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## FINANCIAL LITERACY AS A FACTOR IN REDUCING OVER-INDEBTEDNESS: ANALYSIS OF CONSUMER LENDING RESTRICTIONS IN KAZAKHSTAN

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**Abstract.** Household over-indebtedness has become a significant socio-economic and financial stability concern in Kazakhstan amid rapid growth in consumer lending and the expansion of digital borrowing channels. In the early 2020s, consumer loans increased substantially, with notable growth rates and a rising volume of problematic household debt identified through credit registries and bureau data. In response, financial regulators, including the Agency for Regulation and Development of the Financial Market and the National Bank of Kazakhstan, introduced a comprehensive set of measures. These include debt-service-to-income limits, caps on effective interest rates and unsecured loans, real-time credit bureau reporting, biometric identification for online lending, and borrower self-exclusion tools via eGov.kz. This article examines the role of financial literacy in enhancing the effectiveness of such regulatory measures. Drawing on international empirical studies, it highlights that financial and debt literacy improve borrowing behavior and reduce exposure to high-cost credit, although the impact of financial education varies across contexts. The study proposes a mixed-method empirical approach using credit bureau data, household statistics, and national financial literacy indices. Methodologically, the study uses descriptive statistical analysis and a comparative assessment of indicators before and after the tightening of consumer lending regulation in Kazakhstan. The findings support integrating financial education with regulatory tools to reduce over-indebtedness sustainably.

**Keywords:** financial literacy, debt literacy, over-indebtedness, consumer lending regulation, debt-service-to-income (DSTI/KDN), annual effective interest rate (AEIR/GESV), credit bureaus.

**Main provisions.** This article substantiates that reducing household over-indebtedness in Kazakhstan requires an integrated approach combining regulatory restrictions and financial literacy development. It demonstrates that borrower-based measures (DSTI/KDN limits, AEIR/GESV caps, limits on unsecured lending, and strengthened credit bureau monitoring) are effective in curbing excessive credit growth, but their impact is significantly enhanced when complemented by higher levels of financial and debt literacy among the population. The study proposes an empirical framework using credit registry data, household statistics, and financial literacy indices, using descriptive and comparative analysis to assess changes in key indicators before and after regulatory tightening. The main conclusion is that sustainable reduction of over-indebtedness can be achieved through the simultaneous implementation of targeted financial education, digital borrower protection tools, and strict affordability assessment mechanisms, minimizing risks of risky borrowing and credit substitution effects.

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**Introduction.** Household over-indebtedness in Kazakhstan has become a critical socio-economic and financial stability issue in the context of rapid expansion of consumer lending and the accelerated digitalization of financial services. Over the past decade, the financial system—traditionally bank-dominated—has increasingly shifted toward retail lending, with consumer credit emerging as one of the fastest-growing segments. This expansion has been driven by the proliferation of digital lending platforms, simplified credit approval procedures, and the widespread availability of online financial services, which significantly reduced borrowing barriers and transaction costs. Consequently, access to credit has expanded to broader population groups, including financially vulnerable households, often without sufficient assessment of long-term repayment capacity. Empirical evidence indicates that consumer loans grew by approximately 40% in 2021, while around 1.5 million borrowers were identified as having problematic debt, with total liabilities amounting to approximately 1.334 billion tenge. These dynamics not only reflect the scale of household indebtedness but also signal the emergence of systemic risks associated with excessive borrowing, declining financial resilience, and potential threats to macro-financial stability.

The problem of over-indebtedness is further exacerbated by structural and behavioral factors, including relatively low levels of financial and debt literacy, income disparities, and the extensive use of unsecured and short-term credit products, particularly within the microfinance sector. Despite continued credit expansion to the population (+26.7% in 2023), a substantial share of households remains exposed to high debt burdens, multiple concurrent loans, and heightened vulnerability to economic shocks such as income volatility and inflationary pressures. Additionally, the rapid growth of non-bank financial institutions and alternative lending channels has increased the complexity and opacity of the credit market, contributing to risks of hidden over-indebtedness and regulatory arbitrage. In this context, the challenge extends beyond credit accessibility to encompass the quality of borrowing decisions and the capacity of households to manage financial obligations effectively. Therefore, the relevance of this study lies in the need for a comprehensive analysis of both regulatory measures aimed at restricting excessive consumer lending and behavioral determinants—particularly financial literacy—that shape household debt behavior and influence overall financial system stability.

