

Currency Imbalances in the Lending System and Their Impact on the Quality of Life of the Population and Social Stability



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Citation: Akyzbekova, N. I., Kuramaeva, E. D., Myrzakhatova, Z. B., Dzhenaieva, M. A., Grigoryan, A., & Baiguttiev, S. S. (2026). Currency imbalances in the lending system and their impact on the quality of life of the population and social stability. *Theoretical and Practical Research in Economic Fields*, 17(3), 797–810.

[https://doi.org/10.14505/tpref.v17.3\(39\).12](https://doi.org/10.14505/tpref.v17.3(39).12)

Article info: Received 29 March 2026;
Received in revised form 14 May 2026;
Accepted 19 July 2026;
Published 30 September 2026.

Abstract: This study investigates the multifaceted phenomenon of currency imbalances within the lending system of the Kyrgyz Republic, examining their influence on financial stability, credit accessibility, and social welfare. The paper aims to identify the structural and dynamic determinants of dollarization, temporal and denomination mismatches, and interest rate asymmetries, providing evidence-based insights for policy formulation.

A quantitative-qualitative approach was employed, combining empirical analysis of lending volumes, interest rates, and currency composition from 2020 to 2024 with a systematic assessment of structural vulnerabilities through tables capturing dollarization indicators, dynamic credit growth, and SWOT characteristics of the banking sector. Analytical frameworks integrated currency denomination, temporal alignment, interest rate structures, and regulatory oversight to evaluate systemic resilience and social impact.

The analysis reveals gradual reorientation toward national currency lending, with the FX loan share declining from 19.95 percent in 2020 to 16.25 percent in 2024, while som-denominated loans experienced sustained growth exceeding 240 percent cumulatively. Interest rate differentials widened, incentivizing foreign currency borrowing yet exposing households and enterprises to exchange rate volatility. Temporal mismatches, concentration risks, and regulatory gaps exacerbate systemic fragility, while digital lending platforms, competitive market dynamics, and state-backed credit mechanisms mitigate some vulnerabilities. Dollarization constrains monetary transmission, segments credit accessibility, and amplifies procyclical effects on asset quality.

The findings support diversified, digitally integrated banking strategies with calibrated interest rates to balance growth and risk. Targeted national currency lending and financial literacy strengthen household resilience and welfare stability.

Keywords: currency imbalances; dollarization; denomination risk; interest rate asymmetry; financial stability; social welfare.

JEL Classification: G21; G28; E44; E52; D14; I31.

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Introduction

The structure of currency denominations within a credit system plays a complex and far-reaching role in shaping socioeconomic balance, directly affecting both household welfare and the stability of society as a whole. When financial obligations are issued in foreign currencies, they introduce uneven exposure to risk, making borrowers

more vulnerable to exchange rate fluctuations and broader liquidity constraints. At the same time, the interaction between loans issued in domestic currency and debts tied to foreign currencies encourages a range of adaptive responses from economic agents, including efforts to stabilize consumption and implement informal or formal risk management strategies. These responses, in turn, influence how material well-being is distributed across different segments of the population.

Evidence from transitional and developing economies suggests that imbalances in the currency composition of debt are often associated with periods of declining household purchasing power, reduced access to essential goods and services, and growing socioeconomic inequality. Currency-related vulnerabilities also tend to spread across interconnected markets, limiting the ability of institutions to sustain macroeconomic stability. Over time, these pressures can create reinforcing cycles that contribute to social tension and instability.

A thorough understanding of these processes requires a comprehensive analytical approach that brings together monetary structures, the transmission of credit risk, and their effects on welfare outcomes. Such an approach makes it possible to more accurately assess policy tools aimed at balancing financial innovation with the need to protect and sustain living standards.

1. Literature Review

Persistent imbalances in the currency composition of lending systems act as a complex factor shaping both financial stability and social outcomes, since a high share of foreign currency-denominated loans embeds exchange rate volatility directly into the balance sheets of households and firms (Kiss, Z. L., 2024; Bénétrix, A., Demirölmez, B., & Schmitz, M., 2023). Such conditions increase systemic fragility, limit the ability of domestic economic agents to allocate resources efficiently, and heighten vulnerability to external shocks. Empirical evidence from sub-Saharan and other emerging economies indicates that interest rate adjustments alone are not sufficient to address these distortions, as the dominance of foreign currencies weakens the conventional transmission channels of monetary policy (Danquah, D. A., & Adu, K. O., 2025; Libman, E., Colodenco, M., & Waibel, M., 2024).

The social implications of dollarized lending extend far beyond purely financial indicators, affecting income distribution, access to credit, and long-term consumption behavior. In many cases, foreign currency loans are primarily directed toward export-oriented companies and large enterprises, while smaller firms and domestically focused businesses face tighter borrowing constraints. This imbalance contributes to growing inequality, particularly among low-income households that remain more exposed to financial instability (Akyzbekova, N. I. *et al.* 2025; Kneer, C., & Raabe, A., 2023). Studies of global financial imbalances and international monetary structures further show that the accumulation of foreign currency liabilities within national banking systems can translate into broader disparities in social welfare, especially when fiscal policy and reserve management mechanisms fail to adequately protect households from sudden increases in debt servicing burdens (Milesi-Ferretti, G. M., 2023; Krylova, L. V., Mudretsov, A. F., & Prudnikova, A. A., 2024; Wray, L. R., 2024).

