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RETHINKING COLLATERAL: ALTERNATIVE-DATA SCORING AND COLLECTIVE GUARANTEES FOR RURAL WOMEN ENTREPRENEURS IN UZBEKISTAN

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Abstract
The thesis argues that combining alternative-data credit scoring with a limited collective guarantee can widen rural women's access to formal credit in Uzbekistan. It draws on a survey of 365 women entrepreneurs in Tashkent region, Central Bank and official statistics, and pilot testing in two enterprises.

Keywords: women's entrepreneurship, rural areas, access to finance, alternative data, collective guarantee

Women's entrepreneurship in Uzbekistan has grown at a remarkable pace. In 2024 the country had about 2.1 million women entrepreneurs, seven times more than in 2020 (UNDP, 2025). Yet as of 1 January 2025 women headed only 12.2% of operating small enterprises and microfirms (National Statistics Committee, 2025). Many women start a business, but far fewer manage to turn it into a registered, growing firm. In rural areas, access to bank credit is one of the main reasons.

The problem lies less in the quality of women's projects than in the way banks assess risk. Lending decisions still rest on two pillars: physical collateral and formal credit history. Rural women rarely own land or housing in their own name, and many have never borrowed from a bank. As credit rationing theory predicts,

borrowers who cannot signal their quality through collateral are excluded even when their projects are viable (Stiglitz & Weiss, 1981).

Official and survey data support this view. In the first half of 2025, women in Tashkent region received 66.8% of business loans by number but only 22.2% by value, and the average loan to a woman (54.5 million UZS) was about seven times smaller than to a man (383.8 million UZS) (Central Bank of the Republic of Uzbekistan, 2025). Our survey of 365 women entrepreneurs in rural districts of Tashkent region shows that only 17.3% started their business with bank credit, while 33.7% relied on personal savings. The OLS model of monthly income ($R^2 = 0.676$) shows that years in business ($\beta = 0.504$, $p < 0.01$) and age ($\beta = 0.085$, $p < 0.05$) raise income, and that businesses financed by bank credit earn more ($\beta = 2.805$, $p < 0.1$). At the regional level, a 1% increase in real credit is associated with a 1.6% increase in the number of women individual entrepreneurs ($R^2 = 0.915$).

International evidence shows that such records can replace part of the missing information. Berg et al. (2020) found that simple digital-footprint data predict default about as well as credit bureau scores, including for applicants without a bureau file. Group lending research shows that social ties can act as a form of collateral (Ghatak & Guinnane, 1999), although unlimited joint liability may place too heavy a burden on borrowers (Giné & Karlan, 2014).

On this basis, we propose a two-tier mechanism. In the first tier, applicants receive a 0–100 score built from five blocks: trade activity (30%), digital payment discipline (20%), social capital (25%), business experience and skills (15%) and family support (10%). Applicants scoring 70 or more receive a collateral-free loan on standard terms; those scoring 50–69 enter the second tier; those below 50 complete training at a Women's Entrepreneurship Infrastructure Centre and are then reassessed. In the second tier, five to seven women in a mahalla form a

mutual guarantee group and build a guarantee fund of 5–10% of the loan amount. In case of default, losses are covered first by this fund, then by the members' shared liability and finally by the State Fund for Support of Entrepreneurial Activity. The mechanism was tested in two pilot enterprises: "Lola" (Bekobod district) received an 18 million UZS loan under the collective guarantee and raised monthly sales by 28%, and "Massive Exclusive" (Toshkent district) received a 12 million UZS loan based on alternative scoring.

The cost-benefit assessment of the wider support model in which the mechanism operates (NPV = 2.10 billion UZS; BCR = 1.68; payback of about two years) indicates that the approach is economically justified. To put it into practice, banks should open a separate scoring track for first-time women borrowers, utility and telecom payment histories should be admitted into credit reports with borrower consent, and part of direct interest subsidies should be redirected into guarantee funds. These steps would help rural women move from informal self-employment to sustainable, registered businesses.

References

1. Berg, T., Burg, V., Gombović, A., & Puri, M. (2020). On the rise of FinTechs: Credit scoring using digital footprints. The Review of Financial Studies, 33(7), 2845–2897. https://doi.org/10.1093/rfs/hhz099
1. Ghatak, M., & Guinnane, T. W. (1999). The economics of lending with joint liability: Theory and practice. Journal of Development Economics, 60(1), 195–228. https://doi.org/10.1016/S0304-3878(99)00041-3
2. Giné, X., & Karlan, D. S. (2014). Group versus individual liability: Short and long term evidence from Philippine microcredit lending groups. Journal of Development Economics, 107, 65–83. https://doi.org/10.1016/j.jdeveco.2013.11.003



3. National Statistics Committee of the Republic of Uzbekistan. (2025). Main indicators of the activities of small enterprises and microfirms in the Republic of Uzbekistan [Press release, 23 July 2025]. https://stat.uz/img/images/ishbilarmonlikdan-mikrofirma-eng_p59459.pdf
4. Central Bank of the Republic of Uzbekistan. (2025). Data on loans issued by commercial banks to support women's entrepreneurship, by region and sector, first half of 2025 [Unpublished data].
5. Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. The American Economic Review, 71(3), 393–410.
6. UNDP. (2025). Women's entrepreneurship in Uzbekistan: Assessment and recommendations. United Nations Development Programme. https://www.undp.org/uzbekistan/publications/womens-entrepreneurship-uzbekistan-assessment-and-recommendations