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The relationship between financial intermediation development and poverty levels: An empirical analysis

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Abstract

Financial intermediaries are an important part of the financial infrastructure of the country's economy, which is aimed primarily at satisfying the needs of the population. Poverty, in a broad sense, is a condition incompatible with the satisfaction of all needs. Thus, financial intermediation, by its nature, carries a toolkit that prevents the spread of poverty. A poor person is not a consumer of financial services, which encourages intermediaries to improve the welfare of citizens to increase the demand for services. The dependence of the poverty level on the development of financial intermediation is of high importance for addressing the challenges faced by developing economies. The purpose of this research is to study the directions of the relationship between the development of mediation and the level of poverty based on an empirical analysis of data on the development of the economies of post-Soviet countries. The author substantiated the need to combine private and public efforts in solving the problems of developing financial intermediation and reducing poverty. It is necessary to maintain a balance of individual and public interests when developing a policy for the development of financial intermediaries.

Keywords: Financial literacy, Impoverishment of the population, Post-soviet countries, Standard of living, Welfare of the population.

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1. Introduction

Poverty is one of the key challenges facing society, affecting the lives of millions of people around the world. This condition is characterized by a lack of material resources to meet basic needs such as food, housing, health care, and education. According to the World Bank [1] in 2021, about 9.2% of the world's population lived on less than $2.15 a day, which is considered the extreme poverty line. Nevertheless, poverty is not only a lack of money; it is also a limitation of opportunities that leads to social and economic exclusion. Poverty is a category that assesses the standard of living and well-being. Poverty involves the inability to fully meet all the needs of the population. One of the factors contributing to poverty reduction is financial intermediation, which plays an important role in providing access to credit, investment, and savings.

While absolute poverty is defined by a fixed level of income, relative poverty is measured in the context of the standard of living of a given society. Both approaches indicate that poverty is closely related to access to basic resources and financial services.

Access to financial services such as savings, credit and insurance enables poor households to manage crises effectively while also enabling them to invest in their future, such as by supporting children's education or fostering small business growth.

Even with access to financial services, low level of financial literacy remains a barrier for poor people.

The development of financial intermediation, particularly in developing countries, enhances opportunities for the population and, consequently, impacts poverty levels. Let's try to prove the hypothesis of the inverse relationship between the level of financial intermediation development and the poverty level.

Financial intermediation has a stimulating effect on investment development, the introduction of innovations into the economy, which contributes to the growth of the country's competitiveness, investment attractiveness and, accordingly, stimulates economic growth and GDP.

Financial intermediation, by increasing aggregate demand and creating additional sources of enrichment, affects the level of income of the population.

Financial intermediation is the basis for the sustainable development of the country, which includes poverty reduction [2]. The sustainability of a country's development is increasingly tied to the maturity of its financial system, with financial intermediaries at its core.

Financial intermediation is based on the introduction of modern technologies, cyber-social systems, artificial intelligence, which reduces the technological gap between developing and developed countries, laying a foundation for combating poverty [3].

The development of financial intermediation has an educational function, since the use of financial intermediaries creates a certain level of financial literacy. It has already been proven that there is a positive correlation between higher levels of education and economic sustainability [4]. Gender-sensitive policies and initiatives to eliminate educational inequalities, especially among marginalized groups, can contribute to the development of human capital. In addition, the development of financial intermediation and e-business, as well as attracting foreign investment for sustainable education and employment initiatives, can stimulate economic growth.

The relationship between the level of financial education and the level of poverty has also been proven using statistical data from Brazil. Researchers found that households led by individuals with higher levels of education are less likely to experience poverty [5].

In our view, financial intermediaries in transitioning economies should undertake rather different functions compared to those in established financial systems. Financial intermediation in developing markets should foster incentives that promote economic growth and reduce poverty.

Several authors have shown, using the experience of African countries, that households with access to basic financial services are much more likely to be non-poor than those without any access [6]. To effectively achieve the sustainable development goals target of eradicating hunger and extreme poverty globally, it is essential to provide the poor with meaningful access to financial services by developing tailored and effective financial products designed to meet their needs.

