DOI 10.31489/2022Ec3/56-66
UDC 338.27

K.M. Kazbekova[1*], G.K. Zhanibekova[2], D.J. Myrzakhanova[3], A.B. Myrzhykbayeva [4]

[1]Narxoz University, Almaty, Kazakhstan,
[2]Kaspian University, Almaty, Kazakhstan
[3]University Of International Business, Almaty, Kazakhstan
[4]Karagandy University of the name of academician E.A. Buketov, Karaganda, Kazakhstan

[1]Karlygash.kazbekova@narxoz.kz, [2]Gaukhar-k@mail.ru, [3]madies@mail.ru, [4]n.davletbaeva74@mail.ru

[1]https://orcid.org/0000-0001-8571-2311, [2]https://orcid.org/0000-0002-7291-4851,
[3]https://orcid.org/0000-0003-0454-7970, [2]https://orcid.org/000-0003-3463-8937

[4]Scopus Author ID:5719550509, [4] Researcher ID: AAF-1829-2020

Risk management and financial stability of banks

Abstract

Object: Increasing the role of the banking sector in the economy is one of the main tasks of the state. Kazakhstan's banking sector is one of the most important sectors of the economy, where the bank acts as a financial institution. Kazakhstan gained considerable success by overcoming the difficult period and achieving its own strategy and tactics of economic reforms after reaching financial stabilization of the peak of structural transformation.

Methods: The methods of research, processing and analysis of financial, economic, mathematical, statistical, logical information.

Results: The main task of risk management is to minimize the negative impact of risks on the financial results of banks.Justification of the objective need for risk management in banks; identifyingthe importance of risk management in banks and prospects for its development; analysis of data, collected from using statistical methods of data processing and analysis; development of conclusions and recommendations on risk management organization in banks.

*Conclusions:*Risk management identifies the bank management effectiveness, taking into account the factors of uncertainty that may have a negative or positive effect on the bank's performance.

The scientific value of the article is as follows:

– specifies the peculiarities of risk management in the bank;

– identifies risk management issues in banks and prospects for its development.

Keywords: risk management, methods, bank, loan portfolio, financial, statistical, model, capital regulation, systemic risk.

Introduction

The practical significance of the article is aimed at use of its basic provisions and conclusions in further work at structural subdivisions of banks and non-banking credit organizations.

To improve the competitiveness of the Kazakhstani economy in the international arena, it is necessary to maintain a stable level of the banking sector development, which can be ensured through the introduction of an effective banking risk management system. The most important issue in banking management is the problem of risk management due to its relevance.

After a large-scale state support of second-tier banks (STB) over the past few years, it is expected a radical improvement in the banking system. However, despite the relative stabilization of the situation in the banking market, the risks of deterioration in the financial condition of individual second-tier banks and, accordingly, the new wave of license revocation seem to persist.

Negative processes in the banking sector continue. First of all, the level of overdue loans attracts attention.

Although their share in the sector as a whole is gradually decreasing, the number of all non-performing loans remains high and still exceeds 10%.

What the numbers say? The level of all bad loans to the beginning of the new year reached 14.51% of the loan portfolio in the banking sector, or almost 2 trillion tenge. At the same time, the share of NPL90 + decreased to 7.3% and amounted to 1016.3 billion tenge in absolute terms.

However, the reserves created by banks turned out to be significantly lower than the aggregate volume of bad loans. On January 1st, 2021 provisions for International Financial Reporting Standards (IFRS) for the entire troubled portfolio of second-tier banks amounted to 1,776.6 billion tenge and for loans with overdue debts above 90 days - 762 billion tenge, that is significantly lower than non-performing loans.

* Corresponding author: E-mail address: *Karlygash.kazbekova@narxoz.kz*

At the beginning of 2021, the number of second-tier banks, which had a share of all problem loans, exceeding this indicator in the sector, as a whole, was 14.51%.

Hypothesis

If the bank's risks are properly managed, the financial situation of the bank will be stable.

It was analyzed in the correlation matrix that if the bank's NPL is higher, it affects the bank's Assets, Liabilities, and capital, as well as the bank's portfolio.

Literature Review

There are many studies by Kazakhstani, Russian, and foreign authors on the problems of the risk management system. The emergence of this issue raised the problem of banking risk management. The scientific works of M.A. Bukhtin, T. Barton, A.G. Algina, S.B. Makhysh, B.I. Lisak, U.M. Iskakov, I.T. Balabanov, G.S. Panov, B.C. llaeven, R. Levinel, G. Majnoni, H. Huizinga, G. Nicodemal, D. Klingebiel, Justin Jing Kiryardan, Gerald J. Lob, and others are devoted to this problem.

The works of these scientists are designed to study the theoretical foundations of risk management in the banking sector, apply the various models of financial risk assessment, and introduce modern management approaches.

Analyzing these works, we identified a number of issues arising in the introduction of the risk management system.

Methods

During the study, the methods of research, processing and summarizing financial, economic, mathematical, statistical, logical information were used.

Results

Considering second-tier banks of the RK in 1993, there were 204 banks, and in 1994, 184 banks remained the same 9.8% in one year. In those years, when the sovereignty turned to the market economy and strengthened the status of our own currency, the financial sector began to take shape (Hajek, 2011).

That is why there are reasons why such a bank has been shut down in one year; in 1995 there were 130 banks; in 2002, 38 banks accounted for 29.2%.