At the same time, emerging financial instruments, including green finance initiatives and digital banking models, demonstrate potential in mitigating some of the negative effects associated with currency mismatches. By improving transparency, expanding access to domestic currency financing, and introducing more flexible risk-sharing mechanisms, these innovations contribute to more inclusive financial systems and help reduce the social costs of foreign currency exposure (Akyzbekova, N. I. *et al.* 2024; Valdecantos, S., Orzi, R., & Camargo, F. J., 2024; Bhardwaj, M., Prakash, N., & Malhotra, R. K., 2025). Furthermore, the integration of digital technologies into payment infrastructures and enterprise management systems has shown measurable benefits in strengthening the circulation of domestic currency and enhancing institutional oversight (Kozhoshev, A. O. *et al.* 2024; Zhang, B., *et al.* 2025).

2. Materials and Methods

This study uses a multidimensional analytical approach to examine currency imbalances in the lending system of the Kyrgyz Republic, combining quantitative credit data, interest rate trends, and the structural features of the banking sector. The analysis draws on official statistics covering loan volumes and interest rates issued by commercial banks in both domestic and foreign currencies from 2020 to 2024, along with institutional reports on regulatory practices, currency exposure, and risk management. The research focuses on five core dimensions of currency-related distortions: maturity mismatches, denomination mismatches, interest rate asymmetries, concentration risks, and regulatory gaps. Each of these dimensions is measured through specific indicators, including the share of foreign currency loans in total credit, weighted average interest rates, the alignment between loan maturities and borrower cash flows, and compliance with prudential standards.

The quantitative analysis relies on time-series methods to track changes in lending volumes across currencies. Loans issued in the national currency increased from 93,066.9 million soms in 2020 to 319,678.5 million soms in 2024, while weighted average interest rates rose from 17.04 percent to 19.79 percent, suggesting that credit availability expanded alongside borrowing costs. Lending in foreign currencies followed a similar upward trend, and the analysis of pricing differences between loan types sheds light on how risk is perceived and how borrowers respond under conditions of dollarization. In addition, examining the spread between interest rates on domestic and foreign currency loans helps identify pricing asymmetries and evaluate their effects on the financial stability of households and firms.

SWOT analysis was used as a qualitative approach to complement other research methods. Institutional and regulatory factors are considered through a qualitative assessment of the banking sector's infrastructure, supervisory environment, and range of financial products. The study reviews the effectiveness of digital lending platforms, the scope of branch networks, and the role of state-backed guarantee mechanisms, linking these elements to exposure to exchange rate volatility and concentration risks. This perspective makes it possible to connect outcomes at the borrower level with broader patterns of systemic resilience, highlighting how financial system design influences social well-being.

Risk transmission channels are further explored using scenario-based modeling to evaluate how exchange rate fluctuations affect debt servicing capacity, the formation of non-performing loans, and capital adequacy. The methodology incorporates an assessment of portfolio concentration, historical trends in currency depreciation, and the sensitivity of repayment burdens to foreign currency shocks. It also considers how institutions adapt over time, focusing on regulatory changes and prudential measures aimed at reducing currency exposure and supporting gradual de-dollarization.

By bringing together these quantitative and qualitative components, the study develops an integrated framework that captures the relationship between currency imbalances, lending behavior, and social outcomes. This approach provides a comprehensive basis for evaluating both the systemic and societal implications of currency composition in the Kyrgyz banking sector, while also offering practical insights for evidence-based policymaking and the design of more resilient financial instruments.

3. Application Functionality

Currency imbalances in the lending system represent a complex phenomenon that closely links the structure of finance with macroeconomic stability and broader social outcomes. Maturity mismatches occur when the timing of financial obligations does not align with borrowers' cash flow patterns, which often happens when long-term loans in foreign currency are funded by short-term external borrowing. These timing gaps increase liquidity pressure during periods of sudden capital outflows, weakening financial stability and disrupting the normal functioning of credit markets.

Denomination mismatches arise when borrowers earn income mainly in the domestic currency while their debts are tied to foreign currencies. This creates direct exposure to exchange rate fluctuations, placing an uneven burden on households and businesses. As exchange rates shift, real purchasing power declines, the likelihood of default rises, and socioeconomic inequalities tend to deepen.

Interest rate asymmetries add another layer of strain to the financial system. When foreign currency loans carry variable rates while domestic loans remain relatively fixed, borrowers face unpredictable changes in debt servicing costs. These fluctuations can spread across interconnected banking portfolios, increasing overall system fragility.

Concentration risks in foreign currency lending further heighten vulnerability, as a high share of such loans makes the system more sensitive to specific exchange rate shocks. This can trigger broader macro-financial imbalances and reduce the ability of institutions to maintain stability. At the same time, weaknesses in regulatory frameworks and gaps in supervisory oversight allow these imbalances to persist, often without adequate monitoring. As a result, currency-related risks interact with the behavior of economic agents in ways that can lead to financial stress, social tension, and a decline in overall living standards (Table 1).

Taking together, these factors point to the need for a comprehensive analytical framework that brings together currency denomination, the timing of financial obligations, interest rate structures, and the quality of institutional oversight. Such an approach allows policymakers and financial institutions to better anticipate potential vulnerabilities, develop flexible financial instruments, and strengthen resilience at the intersection of financial systems and social well-being.

Table 1. Types of currency imbalances in the lending system

Type of Currency Imbalance	Description	Causes	Potential Consequences
Maturity mismatch	Loans in foreign currency with short-term funding while borrowers have long-term obligations	Reliance on short-term external borrowing, insufficient hedging	Liquidity crises, higher refinancing risk, bank instability
Currency denomination mismatch	Borrowers' income in domestic currency while debt is in foreign currency	Dollarized lending, inadequate risk assessment	Exchange rate losses, reduced household purchasing power, increased defaults
Interest rate mismatch	Variable-rate foreign currency loans vs. fixed domestic currency liabilities	Different interest rate regimes, speculative lending	Financial stress on borrowers, higher non-performing loans
Concentration risk	High proportion of loans in one foreign currency	Excessive exposure to a single foreign currency	Systemic risk in case of exchange rate shock, macroeconomic instability
Regulatory gap imbalance	Lack of regulation for currency risk management	Weak banking regulations, insufficient oversight	Unmonitored currency risk, banking sector vulnerability, social impact

Source: developed by the authors

The banking sector of the Kyrgyz Republic reflects a mix of structural strengths and underlying vulnerabilities shaped by both its historical development and ongoing reforms. A wide branch network remains a fundamental part of the system, supporting the collection of deposits and the distribution of credit across different regions and population groups. At the same time, the gradual rollout of digital lending platforms has improved access and efficiency, making financial services more responsive and easier to use for both households and businesses.