According to the research results by experts on the experience of Indonesia, it has been shown that banking intermediation in the province of East Kalimantan directly affects economic growth and the level of poverty in the region [7].

2. Materials and Methods

To substantiate the relationship between the development of financial intermediation, theoretical concepts, and methodological tools of institutional theory, the systems approach, and other modern theories are used. The named concepts provide a useful framework for studying complex interactions but have their own unique emphases and methodological principles. Institutional theory focuses on the significance of social norms, rules, and cultural aspects that influence the behavior of organizations, while the systems approach considers organizations as parts of broader interconnected systems.

Institutional theory emerged as a way of analyzing how social norms, rules, and expectations influence organizational behavior. According to this theory, organizations not only strive to maximize efficiency but also adapt to institutional norms and expectations to legitimize their activities [8].

The main principles of institutional theory are:

1. Institutional isomorphisms. DiMaggio and Powell [9] introduced the concept of isomorphisms, which describe how organizations become like each other under the influence of normative, mimetic, and coercive pressures.
2. The role of legitimacy. Organizations seek to be recognized as legitimate in their environment. This may involve adopting standards that do not always improve efficiency but promote public trust [10].
3. Institutional environment. Organizations operate in the context of a complex institutional environment that includes cultural, legal, and social factors. This environment defines the scope and constraints for the actions of organizations.

The systems approach emerged in the mid-20th century as an interdisciplinary method for analyzing complex interactions between components within a single, holistic framework. The basic idea behind the approach is that systems, whether biological, social, or organizational, should be viewed as interconnected elements operating within a larger context [11].

The main principles of the systems approach are:

1. Integrity. Systems cannot be understood by studying individual elements. The interactions and interdependencies between parts of the system are important.
2. Hierarchy of systems. Systems have a multi-level structure, where each level influences the others.
3. Feedback. The system's approach emphasizes the importance of feedback, which allows the system to adapt to changes in the external environment.
4. Adaptation and dynamics. Systems constantly interact with the environment and change in response to external and internal challenges.

Institutional theory and the systems approach differ in their emphasis but have points of intersection.

1. Both approaches recognize the importance of the external environment. Institutional theory emphasizes the cultural and normative aspects of the environment, while the systems approach emphasizes the adaptation of the system to external conditions.
2. Institutional theory focuses more on rules and social structures, while the systems approach studies the dynamic interactions between elements.
3. Institutional theory helps explain why organizations adopt certain norms even if they do not promote efficiency. The systems approach, on the other hand, is more often used to analyze processes and optimize the operation of systems.

The study uses the author's interdisciplinary approach, combining the tools of economic, social, political, psychological research, and knowledge economics [12].

The research uses statistical data on the development of post-Soviet countries for the period after the collapse of the union state. All these countries have chosen different paths of economic development and different models of financial markets, which has affected the level of well-being of the population and the level of poverty.

3. Results

Figure 1 presents the author's scheme of the relationship between the poverty level and the level of development of financial intermediation in the country. The scheme presents the relationship between poverty indicators, risk factors embedded in the financial system, state policy and the type of financial market that has been developed in the state.

The model uses three types of factors: internal (the level of economic development of the country); external and institutional.

All groups of factors are interconnected and interdependent; they all affect both the level of poverty and the level of development of financial intermediation.