From 1993 to 2002, 166 banks were closed, i.e. 18.6%. And in 2005 there were 35 banks, in 2010 there were 39 banks, which means, it included 3 more banks.

And now in 2018 there are only 28 banks in the financial market.

According to statistics, in 1993 there were 204 banks, and in 2018 - 28 banks (204-28) remained at 15.6%, and in 2022-22 banks (204-22).The effects of the financial crisis and the effects of economic instability have a direct impact on the banking sector.

The sharp decline in the number of banks depends on the economic instability, and also depends on the strategy of incorrect risk management of bank holderstaking into account factors influencing, that is, the policy of incorrect internal risk management and incorrect strategy.

Recently several banks lost their licenses, and some banks are merging into one another. As to the banking sector in the modern financial market, the banking sector was represented by 22 second-tier banks, the number of foreign banks is 12, including 10 subsidiary banks.

On the banks' assets and loan portfolio, the assets of tier two banks in Kazakhstan as of June 1st, 2021 amounted to 23 507.2 billion Tenge (at the beginning of 2021 - 24 157.9 billion Tenge), and the decrease for 2020 was 2.7%.

The problem is in the improper implementation of the risk management system of banks by the loss of banks' licenses on the financial market and their departure from the financial market, inappropriate corporate governance;bank employees are unable to manage their risks.

In terms of banks' assets, the largest share in the structure of assets (52.4% of total assets) was 13 397.6 billion Tenge (in the beginning of 2021 - 13 590.5 billion Tenge), and the decrease for 2021 - 1.4%. Compared with the banks of the Russian Federation, our neighbors, their banking system is closer to us, but the steps of our banks are weak.

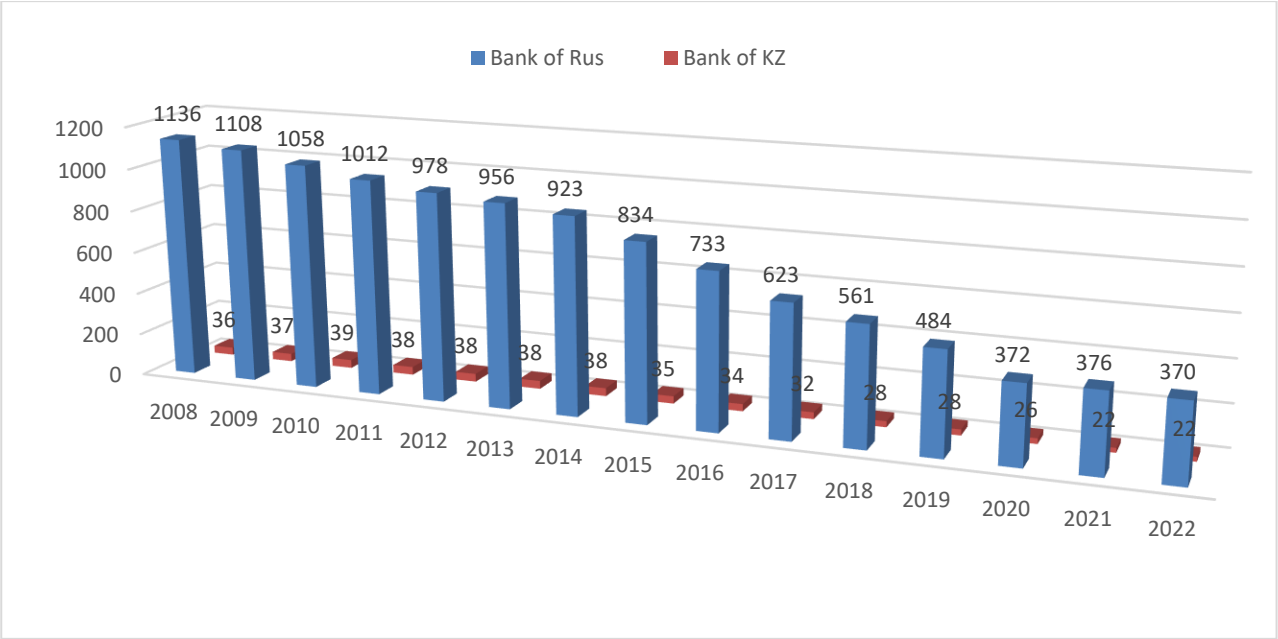


Figure 1. Comparative dynamics of the number of banks of Kazakhstan second-tier banks and Russian banks between 2008 and 2022

Note – Compiled by the authors based on statistical data

The large number of banks here is also based on the population size. According to statistics on Russian banks, in 2008 there were 1136 banks, and in 2012 978 banks were reduced by 86% .

There were 834 banks in 2015, and 923 banks in 2014, having decreased to 89 banks for the year (923 - 834). Statistics shows that 834 banks (1136 - 834) reduced to 302 banks in 2007 compared to 26.6% in 2009, amounted to 561 banks, compared to 2015 (834-561), with the loss of 303 licenses, which is 67.2% Compared to Figure 2, we can see changes in Kazakhstani banks and Russian banks from 2008 to 2022. We see that both our banks and Russian banks are not in a good condition.