Strong competition within the sector has encouraged banks to introduce new financial products and adapt to changing market needs, including the growing use of fintech solutions in payments and lending. In addition, state-backed guarantee programs and subsidized credit initiatives targeted at priority sectors play an important role in strengthening institutional stability. These mechanisms help reduce risks связанные with information asymmetry and limited liquidity, contributing to a more устойчивая financial environment (Table 2).

Table 2. SWOT analysis of the credit system of the Kyrgyz Republic

Strengths	Weaknesses
Developed network of banking institutions with extensive branch infrastructure	Predominance of short-term loans over long-term financing
Implementation of digital lending platforms facilitating access and efficiency	Limited diversification of currency structure in credit portfolios
High competition driving innovation in financial products	Low financial literacy among the population affecting borrowing decisions
State support through guarantees and subsidized loans for priority sectors	High concentration of credit risk in major banks
Growing adoption of fintech solutions in payment and lending processes	Limited access to credit products for micro and small enterprises
Opportunities	Threats
Expansion of mortgage, consumer, and small business lending	Exchange rate volatility increasing repayment risk for foreign currency loans
Cooperation with international financial institutions and investors	Risk of excessive foreign currency lending to households and SMEs
Adoption of advanced financial technologies to reduce operational costs	Potential deterioration of macroeconomic stability impacting credit portfolios
Development of credit rating systems and risk assessment tools	Increase in borrower insolvency and non-performing loans
Promotion of long-term financing for real sector development	Exposure to external financial crises affecting banking liquidity

Source: developed by the authors

Despite these favorable conditions, the sector still faces clear structural constraints that limit the sustainable expansion of credit. One of the main issues is the dominance of short-term lending over long-term financing, which creates a mismatch between the time horizon of investments and the schedule of debt repayments. This imbalance

increases exposure to liquidity shocks and cyclical repayment pressures. At the same time, limited diversification in the currency structure of loan portfolios leaves both banks and borrowers vulnerable to exchange rate fluctuations, especially when foreign currency debts are paired with income earned in domestic currency. Low levels of financial literacy further compound these risks, as households may struggle to accurately assess borrowing conditions and long-term obligations, increasing the likelihood of over-indebtedness and contributing to broader systemic instability through accumulated defaults. In addition, the concentration of credit risk within a small group of large banks strengthens interdependencies within the sector, reducing its ability to absorb shocks, while restricted access to financing for micro and small enterprises slows inclusive financial development and limits growth potential in underserved regions.

At the same time, there are meaningful opportunities for further development. The expansion of mortgage, consumer, and small business lending can support improvements in household welfare while also stimulating growth in productive sectors. Cooperation with international financial institutions opens access to external funding, technical expertise, and more advanced approaches to risk management. The growing integration of digital financial technologies offers additional benefits, including lower operational costs, improved monitoring, and more flexible evaluation of credit risk over time and across regions. The development of comprehensive credit rating systems and analytical tools also strengthens the ability to assess borrower solvency, encourages more responsible lending practices, and supports more efficient allocation of financial resources. Expanding long-term financing, particularly for investment purposes, helps align debt structures with economic activity, contributing to more stable credit flows and more sustainable economic growth.

At the same time, ongoing macroeconomic vulnerabilities and exposure to external shocks remain significant challenges. Exchange rate volatility continues to increase repayment risks for borrowers with foreign currency obligations, and excessive reliance on such lending for households and small businesses can lead to correlated defaults that amplify systemic risk. A deterioration in macroeconomic conditions may weaken the quality of loan portfolios, increase the share of non-performing loans, and reduce the operational capacity of financial institutions. Furthermore, the integration of the domestic banking system into regional and global financial markets creates additional exposure to external crises, potentially constraining liquidity and triggering spillover effects. These risks highlight the importance of a coordinated policy approach that aligns lending practices, strengthens financial literacy, and implements effective risk mitigation tools, ensuring that economic growth is balanced with financial stability and improvements in household welfare.

