

# Scientific and Technical Journal Namangan Institute of Engineering and Technology











- 2. Abdullayev, I., & Azimova, D. (2020). The impact of innovation on economic growth: Evidence from Uzbekistan. Journal of Central Asian Studies, 4(1), 23-34.
- 3. Yuldashev, M., & Tursunova, N. (2021). The role of innovation in the development of small and medium-sized enterprises in Uzbekistan. International Journal of Innovative Technology and Exploring Engineering, 10(7), 389-394.
- 4. Makhmudov, O. (2020). The impact of innovation on economic growth: Evidence from Uzbekistan. Academy of Entrepreneurship Journal, 26(1), 1-17.
- 5. Djabbarova, Z. (2020). Innovation policy in Uzbekistan: Current status and challenges. Journal of Business and Economics, 11(1), 1-16.
  - 6. https://stat.uz
- 7. Ayyagari, M., Beck, T., & Demirguc-Kunt, A. (2011). Small and medium enterprises across the globe. Small Business Economics, 38(4), 35-54.
- 8. Beck, T., Demirguc-Kunt, A., & Levine, R. (2005). SMEs, growth, and poverty: Cross-country evidence. Journal of Economic Growth, 10(3), 199-229.
- 9. Lee, J. W., & Kim, K. (2014). Technology and the world income distribution. Journal of Policy Modeling, 36(1), 27-42.
- 10. Madsen, J. B., & Islam, N. (2014). The importance of R&D for economic growth. Contemporary Economic Policy, 32(4), 774-791.
- 11. Schumpeter, J. A. (1934). The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle. Harvard University Press.
- 12. Mulaydinov, F., & Nishonqulov, S. (2021). Raqamli iqtisodiyotni rivojlantirishda axborot texnologiyalarining orni-The role of information technologies in the development of the digital economy.
- 13. Mulaydinov, F., & Nishonqulov, S. (2021). The role of information technologies in the development of the digital economy. The role of information technologies in the development of the digital economy.
- 14. Nishonqulov, S. F. O., Rajabboyev, B. O. O., & Mamasoliyev, J. O. O. (2021). Digitalization of the economy and its networks. Introduction of digital technologies to the sector of the economy. Scientific progress, 2(3), 825-831.
- 15. Farxodjon ogli, N. S., & Odil ogli, R. B. (2021). Raqamli iqtisodiyot almashinuvining resurslar sarfiga sakkizta tasiri. Boshqaruv va etika qoidalari onlayn ilmiy jurnali, 1(1), 53-56.
- 16. Toxirov, R. S., & Raxmonov, N. R. O. G. L. (2021). Dasturiy ta'minot yordamida zamonaviy boshqaruvni tashkil etish istiqbollari. Central Asian Academic Journal of Scientific Research, 1(1), 181-186.
- 17. Rustam, T. (2022). Tadbirkorlik subyektlari samaradorligini baholashning uslubiy yondashuvlari. qoʻqon universiteti xabarnomasi, 5, 40-43.

# PROBLEMATIC ISSUES OF TAKING LOANS FROM COMMERCIAL BANKS

**HAKIMOV ODIL** 

Advisor of the rector of Termez state Pedagogical institute E-mail: Xakimovodil257@gmail.com, phone.: (+99899) 777 00-45

#### Abstract:

**Objective.** This article examines the concept of the loans of the bank and the impact of problems encountered in taking a bank loan on the financial situation of customers and general conclusions and suggestions are presented.

Vol 8, Issue 3 www.niet.uz



**Methods.** This article uses research methods such as verbal interpretation, systematization and classification, and scientific abstraction. In addition, the data of the World Bank, the Central Bank of the Republic of Uzbekistan and the Statistical Agency under the President of the Republic of Uzbekistan were used to collect, systematize and interpret the statistical data presented in the scientific article.