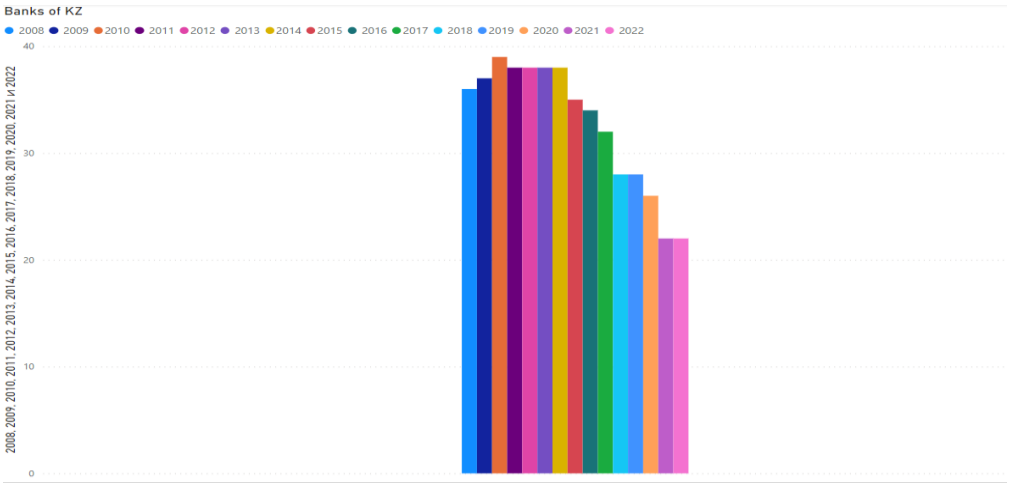


Figure 2. Comparative dynamics of the number of banks of Kazakhstan between 2008 and 2022

Note – Compiled by the authors on the basis of statistical data made in the Power BI program

The most negative thing is the reduction of banks; termination of bank's activity on the financial market, and ill-management of banks' own risks and regulators pick up licenses from second-tier banks (Lisak, 2013). The banking sector is badly affected by other sectors of the economy, and overall banking financial crises have a negative impact on the economy as a whole.

The banking sector is exposed to a variety of risks, and its impact on the economic law can not be undermined, so the bank needs to be able to manage risks, not to eliminate the risks, but also to control its effect.

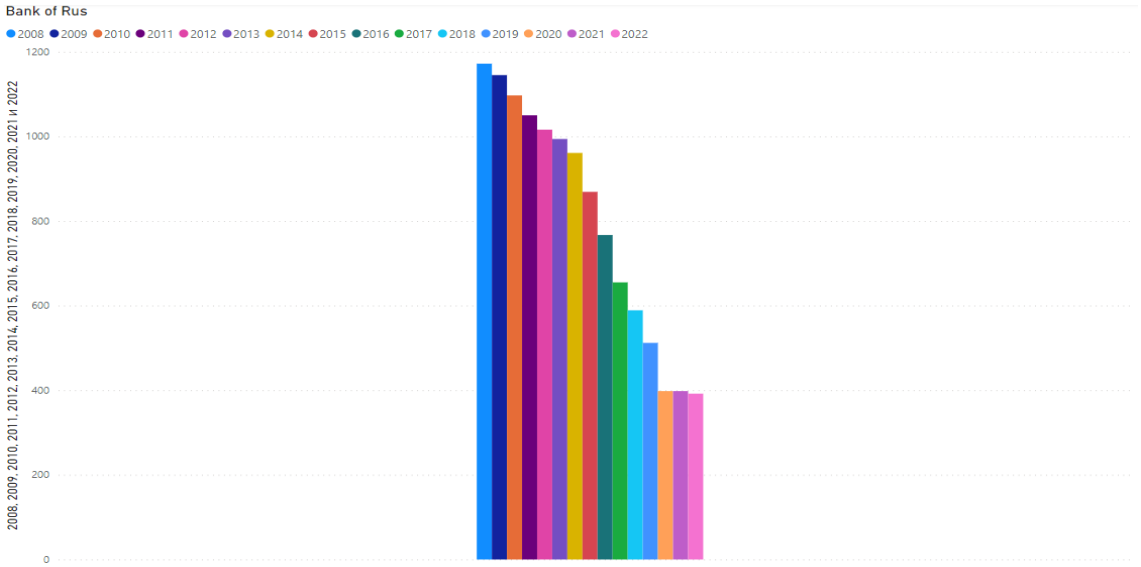


Figure 3. Comparative dynamics of Russian banks between 2008 and 2022

Note – Compiled by the authors on the basis of statistical data made in the Power BI program

Domestic banks and Russian banks are sometimes unsuccessful in risk management. Basically, it uses the management system to optimize the operations of large banks, to assess the risks in the current process and to increase the market value of the bank. And small banks consider the risk management system as a superficial issue, not only for risk prevention, but also by the state, when it is necessary to comply with regulatory requirements by the National Bank.

Due to unplanned risk management, these small banks are no longer endured by competitors in the financial market. Compared to Czech banks, where banks are monopolized and 4 second-tier banks monitor 60% of assets.

Economically developed states rely on certain principles.

The banking industry is not subject to government policy, which has a positive impact on monetary policy.

There are about 40 large banks in Czech Republic, among them shares of which are owned by foreign shareholders.

In its strategy, the bank keeps the data on clients' money secretly, whether they aretax authorities who ask for information or information that the police requests about the client, the bank does not disseminate information about the client, which increases the confidence of clients in the bank. In the history of the bank, foreign citizens' funds have never been confiscated (Volkov, 2015).

At the same time, the bank gives a guarantee. Foreigners may retain their own funds in kron or other foreign currency.

