Improvement of the Internal Control System of Credit Risk in Banking Sector of the Republic of Moldova in Conditions of the COVID-19 Pandemic

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Abstract: The internal control system of credit risk in the banking sector of the Republic of Moldova is currently jeopardized by the effects of COVID-19 pandemic. The COVID-19 crisis has triggered five major challenges to the credit risk environment: changes in the credit worthiness at the sector and subsector level, difficulty in differentiating between borrowers in the same sector/subsector, scare, lagging data on crisis conditions, socially responsible collections needed to meet changing customer preferences, large wave of non-performing loans which must be addressed in a new way. Consequently, banking institutions are forced to identify new solutions in fostering the efficiency of internal control systems.

Key words: internal control system, credit risk, COVID–19, impact, banking sector, improvement, consolidation, audit.

1. Introduction

The credit risk is one of the most significant risks in the banking sector, which makes up about 60% of total exposures. Therefore, one of the main reasons of banking failures which resulted in major financial losses, is the excessive risk over the risk appetite, undertaken by the bank management, combined with further inability to control it.

In the banking sector of the Republic of Moldova, the internal control systems (ICS) have been putted in place, however their efficiency and effectiveness cannot be guaranteed which makes banks vulnerable to the credit risk. Consequently, the motivation behind the development of an efficient internal control system of the credit risk relies on enhancing the credit risk management, and prevention or early detection of potential financial losses.

In present, the worldwide economy and banking sector is impacted by the COVID-19 pandemic effects, which affects negatively the internal control systems of the banks. The "new normal" and rapidly increasing credit risk, puts pressure on banking institutions to identify new solutions in fostering the efficiency of internal control systems.

The scope of the research is identification of possibilities of improvement of internal control system of the credit risk in conditions of the COVID-19 pandemic. The investigation was carried out on the basis of analysis of the banking sector of the Republic of Moldova.

Methodology of research. For the elaboration of the article, general scientific knowledge of banking framework was applied, as well as concrete historical approaches that would allow the

consideration of development phenomena and processes. The techniques used were: induction, deduction, comparison methods, Pearson correlation coefficient calculation, synthesis and analysis.

2. The overview of the banking sector and level of credit risk in the Republic of Moldova

The banking sector of the Republic of Moldova has emerged from the date of the declaration of independence of the Republic of Moldova in 1991. During its evolution of about 30 years, the banking sector of Moldova was affected by several negative waves, ending in withdrawal of licenses of numerous banking institutions. The most destructive waves for the banking sector of Moldova were the global financial crisis in 2008-2009 and the crisis related to the fraud of one billion dollars in 2014, which was one of the most serious banking frauds ever. Theft of the Billion comprises the fraudulent financial transfers of about MDL13,3 bln (767 million dollars, an amount equivalent to 12% of the annual GDP per county), which were performed through the JSCB "Banca de Economii", JSCB "Banca Sociala" and JSCB "Unibank". Besides the root cause of fraud occurrence – the corruption, it is an appropriate example of a defective internal control system, which resulted in liquidation of the three leading Moldavian banks which have negatively impacted the further evolution of the banking sector of the Republic of Moldova, causing a huge reputational damage and in the final stage, manifesting stagnant effect over the national economic situation and requiring prompt recovery actions.

Another important recent event of the banking sector, is implementation of the Basel III standards in the Republic of Moldova, which have affected banks' indicators.

In present, the banking sector is affected by a new negative event – the economic crisis caused by consequences of the COVID-19 pandemic, but the effects are still unpredictable in present as the situation changes on a daily basis.

At the current period, the banking sector in the Republic of Moldova is mainly domestically oriented and based on traditional lending activities. According to the information from National Bank of Moldova, in 2020, there were 11 licensed banks operating in the Republic of Moldova, with total assets close to MDL 99,2 bln, which is about 48.35% of total GDP of the country. Together the total assets of 5 largest banks accounts for almost 82,60% of the system (table 1). Loans to the economy represent the largest share of total assets, about 43,76%, most of which are directed toward corporate sector, about 63.94%. The volume of deposits exceeds the volume of loans extended in the economy, almost twice, which indicates on high liquidity of the banking sector in the Republic of Moldova.

Table 1. Balance Sheet Summary of the Banking Sector in the Republic of Moldova as of 2020

(Bln. MDL)

	Banking sector	5 largest banks	All other banks
Total assets	99,21	81,94	17,26
Total loans	43,42	37,28	6,13
Total deposits	75,13	62, 64	12,49
Total regulatory capital	13, 40	10,45	2,94
Total risk-weighted assets (RWAs)	48,59	41,24	7,34
Capital adequacy ratio (% of RWAs)	27,58%	25,35%	40,10%
Ratio of non-performing loans	8,33%	8,47%	8,27%

Source: elaborated by the author based on Reports on economic-financial activity of banks from RM. https://www.bnm.md/bdi/pages/reports/drsb/DRSB1.xhtml.

The total regulatory capital is the sum of Tier I Capital and Tier II Capital and in 2020 it is about MDL 13,4 bln, which is an adequate amount. The risk-weighted assets, according to CFI (Corporate Fiancé Institute), is the asset classification system that is used to determine the minimum capital that banks should keep as a reserve to reduce the risk of insolvency, based on which was calculated capital adequacy ratio. Under Basel III, the minimum capital adequacy ratio that banks must maintain is 8% and as it can be seen in the table above, the banking sector comply with the normative range.

3. Analysis of the impact of internal control system over the credit risk in the banking sector of the Republic of Moldova

In order to identify if the credit risk may be reduced by consolidation of internal control system practices, it is necessary to identify which is the impact of internal control system over the credit risk. For this purpose, it is proposed to perform a quantitative analysis based on calculation of Pearson's Correlation Coefficient. For the present analysis, were selected three banks: JSCB "Moldova-Agroindbank", JSCB "Eximbank" and JSCB "Mobiasbanca OTP Group", which comply in a full manner with the regulations in the area of internal control system. The structure of internal control system of these banks is mainly composed of board of directors, which is responsible for the overall existence and effectiveness of the system together with its audit committee, and three internal control functions as stipulated in the Regulation on Banking Activity Management Framework: risk management, compliance and internal audit. It is notable to mention, that JSCB "Eximbank" and JSCB "Mobiasbanca OTP Group" during the last two years have passed through the significant changes in shareholders' composition, which will be reflected in their financial results.