The main objective of this study is to evaluate the effectiveness of these regulatory measures in reducing over-indebtedness and to determine the role of financial literacy as a complementary factor. The research addresses three key tasks: (1) to assess the relationship between financial literacy and the probability of excessive indebtedness; (2) to analyze the impact of regulatory restrictions on consumer lending dynamics and credit risk indicators; and (3) to evaluate the interaction effect between financial literacy and regulatory policies.

The study tests several hypotheses. H1: higher levels of financial and debt literacy are associated with lower probability of over-indebtedness and delinquency. H2: regulatory tightening in 2024-2025 significantly reduced high-risk lending and improved credit portfolio quality. H3: the effect of regulatory measures is stronger for financially vulnerable (low-literacy) borrowers but may lead to substitution toward alternative credit channels. H4: a combined approach integrating financial education and regulatory constraints is more effective than isolated policy measures.

The empirical analysis confirms that while regulatory measures effectively limit excessive credit growth, their long-term impact depends on the level of financial literacy. The findings support the conclusion that sustainable reduction of over-indebtedness requires a balanced strategy combining financial education, digital borrower protection tools, and strict affordability regulation, ensuring both demand-side and supply-side stabilization.



**Literature review.** Contemporary international studies consistently highlight financial literacy as a key determinant in reducing household over-indebtedness. Świecka B., analyzing generational differences in financial behavior based on survey evidence from Poland, argues that higher levels of financial literacy significantly reduce the likelihood of excessive indebtedness, particularly among younger cohorts who are more prone to impulsive borrowing decisions [1]. The author emphasizes that financial literacy functions as a protective factor against the accumulation of problematic debt. Similar conclusions are drawn by Mrnjavac Ž., Bulog I., Rimac Smiljanić A., and Pepur S., who demonstrate that financial literacy and self-efficacy play a crucial role in strengthening household financial resilience [2]. Their findings indicate that insufficient financial knowledge contributes to financial instability and increases the risk of over-indebtedness, ultimately affecting overall well-being and life satisfaction. Suharto I. and Elliyana E. focus on behavioral dimensions, showing that financial literacy combined with self-control significantly reduces the probability of excessive borrowing [3]. Their study underlines the importance of integrating financial education with behavioral tools that enhance discipline and responsible financial decision-making.

Han K., Wan J., Lao Z., and Wang X. provide empirical evidence from rural China, confirming that financial literacy has a statistically significant negative effect on over-indebtedness [4]. They argue that improved financial knowledge enhances households' ability to manage risks, optimize borrowing decisions, and maintain financial stability. Korczak D. emphasizes the preventive role of financial education, noting that increased financial literacy leads to a decline in the use of high-cost credit products, such as payday loans [5]. This suggests that financially informed individuals are less likely to engage in risky borrowing practices. Van Niekerk G. approaches the issue from a legal and behavioral perspective, arguing that although financial literacy alone may not fully eliminate over-indebtedness, it substantially mitigates its risks when combined with regulatory safeguards [6]. Hamid F.S. highlights the role of behavioral biases in consumer credit markets, demonstrating that financial literacy helps reduce irrational financial behavior and limits the probability of excessive debt accumulation [7].

Thapa B.S., Paudel M.R., and Lanzavecchia A. emphasize the importance of financial literacy programs in improving borrowers' decision-making capacity, particularly among microfinance clients [8]. Their findings suggest that financial education enhances income management and reduces vulnerability to debt traps. Srivastava A. and Saxena N. conclude that the combination of financial inclusion policies, regulatory frameworks, and financial literacy initiatives is essential for reducing inequality and preventing household financial distress [9]. Overall, the literature demonstrates that financial literacy is a critical, though not sufficient, factor in mitigating over-indebtedness. The most effective outcomes are achieved when financial education is combined with regulatory measures and behavioral interventions, forming a comprehensive approach to sustainable debt management.