The government has legally guaranteed that each client receives up to 400,000 kron if the bank has certain problems.

The introduction of a risk management system in the banking sector is a mandatory requirement for a number of regulatory acts, state and international standards.

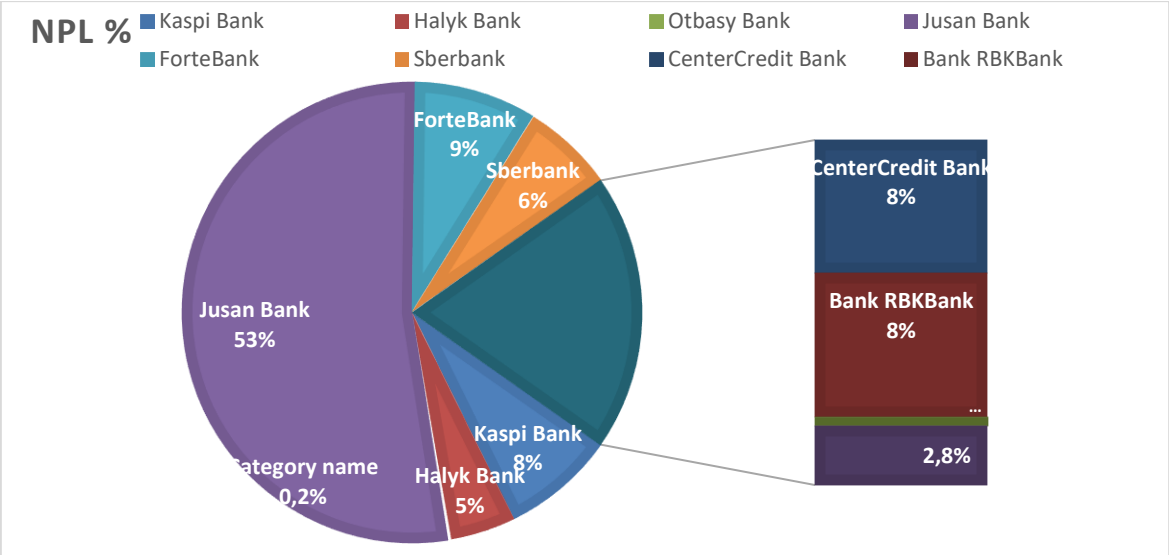


Figure 4. NPL of Kazakh banks' indicators 2022

Note – Compiled by the authors on the basis of statistical data

The growth of non-performing loans accelerated.The share of non- -performing loans (NPL 90+) at the end of June 2022 was 3.61% while, the gpowth of non- -performing loans accelerated from 0.9% to 3.2% and amounted to 770 billion tenge.

The share of ovrdue loans increased from 6.89% in May to 7.28% in June.The highest share of overdue loans in the first tier of banks is observed at Jusan Bank (NPL 53%) ,Forte bank (NPL 8%), Kaspi Bank NPL 6%).

The level of coverage of the portfolio of non-performing loans with an overdue period of more than 90 days by the amount of formed provisions in the sector in June amounted to 203.6% (210.3% at the beginning of the year, 201.7% in May)

The bank has the right to choose the best practices which are considered to be safe and effective in risk management system, to choose the most effective risk assessment methods for the bank, but all the methods used by the bank should comply with legal and regulatory requirements.

Nevertheless, economic instability, that is, the external factors affecting the banking sector have had its own consequences. Here, the corporate governance system was also affected by economic instability and political conditions.

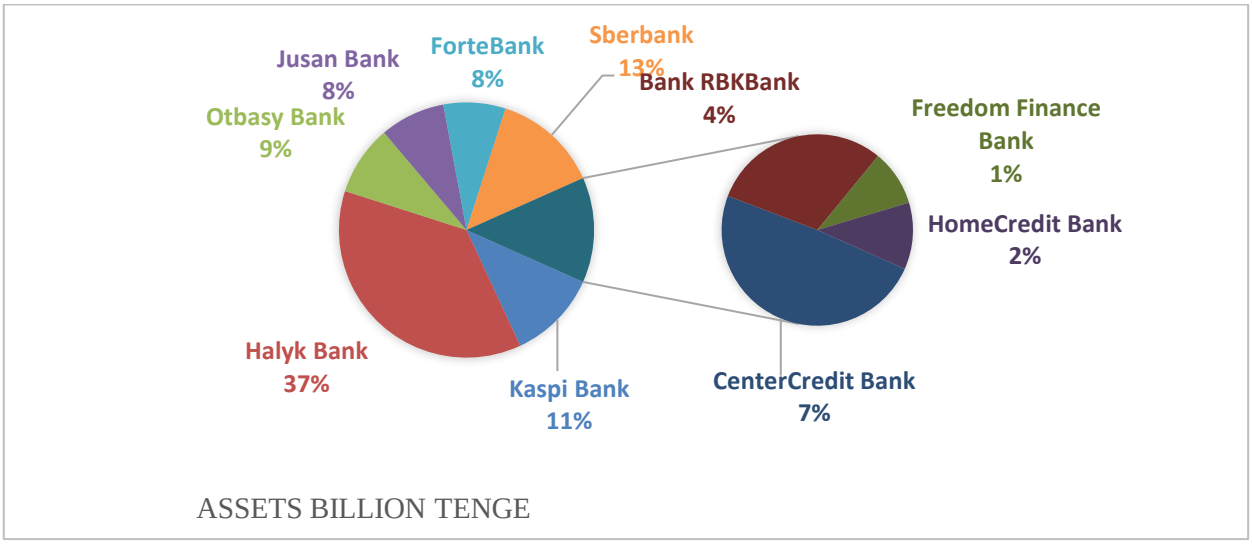


Figure 5. Kazakhstan bank assets 2022

Note – Compiled by the authors on the basis of statistical data

As of July 1, 2022 assets amounted to 39.23 trillion tenge.