**Results.** The growth of problem loans can be minimized by introducing client-oriented insurance instruments and actively promoting financial literacy among the population. Deposit insurance, however, may have an effect on people with lower levels of financial literacy of the population. A deposit insurance scheme may deliver a much clearer guarantee of trustworthiness than any refinement of regulatory framework.

**Conclusion.** The article proposes mechanisms for reducing credit risks, taking into account insurance instruments, and develops proposals for improving financial literacy and financial inclusiveness of banking services. It also substantiates the relevance of improving the mechanisms for collecting innovative ideas and proposals from business entities, including entrepreneurs with experience in the field of banking services.

**Keywords:** Loan, money, mortgage, interest rate, resource, savings, inflation, supply, insurance, sanctions, contract.

Introduction. We believe that it is necessary to have a complete understanding of the credit system before studying the existing problems in obtaining a loan. The main reason for this is that by influencing a certain element of the credit system, the entire system can be changed for the better or for the worse.

Analyzing the lending process of commercial banks, the amount of loans is increasing year by year. Nevertheless, the demand for credit by individuals and legal entities remains high. The share of total credit investments of commercial banks by sector is 343572 billion as of 07.01.2022, if it was 423,773 billion sums by 01.07.2023, that is, it increased by 23.3% to 80,201 billion sums. In industry from 120814 billion sums to 126035 billion sums 5221 billion sums by 4.3%, in agriculture from 34456 billion sums to 44099 billion sums 9643 billion sums by 28.0%, in the construction sector from 9370 billion sums to 11243 billion sums to 1873 billion sums 2 to 0.0 % trade and general service from 28,758 billion sums to 30,858 billion sums to 2,100 billion sums by 7.3%, in transport and communication from 27,311 billion sums to 30,379 billion sums 3,068 billion sums by 11.2%, development of material and technical support from 3,410 billion sums to 4,235 It can be observed that housing and communal services increased from 1,766 billion sums to 1,941 billion sums to 175 billion sums by 9.9%, from 80,461 billion sums to 123,974 billion sums by 29.4%.[2]

## Review of literature on the subject.

A bank is a legal entity that is a commercial organization that performs a set of operations defined as banking activities on opening and maintaining bank accounts, making payments, attracting funds to deposits (deposits), granting loans on its own behalf. [4]

Credit [5] (Latin creditum - loan, credo - I believe, I approve) means lending money, goods and services for a certain period of time on the condition that they are returned by paying an agreed rate (interest). Based on the principles of credit, loans are given to a bank client who is able to repay the loan for a certain purpose, for an agreed period, on the condition that it will be returned on time with security.

In the course of historical development, monetary and commodity forms of credit are used more widely, it is used in banking, commercial, state, consumer and international forms of credit. A very important aspect of society's activity is production. In the production process, economic resources are used, goods and services are created. The reproduction of credit-commodity-money relations in the existing conditions is the natural basis for the creation of credit relations. [4]

When giving loans, banks should be able to assess in advance the risk of customers being able to repay the loan or



not, otherwise they may not be able to provide the resources involved for lending and the interest accrued to them.

Today, banks provide short-term loans up to 1 year, medium-term loans from one year to three years, and long-term loans over three years. [5] Including microloans (online and offline), consumer loans, business loans, program and preferential loans, loans for construction, mortgage loans, loans for working capital, agriculture (fishing, beekeeping, sheep farming, lemon farming, horticulture, etc.) loans, student loans, loans for employment of women are being given.

The President of the Republic of Uzbekistan expressed his opinion on the loan percentage and said the following: "I understand well, everyone wants to get a cheap loan. However, if we artificially reduce interest rates, the balance in the money market will be disturbed. Therefore, we should not forget about macroeconomic stability in order to provide cheap loans to the economy. Without stability, we cannot achieve our economic growth goals. In this regard, we will consistently continue the work aimed at reducing inflation, which directly affects interest rates, and, I repeat, inflation, as well as transferring bank lending to full market mechanisms". Also, in the pre-election programs of the President Republic of the of Uzbekistan, Sh.M. Mirziyoyev, during the pre-election mentioned programs. it was investment attraction will be increased to 250 billion dollars by 2030, and the annual lending volume will be increased from 18 billion dollars to 40 billion dollars, and the loan interest rate will be reduced from 20 percent to 10-12 percent. [7] Therefore, today's central bank's current rate makes up 14% and the inflation rate is 9%.