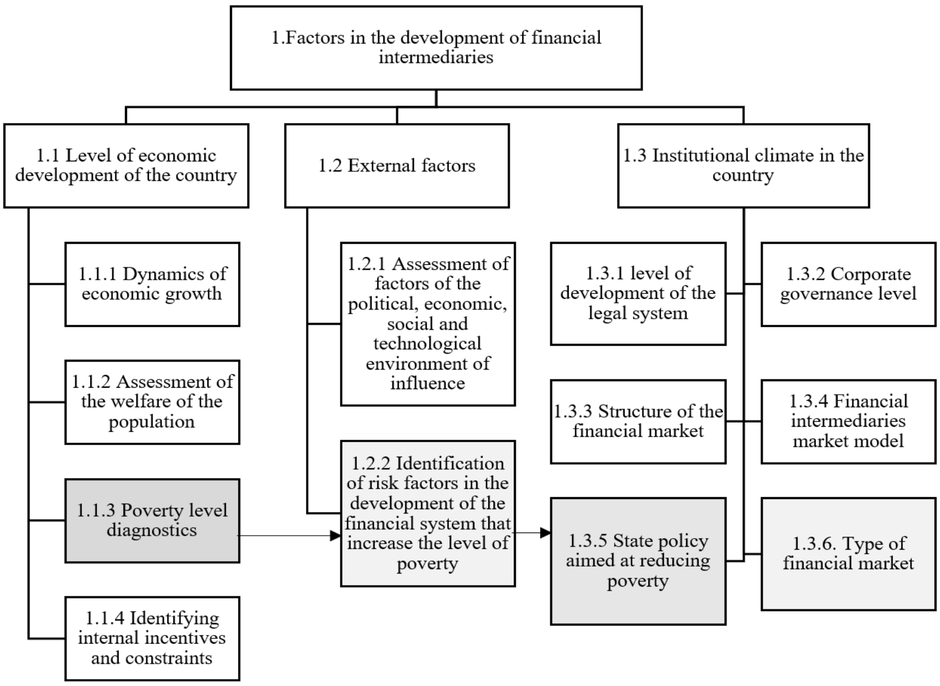

Figure 1.
Diagram of the relationship between the level of development of financial intermediation institutions and the level of poverty.

The diagram shows the direction of the poverty level's influence on state policy, the choice of the type of financial market. When developing state policy in the field of financial intermediation, it is necessary to consider possible effects. Which will be reflected in the poverty level in the country. For example, it is possible to provide for financing of private business in the form of microenterprises to maintain the standard of living of the poorest segments of the population, who have the opportunity to produce any products, grow agricultural crops.

At the stage of analyzing the dynamics of economic growth, it is necessary to track the correlation of national and global dynamics, the correlation of the stages of economic development is also important. At the stage of crisis, there is a high probability of increasing the poverty level. When assessing the well-being of the population as the main parameter, the human development index is usually used as an integral indicator of the socio-economic well-being of the population. It is important to note the importance of diagnosing the financial literacy factor to assess the degree of readiness of the population to work with new financial instruments.

Financial intermediation provides for the growth of financial literacy, since financial intermediaries, usually by advertising their own services, inform the population about new opportunities. It is important to ensure the population's trust in financial institutions, otherwise they will not be in demand [13].

Inflation expectations are an important diagnostic parameter when studying internal factors. The inflation level influences the outlook of market participants and their willingness to invest.

When examining the financial market, macroeconomic parameters are included in the analysis: changes in money supply indicators, the state's monetary policy, the key rate, lending volumes, deposit dynamics, overdue debt, etc.

When considering individual characteristics of the financial intermediation market, it is important to understand the consumer values of services and form a portfolio of offers depending on the wealth of clients [14]. When analyzing internal factors, it is important to assess the degree of competition in the market [15].

Currently, there is a wide variety of methods for analyzing data in the financial market, such as intelligent analytics and neural network programming.

When assessing external factors, it is important to identify parameters that can directly affect the poverty level. For example, the risk of "overheating" of the economy and the creation of "soap bubbles" entails the risk of bankruptcy, increased unemployment and, consequently, impoverishment of the population.

It is also necessary to consider subjective factors that influence the choice of financial instruments, as well as the desire to engage in economic activity. Cognitive distortions also occur in the financial intermediary market; investors are not always guided by rational motives. Moreover, irrationally made decisions can lead to significant mistakes and a sharp reduction in income, up to bankruptcy. The political environment can also influence economic activity and market conditions, since instability in political relations between countries can create obstacles to partnership contracts, disrupt logistics links, etc.