This was reported by the press service of the Agency for Regulation and Development of the Financial Market. Second-tier banks have a significant stock of highly liquid assets,amounting to more than 11.41 trillion tenge or 29.1% of assets.

“Halyk Bank” is the leader in the current 2021. Multiple correlation-regression analysis was performed on the basis of “Halyk Bank” financial data.

The GRETL program was used in the analysis. As a result of the analysis, the indicator (Y) was the bank's cumulative income. The reason is that second-tier banks in the financial market are trying to earn profits in the competitive market conditions. Key financial indicators have been used as indicator factors that affect the bank's revenue.

Among them, we have identified: X1-capital, X2-Assets, X3 - Short-term and long-term debts and loans, X4 - Overdue loans up to 90 days (Ushanov, 2015). If we take X4, the financial crisis that began in 2007 has left its mark on the banking sector.

The bank's clients are experiencing problem loans, which are not paid due to the economic instability, deterioration of their clients' social standing, which is loans more than 90 days.

The bank increased interest-bearing loans with hope for having a profitby overdue loans, but vice versa, the number of overdue loans for more than 90 days increased, primarily due to the fact that the bank was unable to manage its credit risk by preliminary analysis, but also by external factors. It affects the assets of the bank (Smirnov & Makarov, 2017).

Correlation-regression analysis was carried out with these factors.

Multiple correlation-regression analysis can not be analyzed by conducting statistical research. In this regard, data on processing of the annual reports of “Halyk Bank” JSC were obtained.

An analysis was made of Excel and Gretl using information about the annual financial performance to determine what factors affect the bank's revenue, benefit.In the ordinary normal distribution, a rather rigid form of simple dependence forms a linear form, i.e., the dependence of the form:

$$y = a0+a1x1 +a2x2 +\ldots+apxp \quad (1)$$

It is important to determine whether to include all variables in the equation or to determine whether there are variables that do not have a significant effect on Y and that they do not need to be added to the equation (1).

To solve this solution, a table consisting of pairs of correlation coefficients was created for all 4 factors.

Table -1 Correlation Matrix

	y	x1	x2	x3	x4
y	1				
x1	0.914589338	1			
x2	0.820241226	0.874785245	1		
x3	0.910312218	0.919857017	0.955665905	1	
x4	-0.547077993	-0.624604021	-0.326906076	-0.350439563	1

According to data from Table 1, factors X1, X2, X3 are closely related to the Y coefficient (correlation coefficients are respectively 0.91, 0.82, and 0.91) and negative (- 0.55). But in spite of strong communication, we eliminate the X2, X3 predictors from the model, as there are multicollinearity effects.

Multicollinearity is one of the main obstacles to the efficient use of multiple regression analysis.

Thus, we establish a regression equation:

$$y = a0+a1x1+a_2x_4 \quad (2)$$

The following is a graph of the values calculated by the regression equation.

Table2 - The model created by the GRETL computation software for the risk management of "Halyk Bank"

	Coefficient	*Std. Error*	*t-ratio*	*p-value*	
const	−1.5752e+07	9.32909e +06	−1.468	0.3361	*
X2	-0.0109609	0.009677 89	-0.73	0.6828	**
X5 X6	53.0934 463.933	44.0721 289.515	1.186 1.602	0.4459 0.3552	 ***
Mean dependent var	5896714		S.D. dependent var	2926977	
Sum squared resid	1.82e+11		S.E. of regression	301694.0	
R-squared	0.994688		Adjusted R-squared	0.989376	
F(2, 2)	187.2501		P-value(F)	0.005312	
Log-likelihood	−67.88981		Akaike criterion	141.7796	
Schwarz criterion	140.6079		Hannan-Quinn	138.6349	
rho	−0.813300		Durbin-Watson	3.472497	

Model 1: OLS, using observations 2018-2021 (T = 5)Dependent variable: Yk

The correlation analysis for the model, as you would see in the chart, is that the multicolleniary is low; the p-value value ranges from 0.2 to 0.8, which means that the model is adequate. Three independent variables with economical value have been selected for each other:

X2 - Assets, thousand Tenge; X5 - Average wages, thousand Tenge; X6 - Minimum wage, thousand Tenge. The regression equation: y = -1,57-0,01X2 + 53,09X5 + 463,9X6

Other explanatory indices show an average, while the volume of assets (X2) exceeds 1 thousand Tenge, showing that the overdue loans decreased by 0.01.

It is true that there is a negative proportion of the decline in overdue loans if the bank's assets are growing.

While other explanatory indices indicate the average, the average wage level (X5) increased by 53%, with overdue payments up to 1 thousand Tenge.

The reason is that the average wage reflects the social status of the country's population. If this figure exceeds only 1 thousand Tenge during the reporting period, then ordinary people will have no money and will have to go to banks.

Hence, there is a possibility of growth of overdue and doubtful loans up to 53%.