Research methodology. This article uses research methods such as verbal

interpretation, systematization and classification, and scientific abstraction. In addition, the data of the World Bank, the Central Bank of the Republic of Uzbekistan and the Statistical Agency under the President of the Republic of Uzbekistan were used to collect, systematize and interpret the statistical data presented in the scientific article.

**Analysis** results. and Each customer signs a loan agreement with a bank or non-banking organization when receiving a loan. In this case, the bank undertakes to provide a loan to the borrower in the amount and conditions stipulated in the contract, and the borrower undertakes to return the received money with the principal amount and percentage. When the borrower violates the terms of repayment of the loan. the interest rate specified in the contract is increased by 1.5 times compared to the overdue part of the payment schedule, and when the borrower violates the payment terms of the calculated interest according to the payment schedule, a fine of 0.2-0.3% of the amount of late payment is calculated for each day of delay. If the debtor does not fulfill his obligations to repay the loan, the bank will start the procedure of compulsory foreclosure on the property pledged to the debtor.

The non-performing loans (NPL) in the banks of Uzbekistan increased by almost 1 trillion sums<sup>8</sup>. Over the last 3-4 years, the total credit-to-GDP ratio in Uzbekistan increased significantly.

Due to the pandemic, the NPL ratio peaked at 5-6 percent in 2020–2021. However, following stronger economic activity and business and household solvency improvement, the NPL ratio decreased to 4.7 percent as of October 1, 2022. NPLs in the industrial and agricultural sectors grew considerably.

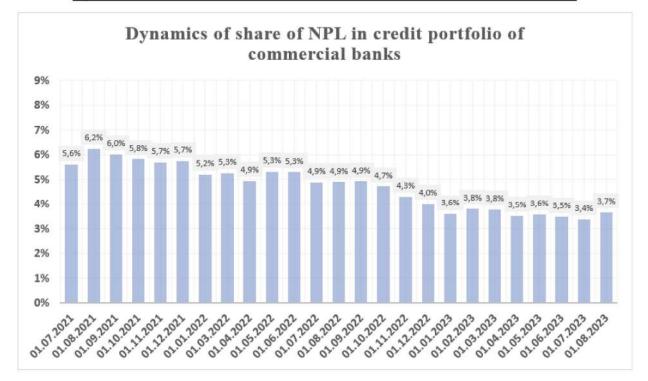
Vol 8, Issue 3 www.niet.uz

1

<sup>8</sup> https://cbu.uz/en/statistics/bankstats/869467/



### Dynamics of share of NPL in credit portfolio of commercial banks<sup>9</sup>



In the state banking sector, NPLs remain above the general level, at 4.2% versus 2% in private banks.

Today, there are a number of problems in the process of lending to individuals.

After the main part of the loan credited to the bank loan and paid overdue, the interest is reflected in the bank account number, although this amount has not been collected by the bank, it is formed in the tax base. Therefore. payment authorities do not pay more attention to the fact that entrepreneurs do not penalties. Due to the fact that banks have started lending based on the scoring method, they are refusing to give loans to customers with bad credit history. In some cases, by giving the Central Bank a positive opinion about the client, the bank is allowed to grant him a loan again. Therefore, it is necessary to increase advertising on the impact of not closing loans on time on the citizen's credit history. Secondly, the bank does not investigate what caused the inability to close the loan, what was the situation of the client at that time. Therefore, the customer should be given another chance.