Analysis begins with determination of the indicators used to measure the variables of the research. It is proposed to measure the influence of the internal control system over the credit risk. For this purpose, the correlation indicators will be calculated on the basis of the dependent and independent variables. The framework for the study comprehensively encompasses dependent variable – credit risk and independent variables – five components of the internal control system (control environment, risk assessment, control activities, information and communication, monitoring).

For each of the variables were identified the appropriate characteristics of internal control system and quantitative indicators which will be further used in the assessment of the correlation between dependent and independent indicators as it was indicated in the figure below (figure 1):

Figure 1. Determination of quantitative indicators for correlation analysis
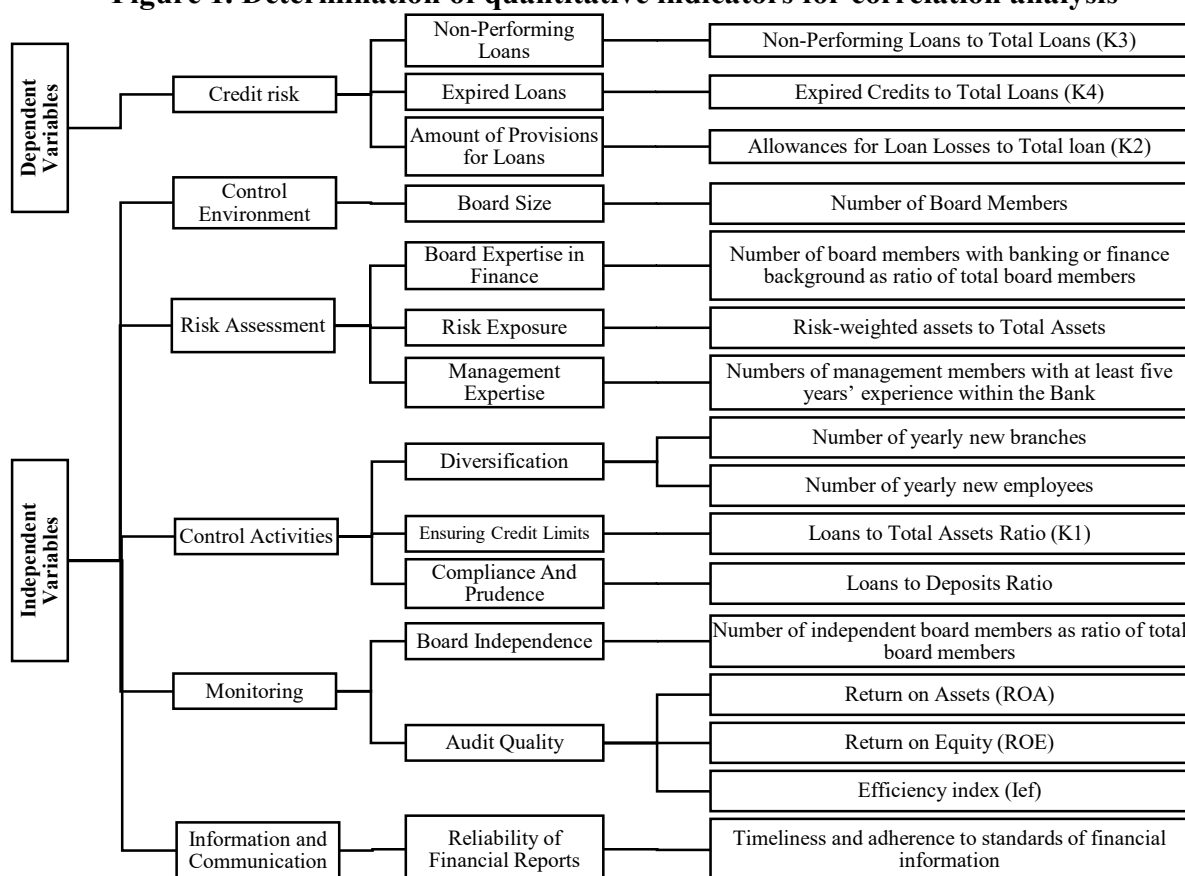
Source: elaborated by the author.

Further were collected and analyzed data for indicators determined in the figure above. One of the most relevant indicators for the present subject is dynamics of non-performing loans to total loans, which indicates the level of risky credits extended from all the extended credits. High non-performing loans ratios indicate on high credit which can adversely affect the soundness of the banking sector and its ability to lend to the real economy. In addition, it would reduce bank profits, because of higher provisions requirement, will be lower interest income, and higher expenses associated with monitoring and management. The banking sector has a fluctuating tendency of the non-performing loans to total loans ratio, while the worst results are reached by JSCB "Eximbank" up to 2018, with the highest value of almost 34%. As soon as the bank was acquired by Intesa Sanpaolo S.p.A. its situation was remediated and in 2020, all the analyzed banks have not exceeded 10% non-performing loans ratio (figure 2). Summarizing, as comparing to values up to 2018, there can be seen visible improvement of credit risk management, consequently it could be mentioned that the Basel III standards have been implemented successfully.