The economic sense has been clarified. Now it is necessary to determine multicolleniary to determine the statistical significance of the model and the economic significance of the model.

The multicolline model created for the"Halyk Bank" JSC was checked.

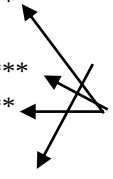
The relationship between the factors should not be more than 10%.

Consequently, the analysis has economic significance and has been confirmed as adequate. It also demonstrated the right choice of factors affecting the loan-dependent variable with past due payments. Using the GRETL application, we will issue the following report:

Model 2: Gretl // MNC, obtained from indicators 1-22 (n = 22)

Dependent variable:NPL (non-performing loan)

	Coefficient St. Defect		*t*- statistics	*P*- value	
Assets	−577721	254828	−2,2671	0,0327	**
ROA	109521	1,43442e+06	0,0764	0,9398	
Liabilities	265249	70619,1	3,7560	0,0010	***
Eqity	−0,0786939	0,036191	−2,1744	0,0398	**
ROE	−164751	342988	−0,4803	0,6353	
Credit_portfolio	0,00296448	0,00993649	0,2983	0,7680	
Loans_90d	0,292296	0,0640243	4,5654	0,0001	***



This Gretl model has only a few dependent variables that are excluded from the previously unrelated business relationships, including Assets, Liabilities, Loans_90d (Over 90 Days of Doubtful Credits), Equity, Credit_portfolio. Variable NPL - (non-performing loan).

Variable indicator shows a strong relationship between NPL and Liabilities, Assets, Equity (Loans), Loans_90d. F = 46.9, which is greater than the table F = 4.057.

Consequently, our model is relevant and important and can be used for further forecasting. From Table 2 we see that R-squared = 0.91 and often R is not the correlation coefficient, but its multiplicity (common) coefficient is R2. By Fisher Criteria.

SAS information-analytical environment.

Graph 3 is made by the key factor: A - years, U - with overdue payments.

As you can see, in 2021 there is a sharp decline in the volume of assets and overdue loans and a subsequent increase (increase) in subsequent years.

The reason for the appearance of blue and red is the increase or decrease in the minimum wage.

If there is a connection between the dependent variable and the factor, the points are located close to the straight line and the number of deviations is small.

There is a marked correlation between the factors of H, X2 and X6. In addition, the correlation coefficients include overdue loans (C) and bank assets (X2), loan portfolio (X1) and average salary (X6), as well as correlation between X1 and X2 factors, and X1 and X4 factors, the number of overdue loans (C) and loan portfolio (X1), bank asset (X2) and average salary (X6).

Consequently, factors affecting the risk management of banks were properly selected and the calculations were made correctly.

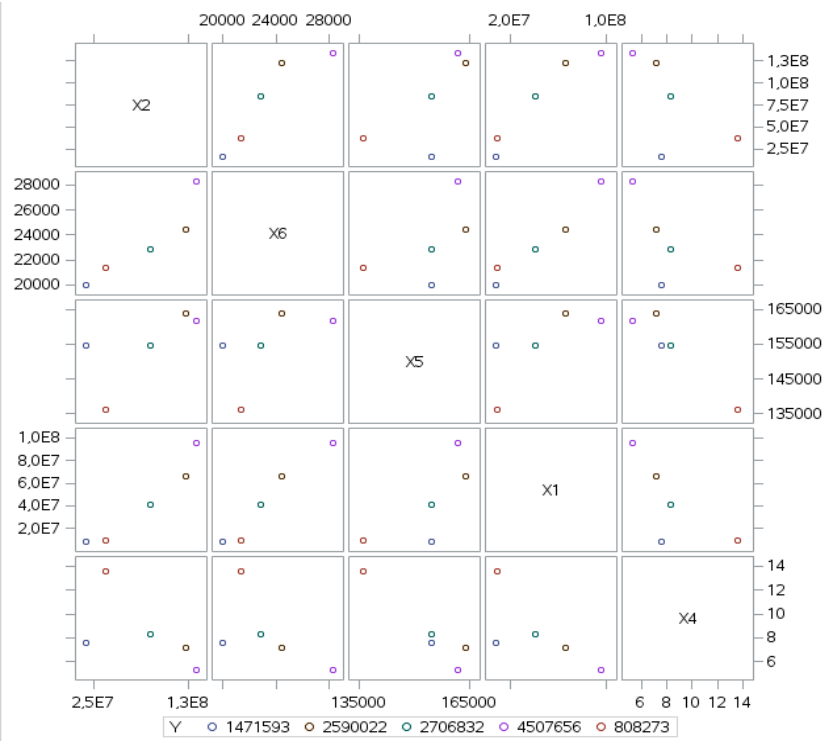


Figure 6. Schedule of correlation relations analyzed in the SAS environment for “Halyk Bank” financial position

Note – Compiled by the authors on the basis of the source data

Figure 6 illustrates analytical work using the SAS information analytical environment to determine the main information spreads of “Halyk Bank” JSC.