The assessment of public debt is of great importance for the analysis of external factors, since this parameter determines the propensity for state default, which will lead to crisis phenomena and affect the level of poverty of the population [16].

As part of the diagnostics of social parameters, demographic and social characteristics, social trends, population size and structure, and characteristics of demand for financial services are assessed.

Based on the results of the analysis, an assessment is made of the levels of risk and possible threats to the external environment, as well as the possibility of preventing threats to the country's economic security.

As a result of the formation of the institutional environment, the directions of state policy in the field of reducing the level of poverty and preventing impoverishment of the population in the future are determined. Financial intermediation from this point of view is a tool with the help of which the population can independently form its own level of well-being.

The study assessed the parameters of the population's standard of living and the level of financial intermediation development in post-Soviet countries.

Let us assess the standard of living in the post-Soviet countries. The integral indicator of human development is the Human Capital Index (HCI), which reflects life expectancy, the educational component and health status. This index has an inverse relationship with the poverty level in the country. The rating and dynamics of the post-Soviet countries, calculated by the level of the Human Capital Index, are presented in Figure 2.

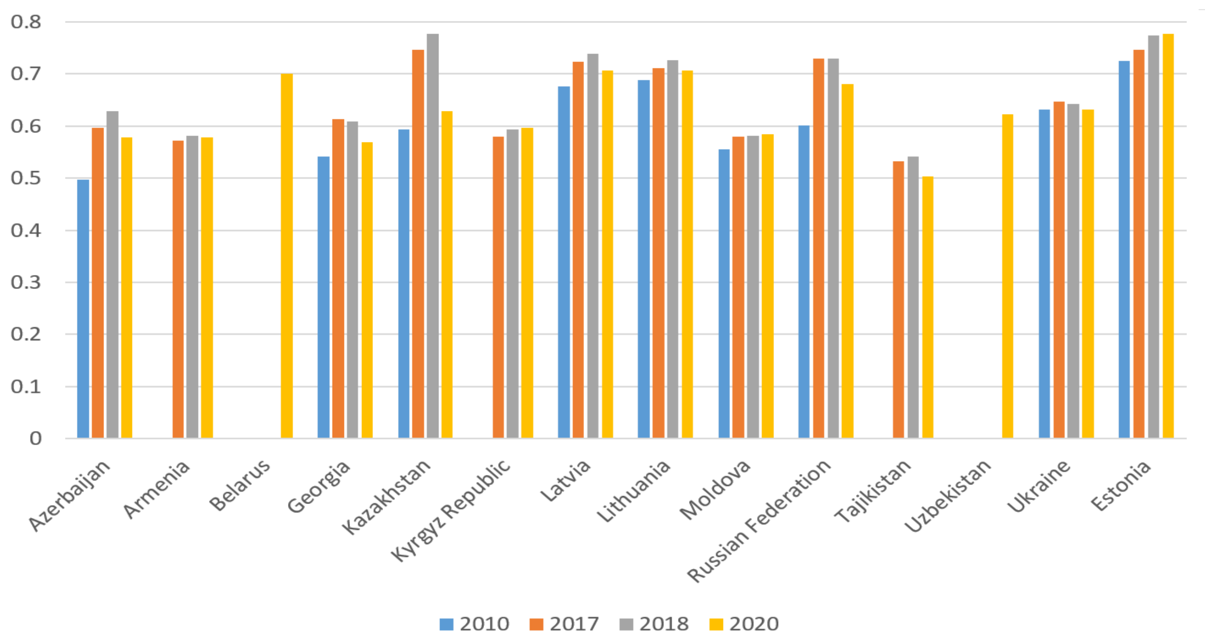

Figure 2.
Human capital index in post-Soviet countries, as of 2010, 2017, 2018 and 2020[1].

[1] https://databank.worldbank.org/id/2919eac8

The figure clearly shows that Estonia holds a leading position with an HCI of 0.777. Following Estonia, there is a group of countries with similar values but a noticeable gap: Latvia (0.707), Lithuania (0.706), and Belarus (0.700). Russia follows closely with a slightly lower HCI of 0.681.