Figure 2. Dynamics of non-performing loans to Total Loans ratio (K3) during 2014-2020 (mln MDL)
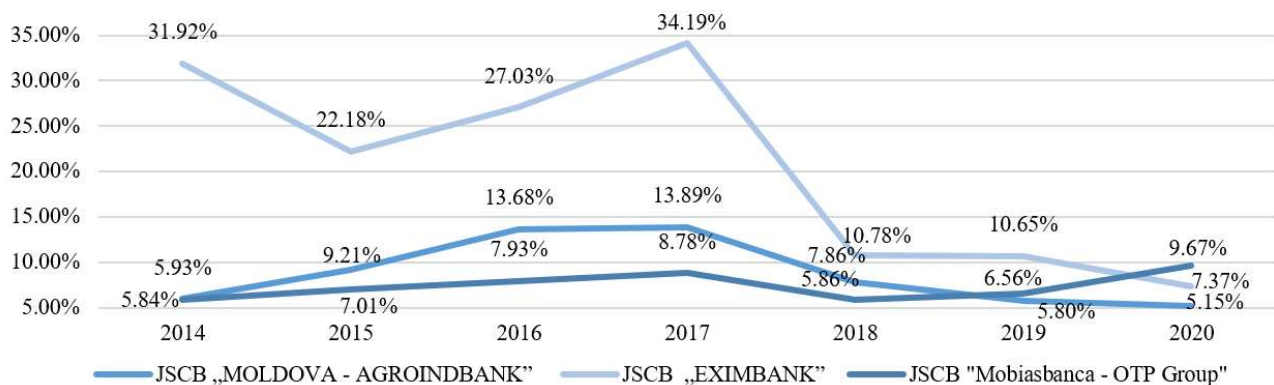
Source: elaborated by the author based on Reports on economic-financial activity of banks from RM. https://www.bnm.md/bdi/pages/reports/drsb/DRSB1.xhtml?id=0&lang=ro.

Besides the financial data regarding credit risk, it was investigated data regarding corporate governance. In the table 2, was summarized information regarding the board of directors' quality. As it can be seen, the largest board is in JSCB "Eximbank". On the one hand, it is assumed, that the larger is the board, the lower is the quality of decisions, because less members comes easier to a common agreement, while large board decisions are time consuming.

Table 2. Quantitative information concerning members of Supervisory Boards of banks as of 31.12.2020

number (%)

	JSCB „MOLDOVA - AGROINDBANK"	JSCB „EXIMBANK"	JSCB "Mobiasbanca - OTP Group"
Number of Board Members	5	7	4
from which:			
-members with banking or finance background	4 (80%)	5 (70%)	3 (75%)
-members with at least 5 years' experience within the Bank	2 (40%)	0 (0%)	1 (25%)
-independent members	3 (60%)	2 (30%)	3 (75%)

Source: elaborated by the author based on information from the information on banks' websites. www.maib.md, www.eximbank.md and www.mobiasbanca.md.

From the other hand, the JSCB" Eximbank" five members with finance ore banking background, which is more than in rest boards. Another important indicator is the experience of the board members in the bank supposed to analysis, as it can be seen, the majority of up to five years experienced board members are in MAIB. The independence of members also plays role in efficiency of the credit risk, as

the more independent are member, the more independent and qualitative decisions they undertake. In this regard in JSCB "Moldova-Agroindbank" and JSCB "Mobiasbanca OTP Group" have three independent members each, which represents about 60-75% of board, while in Eximbank just 30% are independent members.

The next step of analysis is investigation of correlation of variables concerning credit risk and internal control system as well as identification of interlink between indicators of internal control system and corporate governance. For this purpose, it was used Pearson correlation coefficient. In statistics, the *Pearson correlation coefficient* is a statistic that measures linear correlation between two variables, in our case dependent variables describing credit risk and independent variables describing internal control system (fig. 1). It has a value between +1 and −1. A value of +1 is total positive linear correlation, 0 is no linear correlation, and −1 is total negative linear correlation. Pearson Correlation Coefficient Formula:

$$\rho_{X,Y} = \frac{COV(X,Y)}{\sigma_X \sigma_Y} \tag{1}$$

where:

cov – the covariance

σ_X – the standard deviation of X (dependent variables)

σ_Y – the standard deviation of Y (independent dependent variables)

In the table bellow were presented calculation of the correlation coefficients:

Table 3

Pearson Correlation Coeffcient between indicators of credit risk and internal control system components for 3 selected banks during 2014-2020

coefficient

INTERNAL CONTROL SYSTEM components \ Credit Risk	JSCB „MOLDOVA - AGROINDBANK"			JSCB „EXIMBANK"			JSCB "Mobiasbanca - OTP Group"		
	K3	K4	K2	K3	K4	K2	K3	K4	K2
RWA to TA ratio	0,8239	0,7887	0,8077	0,0446	0,0950	-0,0729	-0,3079	0,0314	-0,4526
New branches	0,2937	0,2683	0,1109	0,1587	0,1833	0,1162	-0,2417	-0,1600	-0,2729
New employees	0,4223	0,4413	0,2307	-0,7007	-0,6808	-0,7575	0,6187	0,4885	0,2622
Loans to TA ratio	-0,3476	-0,3115	-0,5249	0,6646	0,6913	0,5894	-0,3732	0,3099	-0,2722
Loans/Deposits ratio	-0,3278	-0,2982	-0,4938	0,6288	0,6740	0,5427	-0,4572	0,3058	-0,2160
ROA	-0,6042	-0,6185	-0,6420	-0,1442	-0,2680	-0,1004	-0,3148	0,2111	0,4647
ROE	-0,4041	-0,4085	-0,5029	-0,1234	-0,2498	-0,0829	-0,2142	0,0488	0,3976
Efficiency index	-0,7197	-0,7298	-0,6181	-0,0280	-0,1637	0,0027	-0,2718	-0,1978	0,2244

Source: elaborated by the author.

To interpret the results, it is proposed to focus on two main correlations based on data of JSCB Moldova-Agroindbank (table 3). The first correlation is RWA/TA ratio and credit risk indicators. As it can be seen from the table, there is an average coefficient of about 0.8, which is a strong direct correlation. This means that if the volume of risky assets in total assets will increase, then credit risk will also increase. The second correlation is efficiency index and credit risk indicators. It could be seen an average coefficient of about -0.65, which is relatively strong indirect correlation. This means that if efficiency of internal control system will increase, credit risk will decrease, consequently the hypothesis was proved that the consolidation of internal control system could reduce credit risk in the banking sector.

4 The impact of the COVID-19 pandemic over the internal control system of credit risk in the global banking sector and the Republic of Moldova

Outbreak of the COVID-19 epidemic, in worldwide proportions occurred at the beginning of the 2020. The WHO declared COVID-19 outbreak as pandemic on March 12, 2020. As a response to the spread of COVID-19, local authorities declared state of emergency on March 17, 2020. The economic

impact of COVID-19 pandemic as well as measures implemented could not be quantified, although they are most likely to be material.

