Insurance as a Means of Minimising Financial Risks in Kyrgyzstan

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Abstract. The aim of the study was to analyse insurance as an instrument of financial protection, its effectiveness and prospects in the context of the Kyrgyz economy. The study examined the dynamics of key macroeconomic, banking and insurance indicators, distinguishing observed data for 2020-2024 from forecast values used in the scenario analysis for 2025 and the period up to 2030. The empirical base consisted of official national statistical data, banking statistics, annual reports of international financial institutions and analytical reviews by international organisations. The study showed that gross insurance premiums increased from 2.8 to 5.1 billion soms between 2020 and 2024, corresponding to nominal growth of approximately 82.1%, while insurance penetration remained at approximately 1% of gross domestic product in 2024. Population coverage by insurance remained low, at approximately 8% in 2024, and the claims ratio fluctuated within the range of 35-45% during the observed period. The principal constraints included macroeconomic instability, widespread informal employment, limited financial inclusion, low institutional trust and insufficient development of long-term insurance products. Banking activity expanded concurrently: the volume of new deposits increased from 54.0 to 72.0 billion soms and new lending from 40.0 to 56.0 billion soms between 2020 and 2024, creating potential for the development of bancassurance. The findings indicate the need for coordinated measures involving institutional strengthening, public insurance programmes, financial education, digitalisation, integration with the banking sector and improvement of the analytical basis for regulatory decisions. The practical significance of the study lies in its potential contribution to public policy on financial protection through insurance mechanisms adapted to the specific institutional and socio-economic conditions of the Kyrgyz Republic.[6]

Keywords: market; protection of the agricultural sector; institutional trust; banking activity; redistribution of risks; economic accessibility of services; coverage of the economic security system.
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1. Introduction

One of the key challenges for developing national economies remains the management of financial risks under conditions of macroeconomic instability. The vulnerability of households, enterprises and the public sector to external shocks, inflationary pressure, exchange rate volatility and unstable economic growth generates the need for mechanisms of financial protection. Among these mechanisms, insurance performs an important risk-redistribution function, providing both individual and collective economic security. However, even in countries that have formally introduced a system of insurance regulation, the level of insurance penetration in the economy and society remains limited, in particular due to institutional, social and market barriers. This issue is especially relevant for transition economies such as the Kyrgyz Republic. During 2020-2024, the country's economy was characterised by a high concentration of macro-financial risks: inflation, unstable growth of Gross Domestic Product (GDP), dependence on external financing, devaluation expectations and a significant share of informal employment. Under such conditions, the majority of the population is covered neither by social insurance schemes nor by voluntary forms of financial protection. The insurance penetration indicator calculated in the present study reached approximately 1.00% of GDP in 2024, while the corresponding level in comparator economies remained substantially higher.

At the theoretical level, insurance performs both compensatory and stabilising functions. The mitigation of the effects of financial shocks for economic agents is achieved through mechanisms of risk pooling, support for long-term financial planning and the formation of trust in institutions (Simionescu and Ulbinaitė, 2021; Silagadze et al., 2019; Singhal et al., 2022). In countries with a high level of insurance coverage these factors correlate with increased economic activity, growth in savings and investment, and the development of infrastructure. In low- and middle-income countries, the potential of insurance as a risk-management instrument is often realised only partially (Shtal et al., 2023; Zheng et al., 2024). On the demand side, this is influenced by factors such as low financial literacy, mistrust of insurance companies and unstable household incomes. On the supply side, there is a limited range of insurance products, narrow geographical coverage of services and weak state support. As noted in the study by Asongu and Odhiambo (2021), in African countries information asymmetry between insurers and policyholders becomes a systemic obstacle to market development. In turn, Barry (2024) highlights social tensions between approaches that view insurance as a form of individual responsibility and those that view it as a component of collective solidarity, tensions that become particularly acute during periods of crisis.

Institutional constraints are also regarded as a critical barrier to the development of the insurance sector in low-income countries (Duisenbayeva et al., 2024; Xhafka et al., 2023). Gatome-Munyua et al. (2024) note that the absence of effective state insurance programmes in areas such as healthcare or agriculture leads to low coverage and a lack of stable demand for insurance services. At the same time, Cedric and Ronald (2025), in a study devoted to African countries, demonstrate that the development of the insurance market has a positive impact on economic complexity and diversification. The factor of expectations and trust must also be taken into account. In a context of market instability, insurance is often perceived not as a protection instrument but as an additional financial burden (Murdifin et al., 2024; Shtal et al., 2018). Marais et al. (2025) emphasise that cyclical profitability of insurers, combined with unstable state policy, generates mistrust in insurance as an institution. Therefore, even when solvent demand exists, without adequate regulatory support the market does not perform its functions effectively.

In the agricultural sector, which is particularly sensitive to climatic and market risks, the situation is similar (Trusova et al., 2020). Subedi and Kattel (2021), using the example of Nepal, showed that combining information campaigns among farmers with subsidisation of insurance premiums increases the coverage of agricultural producers by insurance products. Zhang et al. (2023) in turn highlight the influence of demographic shifts on the structure of insurance demand: population ageing, labour migration and a shrinking share of formally employed workers change consumer priorities, particularly towards health and pension insurance.

Two additional factors are particularly relevant to the Kyrgyz context. First, the literature on microinsurance indicates that the demand for formal insurance in economies characterised by low income and extensive informal employment depends not only on exposure to risk but also on affordability, trust, local institutional arrangements and the ability of households to make regular premium payments (Dror and Firth, 2014). This perspective is relevant to the Kyrgyz Republic because a large informal sector can limit access to conventional insurance products even when households remain highly exposed to financial shocks. Second, remittances constitute an important component of household finance in the country. Personal remittances received were equivalent to 17.7% of GDP in 2024 (World Bank, 2025), suggesting that migration-related income may influence both households' capacity for self-insurance and their demand for formal risk-transfer mechanisms. At the institutional level, the Kyrgyz Republic also operates within the Eurasian Economic Union, where the harmonisation of financial-market regulation includes the insurance sector and the development of conditions for access by insurance organisations to the common financial market (Eurasian Economic Commission, 2025). These factors indicate that insurance demand in Kyrgyzstan should be interpreted not only through income and financial literacy but also through informality, migration-linked income flows, alternative forms of household risk sharing and the evolving regional regulatory framework.