The economic literature suggests that explicit deposit insurance might increase depositors' confidence and prevent bank runs. However, the deposit insurance scheme also gives commercial banks incentive to undertake unnecessary risks (the "moral hazard" problem) and increase lending and borrowing spreads. Large commercial banks that currently dominate the financial market, already enjoy implicit deposit insurance. Deposit insurance, however, may have an effect on people with lower levels of financial literacy of the population. A deposit insurance scheme may deliver a much clearer guarantee of trustworthiness than any refinement of regulatory framework (such the introduction of Basel III).

Financial literacy and financial inclusion go hand in hand. People with higher levels of financial literacy tend to

Vol 8, Issue 3 www.niet.uz

5

<sup>&</sup>lt;sup>9</sup> https://www.ceicdata.com/en/indicator/uzbekistan/non-performing-loans-ratio



save more, are more aware of various financial products, are more responsible borrowers. The data we have analyzed for the purposes of this study points to the conclusion that financial literacy is correlated with income and education levels.

Our citizens, who have gone to foreign countries to earn additional income. work officially or unofficially, and send large amounts of foreign currency to build a house, marry their child, buy a car, and fulfill their needs. Today, our commercial banks do not have a scoring system based on these funds, because tax and INPS payments are not made from these funds. Our working migrants are given loans of a certain fixed amount, even if they are not citizens of that country. They only prohibit foreign citizens with debts from leaving the country. Also, a foreign citizen who has not returned a bank loan will not be granted a loan from another bank.

Online loans from commercial banks through mobile applications have been made very easy and convenient, which is definitely an achievement of banks. It is worth noting that the risk of non-return of the bank loan is insured from 0.2 to 1 percent when receiving a microloan. Also, insurance companies have been giving an insurance premium of 40-60% to an employee they find as an agent among bank employees. So insurance companies are making 40% of the money they give to an insurance agent by entering into a noloss system for scoring loans. Therefore, insurance organizations were opened at a number of banks. 10 However, in Article 7 of Law "On Banks and Banking Activities"11 it is indicated that "insurance activity is considered a prohibited or restricted activity for banks". Insurance payments for other loans are also being made in this situation.

Today, in accordance with the Decree of the President of the Republic of Uzbekistan dated November 28, 2019 No. PF-5886 "On additional measures to improve the mechanisms of mortgage loans", commercial banks use the funds of JSC "Mortgage Refinancing Company of Uzbekistan" from the primary, secondary and housing markets. 385.0 million sums for the purchase of apartments for a period of 20 years up to 80.0 million sums for housing repair for 10 years mortgage loans up to sums are allocated.

When getting a mortgage loan, spend 400-1200 thousand customers sums on notary fees, and 1500.0-2500.0 thousand sums on home insurance. In our opinion, although it has not been observed in the world experience, it is in Article 1 of the constitution of our country<sup>12</sup> based on the article "Uzbekistan is a sovereign. democratic, legal, social and secular state with a republican form of government", home insurance should be paid at the expense of the trusted builder who built the house during the sale of the house, and notary fees should be paid at the expense of banks that earn income for 20 years. This first of all means that the builder has built a quality house and makes the bank aware that the client is a long-term partner.

Therefore, first of all, in applications, it is necessary to allow customers to get insurance from the insurance organization they want, in addition, for example, a mechanism for returning 50% of the insured payment for the closed amount to the customer after every 1 year, for example, a loan taken by the customer for 3 or 5 years. There are no magazines or newspapers that provide a summary of the sums paid out to insured customers in the event of an insurance event to analyze and increase confidence in insurance.

Vol 8, Issue 3 www.niet.uz

<sup>&</sup>lt;sup>10</sup> Halq Bank "Halq Insurance", Ipoteka Bank "Imkon Insurance", Trust Bank "Gross Insurance", Kapital Bank "Kapital Insurance", Hamkor Bank "Hamkor Insurance", etc.