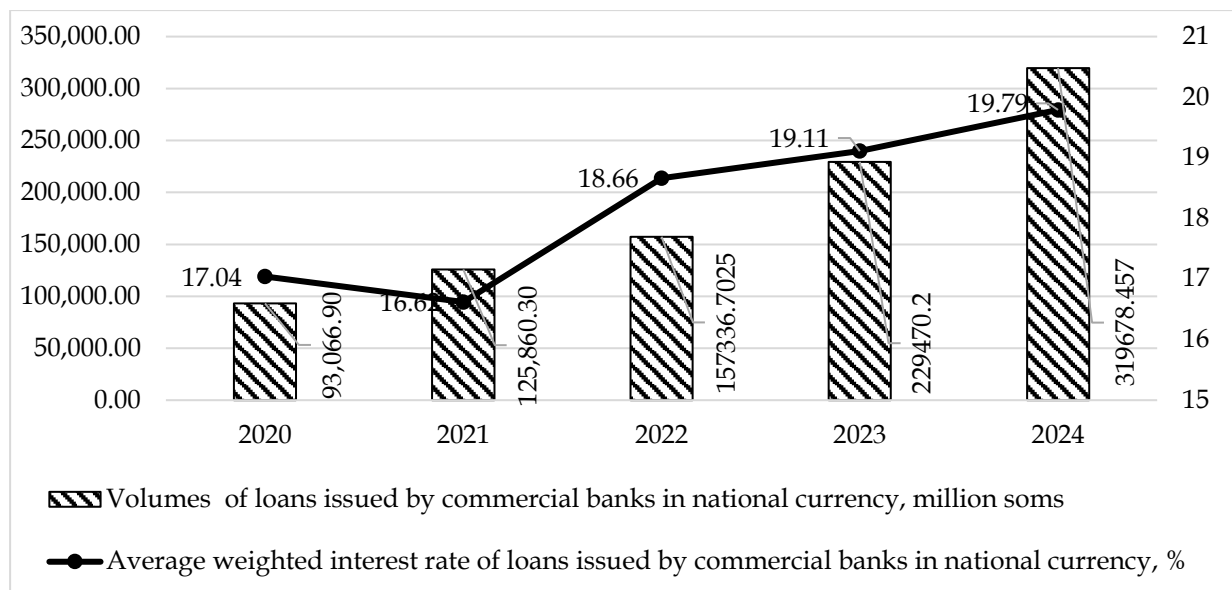
The dynamics of loan volumes and interest rates on credits issued in the national currency point to a relatively advanced stage of financial sector development. The steady expansion of lending reflects stronger domestic financial intermediation, supported by growing confidence in the national currency and adaptive behavior among economic agents. At the same time, rising interest rates indicate that banks are adjusting their pricing strategies to account for inflationary pressures, liquidity conditions, and capital requirements. The coexistence of increasing credit volumes and higher borrowing costs creates a mixed financial environment, where access to capital becomes more selective and the effects of monetary policy differ across sectors. In this context, lending in the national currency plays an increasingly important role in shaping investment decisions, influencing corporate financial strategies, and contributing to overall macrofinancial stability through ongoing interactions between credit demand, pricing signals, and regulatory frameworks.

The trend in loans issued by commercial banks in the national currency shows steady and clearly measurable growth over the period from 2020 to 2024. In 2020, total lending amounted to 93,066.9 million soms, reflecting relatively cautious credit activity amid heightened macroeconomic uncertainty. By 2021, the volume had risen to 125,860.3 million soms, representing an increase of more than 35 percent and signaling a recovery in lending demand along with a gradual normalization of domestic financial flows. This upward movement continued in 2022, when loan volumes reached 157,336.7 million soms, pointing to stronger reliance on national currency financing and further consolidation of domestic credit mechanisms. Growth accelerated significantly in 2023, with lending expanding to 229,470.2 million soms, and in 2024 the total surged to 319,678.5 million soms. Compared to 2020, this represents more than a threefold increase, highlighting a period of large-scale monetary expansion within the banking sector (Kneer, C., & Raabe, A., 2023).

Changes in interest rates add an important qualitative dimension to this analysis. In 2020, the weighted average interest rate on loans in the national currency stood at 17.04 percent and declined slightly to 16.62 percent in 2021, reflecting relatively accommodative lending conditions and competitive pressures among banks. In 2022, however, the rate rose sharply to 18.66 percent, in line with increasing inflation and higher costs of financial resources. This upward trend continued in 2023, when the rate reached 19.11 percent, and climbed further to 19.79

percent in 2024, the highest level observed during the period. This pattern suggests a tightening in risk assessment and pricing strategies within the commercial banking sector (Figure 1).

Figure 1. Volumes and interest rates of loans issued by commercial banks in national currency in the Kyrgyz Republic

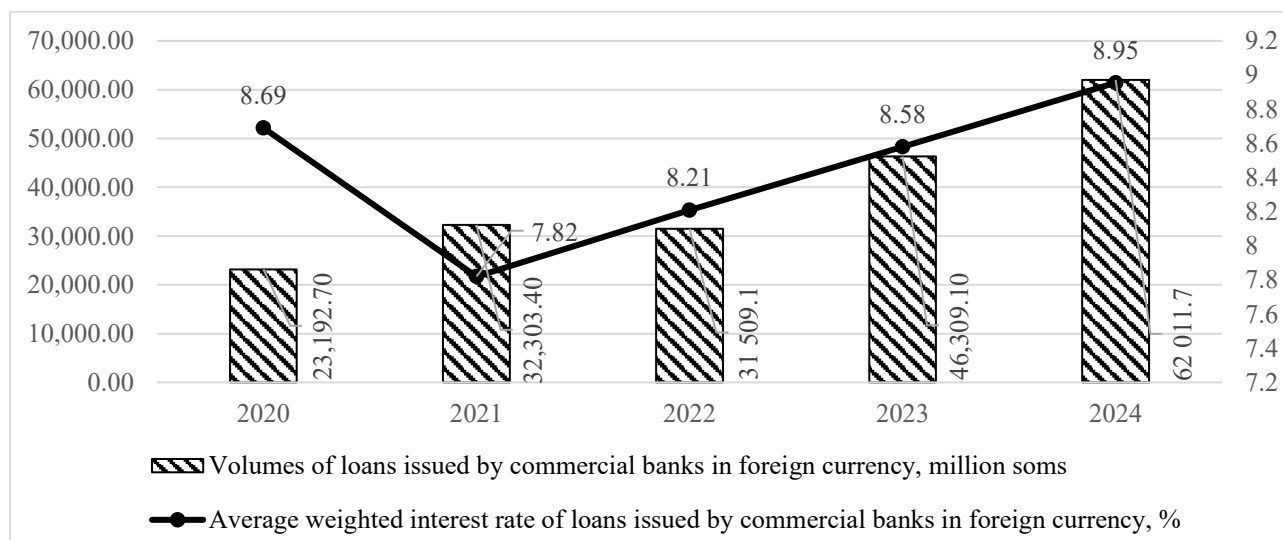


Source: Compiled by the authors based on the National Bank of the Kyrgyz Republic (Bulletin of the National Bank of the Kyrgyz Republic)

The pattern of foreign currency lending by commercial banks in the Kyrgyz Republic between 2020 and 2024 shows a clear expansion of credit activity alongside ongoing structural adjustments in the financial system. Over this period, the total volume of loans denominated in foreign currency increased from 23,192.70 million soms in 2020 to 62,011.7 million soms in 2024, nearly tripling within five years. This sharp rise points to a growing role of foreign currency instruments in the domestic lending structure and a stronger orientation toward externally linked financial flows.