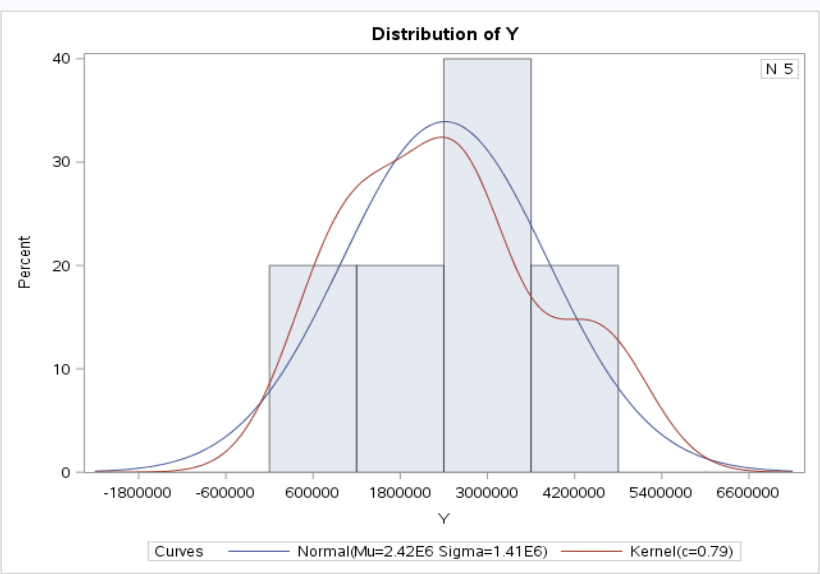


Figure 7. Created by the SAS software for the distribution of the Variable Y of "Halyk Bank" JSC

Note – Compiled by the authors on the basis of source data

As you can see in Figure 7, the distribution range of the dependent variable is given in the figure in a red line. By default, the distribution zone must match the blue line. It has been established that over the 5 years of 2017-2021 the volume of overdue loans of the bank is constantly spreading and affecting other factors. "Halyk Bank's" financial position was analyzed in MS Excel, SAS and GRETL.

Specific purpose of the analytical work is to determine the extent to which the financial situation of the banks concerned is affected.

Discussions

That is, if the bank does not allocate funds for marketing and management policy, the bank will issue loans, regardless of the financial position of its clients, to attract funds. This can lead to an increase in overdue loans (Volkov, 2015). To sum up, it has been determined that there is a negative proportional relationship with the decrease of overdue loans if the bank's assets grow.

The statistical criteria were checked to determine the concepts obtained during the final analysis of the models. As a result, the concepts were confirmed and certain factors influencing the risk-management of the banking system were found. Risk can not be overcome, but it can reduce the likelihood of its occurrence or its consequences for the bank.

Analysis of "Halyk Bank" risk management systems has shown that banks have a well-developed policy that identifies ways to manage the risk-management process.

It includes the functions of independent units and collegial bodies for risk management, risk assessment, monitoring and control, and distribution of powers and responsibilities among them.

Conclusions

Based on the analyzes and assumptions, the following conclusions and recommendations can be made:

We need to further develop the risk management process using new information technologies. The peculiarity of Kazakhstan's specificity is the absence of a good regulatory framework and competent regulation in the risk management, and the gap between the risk managers' relations.

Unfortunately, those with experience in risk management do not intend to exchange their original solutions, know-how and analytical methods.

The risk management of the Republic of Kazakhstan still needs to be explained to both professionals and the general public by the problem of information openness and public accessibility.

Therefore, it is important for the players of the Kazakh banking market to use the foreign experience wisely.

It is possible to conclude that, based on the analysis; the management of the bank requires further improvement for large-scale productivity regardless of the substantial work done on the basis of organizational fundamentals of risk management.

References

Agentstvo Respubliki Kazakhstan po regulirovaniyu i razvitiyu finansovogo rynka [Agency of the Republic of Kazakhstan for regulation and development of the financial market]. (2022). *gov.kz.* Retrieved from https://www.gov.kz/memleket/entities/ [in Russian].

Basel Committee on Banking Supervision (2004). International convergence of capital measurement and capital standards. Basel Committee on Banking Supervision. (2004). Moscow: Bank for International Settlements. Retrieved from://efaidnbmnnnibpcajpcglclefindmkaj/https://www.bis.org/publ/bcbs107

Bureau of National statistics (2022). Agency for Strategic planning and reforms of the Republic of Kazakhstan. *stat.gov.k.* https://www.stat.gov.k

Hajek, P. (2011). Mark-to-Market Rule: Can Fair Value Accounting Be Fair During a Financial Crisis? *International Statistical-Economical Days in Prague (MSED).* University of Economics in Prague. *msed.vse.cz.* https://msed.vse.cz/files/2011/Hajek.pdf

Lisak, B.I. (2013). Integrirovannyi risk-menedzhment [Integrated risk management in banks]. *lib.uib.kz.* Retrieved from http://lib.uib.kz/product/ [in Russian].

Smirnov, A.V., & Makarov, D.I. (2017). Klassifikatsiia bankovskikh riskov [Classification of banking risk]. *cyberleninka.ru.* Retrieved from https://cyberleninka.ru/article/n/klassifikatsiya-bankovskih-riskov-1 [in Russian].

Ushanov, A.E. (2015). Optimizatsiya kreditnogo protsessa v usloviyakh vyzovov [Optimization of the credit process in the face of challenges]. *cyberleninka.ru.* Retrieved from https://cyberleninka.ru/article/n/optimizatsiya-kreditnogo-protsessa-v-usloviyah-vyzovov [in Russian].

Volkov, A.A. (2015). *Upravlenie riskami v kommercheskom banke [Risk management in a commercial bank]*. Moscow: Omega-L [in Russian].