Law of the Republic of Uzbekistan "On Banks and Banking Activities", dated 05.11.2019 O'RQ-580.
Constitution of the Republic of Uzbekistan, Article 1. 01.05.2023



In our country, as a result of the analysis of the insurance contract, the insurance organizations do not pay attention to how the insurance event can occur in this insurance contract, which is considered one of the main aspects.

For example, as a result of the loss of the borrower's ability to pay during the period of timely repayment of the main debt to the Insured within the insurance money determined on the basis of the terms and conditions of this agreement under the loan agreement No. 1216 concluded between the Insured and the borrower on August 10, 2023 in the contract of individuals (it is stated that the loss of the Insured in the event of non-fulfillment of the obligation (on the basis of the tariff specified in clauses 2.5 and 2.6 of Section 2 of this contract) is considered an insurance event. Since the first goal of the insured is to get a loan as soon as possible, this clause is not important at all. If the policyholder reads clause 2.5 carefully, he will see that the insurance money will be paid in case of death due to an accident and clause 2.6 in case of disability. Similarly, in the study of the insurance event in the credit contracts of legal entities, it can be seen that the insurance money is paid out only in case of bankruptcy of the organization.

In order to protect the rights of the counterparty and prevent discrimination of the commercial bank in the credit contracts concluded with the customers, we believe that it is necessary to carry out an examination by the Competition promotion and consumer protection committee of the Republic of Uzbekistan and the Federation for the Protection of Consumer Rights.

In addition, in order to protect the rights of the counterparty and prevent discrimination, we believe that it is necessary to examine the contracts concluded on the insurance payments of the loans given in the banks by the Competition Committee of the Republic of Uzbekistan and the Federation for the Protection of consumer rights.

Due to the fact that the procedures for obtaining internal leave for credit are not established, it is necessary to allow the internal leave to be extended for 3 or 6 months in various cases, regardless of individual's decision, i.e., when they are sick, go on vacation, get married to their children and become more profitable, etc.

It is necessary to introduce the non-payment of tax payments for up to 6 months from any newly opened business activity. In addition, if we do not completely eliminate the system of applying penalties in the tax authorities, entrepreneurs will sink more and more into the quagmire. Mechanisms should be developed to encourage entrepreneurs who pay a large amount of tax compared to similar entrepreneurs.

It is necessary to create a mechanism for non-payment of property tax when entrepreneurs receive capital equipment for production on credit and receive credit for processing products until the credit is closed. Loans are becoming a problem due to the fact that productions are not provided with working capital in most cases.

The loan interest rates of the loans received by legal organizations from banks remain high. Credit terms do not correspond to real life at all, that is, a loan is taken out of compulsion depending on bank conditions, without taking into account the payback period of the project. Because of this, many projects go bankrupt before completion due to insufficient financing (lack of working capital, etc.) and become non-performing loans.

Loans of legal organizations were extended mainly during the pandemic according to the government's decision. In other periods, it is impossible to extend the loan period. Penalties and interest on unpaid loans leave entrepreneurs in a difficult situation. Another reason for the development is that a mechanism has been established in Japan to record the mistakes made in each direction, so that no one else makes this mistake. In addition, pensioners



who have retired from working in many organizations in our country should be used wisely.

According to our observations, some of former bankers who have many years of practical experience in the sphere of banking services move to the business sector and start working, different innovative ideas and thoughts begin to arise. However, we do not have a system that collects these opinions from such entrepreneurs. Therefore, it is necessary to organize online voluntary advisory councils consisting of citizens who have been

engaged in business activities for many years in the field (in the direction of our scientific work, in banks). If there is an economic decline or problems in a certain area, the matter should be brought to this board for discussion in a cross-sectional manner. No idea should be criticized. Summarizing these ideas and working on them, in our opinion, should be in the economy department and higher education institution. It is necessary to implement each problem as a scientific work, to turn it into an object of analysis and making recommendations.