A synthesis of scholarly approaches reveals a systemic gap in the contemporary literature: most existing studies focus on advanced economies or countries with clearly structured social insurance systems. Far less studied are the functioning of insurance mechanisms in the context of transition economies, where macro-financial instability is coupled with institutional weakness and limited access to financial services. A separate under-researched aspect in the literature is the interaction between the level of insurance development and financial inclusion. Some researchers, such as Ofori et al. (2023), point to the importance of supply-side factors – in particular, product availability, pricing policies and distribution channels.

The aim of the present study was to analyse the effectiveness of insurance as a tool for redistributing financial risks in the Kyrgyz Republic under conditions of macro-financial instability, institutional constraints and limited financial inclusion. To achieve this aim, the following tasks were formulated: to analyse the impact of macro-financial risks and institutional factors; to assess the current state, structure and functional characteristics of the insurance market; and to examine the relationship between the development of the insurance sector and the financial system.

2. Materials and methods

The study was based on a multi-level analysis of quantitative, qualitative and forecast characteristics of the insurance market of the Kyrgyz Republic. Observed annual indicators covered the period 2020-2024. Values for 2025 used in the scenario component of the study were treated as forecast estimates because complete official data for that year were not available at the time the analytical dataset was compiled. Accordingly, observed historical trends and forecast values were analysed separately and were not interpreted as a single series of realised observations. The empirical dataset combined official national statistics, banking data, reports of international financial institutions and analytical materials of international organisations.

In the course of the work, formulae were used to determine key indicators of insurance market development, in particular (formula (1)):

$$K_{pay} = \left(\frac{\mathrm{V}_{ins}}{\mathrm{P}_{ins}}\right) \times 100\%,$$

(1)

where: K_{pay} – claims ratio (%), P_{ins} – volume of insurance premiums (soms), V_{ins} – volume of insurance claims paid (soms).

This formula was applied to assess the share of funds that insurers paid out to clients in comparison with contributions received. In this study it is used to analyse the effectiveness of the compensatory function of the insurance market over the observed 2020-2024 period (formula (2)):

$$Ch_{GPD} = \left(\frac{\mathrm{P}_{ins}}{\mathrm{GDP}}\right) \times 100\%,$$

(2)

where: Ch_{GDP} – share of insurance premiums in GDP (%), P_{ins} – volume of insurance premiums (soms).

This formula was used to compare the level of integration of the insurance sector into the economies of different countries. In the study it serves to assess the scale of the insurance market within the structure of GDP in Kyrgyzstan and in peer countries (formula (3)):

$$Ch_{life} = \left(\frac{\mathrm{V}_{tot}}{\mathrm{V}_{life}}\right) \times 100\%,$$

(3)

where: Ch_{life} – share of life insurance (%), V_{tot} – total insurance contributions (soms), V_{life} – life insurance contributions (soms).

This indicator made it possible to estimate the extent to which the market is oriented towards long-term financial products. In the study it shows the share of life insurance in the overall volume of insurance products (formula (4)):

$$\mathrm{Ch}_{pop} = \left(\frac{\mathrm{Pol}_{act}}{\mathrm{N}_{act}}\right) \times 100\%,$$

(4)

where: Ch_{pop} – share of the covered population (%), N_{act} – number of economically active population (persons), Pol_{act} – number of active insurance policies (units).

This formula was used to assess the real involvement of the population in insurance. On its basis, the share of economically active persons in Kyrgyzstan who have valid insurance contracts was determined (formula (5)):

$$\mathrm{R}_{pen} = \left(\frac{\mathrm{P}_{tot}}{\mathrm{GDP}}\right) \times 100\%,$$

(5)

where: R_{pen} – level of insurance penetration (%), GDP – gross domestic product (soms), P_{tot} – total insurance premiums (soms).

This formula was used to calculate the share of insurance premiums in the structure of GDP as a key indicator of market development. It was applied to analyse changes in this indicator in relation to banking activity and overall demand for financial services in Kyrgyzstan.

Indicators of banking and insurance activity were brought to a common scale of measurement using standard normalisation methods, which made it possible to establish a potential relationship between the level of financial inclusion and demand for insurance products. Visualisation of the results was carried out in Microsoft Excel 365 using time-series charts, histograms and structural diagrams created on the basis of consolidated annual tables. The structure of the insurance market was analysed in terms of types of contracts, geographical distribution of companies and the intensity of public participation in insurance programmes (Organisation for Economic Co-operation and Development, 2024).

A separate block of the study was devoted to a comparative analysis of the Kyrgyz Republic with other countries having a similar level of socio-economic development. Kazakhstan, Uzbekistan and Tajikistan were chosen as regional peers, while the benchmark group consisted of Central and Eastern European countries with developed insurance markets (Poland, Czechia, Lithuania, Estonia). In addition, the comparison group included low- and middle-income countries: Georgia, Mongolia, Kenya, the Philippines and Indonesia (Organisation for Economic Co-operation and Development, 2022; 2023; 2024). The analysis used both absolute indicators (total premiums, number of contracts, volume of claims paid) and relative indicators – insurance penetration in GDP, share of coverage of the economically active population, and the ratio of risk to savings-type policies. The main analytical unit was the respondent country, which made it possible to generalise the data in the form of a cross-national comparison (United Nations Development Programme, 2025).

The sample of observed statistical data included annual observations for 2020-2024. The inclusion criteria were the availability of publicly accessible reporting, comparability of the indicators used in the analysis, and the existence of a formalised insurance system in the comparator countries. Countries for which the required indicators were unavailable or insufficiently comparable were excluded from the relevant comparisons. Elements of scenario analysis were applied separately to assess possible trajectories of insurance-market development. Because complete official data for 2025 were not available when the analytical dataset was compiled, the 2025 values used in the scenario component were treated as forecast estimates rather than realised observations. These estimates were subsequently used as an intermediate point in constructing medium- and long-term scenarios up to 2030.