Қ.М. Қазбекова, Г.К. Жанибекова, Д.Ж. Мырзаханова, А.Б. Мыржықбаева

Тәуекелдерді басқару және банктердің қаржылық тұрақтылығы

Аңдатпа

Мақсаты: Тәуекелді басқару — бұл банктің тәуекелі мен табыстылығы арасындағы оңтайлы арақатынасты табу. Банктік тәуекелдерді басқару — бұл тәуекелдерді басқару процесі, яғни тәуекелдерді анықтауға және оларды шешудің әдістері мен жолдарын әзірлеуге бағытталған шаралар кешені. Мақсат —тәуекелдердің сипаттамаларын, сондай-ақ қаржылық шығындарды азайту және банктердің табысты жұмыс істеу шарттарын қамтамасыз ету үшін олардың әртүрлі түрлерін басқарудың экономикалық негіздерін анықтау.

Әдістері: Үрдістік және қаржылық, экономикалық, математикалық, статистикалық, логикалық талдау.

Нәтижелері: Банктердегі тәуекелдерді басқарудың объективті қажеттілігі негізделген, банктердегі тәуекелдерді басқарудың маңыздылығы және оны дамыту перспективалары анықталған. Қаржылық-статистикалық мәліметтер өңделіп, диаграмма түрінде ұсынылған.

Талдау барысында статистикалық әдістерді қолдану нәтижесінде жиналған мәліметтер талданған.

Тұжырымдар: Банктерде тәуекелдерді басқаруды ұйымдастыру бойынша қорытындылар мен ұсынымдар әзірленді. Тәуекелдерді басқару тиімділігіне теріс немесе оң әсер етуі мүмкін белгісіздік факторларын ескере отырып, банкті басқарудың тиімділігі анықталып, тәуекелдерді басқару ұғымдары берілген. Мақаланың ғылыми құндылығы мынада

– банктегі тәуекелдерді басқарудың ерекшеліктерін көрсетеді;

– банктердегі тәуекелдерді басқару мәселелері және оның даму перспективалары анықталған.

Кілт сөздер: тәуекелдерді басқару, әдістер, банк, несие портфелі, қаржылық талдау, статистикалық талдау, модель, капиталды реттеу, жүйелік тәуекел.

Қ.М. Қазбекова, Г.К. Жанибекова, Д.Ж. Мырзаханова, А.Б. Мыржықбаева

Управление рисками и финансовая устойчивость банков

Аннотация:

Цель: Управление рисками состоит в нахождении оптимального соотношения между риском и доходностью банка. Управление рисками банков — это процесс управления рисками, то есть совокупность мероприятий, направленных на выявление рисков и разработку методов и способов их решения. Целью является выявление особенностей рисков, а также экономических основ управления различными их видами для снижения финансовых потерь и обеспечения условий успешного функционирования банков.

Методы: Методы исследования, обработки и анализа финансовой, экономической, математической, статистической, логической информации.

Результаты: Обоснована объективная необходимость управления рисками в банках, определена значимость управления рисками в банках и перспективы его развития. Финансово-статистические данные были обработаны и представлены в виде диаграммы.

В ходе анализа были проанализированы данные, собранные в результате использования статистических методов.

Выводы: Разработаны выводы и рекомендации по организации управления рисками в банках. С учетом факторов неопределенности, которые могут отрицательно или положительно повлиять на эффективность управления рисками, определена эффективность управления банком и даны понятия, управления рисками. Научная ценность статьи заключается в следующем:

– показаны особенности управления рисками в банке;

– определены проблемы управления рисками в банках и перспективы его развития.

Ключевые слова: управление рисками, методы, банк, ссудный портфель, финансовый анализ, статистический анализ, модель, регулирование капитала, системный риск.

References

Агентство Республики Казахстан по регулированию и развитию финансового рынка [Электронный ресурс]. — 2022. — Режим доступа: https://www.gov.kz/memleket/entities/

Basel Committee on Banking Supervision (2004). International convergence of capital measurement and capital standards. Basel Committee on Banking Supervision. — M.: Bank for International Settlements, 2004. [Electronic resource]. — Access mode: efaidnbmnnnibpcajpcglclefindmkaj/https://www.bis.org/publ/bcbs107

Hajek P. Mark-to-Market Rule: Can Fair Value Accounting Be Fair During a Financial Crisis? / P. Hajek // International Statistical-Economical Days in Prague (MSED). University of Economics in Prague. — 2011. Retrieved from https://msed.vse.cz/files/2011/Hajek.pdf

Лисак Б.И. Интегрированный риск-менеджмент [Электронный ресурс] / Б.И. Лисак. — 2013. — Режим доступа: http://lib.uib.kz/product/

Смирнов А.В. Классификация банковских рисков [Электронный ресурс] / А.В. Смирнов, Д.И. Макаров. — 2017. — Режим доступа: https://cyberleninka.ru/article/n/klassifikatsiya-bankovskih-riskov-1

Ушанов А.Е. Оптимизация кредитного процесса в условиях вызовов [Электронный ресурс] / А.Е. Ушанов. — 2015. — Режим доступа: https://cyberleninka.ru/article/n/optimizatsiya-kreditnogo-protsessa-v-usloviyah-vyzovov

Волков А.А. Управление рисками в коммерческом банке. А.А. Волков. — М.: Омега Л, 2015.

Бюро национальной статистики Агентства по стратегическому планированию и реформам Республики Казахстан [Электронный ресурс]. — 2022. — Режим доступа: https://www.stat.gov.kz/