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Article

Financial intermediation development model as a factor of growth of population welfare in post-Soviet countries

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Abstract: The economy of post-Soviet countries has its own specifics, including those related to the development of the financial system and the financial intermediation market. Based on the results of a study, the author has identified a problem associated with the lack of sound tools that could be used to improve the efficiency of the financial intermediary market. The main directions of such a process are mobilization of savings, distribution of financial assets, payment system, risk management and control over market agents involved in financial transactions. The digital or cyber-social approach proposed by the author involves the use of innovations in the financial market, expanding the accumulated pool of knowledge and increasing the intellectual capital of financial intermediaries, and the active use of information and communication networks to perform various financial transactions and provide financial services. The unique characteristics of financial intermediation development in former USSR countries are determined by the emerging type of economy, characteristic of many states, which causes an insufficient degree of development of traditional forms of financial intermediation, the use of specific tools, such as Islamic finance, and poor penetration of digital technologies into the economy.

Keywords: population welfare; invention; cyber-social approach; strategizing; financial intermediaries; involvement effect

1. Introduction

Having entered a new stage of their development, former Soviet Union countries are faced with several problems and challenges, but at the same time it is opening opportunities and prospects. Global crisis phenomena, as well as sanctions from Western countries in connection with the Russian military operation in Ukraine, have led to the actual isolation of the financial systems of Russia and Belarus from developed financial markets. This situation has an impact on the well-being of the population in the countries under consideration. Which, in turn, given the enormous influence of the Russian economy on the region, has a multidirectional impact on the population of post-Soviet countries. One of the ways to correct the situation could be financial intermediation, which, by improving the financial environment, could stimulate production and, as a result, improve people's lives.

There are many theoretical works emphasizing the connection between the degree of advancement in financial intermediation and the welfare of residents (Cavallaro and Villani, 2022; Musabeh et al., 2020; Turyan, 2023b).

Numerous researchers underscore the significance of central banks in the functioning of the financial system (Singh, 2023; Uglitskikh et al., 2017). However, the evolution of financial intermediation has led to the increased role of a decentralized

system in which the equalization of the supply and demand of funds occurs within an extended chain of credit intermediation (Castro-Iragorri et al., 2021; Cetorelli et al., 2012; He and Li, 2021).

We agree (Pishchulov, 2021) that financial institution specialization as they facilitate the flow of funds can impact the transaction speed within economy. This, in turn, has implications for economic growth and the overall welfare of the population.

In the context of transforming economies, financial intermediaries play distinct roles compared to those in established financial systems. In developing financial markets, financial intermediation should be geared toward stimulating active economic growth. Achieving this goal necessitates the utilization of innovative tools and the establishment of effective public-private partnership mechanisms.

According to Pischik (2016), the development of financial markets in developing countries can benefit from a greater emphasis on both the insurance market and the securities market. Meanwhile, Pisarenko highlights the significance of specialized financial institutions, specifically financial conglomerates (Pisarenko and Chernova, 2015). In our view, a comprehensive approach to fostering financial intermediation institutions is essential. This includes the development and strengthening of entities such as investment funds, financial cooperatives, and pension funds.

It should be noted that the modern realities of the development of financial intermediation are associated with the development of new decentralized forms, which are represented by tools based on blockchain technologies. Decentralized finance has a special transaction mechanism that is fundamentally different from traditional centralized flows managed by an intermediary guarantor. Decentralized finance allows transactions to be anonymous and opaque for every participant involved. Many questions arise that need to be resolved theoretically and practically: how effective the use of decentralized finance in the markets of emerging economies is; how the use of decentralized finance affects the well-being of the population; what the role of government regulation in the market of new financial services should be, etc.

2. Materials and methods

The methodological approach of this study is built on several theoretical frameworks, including institutional theory, systems analysis, and the cyber-social approach. These frameworks provide different perspectives on how financial intermediation can influence the welfare of populations in post-Soviet countries. However, these perspectives have not yet been fully explained or integrated. This section will explore relevant studies to clarify these connections and propose a unified theoretical framework to address the research question.

Institutional theory examines how institutions—defined as formal and informal rules, norms, and practices—shape economic behavior and outcomes. Hodgson (2006) and North (1990) have highlighted the critical role of institutions in economic development, arguing that well-functioning institutions reduce transaction costs, mitigate information asymmetry, and build trust among market participants. In the context of financial intermediation, institutions play a key role in determining the efficiency and effectiveness of financial markets (Diamond, 1984; Levine, 2002).

In post-Soviet countries, the institutional landscape is marked by the transition from centrally planned economies to market-oriented systems. This transition has brought about significant institutional challenges, including weak legal frameworks, low levels of trust in financial institutions, and the persistence of informal practices (Magyar and Madlovich, 2020). Addressing these institutional weaknesses is crucial for developing efficient financial intermediation systems that can enhance population welfare (Pishchulov, 2021; Uglitskikh et al., 2017).

Systems analysis provides a holistic framework for understanding the interactions between different components of the financial system, including banks, non-banking financial institutions, regulators, and markets. This approach is valuable for examining how systemic risks are managed and how financial stability is maintained within an economy (Cetorelli et al., 2012, Kim et al., 2023). Systems analysis also allows for the exploration of feedback loops, where changes in one component of the system can have significant ripple effects throughout the entire financial system (Minsky, 1986).

In the context of post-Soviet countries, the application of systems analysis is particularly important given the transitional nature of their economies. Gatti et al. (1994) emphasized the need to understand systemic vulnerabilities in developing financial systems, where regulatory frameworks and institutional capacities are still evolving. This study will apply systems analysis to explore the complex interactions within the financial systems of post-Soviet countries and their implications for economic growth and welfare.

This study also draws on methods from economic, social, and psychological research to understand the behavior of financial market participants and the broader socio-economic context. Financial literacy, for example, is a critical factor influencing how individuals engage with financial institutions and utilize financial products. Higher levels of financial literacy are associated with better financial decision-making and greater financial inclusion, both of which contribute to improved population welfare (Collins and O'Rourke, 2010; Lusardi and Messy, 2023; Sudakova, 2018).

Moreover, social and psychological factors, such as trust in financial institutions and prevailing social norms, significantly influence the effectiveness of financial intermediation (Mhlanga, 2022). In post-Soviet countries, the legacy of centralized control and the recent transition to market economies have created a unique socio-economic environment where these factors are particularly relevant (Artemieva, 2020).

The cyber-social approach focuses on the role of digital technologies and cyber-social innovations in transforming financial systems. While relatively new, this approach has gained attention in the literature on decentralized finance (DeFi) and blockchain technologies, which suggest that these innovations can disrupt traditional financial systems by offering more efficient, transparent, and inclusive financial services (Piketty, 2014; Turyan, 2023a, 2024).

For post-Soviet countries, the adoption of cyber-social technologies presents an opportunity to address some of the institutional weaknesses identified earlier. Digital innovations can enhance transparency, reduce transaction costs, and increase access to financial services, particularly in regions where traditional financial institutions are underdeveloped (Musabeh et al., 2020). However, the studies also point to the risks associated with these technologies, such as increased financial volatility and

regulatory challenges (Caprio, 2013; Kaur et al., 2023; Kindleberger and Laffargue, 1982; Zetzsche et al., 2020).