The damage to businesses and economies is becoming more obvious day by day, which indicates on potential increase of the credit risk for the banking sector, since the debtors could be unable to repay their loans to banks. At the global level, the COVID-19 crisis has triggered *five major challenges* to the credit risk environment:

- changes in the credit worthiness at the sector and subsector level, which will force banking institutions to analyze demand shocks and recovery trajectories and to translate to probability-of-default multipliers;
- difficulty in differentiating between borrowers in the same sector or subsector, which will force banks to perform a much detailed research of borrowers' financials and business models to estimate resilience to COVID-19 crisis effects;
- pertinent data on crisis conditions which are scare, lagging and not fed automatically into decision making process, which requires new approaches such as for example mine transaction data to derive cash flow affordability, mine alternative high-frequency data to drive revenue trends, auto-feed results into decisions engine;
- socially responsible collections needed to meet changing customer preferences which will force banks to shift to a customer-assistance interaction model and make it a priority in a digital transformation;
- unleash of a large wave of nonperforming loans which must be addressed in a new way, for example by developing a sector-specific solution, augment capacity and evaluate cost-benefits of organic versus inorganic options.

In response to the crisis, a series of banks started to approach underwriting and monitoring with a new configuration of sector analysis, borrower resilience and high-frequency analytics of internal control system. The banking sector is moving from sector analysis toward subsector analysis, using real-time data and analytics of internal control system to support decision making process for a more accurate internal control system and management of credit risk. The transition to the new approaches listed above will help banks to cope with present crisis but also serve as a rehearsal for the step change that credit risk management and internal control system of credit risk will have to make in forthcoming years.

The financial system and especially banking sector, in present, is better equipped for rapid crisis management than it was in the past crises, due to the new requirements imposed by the Basel III Agreement. Banks possess significantly higher Tier 1 Capital ratios and have higher provisions coverage ratios for nonperforming loans, than in previous crises. Under these circumstances, banks have much strong capital and liquidity positions, which are a part of results of regulatory reforms implemented after global financial crisis of 2008 – 2009. Another stabilizing factor, were the prompt and urgent measures undertaken by the Government and Supervisors inside each country to sustain economy, banking sector and population.

At the level of national banking sector, according to the report published by the World Bank "Moldova Economic Update", the Republic of Moldova has been influenced by the COVID-19 pandemic, which had drastically worsened the economic situation bringing to the significant economic contraction in 2020 and a slow recovery expected in 2021. In order to assess quantitatively the modifications in the economic situation of the country it has been analyzed a series of macroeconomic indicators. The first analyzed indicator is the GDP (figure 3), which denotes the aggregate value of total goods and services produced within a country within a given period. In 2020, the GDP was about USD 11,86 bln. As it can be seen in the fig. 3, the GDP has a relatively stable volume over the three year, even so there could be observed an insignificant decrease of GDP volume in 2020, by about USD 109 mln.

Figure 3. Dynamics of GDP of the Republic of Moldova during 2018-2020
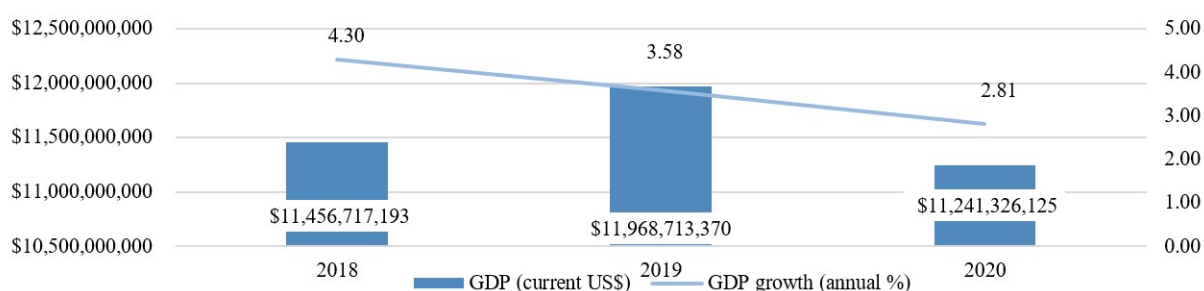
The inflation rate describes the rate of increase of the general price level of goods and services in a national GDP over time. The figure 4 demonstrates the monthly dynamics of the inflation rate in the Republic of Moldova within period of 2018–2020 year. The indicator has an evident downward trend, reaching by December 2020 value of 0.4%, which is an extremely low value of the inflation. In average, the indicator decreases per month by about 0.5%. Such a low level of inflation rate could be a signal of economic issues which could be associated with weakening of the economy. Low inflation rate could be caused by increasing rate of unemployment, which indicates that the population and businesses may be less willing to make investment and spend on consumption and consequently the demand will decrease. A decreasing demand, in its turn, impedes prices from growth and the inflation rate is slowing down.

Figure 4. Dynamics of inflation rate and unemployment rate in the Republic of Moldova during 2018-2020 (%)
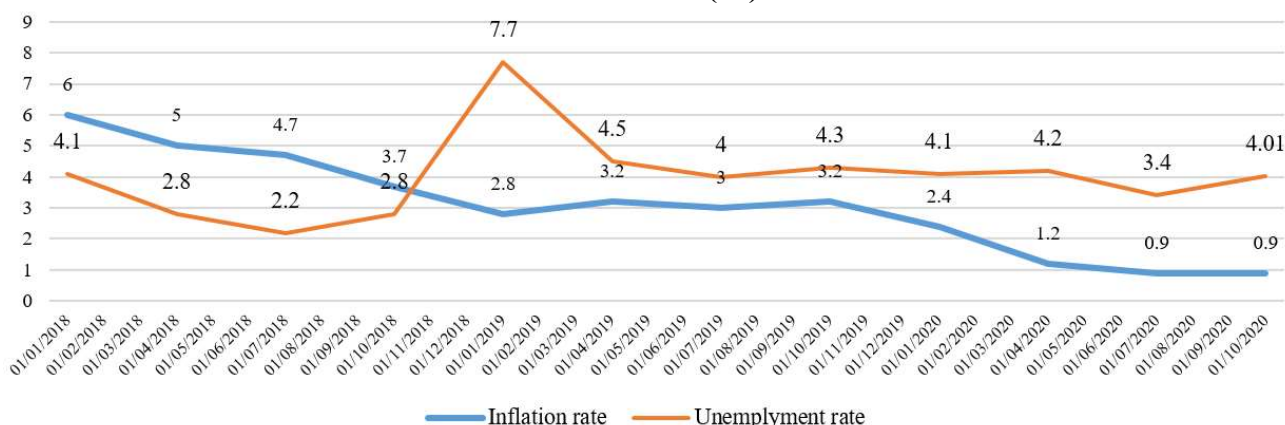
On the same figure it is observed a relatively stable rate of unemployment trend, which does not manifest a similar tendency with inflation rate. The average unemployment rate within the analyzed period is about 4%.