At the same time, this growth was not entirely smooth. After a notable increase in 2021 to 32,303.40 million soms, lending volumes slightly declined in 2022 to 31,509.1 million soms. This temporary slowdown can be linked to heightened exchange rate volatility, geopolitical uncertainty, and more cautious risk assessment by banks. However, the trend quickly reversed, with lending rising again in 2023 to 46,309.10 million soms and reaching 62,011.7 million soms in 2024. This renewed growth likely reflects a recovery in external trade activity, stronger demand for import financing, and improved expectations regarding currency stability.

Figure 2. Volumes and interest rates of loans issued by commercial banks in foreign currency in the Kyrgyz Republic



Source: compiled by the authors based on the National Bank of the Kyrgyz Republic (Bulletin of the National Bank of the Kyrgyz Republic)

Interest rate movements over the same period were more moderate. The weighted average rate fell from 8.69 percent in 2020 to 7.82 percent in 2021, suggesting relatively favorable lending conditions and competitive pressure among banks. In 2022, the rate edged up to 8.21 percent and continued to increase gradually to 8.58 percent in 2023 and 8.95 percent in 2024. This gradual rise indicates a reassessment of currency-related risks and changing liquidity conditions in the financial system (Figure 2).

The combination of rapid growth in loan volumes and relatively stable interest rates suggests that demand-side factors played a leading role. Foreign currency lending appears to have been driven largely by corporate borrowers involved in trade-related activities, as well as by the perceived cost advantages of borrowing in foreign currency compared to loans in the national currency. At the same time, the gradual increase in interest rates toward the end of the period reflects growing sensitivity to exchange rate effects and stricter capital adequacy considerations within the banking sector.

Overall, the pattern that emerges points to a continuing shift in the currency structure of the banking system, marked by deeper integration into cross-border financial flows and a changing distribution of risk. Foreign currency lending has become more important within the system, increasing both the potential for growth and the level of exposure to external shocks. In this environment, strong macroprudential oversight and carefully designed regulatory frameworks play a critical role in maintaining financial stability and supporting balanced development across the sector.

4. Research Results

Structural Indicators of Dollarization in the Lending System of the Kyrgyz Republic were calculated using the following formulas:

$$\text{Total Portfolio} = \text{KGS Loans} + \text{FX Loans}$$

$$\text{FX Share} = \text{FX} / \text{Total} \times 100$$

$$\text{Dollarization Ratio} = \text{FX} / \text{KGS}$$

$$\text{Interest Differential} = i(\text{KGS}) - i(\text{FX})$$

The proportion of foreign currency loans within the total loan portfolio shows a gradual decline, falling from 19.95 percent in 2020 to 16.25 percent in 2024. This trend reflects a gradual shift in credit allocation toward the national currency, driven by regulatory measures and evolving institutional strategies aimed at reducing currency mismatches and limiting exchange rate exposure.

Similarly, the dollarization ratio, which measures the volume of foreign currency loans relative to national currency lending, decreased from 0.25 to 0.19 over the same period. While foreign currency lending continues to grow in absolute terms, the faster expansion of som-denominated loans indicates a structural adjustment in portfolio composition.

Table 3. Structural Indicators of Dollarization in the Lending System of the Kyrgyz Republic

Year	Total Loan Portfolio (mln soms)	FX Loan Share (%)	KGS Loan Share (%)	Dollarization Ratio (FX/KGS)	Interest Rate Differential (p.p.)
2020	116 259.6	19.95	80.05	0.25	8.35
2021	158 163.7	20.42	79.58	0.26	8.80
2022	188 845.8	16.69	83.31	0.20	10.45
2023	275 779.3	16.80	83.20	0.20	10.53
2024	381 690.2	16.25	83.75	0.19	10.84

Source: calculated by the authors based on the National Bank of the Kyrgyz Republic (Bulletin of the National Bank of the Kyrgyz Republic)

Interest rate differentials between national and foreign currency loans widened from 8.35 to 10.84 percentage points, highlighting the continued incentive for borrowers to access foreign currency credit despite systemic efforts to promote national currency lending. This widening spread captures the tension between minimizing borrowing costs for clients and the heightened exchange rate risk faced by lenders.

Overall, Table 3 illustrates a banking sector undergoing gradual transformation, with national currency loans taking an increasingly prominent role in the portfolio, while foreign currency exposure remains an important systemic factor. Interest rate patterns continue to shape borrower behavior, and the structural indicators reflect a financial system that is adapting to balance the goals of growth, stability, and effective risk management.

Lending and Dollarization indicators were calculated using the following formulas: $\text{Growth Rate} = (V_t - V_{t-1}) / V_{t-1} \times 100$

$\text{Structural Shift} = \text{FX Share}(t) - \text{FX Share}(t-1)$

National currency loans demonstrate strong and consistent growth, with annual increases ranging from 25 to 45 percent, resulting in a cumulative rise of over 240 percent across five years. This rapid expansion reflects both rising domestic demand for credit and the strengthening of monetary transmission mechanisms that favor som-denominated lending.