To unify the various theoretical approaches discussed, this study adopts Institutional Economics as the overarching theoretical framework. Institutional Economics provides a comprehensive lens through which to analyze the development of financial intermediation by integrating institutional theory, systems analysis, and the cyber-social approach.

This framework allows for:

1) Institutional Analysis: Investigating how institutional structures in post-Soviet countries influence financial intermediation and its impact on welfare.

2) Systems Integration: Applying systems analysis to explore the interactions between different components of the financial system within the institutional context.

3) Behavioral Insights: Incorporating economic, social, and psychological research to understand how individuals and institutions behave within the financial system.

4) Technological Innovation: Examining the role of cyber-social technologies as institutional innovations that could transform financial intermediation in transitional economies.

By utilizing Institutional Economics, this study will provide a comprehensive analysis of how financial intermediation in post-Soviet countries can be developed to enhance population welfare, considering both traditional institutional factors and modern technological innovations.

3. Results and discussion

The concept of a model for the enhancement of financial intermediation institutions in former Soviet countries should be based, first, on the principles of the evolution of economic institutions. In this case, one should consider not only the formal instruments for developing the market of financial intermediaries, but also a deeper institutional level, which, from the point of view of Hodgson and Knudsen (2004) includes the “mindset and behavior” of market players.

The author proposes to use a modern, digital approach when developing a model. It seems appropriate to include in the scientific apparatus of this study the term “invention,” which Popov and Vlasov (2013) propose to use as a designation for new ideas obtained during fundamental analysis and applied scientific research. The model for the development of financial intermediation institutions, designed by the author, is an innovation that will stimulate the development of the financial market to increase the welfare of the population of post-Soviet countries. The innovation in advancing financial intermediaries entails the digital transformation of economic systems. When modeling the evolution of financial intermediation institutions, it’s advisable to initially define the concept of the financial market, as it will serve as the foundation for modeling the system of financial intermediation institutions later (**Figure 1**).

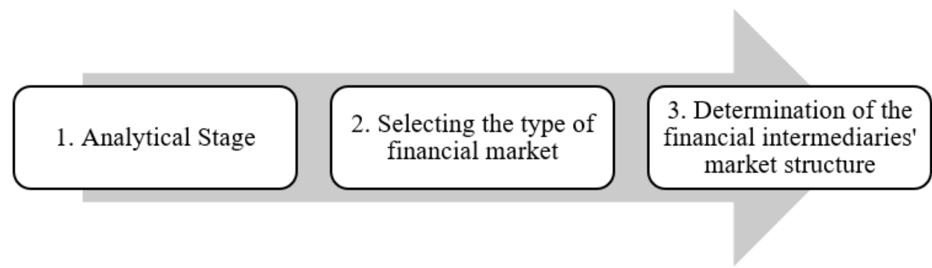

Figure 1. Preliminary stage of developing a model for the development of financial intermediation institutions in post-Soviet countries.

The preliminary stage of model development, as a first step, includes an analysis of the institutional environment, which includes research into institutional factors in the development of the financial market, diagnostics of the current conditions for the development of the financial market and the actual level of development of financial institutions. As mentioned earlier, both formal and informal levels of the institutional environment should be included in the research context.

At the first stage, research work is carried out in several directions (**Figure 2**).

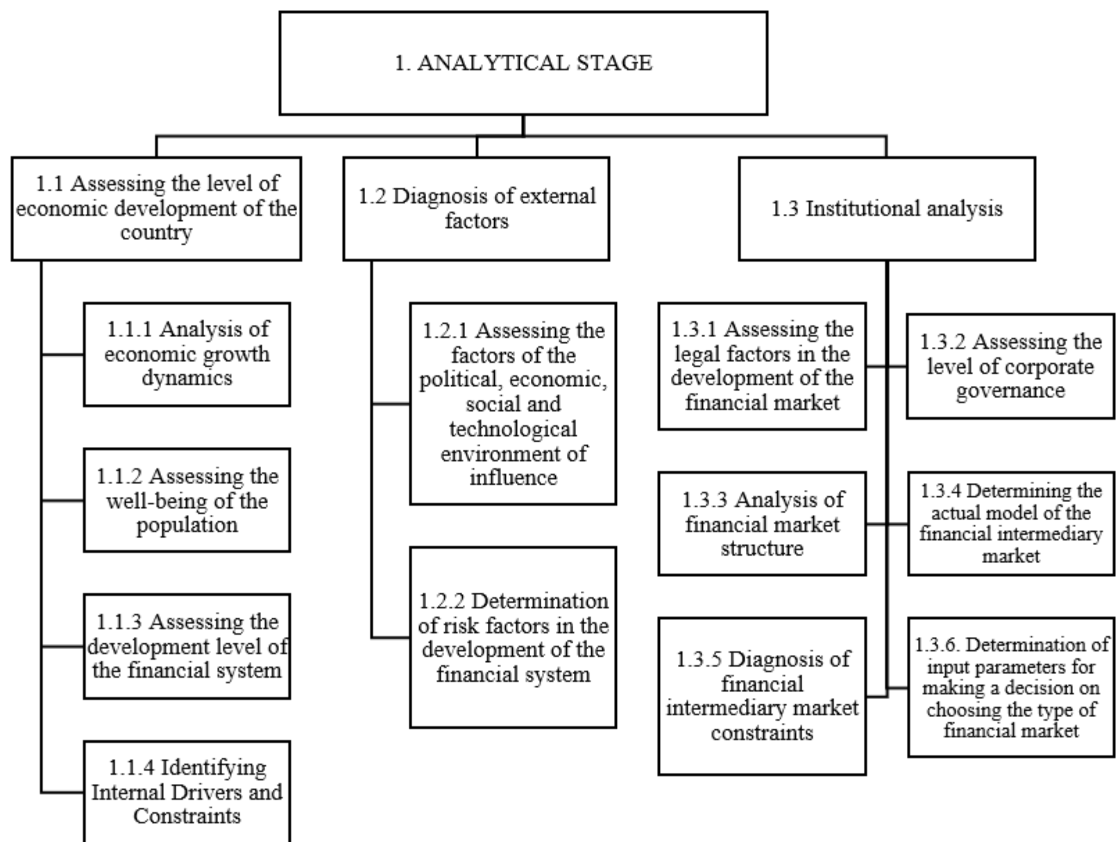

Figure 2. Scheme of the analytical stage of developing a model for the development of financial intermediation institutions in post-Soviet countries.

Source: Compiled by the author.

Therefore, a list of essential tasks has been outlined, constituting the analytical phase of developing a model for the advancement of financial intermediation institutions in post-Soviet countries. Let’s now take a closer look at some

methodological aspects that, according to the author, should be considered within the framework of this stage.

At the stage of analyzing the dynamics of economic growth, the correlation of national and global dynamics should be tracked; the correlation of the stages of economic development is also important. When it comes to modeling the structure of financial markets, the risk of so-called "financial bubbles" should be minimized, in the light of using the ideas of Gatti et al. (1994). The dynamics of economic growth determine the current stage of development of the country's economy in terms of the economic growth period.