A stable tendency could be explained by a possible high share of non-official labor force which is employed in the labor market without official registration. Another explanation would be issues on labor market specific to the COVID-19 situation, such as interruption/suspension of activity, remote working, transition to part-time work, reduction of hours actually worked, etc. which has impacted the population financially similarly as unemployment. According to the Bureau of National Statistics of the Republic of Moldova, in 2020, 10% of people older than 15 years, or more than 217k, declared that due to the epidemiological situation in country they had difficulties on labor market. 24.4% or 200,6k declared their position was negatively affected through one of the issues mentioned above, as compared to 4.1% or 33.2k in 2019.

As a consequence of worsening of the economic situation of the country, the banking sector similarly to the rest economic braches fell under the danger. In order to support/protect the

economic/banking sector National Bank of Moldova (NBM) initiated a series of measures at the level of normative framework. First of all, the NBM approved two decisions in order to maintain the stability and viability of the banking system: Decision no 81 of March 27th, 2020 and Decision no 69 of. March 17th, 2020. According to these decisions the classification category and the level of credit loss reductions for individual debtors were maintained, as well as the extension or renegotiation of the terms for loans granted to legal entities, without the automatic classification of these loans in a tougher category.

In the first quarter of 2020, the gross (prudential) balance of loans constituted 45.4% of total assets or 42.0 billion lei, increasing during the analyzed period by 4.1% (1.7 billion lei). At the same time, the volume of new loans granted during the first quarter of 2020 increased by 3.5% compared to the same period of the previous year. The largest increases in the loan portfolio were recorded in loans granted to trade - by 4.6% (MDL 438.3 mln) and in loans granted for the purchase/construction of real estate - by 5.5% (MDL 340.9 mln).

As a consequence of measures adopted by the NBM in the beginning of the second quarter, in the end of April, 2020, the share of non-performing loans in total loans in the economy was almost 8.3% and had increased only by 0.2 p.p. as compared to the end of February, 2020. As a consequence, the banks' profitability has decreased. As stated in the decisions, starting with March, 2020 banks were able to extend or renegotiate credit contracts at the request of their clients. Consequently, as of the end of May – 22.05.2020, were extended/renegotiated payment of about MDL 4.8 bln, which is about 11.62% from total credits of banking sector.

Another measure implemented by the NBM in order to mitigate the impact of crisis created by COVID-19 pandemic was the issue of the decision of May 12th, 2020 to amend the Regulation on the treatment of credit risk for banks according to the standardized approach, which specifies regarding the provisions related to the treatment of credit risk of public sector entities in the Republic of Moldova. Consequently, in order to calculate the credit risk and own funds requirements of banks, exposures to public sector entities in the Republic of Moldova, as well as the exposures guaranteed by them, together with the eligibility requirements, receive a risk weight equal to 20 %. In this way the banks were able to grant guaranteed credits to public sector entities, which had contributed to the sustainability of the national economy.

In addition, NBM issued the recommendation to refrain from dividends payment up to September 30th, 2020. The decision was issued in the context of mitigation of effects caused by the COVID-19 pandemic for maintenance of banks capitalization and stability. At the same meeting, were approved measures to relax the capital buffer requirements. Thus, the NBM allows banks to use temporarily the capital buffer previously established. The conserved capital could be used to absorb any deterioration in the quality of the credit portfolio and to support the financing of the business environment and the population.

Also, NBM decreased of the rate of required reserves in lei up to 34%. It was approved the amendment of art. 3 of the Decision of March 20th, 2020 on level of NBM interest rates and norm of required reserves. Thus, the norm of required reserves in MDL and in non-convertible currency for their application period April 16 – May 15, 2020 is set at 34.0 percent of the calculation base.

With the purpose of assessment of efficiency of the internal control system of the credit risk in the banking sector, as well as the effectiveness of the measures undertaken by the Regulator during the period of COVID-19 pandemic, it is proposed to analyze the tendency in quality of the loan portfolio of a bank. The assessment is performed based on a bank from the Moldavian banking sector – JSCB "EXIMBANK". There are analyzed a series of credit risk indicators for the period of January 2018 – December 2020, in order to evaluate the dynamics of indicators and to identify the worsening or improving in the quality of loans portfolio.

The first analyzed indicator is the volume of loans portfolio. As it could be seen in the fig. 5, the general tendency of indicator is constantly growing. As of December 2020, the volume of total loans in the JSCB "EXIMABNK" reached an amount of MDL 1,64 bln, which is the highest amount during the analyzed period.

Figure 5. **Dynamics of volume of loans in JSCB "EXIMBANK" during 2018-2020 (MDL mln)**
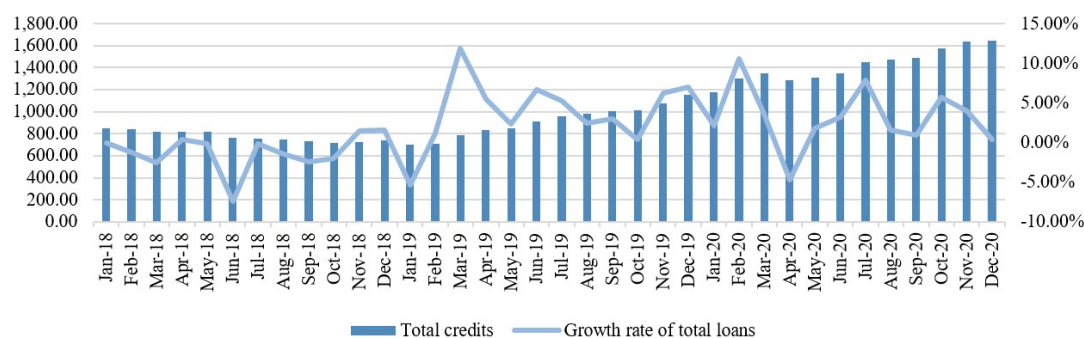
As analyzing the growth rate of volume of total loans during the 2020, it could be observed a sudden downturn in the trend in March – April 2020, by about -4,71%, which could be caused by decreasing financial capacity of population caused by the lockdown. But the trend has recovered in May (figure 5).