Domestic researchers increasingly focus on the problem of household over-indebtedness in Kazakhstan, emphasizing its socio-economic consequences and structural determinants. Kossaumassova A., Zhadigerova O., and co-authors highlight that rising household debt levels pose significant socio-economic risks, including increased financial vulnerability and regional disparities [10]. Their study identifies that regions such as North Kazakhstan and Turkistan demonstrate higher exposure to over-indebtedness, partly due to lower levels of financial literacy and income instability.

Ziwei L. and Nizamdinova A. examine the role of behavioral finance tools in financial decision-making in Kazakhstan [11]. The authors argue that financial literacy is closely



associated with more rational borrowing behavior, including early repayment strategies and reduced interest costs. They emphasize that insufficient financial knowledge contributes to suboptimal financial choices and increases the likelihood of excessive debt accumulation. Zh. Z.G. and Yessen A. focus on younger cohorts, particularly Generation Z, analyzing behavioral and institutional factors influencing debt burden [12]. Their findings suggest that early exposure to credit products, combined with limited financial literacy, leads to increased reliance on microfinance and consumer loans, thereby raising the risk of long-term over-indebtedness among young borrowers. Zholdasbekova G. and Kupeshova B. provide a comprehensive analysis of socio-economic factors affecting household credit behavior in Kazakhstan [13]. The authors conclude that financial literacy is one of the key determinants influencing borrowing decisions, as well as the ability to manage debt effectively and avoid financial distress. Their research shows that financial literacy, along with cognitive and behavioral factors, plays a crucial role in reducing uncertainty and maintaining financial stability. They also note that the digitalization of financial services, while increasing accessibility, simultaneously raises the risks of impulsive borrowing and over-indebtedness. Bayakhmetova A.T. and co-authors analyze the impact of innovative financial products on household credit behavior. They emphasize that despite the expansion of financial technologies, uneven levels of financial literacy remain a limiting factor in ensuring responsible borrowing and sustainable financial development [14].

Overall, domestic studies confirm that household over-indebtedness in Kazakhstan is driven by a combination of structural, institutional, and behavioral factors. Financial literacy emerges as a central element influencing debt behavior, but its effectiveness is significantly enhanced when supported by regulatory measures and institutional safeguards aimed at protecting borrowers and ensuring financial stability.

**Materials and methods.** This study uses a mixed empirical design combining descriptive statistical analysis, comparative analysis of regulatory changes, and interpretation of aggregate macro-financial indicators. The empirical base includes official data from the National Bank of the Republic of Kazakhstan, the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market, the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, and aggregated information published by credit bureaus on household borrowing dynamics.

The observation period covers 2021–2025, which makes it possible to compare the phase of accelerated consumer lending expansion with the phase of tightening regulatory restrictions introduced in 2024–2025. The unit of observation in the descriptive part of the study is a calendar year. The study focuses on the following indicators: average debt-service-to-income ratio (DSTI/KDN), share of borrowers with DSTI above the supervisory threshold, non-performing loans over 90 days (NPL90+), annual growth of consumer lending, and macroeconomic controls reflecting household income and the general economic environment.

Financial literacy in this study is interpreted as a multidimensional construct including financial knowledge, financial behaviour, and financial attitudes. This approach corresponds to the OECD/INFE measurement logic and allows the concept to be linked not only to awareness, but also to actual borrowing behaviour and repayment discipline.

A key indicator used in the study is the debt-service-to-income ratio (DSTI/KDN), calculated as:

$$DSTI = \frac{\sum_{i=1}^n P_i}{Y} \quad (1)$$



where:

$P_i$  – periodic payment on loan  $i$ ;

$Y$  – borrower's monthly income;

$n$  – number of active loans.

This indicator measures the share of income allocated to debt servicing and is used to assess borrower affordability. Regulatory thresholds in Kazakhstan set  $DSTI \leq 0.5$ , and for high-risk borrowers  $\leq 0.25$ .

The annual effective interest rate (AEIR/GESV) is calculated as:

$$AEIR = \left(1 + \frac{r}{m}\right)^m - 1 \quad (2)$$

where:

$r$  – nominal annual interest rate;

$m$  – number of compounding periods per year.