The strategic objectives of ensuring economic growth in a federal structure include smoothing out disproportions in the development of regions and balancing economic development in the spatial model. Impacts on the territorial proportions of economic activity are carried out by methods of government regulation, which do not always provide the necessary results. For example, Kolomak (2014) in his publication substantiates the ineffectiveness of state intervention in the regional development of the country by generating "growth points"; a more workable policy, in the author's opinion, is to smooth out regional imbalances. In our opinion, Kolomak's conclusions can be challenged by citing as an example the successful experience of creating "growth points" to attract global finance, accumulated in Singapore, Hong Kong, offshore jurisdictions, etc.

When tracking the dynamics of economic growth, at present, it is necessary to consider some aspects related to sustainable development. New trends in global financial institutions when choosing counterparties are associated with considering not only profitability factors, but also greater attention to climate and environmental risks. The redistribution of global financial flows already considers the basic guidelines laid down in the Paris Climate Agreement (UN Framework Convention on Climate Change, 2015).

As part of this stage, from the analytical perspective, it is necessary to assess the degree of openness of the market economy, which, according to Grinberg (2015), largely determines the prospects for development, including the financial market.

When assessing the well-being of the population, it is proposed to use the human development index as the main parameter, as an integral indicator of the socio-economic well-being of the population. It should be noted the importance of diagnosing the financial literacy factor to assess the degree of population preparedness to work with new financial instruments.

The level of financial literacy of the population determines the activity of using various financial instruments, which, in turn, affects the intensity of financial flows. The relationship between the financial literacy of the population and the degree of trust in financial institutions is also substantiated in scientific literature (Artemieva, 2020). As a result, we can say that there is a correlation between financial literacy and the level of well-being of the population.

Based on the diagnostic results, the current financial market model is determined. The model may have features of several types of markets and can be a mixed one.

The actual model of the financial intermediaries' market is derived from the financial market model. It includes defining the role of the financial regulator, market configuration, structural configuration of the market, determining the importance and

degree of development of various types of intermediaries. As part of constructing a model of the market for financial intermediaries, the types of relationships and interactions between market participants are determined.

Based on risk diagnostics, limiters are determined that set the boundaries for the development of the financial intermediary market. The limitations are the institutional framework, the peculiarities of the population's mentality, etc. We are discussing boundaries that cannot be circumvented in short or medium term, while still considering the use of government intervention tools in the economy. An example of such limitations may be the level of public trust in a certain kind of financial intermediary, as well as the level of financial literacy. In a few countries of the former USSR, for example, Uzbekistan, Tajikistan, there are still traditions that do not allow girls to receive higher education; accordingly, the level of financial literacy among the entire population cannot be increased to the same extent as in other countries where there is no such approach to education of girls.

When considering institutional factors in the development of the financial market of former USSR countries, one should consider the opinion of Magyar and Madlovich (2020), who emphasize the importance of the post-Soviet countries' institutional structure formation with the lack of an initial separation of three spheres - politics, business, and public activity. We consider the position of the mentioned authors, who tend to see deep civilizational roots in the problem under consideration, to be correct. During the Soviet regime, a discipline was formed, referred to as the institution of "power-property," which, after the collapse of the union states, was initially preserved only in some countries that did not carry out full-scale privatization (Uzbekistan, Turkmenistan, Belarus). With the development, in most countries of the post-Soviet territory the discipline of power-property was again restored, which now took various forms from oligarchic (Russia, Ukraine, Moldova, Georgia) to bureaucratic (Armenia, Azerbaijan, Kyrgyzstan, Kazakhstan).

Legal factors for the development of financial markets are summarized in **Table 1**.

Table 1. Prerequisites for choosing a financial market model based on local nstitutional conditions.

Country	Selection factors
Azerbaijan	The presence of a large share of foreign capital, Islamic banking began to develop.
Armenia	High share of the banking sector.
Belarus	The use of the continental financial market model has small impact on the economic situation of the country.
Kazakhstan	Dependence of the financial sector development on the oil market, active development of the stock exchange.
Kyrgyzstan	Insufficient activity in the development of the financial market, the active development of Islamic banking is enshrined at the legislative level.
Uzbekistan	Underdevelopment of the institutional framework and the securities' secondary market.
Tajikistan	Islamic banking began to develop; provisions regulating Islamic banking, microfinance organizations and credit unions were enshrined at the legislative level.
Uzbekistan	Islamic banking has begun to develop; there are problems with the high level of the shadow economy and the high prevalence of cash circulation.
Turkmenistan	Poor development of the financial market, high degree of dependence on international credit structures.

Table 1. (*Continued*).

Country	Selection factors
Georgia	High dependence on external borrowings and poor development of financial intermediation, high degree of dollarization of the economy, small range of financial services, limited access to finance for small businesses, active development of digital technologies.
Moldova	Weak development of financial intermediation, insufficient activity of private investors, low liquidity of the banking sector, high dependence on IMF funds.
Estonia	High degree of banking intermediary services in the financial market, active use of new technologies: blockchain, etc.
Latvia	Highly concentrated bank capital, high speed of banking operations.
Lithuania	Active development of the fintech sector, use of blockchain technologies.
Russian Federation	Impact of sanctions, high inflation, high degree of uncertainty.

The level of corporate governance plays a significant role in the activities of financial institutions; it determines the risk level of using various instruments. When assessing corporate governance in the banking sector, it is important to consider the stakeholder approach. It is necessary to ensure a balance of interests of all stakeholders. At the diagnostic stage, the main aspects that determine the effectiveness of corporate governance are subject to assessment: organizational management structures, information systems, degree of openness, governance, motivation system, etc. Bloomfield (2013) rightly believes that when assessing corporate governance, it is necessary to include a historical factor in the analysis.

Corporate governance now reflects the concept of sustainable development, here we are talking about the so-called "green" securities of corporations. Corporate governance can influence the investment climate; here we agree with the opinion of several authors (Pivovarov and Ostrovsky, 2020), since western investors are currently paying great attention to the social component of assets when making investments. From our point of view, the role of the social factor in securities is overestimated, but since this trend occurs, it should be considered.

Considering the level of corporate governance in the EAEU (Eurasian Economic Union) countries, it should be noted the lack of an institutional framework in some countries, for example in Armenia, while in Kyrgyzstan and Russia corporate governance standards are enshrined at the national level by financial regulators.

The stage of determining the strategic vision of the financial market (strategizing) includes several phases, which contain assessing the possibilities of using standard models, defining strategic development goals, and modeling the future structure of the financial intermediary market (**Figure 3**).