3. Results

3.1. Macro-financial risks and institutional preconditions of the insurance market

The macroeconomic environment of the Kyrgyz Republic during the observed 2020-2024 period generated a high concentration of financial risks that directly affected the stability of households and the ability of businesses to ensure insurance cover. The main risk factors included unstable economic growth, high inflation, a low level of formal employment, depreciation of the national currency and fiscal dependence on external financing. According to the Kyrgyzstan Country Programme Document 2023-2027 (2022), in 2021-2023 real GDP growth was uneven – from post-pandemic recovery to a slowdown caused by external geopolitical shocks. In 2023 the economic growth rate reached 7.0%, yet inflation rose in parallel, averaging 11.8% over the year. This level of inflationary pressure significantly reduced households' purchasing power, constraining long-term financial planning, including the purchase of insurance products.

A high level of informal employment remained an important structural constraint. According to the International Labour Organization (2022), informally employed workers accounted for 71.8% of total employment in the Kyrgyz Republic. This labour-market structure limits participation in contribution-based protection mechanisms and can also reduce demand for voluntary insurance because household incomes are less predictable. An additional source of vulnerability was the excessive dependence of the state budget on external financing. In 2025 more than 30% of public expenditure was covered by international donor sources, which made it impossible to implement sustainable national insurance programmes without additional external support (International Finance Corporation, 2025). In the absence of sufficient fiscal autonomy, the state cannot act as a guarantor of universal insurance cover for broad segments of the population. Financial instability also influenced households' subjective sense of security. As noted in the study by Gassmann et al. (2022), a high level of macroeconomic turbulence leads to a loss of trust in long-term institutions such as insurance companies. This further constrains the penetration of insurance products into the sphere of private risk financing.

The development of insurance in the Kyrgyz Republic is significantly constrained by weaknesses in the institutional environment. Despite the existence of formal regulation, including the Supervisory Committee of the National Bank of the Kyrgyz Republic, the actual level of integration of insurance mechanisms into the national risk-management system remains limited. One of the main challenges is the low insurance coverage of the population. According to estimates by the national regulator, the share of insurance premiums in GDP in 2023 did not exceed 1%, whereas the average for member countries of the Organisation for Economic Co-operation and Development (2024) in the same period was above 6%. This indicates a systemic inability of the market to provide an adequate level of financial risk redistribution among broad population groups.

In addition, the insurance sector is effectively isolated from other elements of the financial system. Although mandatory home insurance with guaranteed budget payments exists under the Law of the Kyrgyz Republic No. 209 "On Compulsory Insurance of Residential Premises Against Fire and Natural Disasters" (2015), effective reinsurance schemes and mutual assistance funds for small and medium-sized enterprises are still lacking. The low level of financial literacy among the population only deepens mistrust of insurance products as a risk-protection instrument. Against this background, the mechanism of risk transformation through insurance in Kyrgyzstan is not fully realised. Theoretically, insurance should ensure the redistribution of individual risk from the insured person to the insurer or to a pool of policyholders, reducing the negative consequences for a single participant at the expense of a shared reserve. This principle, known as risk pooling, is key to building a sustainable insurance market in any economy (Cole and Fier, 2025; Kerimkhulle et al., 2025b).

Table 1 presents a generalised model of the mechanism of risk redistribution through insurance, adapted to the context of the Kyrgyz Republic. It shows how financial risks arising at the level of households or enterprises are transferred to insurance companies which, in turn, may further pass on part of these risks through reinsurance or the creation of insurance funds. Depending on the level of market development, risk transformation may be complete, partial or absent.

Table 1. Structure of the redistribution of financial risks through insurance mechanisms in the Kyrgyz Republic

Source of risk	Transmission mechanism	Main actor	Secondary (optional) mechanism
Households	Purchase of an insurance policy	Insurance companies	Reinsurance
Small and medium-sized enterprises	Insurance of assets/personnel	Insurance companies	Creation of insurance funds
Agricultural producers	Insurance of crops/equipment	Private or state insurers	State guarantees/subsidies
Financial institutions	Compulsory insurance of risks	Leasing/banking companies	Reinsurance or regulatory reserves
State (public funds)	Life/health insurance programmes	State authorities	International assistance/donors

Source: compiled by the authors based on Organisation for Economic Co-operation and Development (2020; 2021; 2022; 2023; 2024; 2025); United Nations Development Programme (2025).

The presented structure demonstrates the basic logic of the functioning of the risk-redistribution mechanism in insurance. Risks arising at the level of households, enterprises or the state can be transferred to professional participants in the insurance market through the conclusion of insurance contracts. The main actor is the insurer, who performs the function of accumulating contributions and redistributing the financial consequences of risk among a broad group of insured persons. In cases of complex or excessive risks, secondary instruments are used, in particular reinsurance or the creation of reserve funds. In addition, in certain sectors – in particular in the agro-industrial complex and the social sphere – the state may act as a guarantor or subsidise insurance programmes. Such mechanisms are critical for building a resilient risk-management system in an unstable macro-financial environment characteristic of transition economies, including the Kyrgyz Republic.

3.2. Current state, structure and functioning of the insurance market

During the observed 2020-2024 period, the insurance sector of the Kyrgyz Republic operated under conditions of macroeconomic turbulence, including the consequences of the COVID-19 pandemic, inflationary pressure, changes in regulatory requirements and external economic risks. Despite these challenges, the main market indicators showed moderate growth. Gross insurance premiums increased from 2.8 billion soms in 2020 to 5.1 billion soms in 2024, corresponding to nominal growth of approximately 82.1%. The 2025 value presented in Figure 1 is a forecast estimate and is therefore not included in the calculation of historical market growth. At the same time, insurance penetration remained at approximately 1% of GDP in 2024. Insurance claims also increased during the observed period, while the claims ratio remained within the range of approximately 35-45%. This pattern may indicate limited activation of compensation mechanisms or the predominance of savings-type rather than risk-oriented insurance products.

In the structure of the insurance portfolio, voluntary property insurance remained predominant, particularly motor insurance, commercial property insurance and cargo insurance. The share of life insurance and compulsory insurance remained insignificant and did not demonstrate substantial growth.

Moreover, the population-coverage indicator calculated within the present study remained low: approximately 8% of the economically active population was covered by an active insurance contract in 2024. This level was insufficient to form a broad system of collective risk sharing. The observed dynamics of gross premiums and claims for 2020-2024, together with the forecast estimates for 2025, are summarised in Figure 1.