#### References

- 1. Constitution of the Republic of Uzbekistan, Article 1. 01.05.2023.
- 2. The Civil Code of the Republic of Uzbekistan, 01.03.1997.
- 3. Law of the Republic of Uzbekistan "On the Central Bank", Law of the Republic of Uzbekistan No. ORQ-582 of 11.11.2019
- 4. Law of the Republic of Uzbekistan "On Banks and Banking Activities", dated 5.11.2019 No. ORQ-580.
- Law of the Republic of Uzbekistan "On Insurance Activities", 23.11.2021 ORQ-730.
  - 6. Law of the Republic of Uzbekistan "On Accounting" No. ORQ-404 of 04.13.2016
- 7. Decree of the President of the Republic of Uzbekistan "On the Development Strategy of New Uzbekistan for 2022-2026" dated January 28, 2022 No. PF-60
- 8. Decree of the President of the Republic of Uzbekistan "On measures to implement the program of providing housing to the population through mortgage loans based on market principles" dated 13.04.2023 No. PF No. 51.
- 9. Decision of the Cabinet of Ministers of the Republic of Uzbekistan dated 7.07.2023 "On measures to implement the program of 20 thousand entrepreneurs 500 thousand related specialists".
- 10. 8. Decision of the President of the Republic of Uzbekistan dated 12.05.2020 "On the strategy of reforming the banking system of the Republic of Uzbekistan for 2020-2025" PF No. 5992.
- 11. Decision No. 3030 of the Board of the Central Bank of the Republic of Uzbekistan dated 02.07.2018 No. 3030 "On approval of the regulation on the minimum requirements for the activity of commercial banks in the implementation of mutual relations with consumers of banking services"
- 12. Decision No. 1834 of the Central Bank of the Republic of Uzbekistan "Instructions on the procedure for accounting and organization of accounting work in the banks of the Republic of Uzbekistan" registered on 11.07.2008. "Тижорат банкларида фоизларни ҳисоблаш тўғрисида" 30.01.2004 йилдаги №1306-сонли низом
- 13. Decision No. 2696 of the Board of the Central Bank of the Republic of Uzbekistan dated 14.07.2015 "On approval of the regulation on the classification of asset quality in commercial banks and the formation of reserves to cover possible losses on assets and the procedure for their use"

Vol 8, Issue 3 www.niet.uz



- 14. The state program "Regarding the implementation of the Strategy of Actions on the five priority directions of the development of the Republic of Uzbekistan in 2017-2021 in the Year of Youth Support and Public Health Promotion" approved by the Decree of the President of the Republic of Uzbekistan No. PF-6155 dated February 3, 2021.
- 15. Resolution No. 163 of the Plenum of the Supreme Economic Court of the Republic of Uzbekistan dated 15.06.2007 "On some issues of application of civil legislation on property liability for non-fulfillment or improper fulfillment of obligations".
- 16. Law No. 670-1 of the Republic of Uzbekistan dated August 29, 1998 "On the contractual and legal basis of the activities of economic entities".
- 17. Rashidov O.Yu., Toymuhamedov I.R., Alimov I.I., Tojiev R.R. Money, credit and banks: Textbook. T.: TDIU, 2009. 439 p
  - 18. National Encyclopedia of Uzbekistan, Volume 1, Tashkent, 2000.

### **EXPORT POTENTIAL OF SMALL ENTERPRISES**

#### **MUSREDINOVA TAMILA**

Researcher of Namangan Institute of Engineering and Technology E-mail.: <a href="mailto:musredinovat@gmail.com">musredinovat@gmail.com</a>, phone.: (+99894) 274 68-86

#### Abstract:

**Objective.** The most important directions of the economic policy of each country at the present stage are the development of exports, increasing the competitiveness of domestic products in the foreign market. It is precisely in conditions of fierce competition and external restrictions that the export potential should be activated, primarily due to the most mobile component of the economy – small and medium-sized businesses. To achieve these objectives, it is necessary to stimulate and involve successful and competitive enterprises (especially those with innovative and high-tech products/services) in the field of foreign economic activity, to promote the realization of their export potential, to improve the qualifications and knowledge of their employees in the field of foreign economic activity.