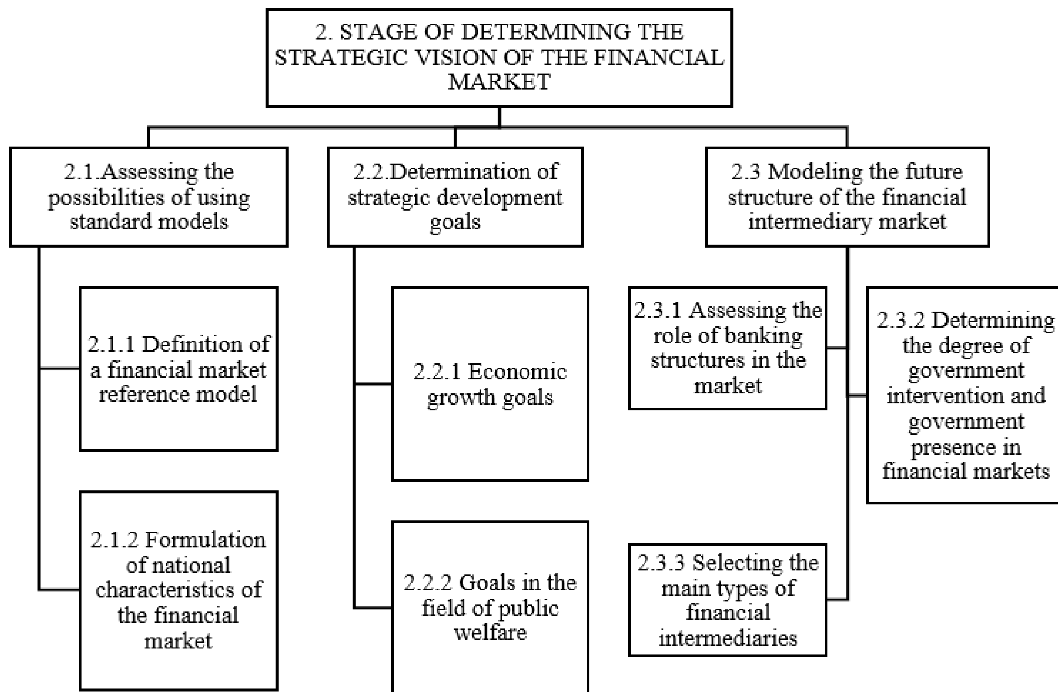

Figure 3. Scheme of the strategizing stage when developing a model for the development of financial intermediation institutions in post-Soviet countries.

Source: Compiled by the author.

At this stage, the strategic guideline for the future development model is determined, and the directions for growth of the financial intermediary market for the future are established.

At the second stage, the actual choice of the financial market concept occurs. When choosing a concept or type of financial market for the development model of financial institutions, it is necessary to consider the target setting, that is, the focus on the welfare of the population.

The main analysis parameters are presented in **Table 2**.

Table 2. Parameters for choosing the type of financial market.

Options	Bank-centric type	Multicentric type
Advantages	Accumulation of information about market entities in banking structures increases the efficiency of corporate governance (Diamond, 1984). Enhanced ability to manage liquidity and intertemporal risk to stimulate economic growth (Levine, 2002). The banking sector acts as an incentive for investment in production development.	It can ensure rapid growth in the market due to various intermediary structures, allowing you to raise funds on various options for alternative lending conditions. Development of competition in the market.
Flaws	Strong dependence on the state, the possibility of market monopolization. Difficulties in using new financial instruments.	Insufficient use of private capital to finance investment projects.
Countries where the model could be effective	Armenia, Belarus, Kazakhstan, Estonia, Latvia.	Azerbaijan, Tajikistan, Kyrgyzstan, Uzbekistan, Russia, Moldova, Lithuania.

Currently, there are several types of financial market models. First, models should be assessed in terms of the bank participation degree. In this regard, bank-centric and multi-centric types of financial markets are differentiated.

One can note the opinion of Stiglitz, who advocates a banking model of the financial market, justifying his position by reducing information costs (Stiglitz, 1985). This opinion is quite reasonable, but other parameters must be considered.

An undoubted advantage of the banking model of the financial market for developing countries is the stimulation of real investments in strategic sectors of the economy. Private investors are not motivated to invest in these areas. On the other hand, the bank-centric type of financial market does not provide an incentive to introduce alternative financial instruments based on new technologies. An example is the United States, where the financial market tends to be multicentric; the development conditions in such a market make it possible to use stock market mechanisms to implement high-tech innovative projects.

When determining the type of financial market, one should consider the model of the financial system, for example, the United States belongs to the market-oriented type, and Germany uses a bank-oriented type of financial system. A competitive financial system has weak potential in conditions of incomplete or underdeveloped markets, therefore, when choosing such a system, these risks should be assessed.

A big advantage for developing financial markets is the ability of a bank-based system to accumulate a large volume of funds from private investors.

National characteristics of the financial market are determined based on the results of the research stage. Standard models are complemented by national specifics, which will allow more effective use of the designed model for regulating the financial market.

While formulating the national characteristics of the financial market, it is necessary to determine the degree of information openness. In this case, maximum openness will not always provide a high degree of stability and certainty. On the contrary, some authors have proven an inverse relationship, when an increase in the volume of information provokes price fluctuations, which ultimately increases market instability and risks (Laffont, 1985).

On the other hand, the small amount of information available to investors, as, for example, in Germany, allows one to doubt the possibilities of increasing profitability in such conditions.

In our opinion, the multicentric model has ample opportunities to stimulate the expansion of innovative development, which is necessary for the developing markets of post-Soviet countries. Only in this way can a leap in economic dynamics be ensured. Under a bank-centric model, innovation in the financial intermediary market will be constrained.

Strategic directions for the development of financial intermediation institutions are presented in **Table 3**.

Table 3. Strategic directions relevant for national financial markets.

Country	Targets for the development of the financial market
Azerbaijan	Development of Islamic banking, reduction of corruption, growth of capitalization in the banking sector, reduction of cash turnover.
Armenia	Reducing dollarization in the economy, bringing the stock and real sectors closer together, intensifying the development of non-bank financial intermediaries.
Belarus	Activation of digital transformation, transition to digital banking, development of public-private partnerships in the financial sector, use of financial conglomerates.
Georgia	Formation and development of an independent financial market, relying on the national banking system; active implementation of cyber-social ecosystems in the financial market.
Kazakhstan	Reducing the dependence of the financial market on the oil sector, stimulating private investment and innovative financing.
Kyrgyzstan	Development of Islamic banking and other alternative non-banking institutions.
Russia	Development of public-private partnerships in the financial sector, use of financial conglomerates.
Tajikistan	Development of Islamic banking, activation of the non-banking market of financial intermediaries.
Uzbekistan	Development of Islamic banking, activation of remote banking, minimization of cash turnover, reduction of the share of problem debt.
Turkmenistan	Formation and development of an independent financial market, relying on the national banking system.

Summarizing the results of the study of promising directions for the development of financial intermediation institutions, we can highlight trends and promising mechanisms.

One should agree with the opinion of Arzhaev that the Eurasian Development Bank (EADB) can become a tool for balancing financial systems and providing incentives for financial intermediation (Arzhaev, 2022). The EADB, as an integrating mechanism in the financial intermediation market of post-Soviet countries, can perform the following functions:

- Provide investment funds to countries that, for political reasons, are denied from the access to the markets of many developed countries (Russia, Belarus);
- Deepen Eurasian integration on the basis of the EAEU, which will contribute to the development of regional financial intermediaries;
- Stimulate the exchange of information competencies, ensuring technology transfer in the field of financing.

Development tools are shown in **Figure 4**.