This indicator reflects the total cost of credit, including fees and commissions, and is subject to regulatory caps.

To measure over-indebtedness at the aggregate level, the study applies the debt burden index (DBI):

$$DBI = \frac{D}{Y_{tot}} \quad (3)$$

where:

$D$  – total household debt;

$Y_{tot}$  – total disposable household income.

Higher DBI values indicate increased financial vulnerability.

To avoid ambiguity, the debt burden indicator is interpreted in this article only for the current reporting period and is not treated as a lifetime debt measure. Accordingly, all cross-year comparisons are based on annual average values of current debt service relative to current disposable income.

For the purposes of empirical comparison, the study distinguishes between the pre-regulation period (2021–2023) and the post-tightening period (2024–2025). The analytical logic is as follows: if regulatory intervention is effective, then after the tightening of restrictions one should observe a deceleration in consumer credit growth, a reduction in the share of high-risk borrowers, and stabilisation of delinquency indicators.

All tabular indicators were formed on the basis of official statistical and analytical materials of the National Bank of the Republic of Kazakhstan, the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market, the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, and published credit bureau data. The growth rate of consumer lending was calculated by the authors as the ratio of the change in the volume of consumer loans in the current year to the volume in the previous year:  $Growth = ((Loans_t - Loans_{t-1}) / Loans_{t-1}) \times 100\%$ . The NPL90+ indicator is interpreted as the share of loans overdue for more than 90 days in the total volume of the relevant loan portfolio. The DSTI indicator was calculated as the ratio of the borrower's total monthly loan payments to monthly income. In the absence of publicly available borrower-level microdata, DSTI and the share of borrowers with DSTI above 0.5 are



treated as authors' analytical estimates based on aggregated data on credit debt and household income.

The data for 2025 are preliminary estimates based on official statistical and analytical information available at the time of the study. Where final annual official data for 2025 were not yet available, the indicators were calculated by the authors using the methodology described in the "Materials and Methods" section.

In the current version of the article, the empirical evidence is interpreted conservatively. The analysis identifies the direction and practical magnitude of changes in indebtedness indicators before and after the tightening of regulation, while causal claims regarding the isolated effect of financial literacy are limited by the aggregated nature of the available data. Therefore, financial literacy is treated as a complementary explanatory factor, the role of which is assessed through theoretical interpretation and empirical association rather than through a fully identified microeconomic causal estimate.

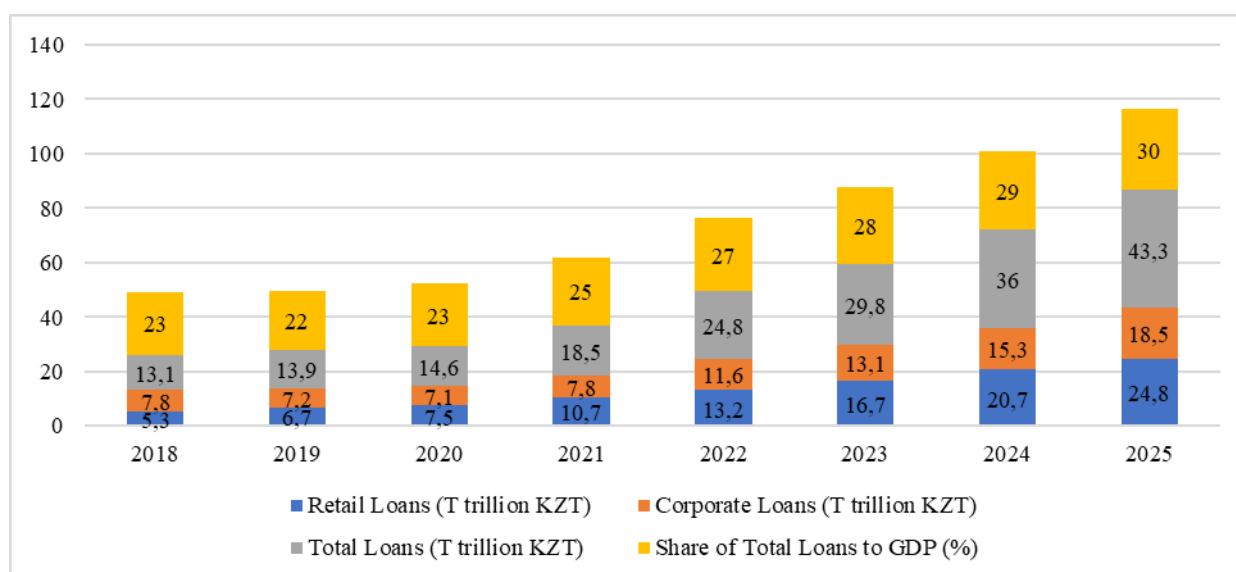
This limitation is explicitly acknowledged in order to preserve methodological consistency between the available data structure and the conclusions drawn from it.