Next, a cluster of countries—Ukraine, Kazakhstan, and Uzbekistan—has HCI values ranging from 0.631 to 0.623. It is important to note that these statistics were published prior to the onset of the special military operation. Another group of countries, including Kyrgyzstan, Moldova, Armenia, Azerbaijan, and Georgia, has HCI values between 0.597 and 0.569. Tajikistan, with an HCI of 0.504, rounds out the group of 14 countries.

A positive trend in the Human Capital Index was observed for all countries in 2017 compared to 2010 (data available for nine countries). The highest increase occurred in Kazakhstan, with a 25.6% rise, while Lithuania saw the smallest growth at 3.4%.

Between 2017 and 2018, a decline in HCI was recorded in two countries: Ukraine (0.7% decrease) and Georgia (0.8% decrease). From 2018 to 2020, negative trends were observed in nine countries, with HCI reductions ranging from 0.5% in Armenia to 19% in Kazakhstan. Conversely, only three countries—Moldova (0.4%), Estonia (0.4%), and Kyrgyzstan (0.5%)—reported HCI growth during this period.

To assess financial intermediation, we consider the number of depositors and borrowers per 1000 people in dynamics from 2010 to 2023 (Figure 3).

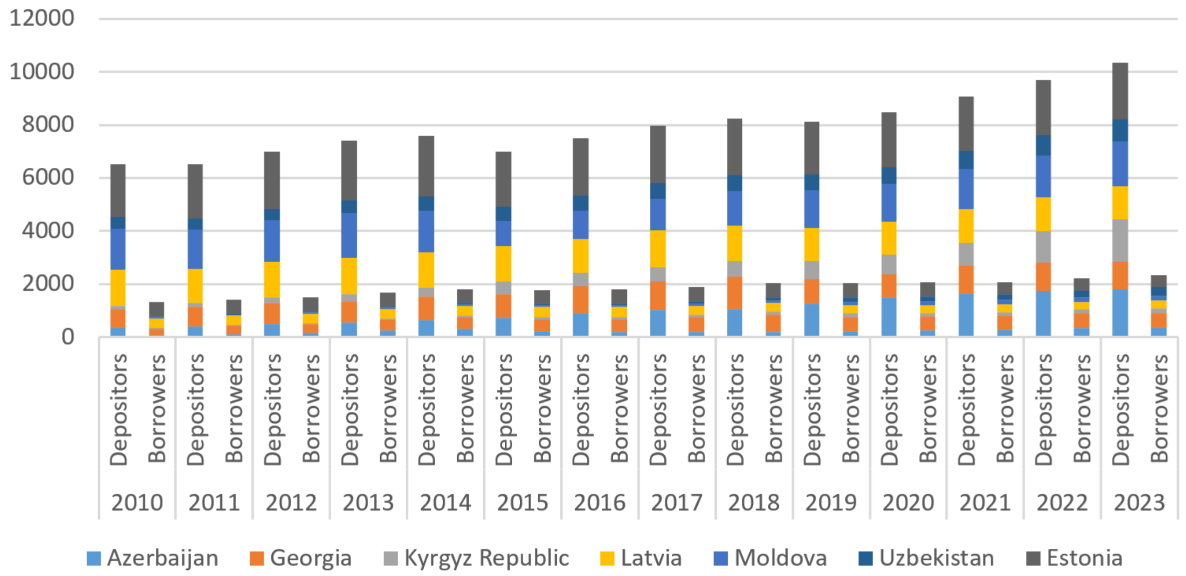

Figure 3.
Number of depositors and borrowers per 1000 people[2].

Positive dynamics are visible in all countries, with the growth (2023 compared to 2010) of the number of borrowers (74.31%) exceeding the growth of depositors (27.76%). This may be a consequence of both an increase in attracted loans due to the expectation of a subsequent deterioration in the socio-economic situation in the region and consumption outpacing the growth of welfare. Note that both aspects are in constant struggle and, in turn, depend on changes in the level of socio-economic uncertainty in society and the growth of education in the financial sector.