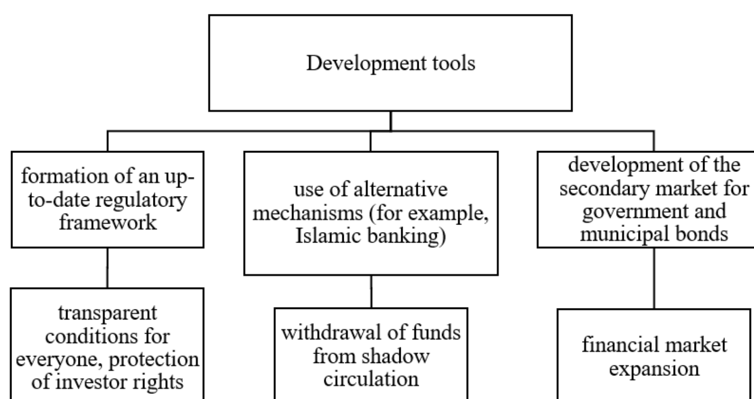

Figure 4. Universal tools for the development of financial intermediaries for post-Soviet countries.

Source: Compiled by the author.

Islamic banking needs to be promoted by launching the market for Islamic swaps, repo, and bonds.

Kazakhstan's integration of Islamic finance has diversified investment streams and reduced reliance on traditional banking, directly impacting household income stability. Kazakhstan's promotion of Islamic finance offers insights into culturally adaptive financial solutions that drive investment and stability. Such examples highlight the potential of tailored approaches to financial intermediation.

The stock exchange market can be expanded through securities issued in Central Asia.

A promising institute is market makers, whose goal is to organize trade and maintain a certain level of demand.

The following tactical measures for a universal strategy for the development of financial intermediaries are also proposed (**Figure 5**).

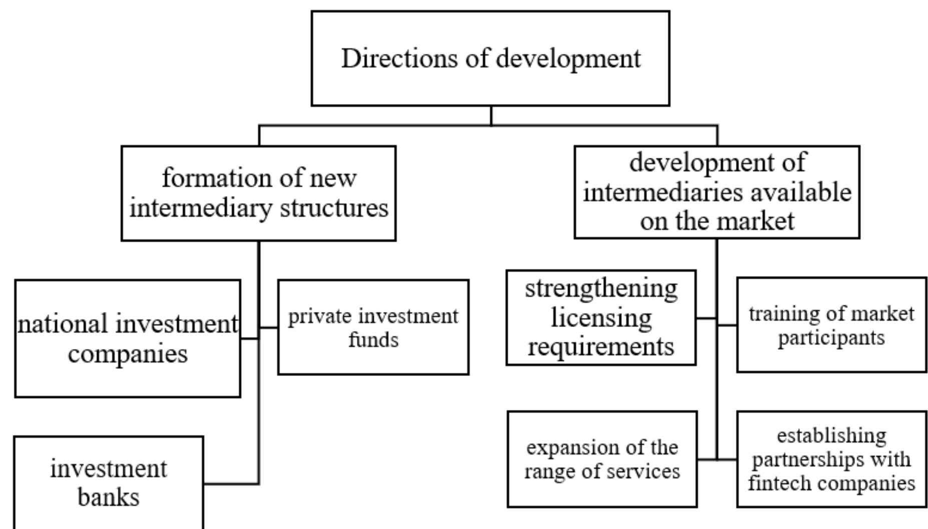

Figure 5. Tactical objectives of the strategy for the development of financial intermediaries for post-Soviet countries.
Source: Compiled by the author.

Let us first consider the opportunities that present themselves for the economic systems of post-Soviet countries if they follow the general guidelines shown above:

1) The development of modern instruments of financial intermediation will allow for the modernization of the economies of post-Soviet countries, which will create conditions for ensuring favorable dynamics of GDP growth.
2) Promotion of increased efficiency of the transformation process of household savings will increase household incomes, subject to guarantees of the safety of capital in the financial system.
3) Segmentation of the market of financial intermediaries and differentiation of services in this area will allow retail investors to manage their finances more competently in terms of distributing income over time and goals, which will increase consumer confidence in their own future and increase satisfaction with the quality of life.

4) The development of financial intermediation institutions in the stock market will attract the broad masses of the population to invest, which will increase household incomes.
5) Providing market participants, including retail investors, with a wider range of tools in the field of insurance of their own financial resources will reduce the uncertainty of the population's financial situation and provide their own "safety cushion".
6) Increasing the degree of public confidence in financial intermediaries will expand the possibilities for financing various strategically important government projects, which will contribute to the economic growth of the countries under consideration and increasing the economic potential of the financial system.
7) The development of the market for financial intermediaries will increase competition in the field of investment, which will lead to the establishment of fair pricing in financial markets; financial products will become more accessible to the population.
8) Improving the institutional conditions, including the regulatory framework, in the financial intermediation market will lead to the elimination of unscrupulous players in the financial market, which will increase the level of public confidence and increase the financial potential of the economic system, stimulating the transformation of savings into investments.

The listed consequences of managing the development of financial intermediaries will ultimately make it possible to increase the population's satisfaction with their own financial situation.

The main goal of developing the market for financial intermediaries in this case is to expand the possibilities of attracting the population to generate their own capital through the effective use of modern financial instruments. Considering this approach to the development of the financial intermediaries' market, we can say that the entrepreneurial initiative of the population will be stimulated.

The author proposes to introduce into scientific circulation the "involvement or engagement effect," which implies to an individual's satisfaction with the effect obtained because of a transaction will be higher, if he himself acted as a "generator of the idea" and was a direct participant in the transaction.

The "engagement effect" in the financial market makes it possible to use the population's potential more widely in the field of investment. The use of this effect is especially important in the markets of countries with transitioning economies, the development conditions of which are associated with high external uncertainty.

From our point of view, it is the impact of the "engagement effect" that makes so-called "green investing" so popular. The investor prefers to use investments related to investing in social projects because it increases his self-esteem. Increased attention to "green" investments is due, among other things, to the presence of an irrational factor in the choice of an investor. The prospects of this direction are indirectly confirmed by the fact that it is a priority instrument of the EADB, an institution that is designed to integrate the financial system of most post-Soviet countries (Strategy of the Eurasian Development Bank 2022–2026, 2022).

It should be noted that the financial system develops considering the trade-off between risk and return. Thus, while increasing the population's potential for income

growth, risks also increase. By expanding the opportunities for retail investors in the financial intermediary market, the state also transfers some of the risks to them. Let's look at the main areas of these risks:

1) More risks are currently associated with the instability of macroeconomic development; some post-Soviet countries are developing under conditions of ever-increasing sanctions, which have a very serious impact on the financial system. It is almost impossible for a retail investor to overcome such risks, but they can be optimized using various hedging mechanisms. This approach involves serious efforts to improve the financial literacy of the population.
2) Active involvement of the population in the investment process can provoke the use of financial instruments without due diligence, which can lead to financial collapse and bankruptcy of individuals.

4. Discussion

Lucas (1988) argues that viewing financial intermediation as a key factor in enhancing the welfare of the population, a well-developed financial system plays a crucial role in fostering both production growth and overall well-being. By facilitating access to capital for investment, such a system contributes significantly to economic prosperity. Stiglitz (2007) highlights the importance of financial inclusion and regulation in the development of the financial sector. He points to the need for a balanced approach that promotes economic growth but also considers social aspects. A former governor of the Reserve Bank of India, Rajan (2010) examines financial stability issues. He emphasizes the importance of proper risk management and regulation of financial institutions to prevent crises that could negatively impact the welfare of the population. Even though the above-mentioned researchers have different points of view on the role and significance of financial intermediation in the growth of the population's well-being, their works helps to better understand the mechanisms through which the financial system can influence economic development and social well-being.