**Results and discussions.** The empirical results indicate that the rapid expansion of consumer lending in Kazakhstan in 2021–2023 was accompanied by a gradual increase in household debt burden. The average DSTI rose from 0.42 in 2021 to 0.47 in 2023, while the share of borrowers with DSTI above 0.5 increased from 27.8% to 33.9%. This pattern suggests that the acceleration of retail lending was increasingly concentrated in segments with elevated repayment pressure.

A structural shift is observed after the tightening of regulatory measures in 2024–2025. The average DSTI declined from 0.47 in 2023 to 0.44 in 2024 and further to 0.38 in 2025. Over the same period, the share of borrowers with DSTI above 0.5 fell from 33.9% to 29.2% and then to 23.7%. In substantive terms, this means that the post-tightening phase was associated with a reduction in the prevalence of high-risk debt profiles.

The dynamics of credit growth also changed materially. Annual growth of consumer lending slowed from 40.0% in 2021 to 28.4% in 2022 and 26.7% in 2023, then further to 18.3% in 2024 and 14.1% in 2025. Thus, the tightening of restrictions was associated not with a collapse of the lending market, but with a visible moderation of retail credit expansion. From a macroprudential perspective, this result can be interpreted as evidence of partial policy effectiveness.

At the same time, the behaviour of delinquency indicators remained more mixed. NPL90+ decreased from 3.5% in 2021 to 2.8% in 2024, but rose again to 3.6% in 2025. This means that regulatory tightening improved the structure of new lending faster than it reduced legacy credit risk. Therefore, the effect of regulatory intervention should be interpreted as stronger for the quality of new loan issuance than for the immediate elimination of accumulated repayment problems.



**Figure 1 – Loan Portfolio of Second-Tier Banks and Share to GDP (Kazakhstan, 2018–2025)**

An important macro-financial indicator is the ratio of total loans to GDP, which increased from approximately 20–23% in 2018–2019 to 27–30% in 2025, indicating a gradual deepening of financial intermediation in the economy. Despite this growth, Kazakhstan’s credit-to-GDP ratio remains moderate compared to international benchmarks, suggesting both the presence of growth potential and the need for careful monitoring of financial stability risks.

Overall, the results confirm that while credit expansion contributes to economic growth, the rapid increase in retail lending raises concerns regarding household over-indebtedness. This reinforces the importance of combining regulatory measures with financial literacy policies to ensure sustainable credit market development. The calculations show that the share of retail loans increased from 40.5% to 57.3%, indicating a structural dominance of household lending. This trend reflects both increased accessibility of credit and a shift in banking strategies toward higher-margin consumer lending products. At the same time, the relative decline in the share of corporate lending confirms the reduced role of business financing within the banking sector.

From a macroeconomic perspective, the ratio of total loans to GDP increased from approximately 20–23% in 2018–2019 to 27% in 2025, indicating moderate but steady financial deepening. However, this level remains below that of many emerging and developed economies, suggesting that while the credit market is expanding, it has not yet reached saturation levels.

At the same time, the rapid growth of retail lending has significantly increased the debt burden on households. This is confirmed by the dynamics of debt-service indicators presented in Table 1.

**Table 1** – Household Debt Burden Indicators

Year	Average DSTI	Share of Borrowers with DSTI > 0.5 (%)
2021	0.42	27.8
2022	0.45	30.6
2023	0.47	33.9
2024	0.44	29.2
2025	0.38	23.7

Source: compiled by the authors based on official data from the National Bank of the Republic of Kazakhstan, the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market, the Bureau of National Statistics, and published credit bureau data. The calculations were performed by the authors using the methodology described in the “Materials and Methods” section.