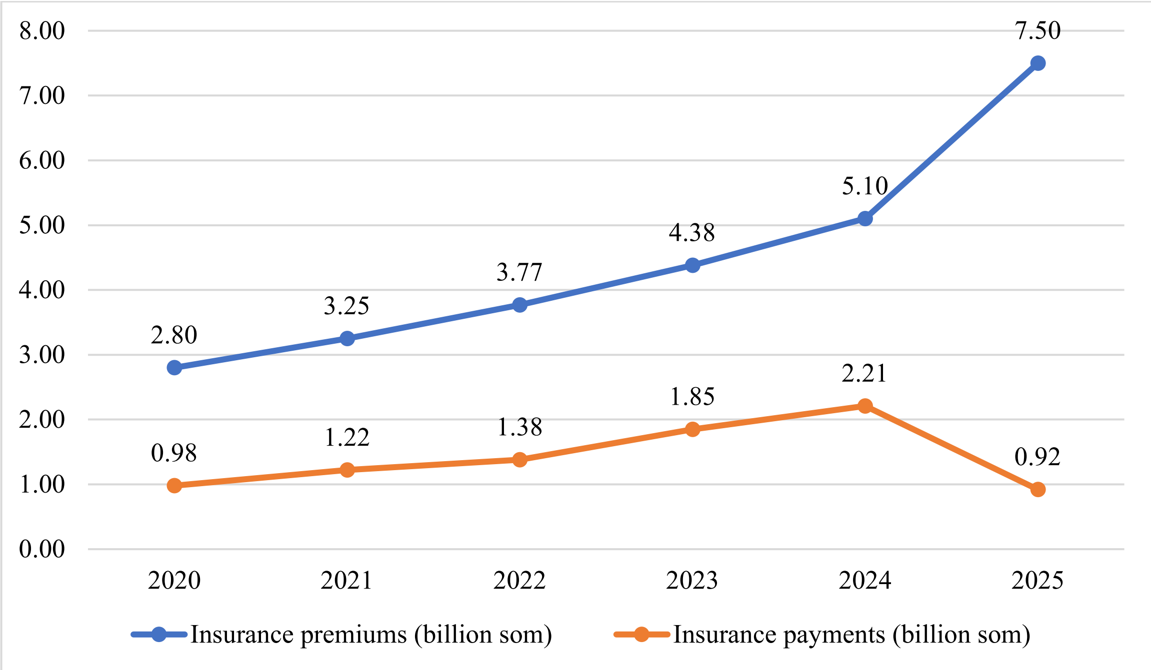

Figure 1. Dynamics of insurance premiums and claims in the Kyrgyz Republic, 2020-2024, with forecast estimates for 2025 (billion soms)

Note: Values for 2020-2024 represent the observed series used in the empirical analysis; the 2025 values are forecast estimates and are not treated as realised observations.
Source: compiled by the authors based on Organisation for Economic Co-operation and Development (2020; 2021; 2022; 2023; 2024; 2025).

The observed dynamics for 2020-2024 indicate an expansion of the insurance market. Insurance premiums increased from 2.8 billion soms in 2020 to 5.1 billion soms in 2024, corresponding to nominal growth of approximately 82.1%. Insurance claims increased from 0.98 billion soms to 2.21 billion soms over the same observed period. The claims ratio consequently remained within a moderate range of approximately 35-45%. The 2025 values shown in Figure 1 – 7.5 billion soms in premiums and 0.92 billion soms in claims – represent forecast estimates rather than realised observations. The apparent decline in claims in 2025 is therefore not interpreted as evidence of an observed market contraction or improvement in claims performance. For this reason, calculations describing the historical market trend in the present study are based on the observed 2020-2024 period.

International experience shows that an effective insurance market is one of the key elements of economic resilience and social protection. In countries with a high level of economic development, insurance is deeply integrated into the lives of both households and businesses. This not only reduces financial risks but also stimulates long-term investment, the accumulation of savings and economic growth (Moura and Oliveira, 2025; Silagadze and Beridze, 2016). One of the most important indicators of the level of development of the insurance market is the share of insurance contributions in gross domestic product. In high-income countries this indicator in 2024 exceeded 8% on average, which reflects a high degree of financial inclusion (Organisation for Economic Co-operation and Development, 2024). By comparison, in Kyrgyzstan this level was approximately 1.00% in 2024, indicating a substantial underutilisation of insurance's potential as an economic security instrument. In the European Union, North America and South-East Asia there is also a high level of population coverage by insurance policies. According to estimates by international organisations, more than 70% of households in these regions have at least one active insurance contract. This is ensured by a combination of factors such as government incentives, a developed culture of financial behaviour, a stable banking system and access to digital insurance products.

Another indicator of market maturity is the share of life insurance in the total market volume. In highly developed countries this often exceeds 50%, which indicates a long-term financial orientation of citizens and the functioning of savings instruments. In contrast, in lower-income states this segment is far less developed. Furthermore, in advanced economies the claims ratio on insured events often ranges from 60-80%, reflecting a high level of trust in insurance companies and the effectiveness of their compensation mechanisms. This is underpinned by strict regulatory standards and close supervision of market participants.

For an objective analysis of the level of development of the insurance market in the Kyrgyz Republic, it is appropriate to consider the indicators of countries with a similar socio-economic context. These include Kazakhstan, Uzbekistan and Tajikistan – Central Asian states with comparable market conditions – as well as a group of low- and middle-income countries according to international classifications. These states share common features: gradual development of the financial sector, limited financial literacy, insufficient depth of insurance services and uneven distribution of insurance instruments across sectors of the economy. At the same time, there is noticeable variation among them in population coverage by insurance products, the share of life insurance, the level of claims payment and the integration of the insurance market into macroeconomic circulation. Comparison makes it possible not only to identify the weaknesses of the Kyrgyz insurance market but also to determine directions for its development by adapting the most effective practices recorded in regional peer countries. Summary indicators are presented in Table 2.