Thus, the growth of financial literacy can be one of the most important reasons and incentives for transferring savings from cash or gold items kept at home to bank deposits, cryptocurrencies, government bonds, and bonds of banks and large corporations, as well as an increase in the number of borrowers.

Based on the conducted diagnostics, it can be noted that statistical data show positive dynamics in both financial intermediation and population welfare indicators, which may indicate a decrease in the poverty level.

Based on the constructed model of the relationship between financial intermediation development and poverty levels, approaches are proposed to shape the vision of the financial market, enabling targeted efforts to address poverty (Figure 4).

[2] https://databank.worldbank.org/id/bd4f9337

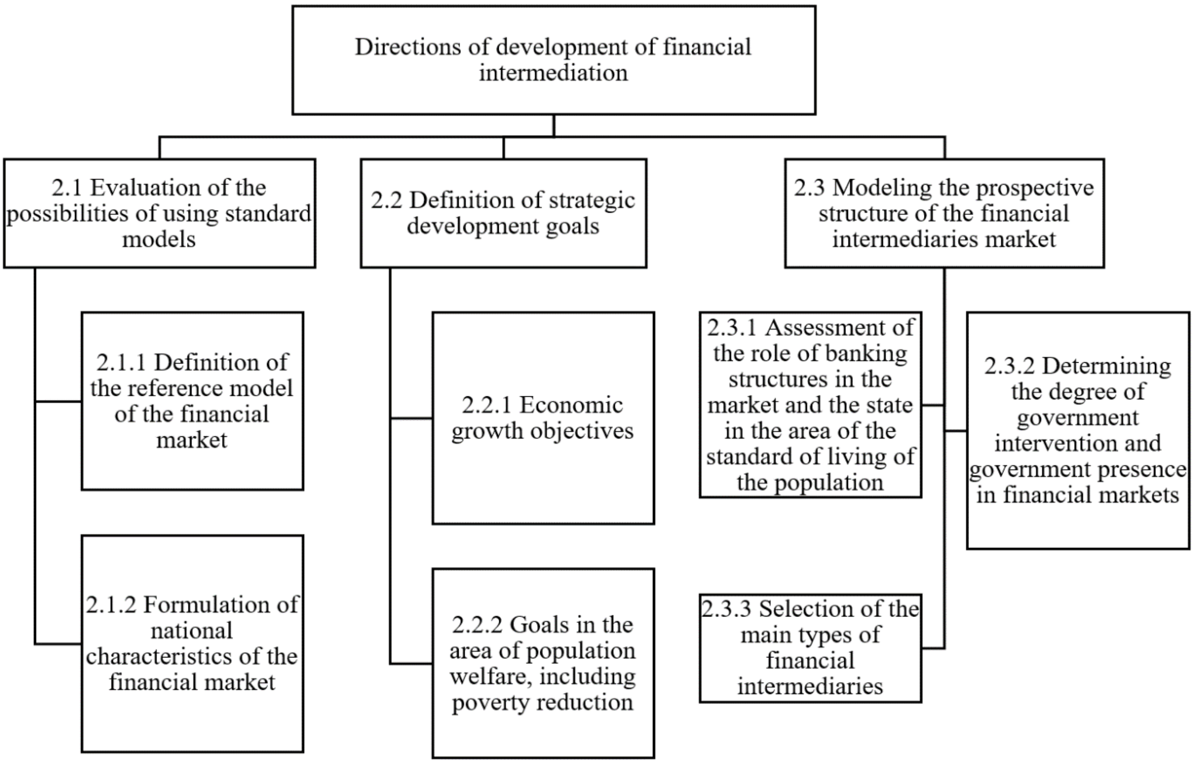

Figure 4.
Directions for the development of financial intermediation institutions and poverty reduction.

The most important part of the strategic model is the relationship between state policy in poverty regulation and the development of financial intermediation.

