ALTERNATIVE CREDIT SCORING AS A MECHANISM FOR EXPANDING SME ACCESS TO FINANCE

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Abstract. *This thesis examines alternative credit scoring, the assessment of borrowers on the basis of non-traditional data such as tax records, payment flows, utility payments and platform activity, as a mechanism for expanding small and medium-sized enterprises' (SME) access to finance in Uzbekistan. Drawing on international empirical evidence, data of the Central Bank of Uzbekistan (CBU) and the World Bank, and the policy measures adopted in 2026, it shows that the main obstacle to SME lending is the lack of verifiable information rather than the lack of funds: only 24% of SMEs have active credit accounts and 68% are covered by the credit bureau, while banks continue to rely on collateral. The thesis argues that the AI-based alternative scoring planned from 1 December 2026 can extend credit to firms without a credit history, but only if it draws on shared, consent-based data infrastructure, is combined with risk-sharing instruments and is subject to standards of explainability and data protection. Policy measures for its implementation are proposed.*

Keywords: *alternative credit scoring, SME finance, alternative data, artificial intelligence, credit information, open banking, financial inclusion, Uzbekistan.*

1. Introduction

Small and medium-sized enterprises are informationally opaque: they rarely have audited financial statements or a long credit history, and their assets are often unsuitable as collateral.

When lenders cannot distinguish good borrowers from bad ones, they ration credit rather than raise interest rates [1], and lending technologies based on financial statements and collateral systematically exclude the smallest firms [2]. Alternative credit scoring addresses the root of this problem: it replaces missing credit history with other verifiable data that reflect a firm's actual business activity [3].

In Uzbekistan the problem is acute. MSMEs account for over 90% of firms and about 55% of GDP, yet only 10% of small and 16% of medium-sized enterprises report access to loans [4].

According to the CBU, only 24% of SMEs have active credit accounts and 68% are registered with the credit bureau [5]. In May 2026 the President approved the introduction, from 1 December 2026, of alternative credit scoring using elements of artificial intelligence, which will assess business activity, turnover, tax records, utility payments and other digital data in order to evaluate entrepreneurs without a credit history [6; 7].

Research problem. Alternative scoring is often presented as a purely technological solution. The conditions under which it actually expands SME access to finance, rather than

merely accelerating lending to firms that banks already serve, have not been analysed for Uzbekistan.

Aim. To assess alternative credit scoring as a mechanism for expanding SME access to finance in Uzbekistan and to formulate recommendations for the design of the scoring system planned for 2026.

2. Methodology

The study combines a review of empirical literature on data-based lending with document analysis and descriptive statistics. Evidence on the predictive power and effects of alternative data comes from peer-reviewed studies covering Germany, China, India and Kenya [8–11]. Data on SME access to finance in Uzbekistan are taken from the World Bank [4] and the CBU Concept for Supporting SMEs for 2026–2030 [5]; information on policy measures and market practice comes from official announcements and bank disclosures [6; 12; 13]. The analytical framework distinguishes three conditions for the effectiveness of alternative scoring: data coverage, model quality and governance.

3. Findings

3.1. International evidence. A growing body of evidence shows that non-traditional data can substitute for credit history and, partly, for collateral. Berg et al. find that simple digital-footprint variables predict default as well as or better than credit bureau scores [8]. Using data on more than two million Chinese firms, Gambacorta et al. show that big tech credit responds to firms' transaction volumes and network scores rather than to house prices, so that data reduce the role of collateral [9]. Ghosh et al. find that small businesses' use of cashless payments improves their access to fintech credit and predicts lower default [10], and a randomised trial in Kenya shows that adopting merchant e-payments increased SMEs' access to mobile loans by at least 50% [11]. The common mechanism is that verifiable transaction records allow lenders to assess cash flows directly.

3.2. Data available in Uzbekistan. Uzbekistan already generates most of the data that alternative scoring requires, but their coverage of SMEs is uneven (Table 1).

Table 1. Sources of data for SME credit scoring in Uzbekistan

Data source	What it reveals	Availability for SMEs
Credit bureau history	Past repayment behaviour	68% of SMEs registered; 24% with active credit accounts
Tax data: e-invoices and online cash registers	Turnover, counterparties, regularity of sales	Mandatory e-invoices for B2B since 2020 and online cash registers for retail since 2021; covers formal firms
Payment data: acquiring, QR, account flows	Cash inflows and outflows in real time	Less than 30% of SME sales electronic; UzQR acceptance mandatory from July 2026
Utility and public-service payments	Payment discipline, scale of operations	Included in the planned alternative scoring model

Data source	What it reveals	Availability for SMEs
Marketplace and platform data	Sales, returns, customer ratings	Over 20,000 sellers on Uzum; limited to online sellers

Sources: [4–6; 14–16].

