Innovative methods of crediting and financing of water consumers

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Abstract. This article reveals questions on innovative methods of lending and financing of enterprises in the real sector of the economy at the present stage. The main purpose of this study is to investigate the advantages and disadvantages of different methods of financing real sector enterprises. This article is relevant because new business lending methods and mechanisms are constantly being developed. These advances help companies grow and expand their operations, creating more opportunities for jobs and economic growth. As technology continues to advance at an unprecedented pace, lending to businesses - especially those in the tech industry - becomes increasingly important. However, traditional methods of risk management may no longer be sufficient in identifying and mitigating potential risks. That's why it's crucial for lenders to adopt new, innovative that. From software development to artificial intelligence, there are a myriad of factors that must be considered when assessing the creditworthiness of these companies. Using outdated risk management techniques could lead to incorrect conclusions and potentially disastrous outcomes. To avoid such scenarios, lenders need to embrace new ways of evaluating risk.

1 Introduction

Crediting and Financing of economic entities of the real sector is one of the most important functions of the financial system of the country, providing the necessary funds for the development of the real sector of the economy, especially small and medium enterprises. One of the main tasks of financing real sector of economy is to provide necessary resources for financing investments, development of small and medium enterprises, development of innovations, production and export which is an important factor for sustainable economic development of the country [1-4].

Lending is one of the most common mechanisms of financing the real sector of economy. Loans have a number of features that indicate the feasibility of their use in this area. Loans provide quick access to necessary resources, increase liquidity of enterprises, help to improve financial situation of enterprises and calculate efficiency of investments.

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At the same time, credits can become a reason of risk for financial stability of real sector of economy, in case of wrong use. It is also necessary to take into account that the credit system may face the problem of lack of liquidity, especially when negative factors in the economy occur [5, 6].

2 Materials and Methods

This article is based on methods of analysis containing analysis of scientific and practical publications in the field of scientific problems, as well as economic and statistical methods involved in the analysis of the subject area [2, 7, 8].

One of the main problems of lending to the real sector of the economy is the lack of access to financial resources for small and medium-sized businesses. This is often due to the lack of guarantees and other forms of collateral for credit obligations.

Another problem is the high level of interest rates on loans. It not only reduces the attractiveness of credit for small and medium-sized enterprises, but also aggravates their financial situation, especially in conditions of economic crisis.

Establishing transparent and legislated rules for lending and financing could help address this situation. It is also important to consider the negative consequences of late repayment of credit debts [1, 9].

At present, for the realization of lending and financing of the real sector of the economy there is an increase in the use of different methods, such as:

1. Crowdfunding is the process of raising money through the Internet to finance projects, support start-ups or develop small businesses.
2. Venture capital is investing in new, innovative companies with high profitability and growth potential.
3. Lending by non-bank financial institutions is getting a loan from companies that are not banks, but provide financial services.
4. Crowd lending is lending to various borrowers who do not want to go to a bank or are unable to get a loan from other financial institutions.
5. Leasing is a financial transaction in which property over property is leased for a certain period of time and the owner of the property receives payment in the form of regular payments and etc.

Next, consider the advantages and disadvantages of bank lending to businesses and crowdfunding.

Table 1. Pros and Cons of Bank Financing vs. Crowdfunding for Businesses

<table>
<thead>
<tr>
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<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Financing</td>
<td>Established and regulated funds, Professional guidance and support, Lower interest rates and fees than alternatives, Strong reputation and trust from lenders, Flexibility in terms of repayment and loan size</td>
<td>Strict eligibility requirements, Time-consuming and lengthy application process, Collateral or credit history required, Limited flexibility and negotiations, Potential for variable interest rates</td>
</tr>
<tr>
<td>Crowdfunding</td>
<td>Potential for large number of investors, Increased exposure and marketing opportunities, No need for credit history or collateral,</td>
<td>Risk of insufficient funding or overfunding, Limited control over investor behavior, Platform fees and commission charged, Potential for legal and regulatory concerns,</td>
</tr>
<tr>
<td>Quick and easy setup and funding process, Potential for early adopter community inflow</td>
<td>Potential for intellectual property disputes</td>
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</tbody>
</table>

Overall, both bank financing and crowdfunding have their advantages and disadvantages when it comes to funding a business. Bank financing offers established and regulated funds, professional guidance and support, and lower interest rates and fees than alternatives. Crowdfunding, on the other hand, offers the potential for a large number of investors, increased exposure and marketing opportunities, and no need for credit history or collateral [10].

However, bank financing also comes with strict eligibility requirements, a time-consuming and lengthy application process, collateral or credit history requirements, and limited flexibility and negotiations. Crowdfunding, on the other hand, comes with the risk of insufficient funding or overfunding, limited control over investor behavior, platform fees and commission charged, potential for legal and regulatory concerns, and potential for intellectual property disputes.

3 Results

Currently, lending to enterprises of the real sector of the economy is growing. At present, lending policy in the EAEU countries is generally stable and focused on the development of the region's economy. Let's analyze below the size of loans, which are granted to enterprises of the real sector.


<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>change</th>
<th>growth rate, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>5310</td>
<td>5291</td>
<td>5479</td>
<td>169</td>
<td>103,18</td>
</tr>
<tr>
<td>Russia</td>
<td>515</td>
<td>500</td>
<td>504</td>
<td>-11</td>
<td>97.86</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>1,4</td>
<td>1,2</td>
<td>1,1</td>
<td>-0,3</td>
<td>78.57</td>
</tr>
</tbody>
</table>

As the analysis shows, loans to real sector enterprises are growing. But due to the pandemic there is a decrease in the size of credit in 2020 in almost all countries of the world.

As before, in the near future, banks will be given preference to lend to different areas of business, depending on the economic situation and the needs of the market.