It should be noted that the discussion about the development model of financial intermediation as a factor in increasing the well-being of the population includes different points of view.

So, Demirguc-Kunt et al. (2017), provides an overview of financial inclusion around the world and reviews the recent empirical evidence on how the use of financial products such as payments services, savings accounts, loans, and insurance can contribute to inclusive growth and economic development. Zeqiraj et al. (2022) examines the dynamic impact of institutional quality (control of corruption, government effectiveness, political stability, regulatory quality, rule of law, and voice and accountability) on financial inclusion across seventy-three developing countries. Alampay et al. (2017) analyzes the role of mobile financial services in improving financial inclusion in developing countries and their impact on economic development. One can agree with the arguments presented by the above-mentioned authors in favor of the point of view that a developed financial system provides access to loans, deposits, insurance, and other financial services for a wide range of people. This helps

them manage their finances, invest in education, health, and business, which ultimately contributes to increased wealth.

Financial intermediaries play a key role in attracting capital and directing it to projects with high profit potential. This stimulates investment, job creation and increased production, which increases national income and wealth. Research on stimulating investment and economic growth is key in economics. Piketty's (2014) work examines the impact of capital on economic growth and inequality, analyzing the various factors that determine the accumulation of capital and its impact on income distribution and the welfare of society. Barro and Sala-i-Martin (2004) analyze different growth models and the factors that contribute to increased production and wealth. The work of Pece et al. (2015) examines the mechanisms through which innovation contributes to economic growth, as well as the factors that determine its successful implementation in the economy.

Those works helps to better understand the mechanisms and factors that can contribute to increased investment and economic development.

A developed financial system can also help improve the level of financial literacy of the population. Education and financial awareness assist people to make informed financial decisions, avoid debt traps, and manage their resources effectively. Research on the development of financial literacy is an important area in modern economic science since financial literacy plays a key role in the financial well-being of individuals and society. Work by Kaise and Lusardi (2024) provides a concise narrative overview of the rapidly growing empirical literature on financial literacy and financial education. The author carried out a survey that studied the level of financial literacy of the target audience and developed guidelines for the improvement of financial literacy among the population. Lusardi and Messy (2023) explores the relationship between the level of financial literacy and the economic behavior of individuals, as well as their financial well-being. Özdemir (2022) reviews the evaluation of the literature on financial education. In Collins and O'Rourke (2012) examines the impact of financial literacy and counseling targeted to low- and moderate-income consumers. We agree with the authors' views on the importance of developing financial literacy, as well as ways to improve it to advance the financial well-being of society.

However, on the other hand, in developing countries, financial intermediation may be inaccessible to a large part of the population due to barriers in the form of high interest rates, low availability of loans, etc. This could lead to deepening inequality and widening the gap between rich and poor. So according to data for 2021 World Bank, Statistics of Key Economic Development Indicators, if in the countries of "Western Europe" up to 97% of the population use bank accounts, then in the world this figure does not reach 80%, i.e., 1.88 billion people do not use banking services. This leads to increased financial inequality, and to Merton's (1968) "Matthew effect" (Parables of the Talents) "The rich get richer, and the poor get poorer". Research on rising financial inequality is an important area in economics, especially in the context of growing differences in income and wealth. For example, Piketty (2014) analyzes long-term trends in the distribution of wealth and income and demonstrates how rising financial inequality is the result of inequality in income and capital income. Burtless and Jencks (2002) describes how the distribution of income has been changed in the

United States since the 1970s, why it has changed, and why it is more unequal than the distribution of other rich democracies. Eichengreen et al. (2021) examines the impact of financial globalization on the growth of financial inequality. They show that the in-country distributional impact of capital account liberalization is context specific, and that different types of flows have different distributional effects. Their overall impact depends on the composition of capital flows, their interaction, and on broader economic and institutional conditions. The relationship between debt, inequality and economic growth is investigated in a study by Rabie (2018). Kunieda (2008) examines the impact of financial globalization on the distribution of income and wealth.

We also note that uncontrolled growth of the financial sector can lead to financial crises that negatively affect the economy and the welfare of the population. An example is the 2008 crisis, when inadequate risk management in the financial sector led to a deep economic downturn. Financial crises can have global consequences for the economy and society. Tirole (2002) analyzes different types of financial crises, their symptoms, proposes a framework for analyzing international financial crises using the sorts of tools used in the modern theory of corporate finance. The Great Depression of 1929 and its causes, which included financial crises and poor economic policies, is explored by Galbraith (2009). Mishkin's (1991) work examines various aspects of financial crises, including their causes, consequences for the economy and financial system, and lessons that can be learned from previous crises. Kindleberger and Laffargue (1982) examines historical cases of financial crises and develops theoretical models to explain their occurrence and development. An analysis of the relationship between financial crises and financial sector regulation, as well as recommendations for improving regulation to prevent future crises, is provided in the study by Caprio (2013).

The development of financial intermediation is sometimes accompanied by a neglect of social aspects, such as financial inclusion for the most vulnerable groups of the population. Insufficient attention to social aspects in various fields, including economics, politics, and sociology, can lead to the exclusion of part of the population from the financial system and increased social tension. So, Wilkinson and Pickett (2010) discuss the social aspects of inequality and its impact on various aspects of society, such as health, education, and trust. Alekseev et al. (2002) examines social problems from an economic point of view, including ecology, inequality, poverty, and unemployment, and proposes approaches to solving them. Spicker (2014) lays out the architecture of social policy as a field of study, binding the discussion of theory to the understanding of social policy in practice. These studies help us to better understand the causes and consequences of social problems and develop strategies and policies to solve them.

5. Conclusion

The transformative potential of financial intermediation lies in its ability to mobilize savings, allocate resources efficiently, and reduce transaction costs. Yet, its success depends on the institutional landscape's maturity and adaptability to incorporate innovative tools like blockchain and decentralized finance. By addressing regulatory challenges and fostering public-private partnerships and targeted social

policies, financial systems can achieve resilience and inclusivity. Moreover, addressing systemic risks, such as economic sanctions or global market volatility, requires proactive governance and adaptive policy frameworks.

Based on the results of the study, the author proposed a concept for the model of the development of financial intermediation organizations. The author proposes to use a modern, digital approach when developing a model for the development of financial institutions. The model for the development of financial intermediation institutions in former Soviet countries, designed by the author, is an innovation that will stimulate the development of the financial market to increase the welfare of the population. The innovation in the development of financial intermediaries provides for the digital transformation of economic systems. The prerequisites for choosing a financial market model are determined based on the institutional conditions for the countries of the post-Soviet space. The choice of a set of financial market structure indicators (stability, depth, accessibility, and efficiency) is justified.

The author has developed a scheme for conducting the strategizing stage when developing a model for the development of financial intermediation institutions. Its goal is to increase the well-being of the population. The parameters for choosing a financial market model are substantiated.