Table 2. Comparative indicators of the insurance market of Kyrgyzstan and other countries, 2024

Country	Share of insurance premiums in GDP (%)	Claims ratio (%)	Share of life insurance (%)	Population coverage (%)
Kyrgyzstan	1.0	43	4.5	8
Kazakhstan	1.3	54	12.1	19
Uzbekistan	0.8	47	6.8	14
Tajikistan	0.7	41	3.4	10
Average for low- and middle-income countries	2.1	60	20.2	45

Source: compiled by the authors based on Organisation for Economic Co-operation and Development (2020; 2021; 2022; 2023; 2024; 2025), and International Finance Corporation (2020; 2021; 2022; 2023; 2024; 2025).

The results of the comparative analysis indicate substantial differences in the structure and level of development of the insurance markets of Kyrgyzstan, its regional neighbours and the group of countries with a similar economic profile. The table covers four key indicators: the share of insurance contributions in gross domestic product, the claims ratio, the proportion of life insurance in total contributions and the share of the population covered by insurance services. The first parameter considered – the share of insurance contributions in GDP – makes it possible to assess the level of integration of insurance into the national economy. Kyrgyzstan shows one of the lowest values among the countries compared, which reflects limited penetration of insurance mechanisms into sectors of economic activity. Against this background, Kazakhstan appears significantly more stable, demonstrating a higher level of involvement of insurance services in economic turnover. Overall, countries with similar income levels also have higher indicators. The value was calculated using Formula 2. The claims ratio, which reflects the share of contributions spent on covering insured events, is an indicator of the quality of insurers' performance and the level of trust in the market. In the Kyrgyz Republic this ratio remains at an insufficient level compared with other countries in the region. A lower level of claims payments may indicate either a low frequency of insured events or the existence of barriers to obtaining compensation in practice. Higher ratios in Uzbekistan and especially in Kazakhstan indicate a more active compensation practice and, consequently, greater public trust in insurance mechanisms. This indicator was calculated according to Formula 1.

Particular attention should be paid to the share of life insurance in the structure of the insurance market. This indicator points to the market's orientation towards long-term financial products with elements of social protection. Kyrgyzstan, like most countries in the region, is characterised by a pronounced dominance of short-term lines of business – property insurance, motor insurance and so on. Life insurance constitutes a minimal share of the overall portfolio, which indicates a low level of long-term financial planning among the population. Even in Kazakhstan, where this segment is relatively more developed, the figures are far below global averages. The calculation of the share of life insurance was carried out using Formula 3. Finally, population coverage by insurance services reflects the extent to which insurance is used as a tool for managing personal and property risks. In Kyrgyzstan this indicator remains one of the lowest, even in comparison with Uzbekistan or Tajikistan. This is explained by low financial literacy, insufficient activity of insurance companies in the regions and the absence of effective channels for distributing insurance products. Kazakhstan's figures, which are substantially higher, show that under conditions of stable market-stimulation policies and institutional support, coverage can increase even at a similar income level. This indicator was calculated according to Formula 4.

The agricultural sector of the Kyrgyz Republic remains critically important both in terms of ensuring food security and supporting employment in rural regions. At the same time, it is characterised by high vulnerability to natural and market risks, which creates an objective need for financial protection mechanisms, in particular insurance. During the observed 2020-2024 period, the country experienced slow but steady growth in the coverage of farm enterprises by insurance products. The share of such farms increased from 2.3% in 2020 to 3.1% in 2024, which indicates limited, though gradual, penetration of insurance mechanisms into the agricultural production sector.

Formal stimulation of the development of agricultural insurance is carried out through state support, the volume of which over the period under review increased from 18 million soms in 2020 to 27 million soms in 2024. However, even taking into account financial support from the state, coverage remains low, which may indicate the limited effectiveness of existing instruments. According to International Finance Corporation (2020; 2024), more than 70% of farm enterprises do not have any insurance cover, which creates substantial challenges for ensuring income stability in the event of force majeure. At the same time, the number of registered insurance claims in the agricultural sector increased from 650 incidents in 2020 to 860 in 2024, which confirms the objective need to expand compensation instruments. The growth in insured events has been accompanied by rising risks associated with climate change and instability in seasonal cycles.

In parallel with the agricultural sector, an important object of analysis is small and medium-sized enterprises (SMEs), which form the backbone of the business environment in Kyrgyzstan. Despite the fact that over 90% of registered enterprises fall into the SME category, their level of insurance protection remains low (International Finance Corporation, 2024).

Survey data show that only about 8-10% of SMEs hold a valid insurance policy, and the vast majority of such policies concern only basic forms of insurance – against fire, property damage or third-party liability. To further summarise the observed development of agricultural insurance in 2020-2024, with the 2025 forecast presented separately, Table 3 presents the relevant statistical parameters. The table contains annual values for such variables as: the share of insured farm enterprises, the volume of state support for insurance and the number of registered insurance claims in the agricultural sector.

Table 3. Key indicators of insurance in the agricultural sector of the Kyrgyz Republic, 2020-2024, with forecast estimates for 2025

Year	Share of insured farm enterprises (%)	State support for insurance (million soms)	Number of insurance claims in agriculture
2020	2.3	18	650
2021	2.5	20	700
2022	2.7	22	730
2023	3.0	25	800
2024	3.1	27	860
2025	2.6	127	771

Note: Values for 2020-2024 represent observed indicators. The 2025 row contains forecast estimates used in the scenario component of the study and should not be interpreted as realised annual outcomes.
Source: compiled by the authors based on International Finance Corporation (2020; 2021; 2022; 2023; 2024; 2025); Organisation for Economic Co-operation and Development (2020; 2021; 2022; 2023; 2024; 2025); United Nations Development Programme (2025); Food and Agriculture Organization of the United Nations (2026).

Analysis of the observed indicators for 2020-2024 shows gradual but limited expansion of agricultural insurance in the Kyrgyz Republic. The share of insured farm enterprises increased from 2.3% in 2020 to 3.1% in 2024, while state support increased from 18 million to 27 million soms. Over the same period, the number of registered insurance claims rose from 650 to 860. These changes indicate that agricultural producers became somewhat more involved in insurance mechanisms, although the overall level of coverage remained low.