Some of the possible areas include:

- **Innovation and Technology** - lending to startups and companies developing new technologies and products. Technology is changing at an unprecedented pace and companies need access to funding to stay ahead of their competitors. From software development to artificial intelligence, lending to tech firms will help drive innovation and create jobs [11].

- **Environmentally friendly technologies** - lending to businesses involved in the production of environmentally friendly technologies and products in order to reduce the negative impact on the environment.

- **Small Business** - lending to small and medium-sized businesses that play an important role in the economy and provide jobs.

- **Infrastructure** - lending to businesses engaged in the construction and maintenance of infrastructure, such as roads, bridges, airports, ports, etc.
- **Health care and science** - lending to companies involved in the development and production of medical equipment, drugs and research. Healthcare is another area where banks should focus their lending efforts. With an aging population, there is an increasing demand for medical services and treatments. By providing capital to healthcare providers, banks can help patients.

- **Financial services** - lending to banks, insurance companies and other financial institutions.

- **Agriculture** - lending to businesses involved in agricultural activities, such as farms and grocery companies.

Lending to tech firms is crucial for driving innovation and staying ahead of competitors. With rapid technological advancements happening every day, companies need access to funding to keep up with these changes. From software development to artificial intelligence, can should mitigate.

These are just some of the possible areas, and specific decisions about lending to businesses should be made based on a careful analysis of risk and potential.

## 4 Discussion

We would like to note that in recent years, due to the growth of integration processes in Kyrgyzstan, many processes are changing. At the same time, the EAEU is one of the big and promising projects for Kyrgyzstan.

**Peculiarities of lending in the EAEU countries.** Developed system of the banking sector. There are many commercial banks operating in each EAEU country. Most banks have a wide network of branches and offer a wide range of banking services, including lending.

Low level of interest rates. Currently, the level of interest rates in the EAEU is relatively low, which promotes the development of lending and consumer demand.

Accessibility of credit. Financial institutions actively promote their credit products, provide customers with convenient ways to obtain credit and, in general, try to make the procedure for obtaining credit as accessible as possible.

A well-developed system of online lending. Most banks offer customers to check out a loan through online banking. This is convenient for customers and helps to save time.

**However, there are some disadvantages.** Lack of flexibility of credit conditions. Most banks have a fairly rigid procedure for processing credit and the terms of the loan can be difficult for customers with low income or poor credit history.

Low level of financial literacy of population. Clients often do not understand the terms of credit and the risks associated with loan repayment.

The presence of unscrupulous lenders. Some lenders can set high interest rates and uncooperative credit conditions, as well as conduct non-transparent activities and violate the rights of clients.

In general, lending in the EAEU countries is at the stage of active development and offers a wide range of services, however, it is necessary to improve lending conditions and increase the level of financial literacy of the population in order to reduce risks for customers and the banking system as a whole.

Digitalization is being introduced in all spheres. The banking sector is also no exception. At present, advanced enterprises have also begun to apply new technologies. Businesses in a digitalized environment, with online lending, may face risks:

- **Fraudulent practices:** With online lending, businesses can face the risk of fraudulent activity. Cybercriminals can capture customers' personal information and use it to obtain credit in their names.
- **Incompatible with the law:** Businesses that engage in online lending must comply with various laws and regulations to avoid legal consequences. For example, they must comply with consumer data protection laws and laws governing interest rates.
- **Financial losses:** If a business makes loans incorrectly or incorrectly assesses a borrower's creditworthiness, they could face financial losses.
- **Changes in the economic and consumer market:** Changes in the economic and consumer market may adversely affect the creditworthiness of borrowers and lead to increased indebtedness and defaults.
- **Technical Problems:** Businesses may experience technical problems with online lending, such as system glitches or software errors.
- **Reputational risks:** Mismanagement of credit operations and failure to meet its obligations to borrowers may negatively affect the reputation of the enterprise and lead to loss of trust of customers and investors.

Lending to businesses has become increasingly important with the rapid advancement of technology. However, traditional risk management methods may not be enough to identify and mitigate potential risks anymore. To avoid making incorrect conclusions that could lead to disastrous outcomes, lenders must adopt innovative ways of assessing a company's creditworthiness. This involves using data from multiple sources, advanced analytics tools or collaborating with third-party experts for deeper insights into their operations [9].

Embracing these new methods will help lenders identify potential issues early on and make informed lending decisions. Although lending to tech firms is essential for driving growth and innovation, it comes with its challenges. Therefore, lenders need to be willing to adapt to the changing landscape and use modern risk management techniques to ensure success.

5 Conclusion

Digitalization in corporate lending is one of the fastest growing trends in the banking sector. Currently, many banking organizations are implementing new technologies and tools that provide customers with innovative solutions for obtaining loans [3].

One of the main advantages of digital lending is the acceleration of the loan application process. Through the use of digital technology, it is possible to automatically process loan applications, which leads to a significant increase in the speed of lending. In addition, it becomes possible for customers to get a loan without going to the bank in person, which also reduces the processing time [11].

In addition, digital lending uses analytical tools to assess the creditworthiness of borrowers. This allows banks to quickly make decisions about loans based on the borrower's financial history and other factors.

One of the indicators of the development of digitalization in lending is the increase in the number of employees in digital development and implementation departments. Many large banks create separate units to work on the development of digital services, indicating a growing interest in this area.

Thus, digitalization in corporate lending is an actively developing area of banking activity, which contributes to faster and shorter loan processing times, as well as provides a more accurate assessment of the borrowers' creditworthiness.

References
6. A.A. Volkov, Society, Economics, Management, **7(1)**, 12-19 (2022)
7. I. Krasnikova, I. Kulibaba, BIO Web Conf., **93**, 03006 (2024) https://doi.org/10.1051/bioconf/20249303006