By comparison, foreign currency loans show greater fluctuations. After a sharp increase in 2021, volumes declined in 2022, reflecting heightened macro financial uncertainty, exchange rate pressures, or revised risk assessments by banks. Lending in foreign currency picked up again in 2023 and 2024, but growth remained more moderate than that of som-denominated loans, underscoring the sensitivity of FX lending to external economic conditions and borrower risk perceptions (Table 4).

Table 4. Dynamic Indicators of Lending and Dollarization

Year	Growth of KGS Loans (%)	Growth of FX Loans (%)	Growth of Total Portfolio (%)	Structural Shift in FX Share (p.p.)
2021	35.23	39.27	36.04	+0.47
2022	25.00	-2.46	19.40	-3.73
2023	45.85	47.03	46.03	+0.11
2024	39.33	33.91	38.41	-0.55

Source: calculated by the authors based on the National Bank of the Kyrgyz Republic (Bulletin of the National Bank of the Kyrgyz Republic)

Structural changes in the share of foreign currency loans, though modest in numerical terms, reflect periodic adjustments in the credit portfolio in response to shifting market conditions. Even small annual shifts carry systemic weight, signaling either progress in de-dollarization or the continued reliance on currency substitution.

Taken together, Table 3 presents a dynamic view of a credit system balancing expansionary pressures with currency risk management. Observed patterns of growth, contraction, and portfolio adjustment demonstrate the complex interaction between interest rate incentives, borrower behavior, and institutional strategy, highlighting the ongoing challenge of aligning credit availability with financial stability goals.

The current structure of dollarization within the Kyrgyz Republic's lending system points to a multifaceted transformation of credit relations, shaped by the persistent dominance of foreign currency instruments in bank portfolios. The substantial presence of foreign currency loans reshapes the composition of credit supply and embeds exchange rate fluctuations directly into borrower balance sheets, increasing exposure to valuation changes and reinforcing asymmetries in risk between financial institutions and economic agents. This environment influences lending decisions and encourages behaviors oriented toward currency arbitrage rather than investment-driven capital allocation.

Differences in interest rates between national and foreign currency loans create distorted pricing signals in the credit market. Lower nominal costs for foreign currency borrowing drive demand for externally denominated loans, while the limited consideration of exchange rate risk reduces the accuracy of long-term debt sustainability assessments. Consequently, the lending system develops a hybrid pricing structure, where apparent affordability underlying financial fragility and heightens sensitivity to external monetary shocks (Table 5).

Dollarization also reshapes patterns of credit accessibility by concentrating on foreign currency lending among export-oriented firms and large-scale corporate borrowers. This segmentation limits financing opportunities for domestically focused sectors and small to medium enterprises, reinforcing structural imbalances in economic development. Under these conditions, the lending system functions not only as a financial intermediary but also as a mechanism of selective resource allocation, favoring borrowers with higher currency-earning capacity rather than broader developmental priorities.

The transmission of currency risk through debt servicing channels amplifies procyclical tendencies in the financial system. Periods of national currency depreciation lead to sharp increases in debt burdens, undermining borrower solvency and deteriorating asset quality on bank balance sheets. This dynamic reduces systemic resilience and increases the banking sector's vulnerability to external shocks that domestic regulatory measures alone cannot fully address.

High levels of dollarization also limit the effectiveness of monetary policy by weakening the transmission of interest rate adjustments into credit volumes and lending behavior. Domestic monetary signals lose influence as

foreign currency–dominated portfolios respond mainly to external financial conditions, narrowing the space for countercyclical intervention. In response, regulatory authorities are forced to expand prudential frameworks to limit currency exposure and encourage a gradual shift toward national currency lending.

Table 5. Impact of dollarization on the lending system in the Kyrgyz Republic

Dimension of Influence	Manifestation within the Lending System	Structural and Economic Implications
Currency composition of loans	High share of foreign currency denominated credits alongside national currency lending	Strengthening of exchange rate sensitivity of borrower balance sheets and amplification of currency mismatch risks
Interest rate formation	Lower nominal rates on foreign currency loans compared to national currency instruments	Incentivization of foreign currency borrowing and distortion of rational risk perception among economic agents
Credit accessibility	Preferential availability of foreign currency loans for export oriented and large corporate borrowers	Segmentation of the lending market and unequal access to financial resources across sectors
Risk transmission mechanisms	Direct transfer of exchange rate volatility into credit servicing capacity	Procyclical reinforcement of financial instability during periods of currency depreciation
Monetary policy effectiveness	Reduced responsiveness of credit volumes to domestic monetary signals	Weakening of interest rate transmission and limited control over credit dynamics
Banking sector stability	Accumulation of currency induced credit risk within bank portfolios	Increased vulnerability of capital adequacy and asset quality to external shocks
Investment behavior	Orientation toward short and medium term projects with foreign currency revenue streams	Constraint on long horizon domestic investment and structural diversification
Institutional adaptation	Gradual expansion of prudential regulation targeting currency exposure	Formation of regulatory resilience and endogenous de dollarization incentives

Source: developed by the authors

Overall, the impact of dollarization on the Kyrgyz Republic's lending system creates a structurally complex environment characterized by constrained monetary autonomy, uneven access to credit, and heightened systemic sensitivity to exchange rate fluctuations. Long-term sustainability under these conditions depends on institutional capacity to build confidence in the national currency, recalibrate risk perception, and foster a lending architecture oriented toward domestic economic growth rather than external nominal stability.

A significant surge in lending occurred in 2023, with loan volumes reaching 229,470.2 million soms, followed by further expansion to 319,678.5 million soms in 2024, reflecting large-scale monetization of economic activity and intensified capital circulation. Interest rate trends complement this volume growth, signaling qualitative changes in credit pricing logic. The weighted average interest rate fell from 17.04 percent in 2020 to 16.62 percent in 2021, reflecting accommodative lending conditions and competitive pressure among banks. It then rose to 18.66 percent in 2022, 19.11 percent in 2023, and 19.79 percent in 2024, reflecting heightened risk sensitivity, inflation pass-through, and adjustments in profitability benchmarks.