The 2025 row represents a forecast scenario rather than an observed continuation of this trend. In this scenario, the share of insured farms declines to 2.6% and the number of claims to 771, whereas state support increases to 127 million soms. Because these values are modelled estimates, the marked increase in projected public support and the simultaneous decreases in the other two indicators are not interpreted as realised structural changes in the agricultural insurance market. The historical conclusions of the study are therefore based on observed data through 2024.

3.3. Interaction between insurance and the financial sector, barriers and prospects

In the modern financial system, the interrelationship between the development of the insurance sector and the banking system is regarded as a key factor in the integration of financial markets. Banking institutions, acting as the main intermediaries in the accumulation and redistribution of financial resources, simultaneously create conditions for long-term planning, which is a fundamental prerequisite for the development of insurance. Access to deposit and credit services promotes financial inclusion, increases savings, enhances the solvency of households and businesses and therefore creates a potential base for growth in demand for insurance products. During the observed 2020-2024 period, a gradual increase in the volume of bank deposits and lending can be observed. To present this dynamic clearly, Figure 2 shows changes in key financial parameters over the past five years.

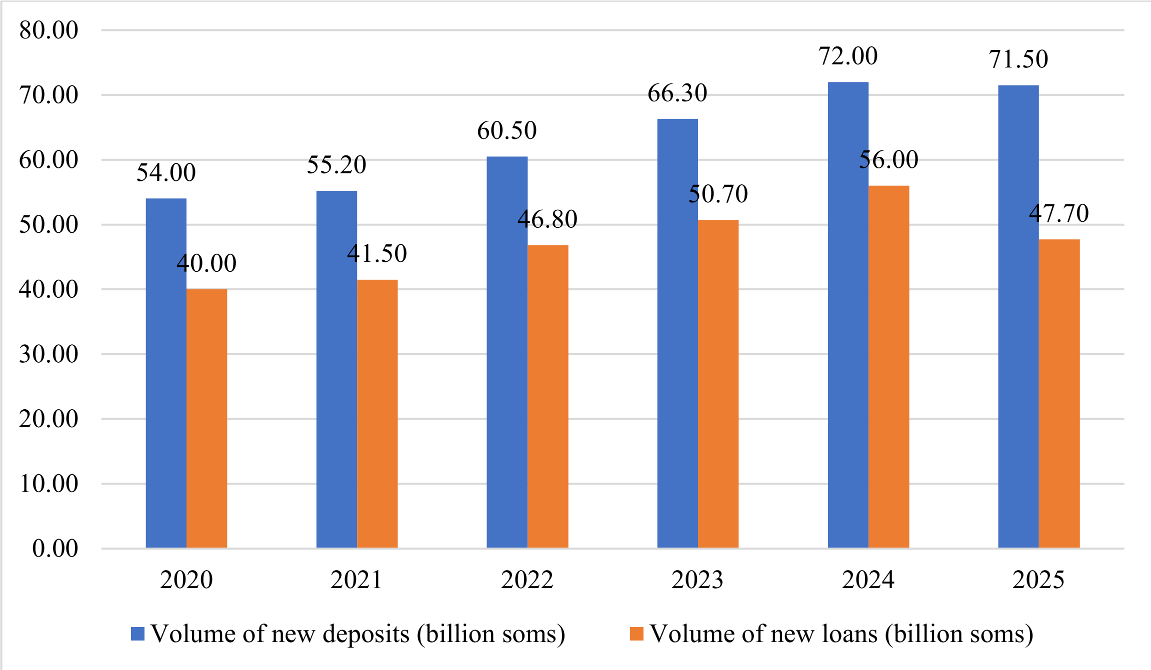

Figure 2. Dynamics of banking activity in Kyrgyzstan, 2020-2024, with forecast estimates for 2025

Note: The 2025 values are forecast estimates and are presented separately from the observed 2020-2024 banking series.
Source: compiled by the authors based on National Bank of the Kyrgyz Republic (n.d.-a; n.d.-b); Organisation for Economic Co-operation and Development (2020; 2021; 2022; 2023; 2024; 2025); International Finance Corporation (2020; 2021; 2022; 2023; 2024; 2025).

Analysis of observed banking activity in the Kyrgyz Republic over 2020-2024 demonstrates a gradual expansion of access to financial resources, although the beginning of the period was marked by instability associated with the COVID-19 pandemic. The volume of new deposits increased from 54.0 billion soms in 2020 to 72.0 billion soms in 2024, while the volume of new loans rose from 40.0 billion to 56.0 billion soms. The recovery became more pronounced from 2022 onwards, when deposits and lending increased concurrently. The values shown for 2025 – 71.5 billion soms in new deposits and 47.7 billion soms in new loans – are forecast estimates rather than realised observations. Accordingly, the projected decline in these indicators was not included in the assessment of the observed 2020-2024 banking trend.

Against this background of banking dynamics, the indicators of the insurance market also gradually increased. In particular, the penetration rate of insurance, which reflects the share of total insurance premiums in GDP (see Formula 2), also showed positive dynamics: from 0.78% in 2020 to 1.00% in 2024. Despite only minor growth in 2020-2021 (by 0.01 percentage points), associated with the crisis environment, the pace of increase accelerated in subsequent years. The rise in this indicator suggests a greater role for insurance in the economy and growing confidence in financial risk-management instruments. The coordinated dynamics of the banking and insurance sectors in the post-crisis period make it possible to assume the existence of a relationship between financial inclusion, the accumulation of funds via banking channels and the willingness of economic agents to invest in insurance products. The recovery of banking activity creates conditions for the development of voluntary insurance, especially in the segment of small business and the urban population with access to banking and digital services.

The long-term trajectory of the insurance sector in the Kyrgyz Republic will largely be determined by the quality of macro-financial management, the resilience of the banking system, the level of digitalisation of insurance products and the state's ability to provide institutional support to the market. Analysis of current trends in the relationship between banking activity and insurance makes it possible to produce a baseline forecast of insurance penetration to 2030. The period 2020-2021, marked by the consequences of the COVID-19 pandemic, was accompanied by a significant slowdown in the development of both the banking and insurance sectors. In these years the insurance penetration rate was 0.78% and 0.79% respectively, indicating limited household solvency and reduced financial activity in crisis conditions. However, from 2022 onwards the indicator began to grow steadily: 0.85% in 2022, 0.93% in 2023 and 1.00% in 2024. Thus, the average annual increase between 2022 and 2024 was approximately 0.075 percentage points per year.