The richest source is fiscal data. Electronic VAT invoices have been mandatory for business-to-business transactions since 2020 and online cash registers for retail since 2021 [14], so the tax authority holds near-real-time records of the turnover of formal firms. Payment data are weaker: less than 30% of SME sales are conducted electronically [4], although the mandatory acceptance of the unified UzQR code from 1 July 2026 should expand them [15]. Platform data cover a smaller but fast-growing segment: Uzum alone serves more than 20,000 sellers [16]. The main limitation is the scarcity of historical default data on SMEs: market participants note that corporate credit lacks sufficient statistical data for model training [17].

3.3. Market practice and the policy framework. Banks have begun to use alternative data in their own models. TBC Uzbekistan offers collateral-free business loans of up to UZS 300 million issued within minutes on the basis of automated assessment and scoring [13], and Agrobank has introduced artificial intelligence and data analytics into credit risk assessment [18].

At the state level, a package of measures adopted in 2026 forms the institutional framework for alternative scoring (Table 2).

Table 2. Policy measures supporting alternative credit scoring for SMEs in Uzbekistan

Measure	Timing	Role in scoring
Unified digital financial platform for SME loan applications, integrated with e-government databases	Launch by 1 July 2026	Automatic transfer of SME data to banks; competing offers
AI-based alternative scoring on turnover, tax, utility and other digital data	From 1 December 2026	Assessment of firms without credit history
Open banking infrastructure	Scheduled for September 2026	Consent-based access to account and payment data
Unsecured portion of microloans for borrowers with positive history raised from UZS 100 mln to 200 mln	2026	Reward for good credit behaviour
Credit bureau coverage of SMEs raised from 68% to 80%; right to an explanation of loan rejections	By 2030	Wider data coverage; transparency of decisions

Sources: [5–7; 12; 19].

The design follows the logic of the international evidence: it combines public data from e-government systems with a marketplace on which several lenders compete for the same applicant.

Its effectiveness, however, will depend on how the data are shared, which lenders can use the scores and how risks are managed.

4. Discussion: constraints and policy recommendations

Alternative scoring can substantially reduce the information barrier, but five constraints may limit its contribution:

1. **Coverage bias.** Scoring based on tax and payment data evaluates firms that are already visible to the state. Firms operating largely in cash, which are those most excluded from credit, remain poorly covered.

2. **Cold-start problem.** SME default histories are short and small in volume, so models trained mainly on retail borrowers may misprice business risk [17].

3. **Price.** Better information lowers risk premia but not funding costs: business loans cost about 22% a year and fast unsecured loans considerably more [20].

4. **Over-indebtedness.** Fast automated credit may attract borrowers who are more likely to over-borrow [21].

5. **Governance and data protection.** Automated decisions require explainability, and the processing of tax and payment data requires consent and purpose limitation under the Law "On Personal Data" [22]. Concentration of data in a single public platform or a few large ecosystems creates resilience and competition risks [23].

The following measures are recommended for the implementation of alternative scoring:

• **Consent-based data sharing:** giving firms the right to share their e-invoice, cash-register, acquiring and QR payment data with any licensed lender through open banking interfaces, not only through a single platform [19].

• **Open access to scores:** making alternative scores available to all licensed lenders, including microfinance organisations, to stimulate competition for small borrowers.

• **Scoring plus guarantees:** combining scores with partial credit guarantees for first-time borrowers, so that lenders can extend unsecured loans while their models accumulate default data.

• **Model governance:** CBU standards for validation, back-testing and fairness testing of scoring models, and implementation of borrowers' right to an explanation of loan rejections [5].

• **Feedback to firms:** using the planned AI recommendations to show entrepreneurs which data and behaviours improve their scores, encouraging the digitalisation of sales [6].

• **Outcome metrics:** monitoring the share of first-time and women-led borrowers, average loan rates and default rates by score band, not only the volume and speed of loans issued.

5. Conclusion

Alternative credit scoring addresses the central problem of SME lending in Uzbekistan: the lack of verifiable information about small firms, which banks have traditionally compensated for with collateral. International evidence shows that tax, payment and platform data can predict default and expand access to credit, and Uzbekistan already holds rich fiscal data and is introducing an AI-based scoring system from 1 December 2026. Whether this system expands access rather than simply accelerating lending to firms that are already served depends on three conditions: broad, consent-based data sharing open to all lenders; risk-sharing that allows lenders to finance first-time borrowers while models mature; and governance standards that ensure explainability, fairness and data protection. If these conditions are met, alternative scoring can shift SME lending in Uzbekistan from collateral to cash flows.

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