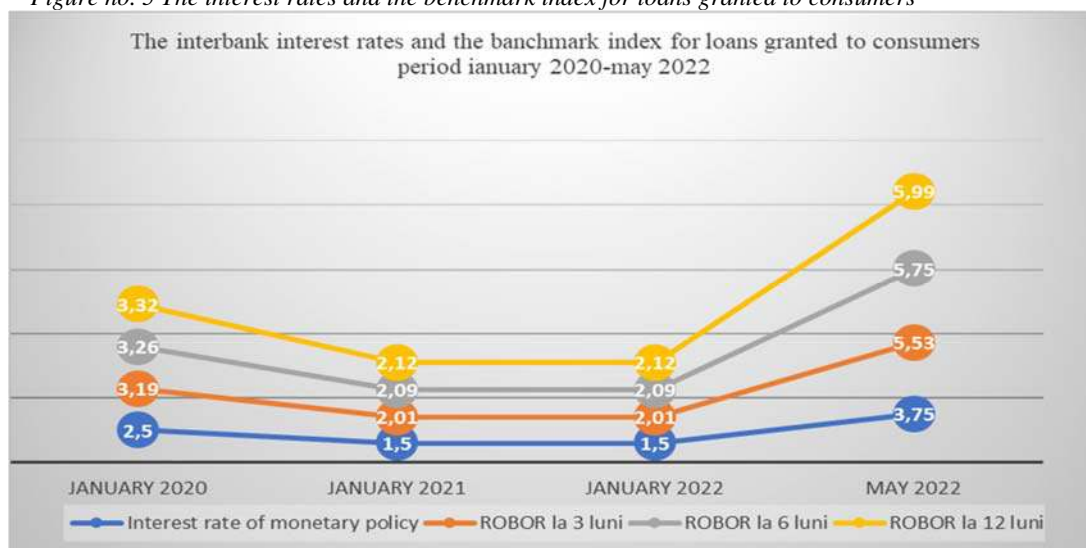
Figure no. 4 Benchmark for consumer credits quarterly series



Source: NBR – screening of the author, 2022

The ROBOR index was analyzed in comparison with the exchange rate of monetary policy, for a period of three years January 2020, 2021, May 2022, at three months, The data used in the analysis were extracted from the data resources of the National Bank of Romania. From the graphic representation it was noted that the ROBOR index and the exchange rate of monetary policy recorded approximately equal increases over the analyzed period. culminating in the highest increase in May 2022.

Figure no. 5 The interest rates and the benchmark index for loans granted to consumers



Source: NBR – screening of the author, 2022

4. Findings

The scientific research has made a comparative analysis of the Romanian banking system during this troubled period. The risks that could affect the financial stability of the banks were maintained at a level that could be managed both during the pandemic and after this period. The situation generated by the pandemic, the electricity crisis that has raised its price to its highest level so far, the sanctions imposed on some Russian banks following the war in Ukraine (mainly the exclusion of Russian banks from SWIFT), the interruption of oil supply from the Russian Federation, The ban on exports and imports of certain products, raw materials and materials from Russia has made the risk of tensions in the case of domestic macroeconomic balances to remain at a severe level, with the prospect of maintaining the alert.

5. Conclusions

The deterioration of the economic situation, especially in 2022, as a result of the conflict between Russia and Ukraine, the disruptions that took place in the supply chain, kept macroeconomic conditions extremely difficult. In this context, banks have come to meet their clients with dedicated support programs for each activity (postponing the payment of credit rates for example). "Risks in terms of global uncertainty, in the context of the energy crisis and the COVID -19 pandemic and the related one the default of loans contracted by the non-governmental sector was at a high level, with prospects constants" (Bulletin of the National Bank of Romania 2021).

The development of the market in terms of financial intermediation in the banking sector could make a particularly important contribution to economic growth, thus ensuring easier access to financial resources. On the other hand, this approach can lead to improved monitoring capacity of funded projects.

In conclusion, the scientific research conducted highlighted the robustness of the Romanian banking system, in harsh economic conditions and in times when uncertainty regarding the future was at very high levels. However, the research has limits consisting of the number of financial indicators analyzed, as well as the fact that the data they were used manually and thus there is the possibility of omitting important data. In view of the research will be extended to other indicators as well as to the ways of granting, distributing and developing loans granted to different non-financial institutions.