The results indicate that the average debt burden increased steadily until 2023, reflecting a growing share of income allocated to debt servicing. The increase of DSTI from 0.42 to 0.47 corresponds to a relative growth of approximately 11.9%, while the share of high-risk borrowers increased by 6.1 percentage points. However, following the implementation of stricter regulatory measures in 2024, both indicators declined significantly, with DSTI decreasing by 0.09 points and the share of high-risk borrowers dropping by more than 10 percentage points, indicating improved financial discipline and reduced excessive borrowing.

The analysis of credit risk indicators further confirms the stabilization of the lending market.

**Table 2** – Credit Risk and Lending Dynamics

Year	NPL90+ (%)	Consumer Loan Growth (%)
2021	3.5	40.0
2022	3.2	28.4
2023	2.9	26.7
2024	2.8	18.3
2025	3.6	14.1

Source: compiled by the authors based on statistical materials of the National Bank of the Republic of Kazakhstan on bank-sector loans to the economy and information from the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market on the state of the banking sector. Growth rates were calculated by the authors as the change in the volume of consumer loans compared with the corresponding period of the previous year.

Despite the rapid expansion of lending, the share of non-performing loans remained relatively moderate, fluctuating between 2.8% and 3.6%, which indicates generally stable credit portfolio quality. However, the increase in this indicator to 3.6% in 2025 suggests the persistence of residual risks associated with the high debt burden of the population.

An additional important result concerns the role of financial literacy in shaping borrowing behavior. The analysis and reviewed empirical literature suggest that higher financial literacy is associated with more responsible borrowing behaviour, lower reliance on high-cost credit products, and reduced vulnerability to over-indebtedness. This confirms that financial literacy acts as a mitigating factor, improving decision-making and reducing exposure to high-risk credit products. At the same time, the results reveal heterogeneous effects across population groups. Borrowers with low financial literacy benefit more from regulatory restrictions, as these measures limit access to high-risk credit and reduce the likelihood of debt accumulation. In contrast, financially literate individuals demonstrate a



stronger behavioral response, adjusting borrowing strategies and reducing reliance on expensive credit instruments.

However, the analysis also identifies potential unintended effects, particularly credit substitution. Some borrowers may shift toward alternative financing channels, including microfinance institutions or informal lending, which may not be fully covered by regulatory constraints. This highlights the limitation of purely regulatory approaches. Overall, the results demonstrate that the regulatory measures implemented in Kazakhstan have been effective in moderating credit growth, reducing high-risk lending, and improving debt sustainability indicators. Nevertheless, the findings clearly indicate that long-term reduction of household over-indebtedness requires a comprehensive approach that integrates regulatory policy, financial literacy development, and behavioral interventions, ensuring both effective control of credit supply and improved quality of financial decision-making.

The obtained results confirm that the rapid expansion of consumer lending in Kazakhstan has been driven not only by market demand but also by structural and institutional distortions within the financial system. One of the key factors explaining the shift toward retail lending is the limited development of corporate lending, which has been significantly constrained by the widespread use of state-subsidized financing mechanisms. As evidenced by national analytical reports, up to 30% of the corporate loan portfolio is subsidized by the state, including programs implemented through development institutions and interest rate subsidies. This creates unequal competitive conditions in the financial market, distorts price signals, and reduces incentives for banks to expand market-based lending to businesses. As a result, banks increasingly reallocate resources toward retail lending, which offers higher profitability and fewer institutional constraints. This structural imbalance contributes to the overconcentration of credit activity in the household sector, thereby increasing the vulnerability of the financial system to household debt risks.

The results also support the argument that financial literacy matters as a complementary factor, but in the current data design this effect should be interpreted cautiously. The available aggregated indicators are consistent with a negative association between higher financial literacy and lower debt vulnerability; however, they do not allow a fully isolated causal estimate of the exact elasticity of indebtedness with respect to financial literacy. For this reason, the article does not interpret financial literacy as a stand-alone substitute for regulation. Instead, it is treated as a mechanism that strengthens borrower resilience and increases the effectiveness of prudential restrictions.