In this case, it is necessary to compare the models of economic development and the degree of intervention in the competitive environment in the financial market, and the possibilities of participation of financial intermediaries in poverty reduction policy.

4. Discussion

Poverty can be seen as a multidimensional phenomenon, including not only economic aspects but also social and psychological constraints. Sen Amartya, a Nobel laureate in economics, emphasized that poverty should be measured through the constraints of opportunities, not just income. He emphasized the importance of freedom and access to resources for a fulfilling life [17].

The impact of financial intermediation on the economic development of a country is obvious, since the level of development of the financial system determines the main macroeconomic parameters [18].

Microfinance has become one of the most well-known tools for combating poverty. For example, research by the Grameen Bank in Bangladesh, founded by Muhammad Yunus, showed that microcredit can significantly increase the income of poor families and improve their living conditions [19]. However, microfinance organizations often face problems with high interest rates and overindebtedness, which limits their effectiveness.

With the advancement of digital technology, there is an opportunity to reduce the gap in access to financial services for the poor. For example, mobile financial platforms such as M-Pesa in Kenya have proven effective in promoting financial inclusion. A study by Suri and Jack [20] found that the use of M-Pesa has lifted millions of Kenyan households out of extreme poverty by providing an easy and secure way to hold and transfer money.

One should agree with the opinion of Russian researchers that financial intermediation directly impacts economic growth, the efficiency of investment activities and the well-being of the population [21].

Accelerated rates of economic growth are stimulated in an economy that can accumulate “long money”.

Magwedere, et al. [22] focuses on the role of financial access, financial efficiency, and financial stability in reducing poverty. The study employs panel data analysis and finds that financial intermediation, including these financial dimensions, reduces poverty.

Levine [23] examined the role of financial development in promoting economic growth. He argued that financial intermediation improves resource allocation, facilitates savings, and reduces poverty through higher economic growth. While his work is macroeconomic, it underscores the role of financial systems in poverty alleviation.

Beck, et al. [24] found that financial development reduces poverty and inequality by providing the poor with tools for saving, investing, and managing risk. They emphasize that financial services empower marginalized groups, allowing them to participate more actively in economic activities.

The importance of financial literacy in maximizing the benefits of financial intermediation was addressed by Calcagno and Monticone [25]. Their findings suggested that educational programs significantly enhance the ability of poor households to manage savings and credit effectively.

In our view, financial intermediaries can be seen as drivers of economic growth, as they help address and resolve the disparities between individuals with surplus financial resources and entities facing a shortage of funding. Financial intermediaries provide financing on more favorable terms for investors busting economic growth. In addition, financial intermediaries create financial products that generate added value, and thus the overall income increases as well.

Currently, financial intermediaries significantly reduce the risks of unfair behavior in the market, which also affects the well-being of the population, since it reduces the level of anxiety regarding their own investments and prospects for further provision of their own life.

Despite the positive impact of financial intermediation, there are limitations. First, financial infrastructure is often inaccessible to the poor in rural and remote areas [24]. Secondly, low levels of financial literacy continue to be a significant obstacle to the effective utilization of financial services [26].

5. Conclusion

Based on the results of the study, the author proposed a model of interaction between the development of financial intermediation institutions and the level of poverty in the country. It is substantiated that financial intermediation determines the level of financial literacy of the population and involves each citizen wishing to improve their financial situation in building their own investment strategy.

Financial intermediation provides alternative opportunities for citizens to obtain additional income, which can prevent a sharp deterioration in the standard of living for the population.

An analysis of the empirical experience of post-Soviet countries has confirmed the hypothesis regarding the inverse relationship between the level of development of financial intermediation and the level of poverty.

Based on the obtained data and the generalized theoretical base, a model for the development of financial intermediation institutions was proposed, affecting public-private mechanisms aimed at reducing the level of poverty.

In accordance with the proposed model, it is necessary to correlate state policy in regulating the welfare of the population with tasks in financial intermediation. A balance must be found between private and public interests.

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