Financial literacy emerges as a cornerstone for the success of financial intermediation. Educating the population about diverse financial products can bridge trust deficits and empower individuals to contribute to and benefit from the financial system. Initiatives to promote financial literacy should be integrated into national economic strategies to foster widespread engagement.

The author proposes to introduce into scientific circulation the “involvement effect”, which implies that an individual’s satisfaction with the effect obtained because of a transaction that will be higher if he himself acted as a “generator of the idea” and was a direct participant in the transaction.

The “engagement effect” in the financial market makes it possible to use the population’s potential more widely in the field of investment. The use of this effect is especially important, according to the author, in the markets of countries with transitioning economies, the development conditions of which are associated with high external uncertainty.

Further research should address several critical areas to develop and improve the financial intermediation model:

1) The impact of decentralized finance (DeFi): Understand how blockchain and decentralized finance technologies can be effectively integrated into emerging economies while managing risks associated with transparency and volatility.

2) Assess the long-term impact of financial education initiatives on economic behavior, especially in underdeveloped regions, and develop scalable frameworks for their implementation.

3) Regional differences in financial inclusion: Conduct comparative studies to understand the institutional and cultural barriers affecting financial inclusion in different post-Soviet countries.

4) Resilience in the face of global uncertainty: Explore how financial systems in emerging economies can adapt to global shocks such as economic sanctions or crises without compromising the well-being of their populations.

5) It will be interesting to explore the intersection of financial intermediation with environmental and social governance (ESG) criteria to align financial growth with sustainable development goals.

Through these research directions, the proposed model can evolve into a comprehensive framework for improving human well-being while addressing the dynamic challenges of global and regional financial landscapes.

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References

Alampay, E.A., Moshi, G.C., Ghosh, I., Peralta, M.L.C., Harshanti, J. (2017). The Impact of Mobile Financial Services in Low- and Lower Middle-Income Countries. International Development Research Centre, and Department for International Development, Ottawa, Canada, UK.

Alekseev, S.M., Sosunova, I.A., Boriskin, D.A. (2002). Ecology, Economics, Society: State, Trends, Prospects. NIA-Priroda, Moscow, ISBN 5–7844–0072–X, (in Russian).

Artemieva, N. (2020). Improvement of the financial literacy of households with a view to decreasing risks of the financial sector stability. Banking Bulletin 11, 18–26, (in Russian).

Arzhaev, F. I. (2022). Eurasian development bank as a consolidating financial instrument of the Eurasian initiative: role, opportunities, prospects. Res. Result Econ. Res. 8, 109–120, https://doi.org/10.18413/2409-1634-2022-8-1-0-11, (in Russian).

Barro, R., Sala-i-Martin, X. (2004). Economic growth. The MIT Press, London and Cambridge, ISBN 0-262-02553-1.

Bloomfield, S. (2013). Theory and Practice of. Corporate Governance: An Integrated Approach. Cambridge University Press, Cambridge.

Burtless, G., Jencks, C. (2002). American Inequality and Its Consequences. Luxembourg Income Study Working Paper Series, No. 339, https://hdl.handle.net/10419/95399.

Caprio, G. (2013). Financial regulation after the crisis: how did we get here, and how do we get out? SSRN Electron. J., https://doi.org/10.2139/ssrn.2350564.

Castro-Iragorri, C., Ramirez, J., Velez, S. (2021). Financial intermediation and risk in decentralized lending protocols. arXiv:2107.14678, https://doi.org/10.48550/arXiv.2107.14678

Cavallaro, E., Villani, I. (2022). Beyond financial deepening: rethinking the finance-growth relationship in an uneven world. Econ. Model. 116, 106009, https://doi.org/10.1016/j.econmod.2022.106009.

Cetorelli, N., Mandel, B. H., Mollineaux, L. (2012). The evolution of banks and financial intermediation: framing the analysis. Econ. Policy Rev. 18, 1–12.

Collins, J. M., O'Rourke, C. M. (2012). Still holding out promise: a review of financial literacy education and financial counseling studies. SSRN Electron. J., https://doi.org/10.2139/ssrn.2088863.

Demirguc-Kunt, A., Klapper, L., Singer, D. (2017). Financial Inclusion and Inclusive Growth: A Review of Recent Empirical Evidence. Policy Research Working Paper 8040. World Bank, Washington, DC.

Diamond, D. W. (1984). Financial intermediation and delegated monitoring. Rev. Econ. Stud. 51, 393–414, https://doi.org/10.2307/2297430.

Eichengreen, B., Csonto, B., ElGanainy, A., Koczan, Z. (2021). Financial globalization and inequality: capital flows as a two-edged sword. IMF Work. Pap. 21, 1–37, https://doi.org/10.5089/9781513566382.001.

Galbraith, J. K. (2009). The Great Crash. Houghton Mifflin Harcourt Publishing Company, New York, ISBN 978-0-395-85999-5.

Gatti, D. D., Gallegati, M., Minsky, H. P. (1994). Financial Institutions, Economic Policy, and the Dynamic Behavior of the Economy, Working Paper, No. 126, Levy Economics Institute of Bard College, Annandale-on-Hudson, NY, https://hdl.handle.net/10419/186808.

Grinberg, R .C. (2015). Russian way out of the crisis: originality versus universal trend. J. New Econ. Assoc. 2, 190–196, (in Russian).

He, Zhiguo and Li, Jian (2021). Intermediation via Credit Chains (November 10, 2021). University of Chicago, Becker Friedman Institute for Economics Working Paper No. 2021-133, November 10, 2021, Available at SSRN: https://ssrn.com/abstract=3961085 or http://dx.doi.org/10.2139/ssrn.3961085

Hodgson, G. M. (2006). What are institutions? J. Econ. Issues 40, 1–25, https://doi.org/10.1080/00213624.2006.11506879.

Hodgson, G. M., Knudsen, T. (2004). The complex evolution of a simple traffic convention: the functions and implications of habit. J. Econ. Behav. Organ. 54, 19–47, https://doi.org/10.1016/j.jebo.2003.04.001.

Kaiser, T., Lusardi, A. (2024). Financial Literacy and Financial Education: An Overview. NBER Working Paper No. 32355, April 2024, DOI 10.3386/w32355.

Kaur, S., Singh, S., Gupta, S. et al. (2023). Risk analysis in decentralized finance (DeFi): a fuzzy-AHP approach. Risk Manag 25, 13. https://doi.org/10.1057/s41283-023-00118-0.

Kim, B., Cruden, G., Crable, E.L. et al. (2023). A structured approach to applying systems analysis methods for examining implementation mechanisms. Implement Sci Commun 4, 127 (2023). https://doi.org/10.1186/s43058-023-00504-5.

Kindleberger, C. P., Laffargue, J.P. (1982). Financial Crises: Theory, History, and Policy. Cambridge University Press, Cambridge

Kolomak, E., A. (2014). The evolution of the spatial distribution of economic activity in Russia. Region: Economics and Sociology. 3 (83), 75–93, (in Russian).

Kunieda, T. (2008). Financial Globalization and Inequality. Munich Personal RePEc Archive Paper no. 11343, https://mpra.ub.uni-muenchen.de/11343/.