An important policy implication follows from the combined evidence. Regulatory tightening can decelerate excessive credit growth and reduce the share of high-risk borrowers, but the long-term sustainability of this effect depends on borrower behaviour, debt awareness, and financial decision-making quality. Consequently, the most effective policy framework is not a choice between regulation and financial literacy, but their institutional combination.

A further limitation concerns the possible displacement of borrowers to alternative or informal channels of financing. The current aggregated dataset does not allow this channel to be measured directly. Therefore, the hypothesis of a shift toward grey or less regulated credit zones should be treated as analytically plausible but not empirically confirmed within the present version of the study.

**Conclusion.** The study shows that in Kazakhstan the tightening of consumer lending regulation in 2024–2025 was associated with slower growth of retail credit and a reduction in the share of high-risk borrowers, as reflected in the decline of average DSTI and the lower share of borrowers above the supervisory threshold. At the same time, the dynamics of



NPL90+ suggest that credit risk accumulated in earlier periods cannot be reduced immediately through regulatory restrictions alone. The findings therefore support a combined policy approach in which prudential regulation limits excessive risk-taking, while financial literacy improves borrowers' ability to evaluate loan affordability, manage repayment obligations, and avoid persistent debt distress. In the current version of the study, this relationship is interpreted as empirically supported in directional terms, while more precise causal quantification requires disaggregated micro-level data.

An important contribution of this study is the analytical confirmation of the complementary role of financial literacy as a key factor influencing household debt behavior. Higher levels of financial and debt literacy are associated with more rational borrowing decisions, lower reliance on high-cost credit, and improved capacity to manage financial obligations. At the same time, the effectiveness of financial literacy is significantly enhanced when combined with regulatory measures, highlighting the complementary nature of demand-side and supply-side interventions. The findings also indicate the presence of heterogeneous effects across population groups, with financially vulnerable individuals benefiting more from regulatory protection, while financially literate borrowers demonstrate greater adaptability and resilience.

The study further identifies several critical challenges for policy development. First, the risk of credit substitution into alternative or informal lending channels remains a significant concern, particularly in the presence of strict regulatory constraints. Second, the continued growth of digital lending platforms and installment-based financing increases the complexity of the credit market and requires more sophisticated regulatory and behavioral interventions. Third, the persistence of high inflation and elevated interest rates limits the effectiveness of traditional monetary and credit policies, necessitating coordinated action across fiscal, monetary, and regulatory authorities.

In light of these findings, the study concludes that a sustainable reduction of household over-indebtedness in Kazakhstan requires an integrated and multi-dimensional policy approach. This approach should combine: (1) effective and enforceable regulatory measures aimed at limiting high-risk lending; (2) targeted financial literacy programs focusing on debt management and informed borrowing; and (3) the development of institutional mechanisms that promote balanced growth of both retail and corporate lending. Strengthening the role of financial education at critical decision-making moments, improving transparency of credit products, and enhancing the use of digital tools for borrower protection are essential components of this strategy.

Overall, the results suggest that the optimal policy framework is based on the principle of complementarity between regulation and financial literacy. Only through the simultaneous development of borrower capabilities and the enforcement of market discipline can Kazakhstan achieve a stable, inclusive, and resilient financial system capable of supporting long-term economic growth while minimizing the risks of excessive household indebtedness.

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#### ҚАРЖЫЛЫҚ САУАТТЫЛЫҚ – ҚАРЫЗ ЖҮКТЕМЕСІН ТӨМЕНДЕТУ ФАКТОРЫ: ҚАЗАҚСТАНДАҒЫ ТҰТЫНУШЫЛЫҚ НЕСИЕЛЕУДІ ШЕКТЕУ ШАРАЛАРЫН ТАЛДАУ