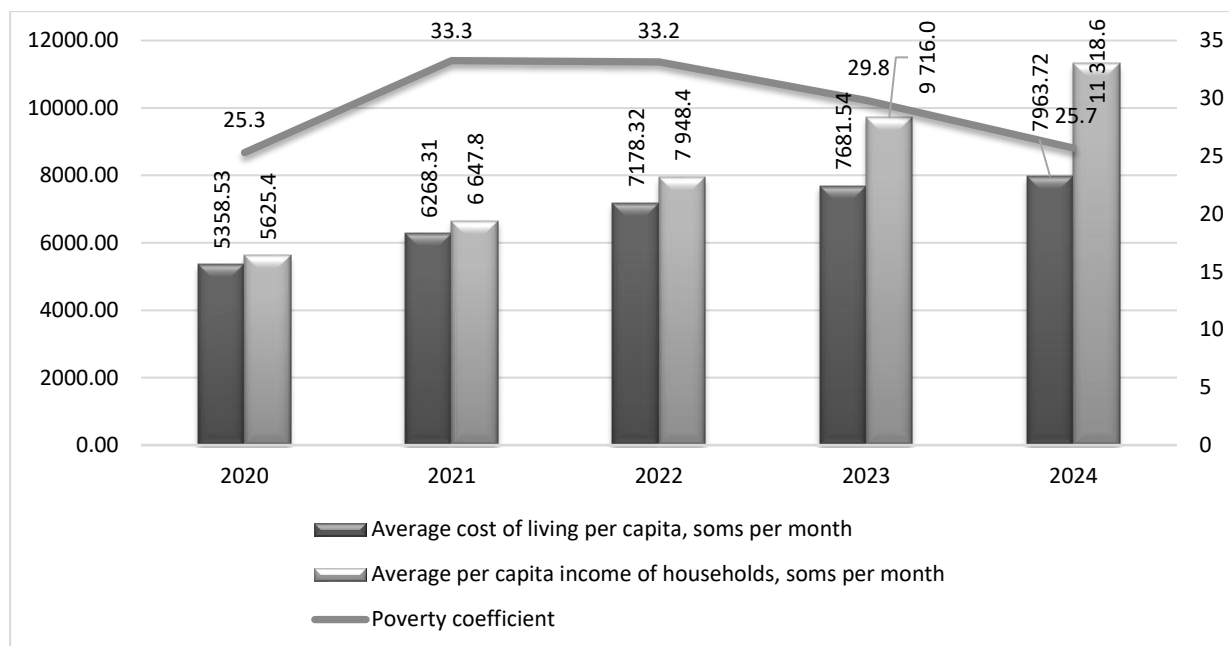
The simultaneous expansion of loan volumes from 93,066.9 million soms to 319,678.5 million soms alongside rising interest rates from 17.04 percent to 19.79 percent creates a complex credit environment in which demand-driven growth coexists with increasing borrowing costs. This environment generates differentiated access to financial resources and shapes long-term trajectories of investment activity, balance sheet management, and systemic financial stability.

The subsistence minimum, which reflects the cost of the basic consumer basket, has steadily increased from 5,358.5 soms in 2020 to 7,963.7 soms in 2024. The absolute increase over the entire period was 48.6%. However, the growth rate has consistently decreased: from 17.0% in 2021 to 14.5% in 2022, 7.0% in 2023, and only 3.7% in 2024. This trend indicates a gradual stabilization of consumer prices and a weakening of inflation expectations following the peak in the cost of living in 2021–2022, consistent with the National Bank's monetary policy measures and the global trend of slowing inflation (Figure 3).

Per capita household income is demonstrating a significantly more dynamic trajectory. Over the same period, they increased from 5,625.4 soms to 11,318.6 soms, more than doubling (an increase of 101.2%). The average annual income growth rate was approximately 19%, with the most significant acceleration observed in 2022–2023 (22.2% and 19.6%, respectively). It is important to note that income growth rates consistently exceeded the subsistence minimum growth rate, particularly in 2022–2024. This led to a steady widening of the gap between

income and the subsistence minimum: while in 2020 the excess was 267 soms (4.9% of the subsistence minimum), in 2024 it reached 3,355 soms (42.1%).

Figure 3. Indicators of the standard of living of the population of the Kyrgyz Republic



Source: compiled by the authors based on the National Statistical Committee of the Kyrgyz Republic

Such a significant excess indicates an increase in the real purchasing power of the average household, which creates objective preconditions for reducing poverty. The poverty rate, calculated as the share of the population with incomes below the subsistence level, has undergone pronounced fluctuations. In 2020, it stood at 25.3%. In 2021, there was a sharp jump to 33.3%, the highest level for the period under review. In 2022, the figure remained virtually unchanged (33.2%). However, starting in 2023, a steady decline has been observed: to 29.8% in 2023 and to 25.7% in 2024, returning to the 2020 level.

5. Discussion

The interplay of cross-border capital flows, structural misalignments in the international monetary system, and domestic banking practices intensifies the consequences of currency imbalances. Fluctuations in exchange rates, transmitted through foreign-denominated loans and global financial linkages, affect household consumption stability and investment decisions, especially in contexts of high external dependence (Eichengreen, B., & Sussman, N., 2024; Ju, J., 2025; Pantelopoulous, G., 2025; Shen, W., 2025). Analytical studies on fiscal operations and sovereign monetary authority highlight that coordinated regulatory interventions, coupled with strategic de-dollarization, are essential for bolstering resilience in both financial and social spheres (Shigehara, K., 2024; Zein, S., Clemente-Almendros, J., & Boldeanu, F., 2024; Aguila, N., Haufe, P., & Wullweber, J., 2024; Burke, J. J. A., 2024).