**Methods.** The development and strengthening of the country's export potential is one of the priorities of the state's economic policy. This fact is confirmed by the research of many leading domestic and foreign specialists. Thus, the staff of the Higher School of Economics conducted a study, the results of which indicate that the export orientation of the company's activities has a positive effect on profitability and the level of innovation activity. In addition, research shows that the development of export potential is one of the most important factors of economic growth.

**Results.** Conclusions are drawn that export-oriented companies have the potential to conduct foreign economic activity, but it is not fully used. Proposals were made to increase it by developing a long-term program for developing the competitiveness of export-oriented small enterprises.

**Conclusion.** Promising areas of work in the field of support for export—oriented enterprises in the near future should also be: — creation and development on the basis of the existing infrastructure of the field of services, in which there is an objective need on the part of small and medium-sized businesses; formation of a structural unit responsible for carrying out a unified policy in the field of development and revitalization of export-oriented enterprises of the region. The main ones are financial support and assistance in attracting investments. Another area of state support for SMEs is the liberalization of tax policy. The implementation of these measures will increase the competitiveness of export-oriented SMEs, which will contribute to the development of small and medium-sized businesses, as well as the economy of the region as a whole.

**Keywords:** Export, perspective, potential, small business, profitability, criteria, improvement, economy.

Introduction. The most important directions of the economic policy of each country at the present stage are the development of exports, increasing the competitiveness of double the foreign market.

competitiveness of domestic products in the foreign market. It is precisely in conditions of fierce competition and external restrictions that the export



# CONTENTS

PRIMARY PROCESSING OF COTTON, TEXTILE AND LIGHT INDUSTRY	
J.Sidiqjanov, N.Nabidjanova	
Development of shrinkage calculation for men's shirt base pattern manufactured by the garment dyeing method	3
N.Nabidjanova, J.Sidiqjanov	
Method development of applying shrinkage values into base pattern of men's garment dyed shirt	10
F.Bozorova, A.Djuraev	
Experimental review of the rubber pad of the new design of the sewing machine	15
M.Mirxojayev	
Manufacture of single cotton fabric with new composition, specified bend from yarn gathered from local raw material cotton fiber	22
A.Khamitov, B.Akhmedov, J.Ulugmuradov	
A study to determine the change in porosity indicators of the shoe upper hinge in technology processes	28
M.Rasulova, K.Khodjaeva	
Study of operating modes in the process of selection and tailoring of package materials in the preparation of men's outerwear	34
M.Chorieva	
Analysis of the protective properties of fabrics for special clothing of oil and gas extraction field workers at high temperatures	41
G.Gulyaeva, I.Shin, K.Kholikov, M.Mukimov	
Research of knitting structure stability parameters	47
R.Rozmetov	
Study of the influence of drying agent temperature on raw cotton and its components	52
A.Gofurov, T.Tuychiev, R.Rozmetov, M.Axmedov	-
Results of research on an improved cotton regenator	57
GROWING, STORAGE, PROCESSING AND AGRICULTURAL PRODUCTS A FOOD TECHNOLOGIES	ND
A.Mukhammadiyev, I.Usmonov, Sh.Uktomjonov	
Electrotechnological processing of sunflower seeds with ultraviolet light	64
A.Yamaletdinova, M.Sattorov	
Application of effective methods in the transportation of high-viscosity oils	69
N.Khashimova	
Analysis of the prospectiveness and safety of the use of plant raw materials in the enrichment of flour and bread products	76
O.Mansurov, A.Xamdamov, O.Qodirov	
Operation process and experimental results of continuously fruit and vegetable drying equipment	81