If the current inertial development path is maintained, the insurance penetration rate in 2025 is expected to be around 1.07%, to reach 1.22% in 2027 and 1.45-1.50% by 2030. This scenario is based on the gradual expansion of financial inclusion, the digitalisation of insurance services and the adaptation of the regulatory framework. However, even in the positive scenario, the market will remain far below the levels of countries with a similar GDP per capita, where the penetration rate often exceeds 2-3% (Organisation for Economic Co-operation and Development, 2024). It should also be noted that the growth potential of the insurance market can be realised only if systemic barriers are overcome, including: the absence of large-scale state insurance programmes, mistrust of insurers, low public awareness of insurance products and the limited regional presence of insurance companies.

Despite the positive dynamics of certain insurance market indicators during the observed 2020-2024 period, the insurance system in the Kyrgyz Republic remains poorly effective in carrying out its basic functions. This is facilitated by a set of obstacles of a multilevel nature that manifest themselves at macro-economic, institutional, market, social and micro levels. Understanding the structure of these barriers is key to forming an effective sector-development strategy.

At the macro, or systemic, level the main barriers are associated with an unstable economic environment. These include low GDP per capita, high inflation, structural dependence of the budget on external assistance and cyclical fluctuations in economic growth. All these factors limit the financial stability of households and businesses and reduce their willingness to participate in long-term financial planning systems, including insurance. At the institutional level, key constraints include low quality of public regulation, fragmented insurance legislation and the absence of fully fledged state or mixed insurance programmes in the fields of social protection, health care, agriculture and property insurance. The existing regulatory framework does not provide for systemic interaction between insurers, the banking sector and the regulator, which prevents the development of an integrated financial market.

Market barriers lie in the structural underdevelopment of the insurance sector itself. A limited number of insurance companies operate in the country, most of them concentrated in the capital. The product line is narrow and does not meet the real needs of the population or businesses. Effective reinsurance mechanisms are lacking, which reduces insurers' capacity to assume large or systemic risks. Competition between market players is low, which does not stimulate innovation or the development of new products. At the social level, the decisive barriers are the low level of financial literacy and the absence of an established culture of using financial instruments. There is pronounced mistrust towards insurance companies, partly due to historical cases of delayed or unjustified refusals to pay claims. Moreover, a significant share of the population lives in conditions of economic uncertainty, which reduces their willingness to spend money on "preventive" instruments such as insurance. Finally, at the micro level, barriers take the form of individual constraints: low household solvency, short financial planning horizons, lack of savings and no clear motivation to protect oneself against risks. Many citizens view insurance not as a financial instrument but as an additional burden on an already limited budget. Thus, the barriers to the development of insurance in Kyrgyzstan form a hierarchical system – from global economic conditions to individual behaviour. Their interconnection and mutual reinforcement create a closed circle of limited financial participation, which requires a comprehensive approach to be broken: through regulatory reform, improved product accessibility, educational initiatives and institutional support for the market.

Taking into account the results of the empirical analysis, the dynamics of key indicators of banking and insurance activity and the forecast estimates of insurance penetration in GDP, a comprehensive set of measures has been developed to promote the sustainable development of the insurance market in the Kyrgyz Republic. The proposed measures cover six interrelated areas: institutional strengthening, development of public insurance programmes, integration with the banking system, enhancement of financial literacy, digitalisation and the creation of an analytical base for regulatory decisions. Each area is accompanied by implementation instruments that can be employed by the government and the financial-sector regulator in cooperation with international partners. Table 4 summarises the recommendations, broken down by strategic area, implementation instruments and expected future effects.

Table 4. Recommendations for improving the functioning of the insurance market in Kyrgyzstan

Area	Implementation instruments	Expected effect
Institutional strengthening	– Reform of supervision by the National Bank of the Kyrgyz Republic – Updating of insurance legislation	Strengthening trust in the market, reduction of shadow schemes
Public insurance programmes	– Pilot programmes (agricultural insurance, health insurance) – Premium subsidies	Expansion of coverage, protection of vulnerable groups
Integration with banks	– Development of bancassurance – Joint products of banks and insurer	Growth in policy sales, improved accessibility
Financial literacy	– National educational campaigns – Inclusion of the topic in education curricula	Increased demand for insurance products
Digitalisation	– Online policy sales – Unified electronic platform – InsurTech support	Process automation, broader coverage
Analytics and statistics	– Open insurance data – Monitoring of penetration rate – Research centre under the National Bank of the Kyrgyz Republic	Transparency, data-driven policy

Source: compiled by the authors.

This system of recommendations is based not only on the theoretical foundations of financial inclusion but also takes into account empirical challenges, the specific features of the Kyrgyz Republic's market and the experience of countries with a similar level of socio-economic development. Its implementation requires concerted action by the state, insurance companies, banks and international partners, with the aim of creating an effective, transparent and inclusive system of financial risk management. Coordinated implementation of the proposed measures could potentially not only strengthen protection against individual risks but also expand the role of insurance mechanisms in the structural consolidation of the country's financial system. Thus, the system of recommendations acquires significance as a tool of economic development policy that combines elements of financial security, social justice and digital transformation.

4. Discussion

The findings indicate that the limited development of insurance in the Kyrgyz Republic cannot be explained by a single macroeconomic or institutional factor. Instead, the observed pattern reflects the interaction of household income constraints, widespread informal employment, limited financial inclusion and weak institutional confidence. This interpretation is consistent with studies showing that the effectiveness of insurance in emerging and transition economies depends on the stability of household resources, the affordability of risk-transfer mechanisms and the capacity of institutions to support reliable insurance relationships (Moosavian and Goodwin, 2021; Benlagha and Hemrit, 2023; Endrejat et al., 2025). The microinsurance literature adds an important dimension to this interpretation: in informal-sector settings, demand is shaped by affordability, institutional trust and locally embedded forms of risk sharing rather than by income alone (Dror and Firth, 2014). In the Kyrgyz context, the importance of remittance income further complicates this relationship, because households may combine formal insurance, savings, family transfers and migration-linked income as alternative mechanisms for coping with financial shocks.