The next analyzed indicator is the volume of provisions, which functions as a protection for the bank from anticipated future losses. According to the Regulation on assets and conditional commitments classification, approved by the NBM no. 231 of October 27, 2011, the loans must be attributed to one of five categories of classification (table 4). For each category the Regulation stipulates the level of coverage with provisions, as follows:
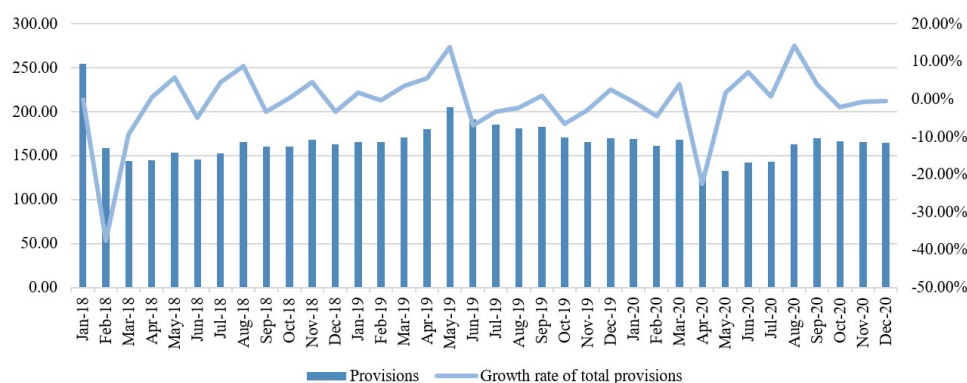
Table 4. Classification of assets and conditional commitments as per NBM Regulation no 231

Category	Level of provisions	Days past due	Characteristics
Standard	2%	0-30	non renegotiated, updated financial situation quarterly
Supervised	5%	31-90	modification in payments for credit, non-realization of business plan
Substandard	30%	91-180	warranties are insufficient or are worsening, non-updated financial situations, credit is used in other purposes
Doubtful	60%	181-360	initiated procedures in court, including intention of insolvability process
Compromised (Losses)	100%	361<	counterparty is in the process of liquidation, absent warranty

Source: elaborated by the author based on Regulation on assets and conditional commitments classification, approved by the DCA of the NBM no.231 of October 27, 2011.

The tendency of the indicator over the three years is fluctuating. The lowest amount is registered in April–May 2020, which could be caused by a decrease in volume of credits in the same period. However, in the next months the tendency of provisions volume became increasing, reaching top value in August–September 2020 about MDL 130 mln (figure 6).

**Figure 6. Dynamics of volume of provisions in JSCB "EXIMBANK" during 2018-2020 (MDL mln)**

Such a tendency could be a negative indicator as it could signal on increasing of non-performing loans, for which the provisions requirements are higher. Consequently, the credit risk had increased. In addition, the increasing growth rate could be caused by imposed condition from the National Bank to increase the level of provisions for the banks in the Moldavian banking sector.

One of the most illustrative indicators of the credit risk in the bank is the volume of non-performing loans, which is demonstrated in the figure 7. It could be seen that the highest volume of non-performing loans is registered in the August 2020 reaching MDL 210.63 mln, while the lowest values where reached in April-May 2020, around MDL 60 mln.

**Figure 7. Dynamics of non-performing loans in JSCB "EXIMBANK" during 2018-2020 (MDL mln)**
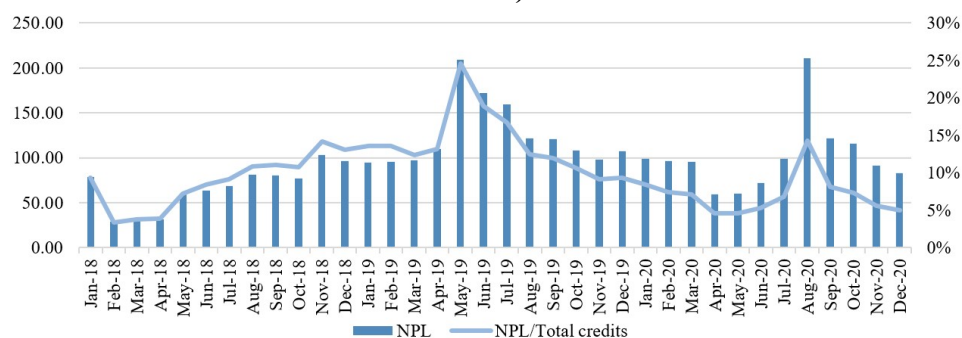
Source: elaborated by the author based on data from National Bank of Moldova. https://www.bnm.md/bdi/pages/reports/drsb/DRSB1.xhtml?id=0&lang=ro.

The explanation for this phenomenon is the Decision no 81 of March 27th, 2020 and Decision no 69 of March 17th, 2020. According to these decisions the classification category and the level of credit loss reductions for individual debtors were maintained, as well as the extension or renegotiation of the terms for loans granted to legal entities, without the automatic classification of these loans in a tougher category. These measures had the purpose to mitigate the impact of COVID-19 pandemic on the banking sector, population and economic agents.

Consequently, even if the clients were unable to repay their loans in April – May they were not reclassified as non-performing loans, while starting from June the reclassification was made and the non-performing loans has raised significantly. The population after several months in lockdown have lost partially their financial capacity to serve the credit and entered into one of the three non-performing loans categories. The dynamics of the indicator shows that the credit risk of the bank has increased. Even so, in the next month the non-performing loans volume is constantly slowing down which could indicate on an efficient internal control system of credit risk which was able to regulate the worsening situation.