Laffont, J. J. (1985). On the welfare analysis of rational expectations equilibria with asymmetric information. Econometrica 53, 1–30, https://doi.org/10.2307/1911721.

Levine, R. (2002). Bank-based or market-based financial systems: which is better? J. Financ. Intermediation 11, 398–428, https://doi.org/10.1006/jfin.2002.0341.

Lucas, R. E. (1988). On the mechanics of economic development. J. Monet. Econ. 22, 3–42, https://doi.org/10.1016/0304-3932(88)90168-7.

Lusardi, A., Messy, F. A. (2023). The importance of financial literacy and its impact on financial wellbeing. J. Financ. Lit. Wellbeing 1, 1–11, https://doi.org/10.1017/flw.2023.8.

Magyar, B., Madlovich, B. (2020). The Anatomy of Post-Communist Regimes. A Conceptual Framework. Central European University Press, Budapest.

Merton, R. K. (1968). The Matthew effect in science. The reward and communication systems of science are considered. Science 159, 56–63, https://doi.org/10.1126/science.159.3810.56.

Mhlanga, D. (2022). Financial Inclusion, Social Exclusion, Social Capital, and Psychological Theories of Poverty in the Fourth Industrial Revolution. In: Digital Financial Inclusion. Palgrave Studies in Impact Finance. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-031-16687-7_16.

Minsky, H. P. (1986). Stabilizing an Unstable Economy. Yale University Press, New Haven and London.

Mishkin, F. S. (1991). Anatomy of a Financial Crisis. NBER Working Paper No. w3934. National Bureau of Economic Research.

Musabeh, A., Alrifai, K., Kalloub, M. (2020). Financial development, economic growth and welfare: evidence from emerging countries. Pressacademia 9, 118–131, https://doi.org/10.17261/pressacademia.2020.1218.

North, D. C. (1990). Institutions, Institutional Change, and Economic Performance. Cambridge University Press, New York.

Özdemir, B. (2022). Financial Literacy in Education Process: Literature Study. The Universal Academic Research Journal, 4(2), 64-70. https://doi.org/10.55236/tuara.977841.

Pece, A. M., Simona, O. E. O., Salisteanu, F. (2015). Innovation and economic growth: an empirical analysis for CEE countries. Procedia Econ. Finance 26, 461–467, https://doi.org/10.1016/s2212-5671(15)00874-6.

Piketty, T. (2014). Capital in the Twenty-First Century. Belknap Press of Harvard University Press, Cambridge

Pisarenko, Zh, V., Chernova, G., V. (2015). Financial convergence as a tool to increas the competitive ability of financial market participants. Finance and Credit 46, 10–23, ISSN: 2311-8709, (in Russian).

Pischik, V. Y. (2016). Building a capital markets union in the euro area: Projection on the EAEU with the participation of Russia. Economics. Taxes. Law, 9 (2), 60–66, (in Russian).

Pishchulov, V. M. (2021). Connecting primary investors and final borrowers is one of the most important functions of financial intermediaries. Economics: Yesterday, Today and Tomorrow 11 (11A), 167–175, DOI: 10.34670/AR.2021.99.42.020, (in Russian).

Pivovarov, I. S., Ostrovsky, D. A. (2020). Prospects of corporate governance development in joint-stock companies of EAEU countries. J. Leg. Econ. Res., 175–180, https://doi.org/10.26163/gief.2020.89.10.029, (in Russian).

Popov, E.V., Vlasov, M.V. (2013). Formal and informal institutes of inventions. Ser. Econ. Manag. 3, 4–14, (in Russian).

Rabie, M. (2018). Debt, inequality and economic growth. In: Rabie, M. (ed.) The Global Debt Crisis and Its Socioeconomic Implications, pp. 125–138. Palgrave Macmillan, Cham, DOI: 10.1007/978-3-319-66215-2_8.

Rajan, R. (2010). Fault Lines: How Hidden Fractures Still Threaten the World Economy. Princeton University Press, New Jersey, ISBN 978-0-691-14683-6.

Singh, A. (2023). The Role Of Central Banks In Managing Monetary Policy And It's Effects On The Economy. Iosr Journal Of Economics And Finance (Iosr-Jef) E-Issn: 2321-5933,P-Issn: 2321-5925.Volume 14, Issue 4 Ser. IV (July. – August. 2023), 41-53, DOI: 10.9790/5933-1404044153

Spicker, P. (2014). Social Policy: Theory and Practice. Policy Press, Bristol, p. 500, ISBN 978-1-44731-610-7.

Stiglitz, J. E. (1985). Credit markets and the control of capital. J. Money Credit Bank. 17, 133–152, https://doi.org/10.2307/1992329.

Stiglitz, J. E. (2007). Making Globalization Work. W. W. Norton, and Company, New York.

Strategy of the Eurasian Development Bank 2022–2026 [Electronic resource] (2024). Eurasian Development Bank. Available online: https://eabr.org/upload/EDB_Strategy_for_2022-2026-RU.cleaned.pdf, (accessed on 28.11.2024), (in Russian).

Sudakova, A. E. (2018). Financial literacy: From theory to practice. Conference Paper. Conference: 18th International Multidisciplinary Scientific GeoConference SGEM2018, DOI: 10.5593/sgem2018/5.4/S22.010.

Tirole, J. (2002). Financial Crises, Liquidity, and the International Monetary System. Princeton University Press, Princeton, ISBN: 9780691099859.

Turyan K. (2024). Paths for the development of financial intermediation in industry 5.0: Opportunities for developing economies (on the example of former USSR republics). Journal of Infrastructure, Policy and Development. 8(12): 9569, https://doi.org/10.24294/jipd9569.

Turyan, K. V. (2023a). Decentralized finance as a factor of growth of population welfare in post-Soviet countries. Conference Paper. Conference: Intelligent Engineering Economics and Industry 5.0 (IEEI_5.0_ECOPROM): Collection of Works of the International Scientific and Practical Conference, pp. 561–565, DOI: 10.18720/IEP/2023.4/164, (in Russian).

Turyan, K. V. (2023b). Influence of financial intermediation institutes on the welfare of the population in the post-Soviet countries: a comparative analysis. Cogent Soc. Sci. 9, https://doi.org/10.1080/23311886.2023.2252260.

Uglitskikh, O. N., Yu, E. K., Gladilin, A. A. (2017). The role of financial intermediaries in the financial market. Econ. Manag. Probl. Solut. 4, 49–53, (in Russian).

UN Framework Convention on Climate Change. Paris Agreement, United Nations (2015). Available online: https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf, (accessed on 28.11.2024).

Wilkinson, R., Pickett, K. (2010). The Spirit Level: Why Equality is Better for Everyone. Penguin, London.

Zeqiraj, V., Sohag, K., Hammoudeh, S. (2022). Financial inclusion in developing countries: do quality institutions matter? J. Int. Financ. Mark. Inst. Money 81, 101677, https://doi.org/10.1016/j.intfin.2022.101677.

Zetzsche, D. A., Arner, D. W., Buckley, R. (2020) Decentralized Finance. Journal of Financial Regulation, Volume 6, Issue 2, 20 September 2020, 172–203, https://doi.org/10.1093/jfr/fjaa010.