6. References

- Anghel, M.G., 2014. Study on Romania's Banking System during the period 2009 – 2013, *ART ECO - Review of Economic Studies and Research*, 5 (4), 69-78
- Anghelache, C., Sfetcu, M. and Bodo, G., 2017. Analysis of Banking Risks in the Context of The Basel Agreements. *Romanian Statistical Review, Supplement*, 12, 83-89
- Anghelache, C., Marinescu, I.A., Mirea, M., 2017. Models of Insolvency Risk, Analysis in Financial and Banking Institutions. *Romanian Statistical Review, Supplement*, 11, 72-78
- Anghelache, C., Anghelache, C.S. and Sfetcu, M., 2009. Risk analysis in the context of the Romanian banking market. *Supplement of the Romanian Statistical Journal*, 6 June, 62-66
- Bianchi, F. and Melosi, L., 2018. Constrained Discretion and Central Bank Transparency. *The Review of Economics and Statistics*, 100 (1), 187-202
- European Central Bank, 2022. Ecosystem, Economic and Monetary developments, European Commission Bulletin, *Economic Bulletin* no.6/2022 – Synthesis, ISSN 2363-3638 (pdf), UE Catalogue No: QB-BQ-22-003-RO-N (pdf),
- Cannata, F. et al – with Foreword by Mario Draghi, 2011. *Basel III and Beyond – A guide to Banking Regulation after the Crisis – Risk Books* – Incisive Financial Publishing Ltd London
- Dăianu, D., 2015, *Who and what do banks work for?* [online] Available at: adevarul.ro/economie/bani/pepentru-lucreaza-bancile_1_54ddc14c448e03c0fd90d907/index.html, 13 Feburary 2015
- Daianu, D., 2015, *Open society and wars*, [online] Available at: <http://www.hotnews.ro/stiri-opinii-19228935-daniel-daianu-societateadeschisa-razboaiele.html>, 29 January 2015

- Deloitte Romania, 2018, 23 July. *Cyber risk and banking regulations in Europe*. [online] Available at: <https://www2.deloitte.com/ro/ro/pages/risk/articles/riscul-cibernetice-si-reglementarile-bancare-in-europa.html> [Accessed in 09.04.2022]
- Deloitte, 2021, 1Th of October. *Post-pandemic banking system – face to face with the legislation of non-performing loans*. [online] Available at: <https://www2.deloitte.com/ro/ro/pages/financial-services/articles/sistemul-bancar-post-pandemic-fata-in-fata-cu-legislatia-creditor-neperformante.html> [Accessed in 09.04.2022]
- Eicher, T. and Leukert, A., 2009. Institutions and Economic Performance: Endogeneity and Parameter Heterogeneity. *Journal of Money, Credit and Banking*, 41 (1), Blackwell Publishing, 197-219
- EY, 2020. *How banks can successfully emerge from COVID-19*. [online] Available at: https://www.ey.com/en_gl/banking-capital-markets/how-banks-can-successfully-emerge-from-covid-19 [Accessed in 24.03.2022]
- Financial Stability Board, 2021. *Lessons learned from the COVID-19 Pandemic from a financial stability perspective*. [online] Available at: <https://www.fsb.org/wp-content/uploads/P130721.pdf>
- Georgescu Florin, 2009. The banking system in Romania – present and perspective. *Finmedia*, 10 noiembrie 2009 (Research Gates)
- Gieve J., 2009, “Seven lessons from the last three years “Speech at The London School of Economics
- Guda, I., 2020. *Economy in the time of coronavirus. A guide to good practice for entrepreneurs and public policies. The impact of the pandemic in redefining banking strategies*. Bucharest: Publica
- Haapio, H., Mero, J., Karjaluto, H., & Shaikh, A. A., 2021. *Implications of the COVID-19 pandemic on market orientation in retail banking*. *Journal of Financial Services Marketing*. <https://doi.org/10.1057/s41264-021-00099-9> [Accessed in 24.10.2022]
- Hernandez de Cos, P., 2021. *The challenges to the banking sector a year after the outbreak of the COVID-19 pandemic*.
- Kiyotaki, N. et al, 2010. *Financial Crisis, Bank Risk Exposure and Government Financial Policy*
- Laeven, L., & Valencia, F., 2013. Systemic banking crises database. *IMF Economic Review*, 61(2), 2013, pp. 225-270
- National Bank of Romania, 2021. *Financial Stability Report: December 2021, year VI (XVI), No 11 (21)*. New series BNR
- Pinzaru, F., Zbucea, A., 2021. *After COVID-19: Management challenges between digitalization, sustainability and resilience*.
- <https://www.bnr.ro/PublicationDocuments.aspx?icid=24264> [Accessed in 15.11.2022]
- <https://www.bnr.ro/Rapoarte-asupra-stabilitatii-financiare--7673.aspx> [Accessed in 15.11.2022]
- <https://insse.ro/cms/ro/tags/anuarul-statistic-al-romaniei> [Accessed in 10.11.2022]
- https://insse.ro/cms/sites/default/files/field/publicatii/asr_2021_serii_de_timp-ro.pdf [Accessed in 10.11.2022]
- <https://www.bnr.ro/Statistica-monetara-si-financiara-6380.aspx> [Accessed in 16.11.2022]
- <https://www.bnr.ro/Indicatori-agregati-privind-institutiile-de-credit-3368.aspx#> [Accessed in 16.11.2022]
- <https://www.bnro.ro/Buletinul-lunar-al-BCE-3222.aspx#peloc> [Accessed in 16.11.2022]