As it was seen above, the non-performing loans were not completely illustrative indicator due to the two imposed decisions of the Regulator, which hided the real value of nonperforming loans during the Q2 2020. Therefore, the analysis of the expired credits will be more representative indicator.

As it could be seen in the figure 8 in 2020 the volume of expired credits has fluctuating tendency reaching lowest values in May-June (MDL 37 mln), while the highest volumes in February and August (MDL 60-70 mln).

Figure 8. Dynamics of volume of expired credits in JSCB "EXIMBANK" during 2018-2020 (MDL mln)
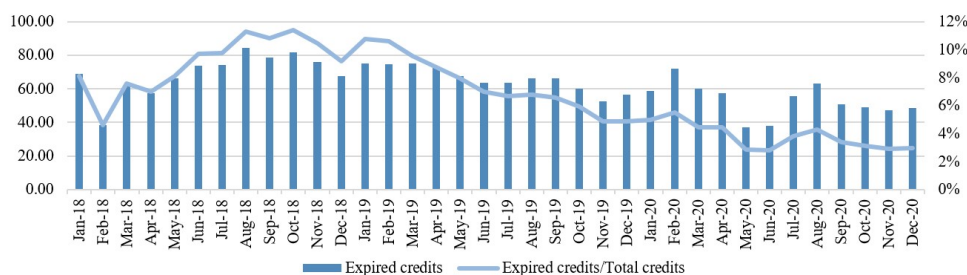
The bank had much worse situation in 2018-2019, which could be a reflection of strategy sustained by the previous owner – Veneto Banca, but the better values of expired credits in such a challenging year as 2020, could depict an improved management of credit risk and the internal control system of credit risk.

As a conclusion of the above analysis of the quality of the loan portfolio of JCB "EXIMBANK" for the most part, the indicators were situated within the adequate ranges, with some deviations registered primarily during the hardest months of the year 2020, due to the unfavorable events caused by the pandemic and lockdown. The population after several months in lockdown have lost partially their financial capacity to serve the credit. The dynamics of the indicators shows that the credit risk of the bank has increased. Even so, it is observed a rapid remediation of indicators in the following months which could indicate on an effective internal control system of the credit risk which was able to regulate the worsening situation.

The effects of the COVID-19 pandemic over the internal control system of credit risk in the banking sector are still ongoing and the prediction of potential losses and negative impact that it would exercise is still non-available. The credit risk is expected to demonstrate a growing tendency, due to expected business failures and financial issues faced by the population, which will make improving and fostering the internal control system of credit risk crucial for banking survival. The critical points in this field would become adopting customer due diligence and ongoing monitoring of clients in the "new normal" of remote business relationship, fostering the analysis of trends in economic sectors to assess a correct risk rating, increasing efforts in maintain and adequate non-performing loans level and an important solution in this totally changed environment would be reactive innovation, implementing automation and continuous and ongoing monitoring of daily changes.

5. Improvement and consolidation of the internal control system of the credit risk in the banking sector of the Republic of Moldova

The solutions on improvement and consolidation of internal control system of credit risk in the banking sector of Moldova is based on identified drawbacks and opportunities during the investigation. First of all, a considerable drawback in the general internal control system in banking sector of the Republic of Moldova is the operational risk. An inherent limitation is that in performance of the control procedures, errors can result from misunderstanding instructions, regulations, mistakes of judgment, carelessness or other operational risk factors. In order to eliminate this issue, it could be advised organization of periodical meetings with issuing normative framework bodies with employees of banking institution for performance of a presentation of key points and structure of issue or update of some normative documents of major importance. The summarization of the normative documents will make the information clearer and transparent as well as more accessible to the employees and could lead to decrease of the misunderstanding of legal framework and operational risk.

It was also identified, that previously the banking sector was dealing with the issue of partially lack of competence of boards, but the research has demonstrated that the issue was remediated and the board have sufficient competence in managing the internal control system. Based on the results of analysis, it is concluded that the improvements made were not sufficient, and in order to improve the indicators it would be recommended that the board to have more frequent attendance of specialized courses with further spreading of information to the key-functions employees. Another solution could be borrowing the international practice of recruiting "young talents", with international background for the key-functions, which could lead to favorable modifications in the methods of management of internal control system of credit risk.

In addition, it was observed, that the profitability and efficiency indicators, have demonstrated non-homogenous results, which indicated that qualitative audit do not guarantee higher profitability results. In order to remediate this drawback, it would be advisable to increase the real competences of

the internal audit, because from the information gathered from investigation of various reports, technical notes, assessment programs, interviews regarding internal control system in addressing credit risk in Moldavian banking sector not available to the public audience, as well as info gathered during the internships attended in the License and Master Cycles it was found that the audit function in banks of the Republic of Moldova meet impediments in information collection from business owners. Other solution would be carrying out the internal trainings on the importance of the audit function within the bank. Besides, it also was identified the deficit of auditors in the Republic of Moldova, proved by understaffing in more banking institutions from the Republic of Moldova. In order to mitigate this issue, first of all it could be proposed to develop and create a faculty within the Universities dedicated to the audit qualification for the License Cycle, due to the fact that such a direction is available only at the level of Master Cycle. Another solution would be budget allocation for staff trainings and consequently encouraging qualified and high professional employees which are activating in a medium or low specialized functions to attend Audit Courses and re-profile within the bank.

In fact, developing and efficient internal control system is a common goal of the organization, rather than goal of management bodies, as its impediments affects every participant of the credit risk process. In order to encourage individuals to work on enhancement of the internal control system of credit risk, the governing bodies should link achievements of the organization's internal control objectives to individual performance objectives. In this way, each person within the organization would be accountable for the achievement of assigned internal control objectives.

It appears to be a need in strengthening of the corporate governance practices. In order to improve the corporate governance within the banking sector of the Republic of Moldova it could be recommended that the Supervisor to enhance the appropriateness and completeness of policy guidance on corporate governance for banks and establish within them clear criteria for assessing the corporate governance practices of banks and publicly recognize the improvements that have been made. In addition, it could be advised to develop a framework which will allow an evaluation of bank's corporate governance practices and normative frameworks as well as tools used to mitigate any deficiencies identified before by the Supervisor. Besides, the corporate governance within banks could be enhanced by allocation of resources for creation of a separate department or office responsible for the corporate governance expertise or integrate corporate governance expertise in existing organizational frameworks. Enhancement of regulatory frameworks, coordination of supervisory responsibilities and sharing of information on bank reviews should become a priority.