CHEMICAL TECHNOLOGIES	
B.Uktamaliyev, M.Kufian, A.Abdukarimov, O.Mamatkarimov	
Temperature dependence of active and reactive impedances of PMMA-EC-LiTf / MGTF <sub>2</sub> solid polymer electrolytes	86
M.Ikramov, B.Zakirov	
Innovative completely soluble NPK gel fertilizers based on biopolymers with	04
controlled release of nutrients	91
A.Khurmamatov, A.Matkarimov	
Results of experiments of studying the composition and purification of technical waters	97
A.Nuritdinov, A.Kamalov, O.Abdulalimov, R.To'raxonov	
Obtaining composite materials based on polycarbonate	104
U.Eshbaeva, D.Safaeva, D.Zufarova, B.Baltabaeva	
Ir spectroscopic analysis of biaxially directed polypropylene and	440
polyethylene polymer films	110
U.Eshbaeva, A.Nishanov, D.Zufarova	
A new adhesive composition for the manufacture of corrugated cardboard	115
D.Salikhanova, M.Ismoilova, B.Adashev, M.Muratov	
Analysis of emulsions obtained in ultrasonic homogenizer and magnetic	
stirrer devices	123
S.Ravshanov, J.Mirzaev, S.Abdullayev, J.Obidov	
Comparative analysis of physical-chemical parameters of domestic triticale	400
grain	128
M.Urinboeva, A.Ismadiyorov	
Cleaning natural and associated gases from sulfur compounds	132
MECHANICS AND ENGINEERING	
U.Kuronbaev, D.Madrakhimov, A.Esanov	
Influence of the clearance between the punch and the matrix on the	40=
formation of burr on the insect teeth of the developed saw cutting machine	135
D.Kholbaev	
Control of cotton pneumotransport facility through scada system	142
D.Kholbaev	
Cotton pneumotransport pipeline control through mechatronic (Scada)	447
system	147
R.Muradov	
Ways to increase the efficiency of gining machine	151
S.Utaev	
Results of the study on changes in the performance indicators of engines	155
when operating in diesel and gas diesel modes	155
B.Mirjalolzoda, M.Abduvakhidov, A.Umarov, A.Akbaraliyev	
Improved gin saw cylinder	161
ADVANCED PEDAGOGICAL TECHNOLOGIES IN EDUCATION	
S.Khudaiberdiev	
Analysis of the most up-to-date server database management systems	164
N.Aripov, Sh.Kamaletdinov, I.Abdumalikov	
Using the factor graph to evaluate the quality of output data for shift-daily	170
loading planning	170
B.Kholhodjaev, B.Kuralov, K.Daminov	



Block diagram and mathematical model of an invariant system	175
A.Yuldashev	
Historical and theoretical foundations of public administration and leadership	184
ECONOMICAL SCIENCES	
A.Isakov	
Strategy and forecasting of effective use of investments in business activity	188
K.Musakhanov	
Agro-tourism entrepreneurship development model in Namangan region	193
N.Makhmudova	
Innovative mechanisms of the development of service sectors in small	201
business and private business subjects in developed asian countries	201
Kh.Kadirova	
Conceptual foundations of the development of the financial market of	206
Uzbekistan	
G'.Shermatov, Sh.Nazarova	
Specific challenges of small business utilization in health care	211
R.Tokhirov, Sh.Nishonkulov	
Econometric analysis of the impact of innovative development of business	215
entities on economic growth on the example of Uzbekistan	
O.Hakimov	
Problematic issues of taking loans from commercial banks	223
T.Musredinova	
Development of an economic strategy for promoting products and services	230
to foreign markets	
F.Bayboboeva	
Fundamentals of economic security in small business activities	234
A.Ergashev	
Improvement of commercial banks' capital and its economic evaluation	240
methods	
G'.Shermatov	
Improving the methodology of identifying and management of risks affecting	247
the activities of commercial banks	onto 6350
Sh.Lutpidinov	
Issues of the development of freelance activity under the development of the	253
digital economy	