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**Түйін.** Үй шаруашылықтарының шамадан тыс қарыздануы Қазақстанда тұтынушылық несиелеудің қарқынды өсуі және цифрлық қарыз алу арналарының кеңеюі жағдайында маңызды әлеуметтік-экономикалық және қаржылық тұрақтылық мәселесіне айналды. 2020-жылдардың басында тұтынушылық несиелер көлемі айтарлықтай өсті, сондай-ақ кредиттік бюролар мен реестрлер деректері негізінде проблемалық қарыздардың артуы байқалды. Осыған байланысты қаржы реттеушілері, атап айтқанда Қаржы нарығын реттеу және дамыту агенттігі мен Қазақстан Республикасының Ұлттық Банкі, бірқатар шаралар енгізді. Оларға қарыз жүктемесіне шектеулер, тиімді сыйақы мөлшерлемесінің шекті деңгейлері, кепілсіз несиелерді шектеу, кредиттік бюролармен жедел ақпарат алмасу, қарыз алушыларды биометриялық сәйкестендіру және eGov.kz арқылы өзін-өзі шектеу мүмкіндігі жатады. Мақалада қаржылық сауаттылықтың осы шаралардың тиімділігін арттырудағы рөлі қарастырылады. Халықаралық зерттеулер қаржылық сауаттылықтың қаржылық шешімдердің сапасын арттыратынын көрсетеді, дегенмен оның әсері әртүрлі болуы мүмкін. Зерттеу кредиттік бюро деректері, үй шаруашылықтарының статистикасы және қаржылық сауаттылық индекстері негізінде кешенді эмпирикалық тәсілді ұсынады. Әдістемелік тұрғыда сипаттамалық статистикалық талдау және Қазақстанда тұтынушылық несиелеуді реттеу күшейтілгенге дейінгі және кейінгі көрсеткіштерді салыстырмалы бағалау әдістері қолданылады. Нәтижелер қаржылық білім беруді реттеуші құралдармен үйлестірудің маңыздылығын дәлелдейді.

**Түйінді сөздер:** қаржылық сауаттылық, қарыздық сауаттылық, шамадан тыс қарыздану, тұтынушылық несиелеуді реттеу, борыштық жүктеме коэффициенті (DSTI/КДН), жылдық тиімді сыйақы мөлшерлемесі (AEIR/ГЭСВ), кредиттік бюролар.



## ФИНАНСОВАЯ ГРАМОТНОСТЬ КАК ФАКТОР СНИЖЕНИЯ ЗАКРЕДИТОВАННОСТИ: АНАЛИЗ МЕР ПО ОГРАНИЧЕНИЮ ПОТРЕБИТЕЛЬСКОГО КРЕДИТОВАНИЯ В КАЗАХСТАНЕ

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**Резюме.** Закредитованность домашних хозяйств стала значимой социально-экономической и финансовой проблемой в Казахстане на фоне быстрого роста потребительского кредитования и расширения цифровых каналов заимствования. В начале 2020-х годов наблюдалось существенное увеличение объемов потребительских кредитов, а также рост проблемной задолженности населения, выявленной на основе данных кредитных реестров и бюро. В ответ финансовые регуляторы, включая Агентство по регулированию и развитию финансового рынка и Национальный Банк Казахстана, внедрили комплекс мер. К ним относятся ограничения по долговой нагрузке, предельные значения годовой эффективной ставки вознаграждения и ограничения по необеспеченным кредитам, онлайн-обмен данными с кредитными бюро, биометрическая идентификация заемщиков и возможность самозапрета через eGov.kz. В статье рассматривается роль финансовой грамотности в повышении эффективности данных мер. На основе международных исследований показано, что финансовая грамотность способствует более рациональному финансовому поведению, хотя ее влияние может различаться. Предлагается комбинированный эмпирический подход с использованием данных кредитных бюро, статистики домохозяйств и индексов финансовой грамотности. В исследовании применяются методы описательного статистического анализа и сравнительной оценки показателей до и после ужесточения регулирования потребительского кредитования в Казахстане. Результаты подтверждают необходимость интеграции финансового образования с регуляторными инструментами для устойчивого снижения закредитованности.

**Ключевые слова:** финансовая грамотность, долговая грамотность, закредитованность, регулирование потребительского кредитования, коэффициент долговой нагрузки (DSTI/КДН), годовая эффективная ставка вознаграждения (AEIR/ГЭСВ), кредитные бюро.

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