Another important subject of internal control system of credit risk improvement is the development of banks' strategy. The bank strategy should be developed in a way to ensure a strong and sustainable position in the market. The main area of strategic problems discovered during the analysis were the deficient definition of the client profile, insufficient focus on assets quality, but a huge focus on assets volume, too large and generalized target market, deficient risk management approaches and others.

According to the Edmund Saunders, CICA, CFE (President of Institute for Internal Controls Europe, ex-advisor from the UK government to Polish officials in the banking sector), to design the bank strategy it is essential first of all to understand well the main COSO (Committee of Sponsoring Organizations of the Treadway Commission) publications and to distinguish well between internal control and internal audit, because the organization can function without internal audit, but it will never function for long without an efficient internal control system. Internal control system should be viewed not as a requirement of regulators and authorities, but as an essential tool for reaching organizations objectives. The strategy should describe an efficient internal control system as the system which is able to address risks to an acceptable level. Therefore, in order to design a strategy, bank should define and fully understand its objectives, risk appetite per each objective, and that the controls provide reasonable assurance that the risk is correctly managed. In addition, the majority of banks in the banking sector of the Republic of Moldova do not align to technical innovations from financial sector available in the 21st century and still exploit outdated operating systems, applications and methods in their subsistence.

Banks from the Republic of Moldova should definitely revise their strategy in direction of implementing modernization, FinTech and cutting-edge technologies in banking day-by-day operations in order to enhance the internal control system of the credit risk and the entire banking activity.

Finally, the overall internal control system usually fails due to the low connectivity to the bank's objectives, strategies and risk profile. Controls should always be designed, implemented, and applied as a response to specific risks and their causes and consequences.

The COVID-19 created distinctly difficult and challenging environment for banks. For this reason, it is important to emphasize the solutions in strengthening of the internal control system of credit risk under these specific conditions.

The first major challenge is the changes in the credit worthiness at the sector and subsector level. In order to defense, banks could orient in analysis of demand shocks and recovery trajectories and to connect their research with the profitability indicators. The second challenge refers to difficulty in differentiation between borrowers in the same sector. It is recommended for banks to study more deeply financials and business models to estimate vulnerability to COVID-19 crisis effects. Another difficulty is that pertinent data on crisis conditions is scarce, lagging and not fed automatically in the decision making process. To overcome this challenge, it is recommended for banks to try to find new info sources, credible and permanent updates as well as automation of the process of incorporation of data sources into the decision making process. One of the most evident challenges represents the transition to remote customer due diligence (CDD) and ongoing remote monitoring, which increases a series of risks related to AML, regulatory risks, legal risks and others. It is recommended to banks to improve the verification techniques and to apply for FinTech for correct customer identification. Finally, a large wave of non-performing loans exposures has started and to overcome this challenge banks should develop sector-specific solution, augment capacity and evaluate cost-benefit of different options.

The banking sector will need to develop its capacity to recognize winners and losers of each sector and subsector to be able to improve the internal control system over the credit risk in the bank, which could be realized by identifying the level of financial stress and operational flexibility by performing a series of stress tests.

From the analysis of quality of credit portfolio carried out, the purpose of which was to identify the situation of internal control system of credit risk in stressing conditions, such as were created by the effect of COVID-19 pandemic, it was identified a slight worsening of credit risk indicators, but at the same time, with a rapid remediation in the following months. However, as the unfavorable events have not finished yet and a major part of analysts forecast upcoming financial crisis just in the coming years, the credit risk could become much more difficult to control in potential future circumstances. It would be a solution to focus on automation of processes as well as partial digitalization of banking activity, which could significantly reduce the credit risk, because, as it was demonstrated, the main deficiency in the most recent circumstances was related to the human factor and issues related to remote performance of activities and operations. Moreover, this solution could represent a bonus for the competitiveness of banks on the market and will ease the population access to banking services.

Finally, one of the most evident possibilities of improvement of internal control system of credit risk, could be the efficient communication from the top to bottom and from the bottom to top. Usually lack of communication can create impediments in controls, by providence of erroneous and inaccurate information or incorrect process implementation due to unclear tasks dissemination.

Implementation of above described solutions for improvement and consolidation could significantly strengthen the internal control system of the credit risk in banking sector of the Republic of Moldova.

6. Conclusions

The internal control system of credit risk may be in place, while its efficiency cannot be guaranteed. In present the internal control system is additionally, jeopardized by the effects of COVID-19 pandemic, which forces banking institutions to identify new measures for enhancing credit risk

management practices. The COVID-19 crisis has triggered five major challenges to the credit risk environment: changes in the credit worthiness at the sector and subsector level, difficulty in differentiating between borrowers in the same sector/subsector, scare, lagging data on crisis conditions, socially responsible collections needed to meet changing customer preferences, unleash of a large wave of non-performing loans which must be addressed in a new way.

To improve the internal control system of credit risk in the banking sector of the Republic of Moldova in conditions of COVID-19 pandemic, the following recommendations are proposed:

1) implementation of automation of several processes related to loan grating and credits monitoring, which would partially reduce operational risk;
2) improving of the corporate governance practices by setting clear criteria for assessing the corporate governance practices of banks and publicly recognize the improvements achieved;
3) high implication of branches' managers in the process of internal control, such a regularly review employees' contact with clients for content and results, comparing transaction lists and the daily entries of employees, etc.;
4) orienting in analysis of demand shocks and recovery trajectories in COVID-19 conditions;
5) studying more deeply financial statements and business models of clients to estimate vulnerability to pandemic effects;
6) trying to find new info sources, credible and permanent updates as well as to automate the process of incorporation of data sources into the decision making process;
7) in conditions of passing to remote KYC/CDD, to strengthen clients' identification and monitoring practices;
8) developing a sector-specific solution, rising capacity and evaluating cost-benefit of different options.

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