In this context, a gradual shift toward national currency lending, reinforced prudential oversight, and the integration of innovative banking technologies emerge as key mechanisms to stabilize credit conditions while promoting social equity. Such measures can reduce the vulnerability of households and enterprises to exchange rate shocks, alleviate inequalities caused by uneven access to credit, and improve overall quality of life through more predictable financial conditions (Avgouleas, E., & Seretakis, A., 2023; Canale, R. R., & Liotti, G., 2022; Patro, K. B., & Rao, B. M., 2024; Rodrigues, P. M. M., Sibbertsen, P., & Voges, M., 2024). Collectively, the combination of institutional innovation, macro-financial prudence, and technological integration forms a comprehensive strategy to address the complex challenges posed by currency imbalances within the lending system.

Dollarization of loans can be seen as a hedging mechanism for the banking system in conditions of high inflation (Zhao, J., Kaya, E., Ali, K. *et al.* 2025).

Conclusions

One factor that could undermine the progress made and trigger a new round of social tension is currency imbalances in the lending system. A significant portion of loans, particularly in the construction and consumer sectors, are denominated in foreign currencies, which, given the high volatility of the exchange rate, creates a

burden of unforeseen expenses for borrowers. The growth of the real debt burden in national terms reduces the purchasing power of the population, limits access to basic goods, and increases income inequality, ultimately undermining social stability.

The regulatory framework of the lending system functions as a complex mechanism shaping both economic stability and social well-being. Interventions aimed at maintaining stability within credit institutions create a predictable financial environment, protecting household resources from systemic disruptions. Through the implementation of liquidity management protocols, monitoring of capital adequacy, and calibrated adjustments to interest rates, regulatory structures reduce exposure to institutional risks and ensure continued access to financial instruments, thereby reinforcing the economic security of the population.

At the same time, expanding financial accessibility serves as a strategic enabler, encompassing microcredit programs, mortgage support, and assistance for entrepreneurial activities, particularly in the small and medium enterprise sector. These initiatives enhance household purchasing power, strengthen individual economic agency, and stimulate internal growth potential, leading to measurable improvements in the population's ability to participate in socio-economic activities (Table 6).

Table 6. Strategic directions for regulating the credit system to improve the quality of life of the population

Strategic Direction of Lending System Regulation	Mechanisms and Measures	Impact on Quality of Life of the Population
Financial Stability of Credit Institutions	Liquidity control, capital adequacy supervision, interest rate regulation	Reduces risk of bank failures, ensures predictable access to financial resources, protects household wealth
Expansion of Financial Accessibility	Microcredit programs, consumer loans, mortgages, support for SMEs	Increases purchasing power, supports entrepreneurship, enhances economic independence
Adoption of Technological Innovations	Digital banking platforms, online lending, credit scoring systems	Reduces transaction costs, accelerates access to loans, improves financial inclusion and economic mobility
Socially-Oriented Credit Policy	Interest rate subsidies, state guarantees, long-term loans for education, healthcare, housing	Strengthens social protection, enables investment in human capital, improves living standards
Legal and Consumer Protection	Transparent loan terms, information on risks, measures against predatory lending	Builds trust in financial institutions, prevents over-indebtedness, supports long-term financial security

Source: developed by the authors

The integration of technological innovations into lending practices serves as both a procedural improvement and a transformative force. Digital banking platforms, algorithm-driven credit assessments, and online transaction systems reduce operational inefficiencies, accelerate the mobilization of financial resources, and connect individuals more fully to modern financial networks. This creates a dynamic interface between households and markets, enhancing mobility, responsiveness, and access to a broader range of economic opportunities.

Socially focused credit instruments further link the regulatory framework to human capital development and welfare enhancement. Mechanisms such as interest rate reductions, government-backed loan guarantees, and targeted long-term financing for sectors like education, housing, and healthcare act as structural channels to alleviate socio-economic vulnerabilities and strengthen intergenerational equity.

Legal and consumer protection measures form a foundational layer of trust, ensuring transparency in contractual obligations, proactive disclosure of risks, and safeguards against exploitative practices. By limiting over-indebtedness and promoting informed financial decision-making, these measures support a stable and resilient connection between lending systems and individuals, fostering an environment that sustains improvements in quality of life.

Overall, the convergence of institutional stability, expanded access, technological integration, social responsiveness, and legal oversight creates a comprehensive framework through which the lending system actively shapes the socio-economic environment, driving measurable gains in financial security, social welfare, and the broader well-being of the population.

Declarations

Credit Authorship Contribution Statement:

Nelli I. Akylbekova: Conceptualization, Investigation, Methodology, Project administration, Formal analysis, Supervision, Data curation, Funding acquisition;

Elmira D. Kuramaeva: Conceptualization, Investigation, Methodology, Project administration, Formal analysis, Writing – original draft, Supervision, Data curation, Validation, Visualization, Funding acquisition;

Zhyldyz B. Myrzakhmatova: Formal analysis, Writing – original draft, Supervision, Data curation, Software, Validation, Writing – review and editing.

Maria A. Dzhenalieva: Project administration, Formal analysis, Supervision, Data curation, Validation.

Armais Grigoryan: Software, Formal analysis, Writing – original draft, Supervision, Data curation, Validation, Visualization.

Seitek S. Baiguttiev: Analysis of living standards of the population of the Kyrgyz Republic.

Declaration of Competing Interest: The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Declaration of use of generative AI and AI-assisted technologies: The authors declare that they have not used generative AI or AI-assisted technologies in the writing process before submission, but only to improve the language and readability of their paper and with the appropriate disclosure.

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