Institutional conditions constitute a second group of constraints. Weak coordination between insurance providers, the banking sector and public institutions reduces the capacity of the market to provide broad risk redistribution. Problems of supervision and adverse selection identified in the wider insurance literature are therefore particularly relevant to an environment in which insurance coverage remains limited (Fitriasari et al., 2024; Pauly, 2024). At the same time, experience from other emerging markets indicates that regulatory commitment and coordination between public and private actors can support the development of more effective insurance mechanisms (Ye, 2022; Li et al., 2024; Meng, 2022). For the Kyrgyz Republic, this institutional dimension also has a regional component. The ongoing harmonisation of financial-market regulation within the Eurasian Economic Union creates a broader framework in which national insurance regulation, market access and supervisory requirements are expected to evolve.

The structure of the Kyrgyz insurance market also points to a mismatch between the risks faced by households and enterprises and the products that are most developed in the market. Property insurance remains dominant, whereas life insurance, agricultural insurance and other forms of long-term protection remain comparatively weak. The regional comparison suggests that a stronger institutional environment can be associated with broader coverage and greater development of long-term insurance products, although such differences cannot be attributed to a single policy instrument. The agricultural sector illustrates the practical consequences of limited coverage particularly clearly: exposure to climatic and production risks remains high, while insurance penetration among farms is low. Previous research similarly emphasises the need to combine public support with appropriate risk-management instruments in climate-sensitive sectors (Collier and Cox, 2021; Wang et al., 2020). Small and medium-sized enterprises face related constraints, including limited product availability and restricted capacity to absorb the cost of insurance. Digital insurance may reduce transaction costs and improve accessibility, although automated risk assessment also creates potential concerns related to unequal treatment of smaller firms (Yermekova et al., 2024; van Bekkum et al., 2025).

The banking results provide a further explanation for the gap between financial-sector growth and insurance penetration. Banking activity expanded substantially during the observed 2020-2024 period, but this expansion was not matched by a comparable integration of insurance into household and business financial behaviour. This suggests that the availability of deposits, credit and digital banking infrastructure is a necessary but insufficient condition for insurance-market development. Bancassurance and digital distribution may provide channels through which existing financial infrastructure can support insurance uptake, but their effectiveness depends on trust, product suitability and regulatory coordination. This interpretation is consistent with evidence that digital transformation in adjacent financial sectors can facilitate insurance development (Shtal et al., 2021; Wang et al., 2024), while improvements in insurers' forecasting and risk-management procedures may enhance operational efficiency in emerging markets (Khalil et al., 2024; Kerimkhulle et al., 2025a).

Taken together, the findings suggest that the principal challenge for the Kyrgyz Republic is not simply to increase the nominal volume of insurance premiums but to strengthen the capacity of insurance to function as an accessible mechanism of financial protection. Macroeconomic instability and informal employment constrain demand, institutional fragmentation weakens confidence, and the narrow product structure limits the capacity of insurance to address long-term and sector-specific risks (Sinoimeri and Teta, 2026; Zarim et al., 2017). Comparative evidence also indicates that these constraints are mutually reinforcing rather than independent (Din et al., 2020; Nguyen and Lam, 2025). Consequently, market expansion requires coordinated measures involving regulation, financial education, digital infrastructure, banking-sector integration and targeted insurance mechanisms rather than isolated interventions.

In this context, the introduction of structured policies based on multi-level diagnostics is particularly relevant. The recommendations presented in Table 4 form a coherent framework for insurance-market development policy. They cover both institutional reforms (updating legislation, improving supervisory effectiveness) and practical instruments – in particular digitalisation, educational campaigns, development of public insurance and expansion of bancassurance channels. At the same time, as Kang et al. (2021) rightly note, any system of pricing and market participation requires precise analysis of risks and sensitivity to clients' behavioural patterns – which is especially relevant for countries with low financial discipline. Thus, overcoming multi-level barriers in the Kyrgyz Republic requires phased implementation of interrelated measures involving the state, the private sector, educational institutions and international partners. Only under such synergy is not only quantitative expansion of the market possible, but also a qualitative transformation of insurance – from an auxiliary financial instrument into a fully-fledged element of the economic security system.

5. Conclusions

The study indicates that the central challenge facing the insurance market of the Kyrgyz Republic is not the absence of nominal market growth but the limited capacity of insurance to operate as a broadly accessible mechanism for financial risk redistribution. During the observed 2020-2024 period, the market expanded, yet insurance penetration, population coverage and the development of long-term insurance products remained comparatively limited. The simultaneous expansion of banking activity did not translate automatically into comparable insurance participation, suggesting that broader financial inclusion alone is insufficient to strengthen insurance demand without institutional trust, suitable products and effective distribution mechanisms.

The findings further indicate that the constraints on insurance development are mutually reinforcing. Macroeconomic instability and widespread informal employment limit households' capacity for long-term financial planning; institutional fragmentation weakens confidence in insurance providers; and the concentration of the market in short-term and property-related products restricts its ability to address social, agricultural and long-term household risks. Remittance-dependent household finance and informal mechanisms of risk sharing may also influence the role assigned to formal insurance. At the institutional level, the development of the Eurasian Economic Union's common financial-market framework adds a regional regulatory dimension to the future evolution of the Kyrgyz insurance sector.

These findings support a coordinated rather than sector-specific policy response. Institutional strengthening, development of appropriate public insurance programmes, expansion of bancassurance, improvement of financial literacy, digitalisation and more transparent market statistics should be treated as complementary measures. Their effectiveness will depend on whether they improve trust, accessibility and the practical value of insurance for households, agricultural producers and small and medium-sized enterprises rather than merely increasing the nominal volume of premiums.

The limitations of the study are related to restricted access to microdata from insurance companies, incomplete official statistics for several market segments and the use of forecast estimates for 2025 in the scenario component of the analysis. The forecast values were therefore interpreted separately from the observed 2020-2024 series. Future research should examine insurance demand using household- and firm-level data and should assess more directly the roles of informal employment, remittances, microinsurance and regulatory integration in determining insurance uptake.

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