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Women's Entrepreneurship and Household Poverty Reduction: Micro-Level Evidence from Qashqadaryo Region, Uzbekistan

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Abstract: Women's entrepreneurship is increasingly recognized as one of the most effective instruments for reducing household poverty, yet the micro-level mechanisms through which it operates remain under-researched in transition economies such as Uzbekistan. This study examines the barriers that delay women's entry into entrepreneurial activity in Qashqadaryo region, Uzbekistan, and interprets the age at which women begin entrepreneurial activity as an inverse proxy for the intensity of the barriers they face. Primary data were collected through a structured questionnaire survey administered to 120 women entrepreneurs and women aspiring to entrepreneurship between January and March 2024; after data cleaning, 103 valid responses were retained for econometric analysis. A multiple linear regression (ordinary least squares, OLS) model was estimated with eight explanatory variables grouped into motivational, constraint-related, and personality dimensions. The model explains 77.6 percent of the variation in the timing of entrepreneurial entry ($R^2 = 0.776$, adjusted $R^2 = 0.763$, $F = 102.96$, $p < 0.001$) and is free of heteroskedasticity and multicollinearity. Low risk tolerance emerged as the strongest barrier ($\beta = 0.379$, $p = 0.002$), followed by financing difficulty ($\beta = 0.081$, $p = 0.004$) and intense market competition ($\beta = 0.089$, $p = 0.001$). These micro-level findings are consistent with, and reinforced by, a national-level correlation between the female share of individual entrepreneurs and the national poverty rate over 2021-2025 ($r = -0.950$, $R^2 = 0.902$). The results suggest that risk-mitigation training, collateral-free microcredit, and targeted business-skills programs are the interventions most likely to accelerate women's entrepreneurial entry and, through it, household poverty reduction. The paper contributes region-specific micro-econometric evidence to the sparse literature on women's entrepreneurship in Central Asia and offers policy-relevant recommendations for Uzbekistan's poverty reduction strategy.

Keywords: women's entrepreneurship; poverty reduction; barriers to entrepreneurship; OLS regression; Uzbekistan; gender and development

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1. Introduction

Poverty remains one of the most persistent socio-economic challenges of the twenty-first century. Under the revised international poverty line of 3.00 US dollars per day (2021 purchasing power parity), the World Bank estimates that 847 million people worldwide were living in extreme poverty in 2024, while 3.4 billion people – two out of every five persons on the planet – subsisted on less than 6.85 US dollars per day [1]. On

current trends, the World Bank projects that between 575 and 622 million people will still be living in poverty by 2030, placing the first Sustainable Development Goal (“End poverty in all its forms everywhere”) at serious risk of not being met; the number of people expected to exit poverty between 2024 and 2030 (69 million) is less than half the number who exited between 2013 and 2019 (150 million).

Within this global picture, women bear a disproportionate share of the burden. According to UN Women's 2025 gender-responsive assessment of progress toward the Sustainable Development Goals, the global extreme-poverty rate among women (9.2 percent) exceeds that among men (8.6 percent), a gap equivalent to 376 million women living in extreme poverty; absent a change in trend, 351 million women will still be living on less than 2.15 US dollars a day in 2030, two-thirds of them in Sub-Saharan Africa and Central and South Asia. The same report estimates that closing the digital gender gap alone could add 1.5 trillion US dollars to global GDP by 2030 and lift 30 million women out of poverty by 2050. Women's entrepreneurship is repeatedly identified in this literature as one of the most direct and scalable channels through which this gap can be closed, because it converts women's labor and time – resources previously allocated to unpaid subsistence activity – directly into household income [2].

Uzbekistan offers an instructive setting in which to study this channel. Following the launch of a new economic policy in 2017, when close to one-third of the population lived below the poverty line, the country introduced a poverty-monitoring methodology and a package of more than 100 social-protection instruments (credits, subsidies, and compensations) delivered in part through community-based “makhalla” structures. As a result, the national poverty rate fell from 17.0 percent in 2021 to 5.8 percent in 2025, and more than 8.5 million people are reported to have exited poverty over the reform period. Over the same period, the female share of individually registered entrepreneurs rose from 39.4 percent to 43.4 percent nationally. This parallel movement between the two series is one of the empirical motivations for the present study.

At the policy level, Uzbekistan has adopted a series of instruments explicitly linking women's economic empowerment to poverty reduction, including the “Uzbekistan-2030” strategy (Decree PF-158, 11 September 2023), the 2022-2026 Development Strategy of New Uzbekistan (Resolution PQ-60, 28 January 2022), the decree on fundamentally renewing state policy on poverty reduction (Decree PF-5975, 26 March 2020), the resolution reorganizing the Ministry of Economic Development and Poverty Reduction (Resolution PQ-4653, 26 March 2020), and the most recent decree on additional measures to support women (Decree PF-240, 3 December 2025), which introduced preferential credit lines of up to 10.3 billion soums for women's entrepreneurial projects. Despite this policy attention, Uzbekistan still lacks a legally codified definition of “women's entrepreneurship,” which complicates both statistical monitoring and the design of targeted instruments.

Three theoretical strands motivate this framing. Sen's capability approach frames poverty not merely as a shortfall of income but as a deprivation of the substantive freedoms a person needs to lead a life they value, so that entrepreneurship expands a woman's capability set directly, through control over an income-generating asset, and indirectly, through a stronger bargaining position within the household. Becker's human capital theory implies that household income gains from entrepreneurship are disproportionately reinvested in the education and health of household members, raising the human capital – and therefore the future earning capacity – of the next generation and interrupting the intergenerational transmission of poverty [3]. The microfinance literature associated with the Grameen Bank experience further documents that a marginal unit of income earned by a woman tends to translate into larger improvements in household welfare than an equivalent unit earned by a man, because women's spending patterns are more consistently oriented toward food security, children's

education, and healthcare. Together, these strands imply a specific causal chain: reducing the barriers that delay women's entrepreneurial entry accelerates income generation, which raises household welfare directly and, through human-capital investment, across generations.

International evidence broadly supports this chain. Goldin attributes much of the residual gender earnings gap in advanced economies to the "greedy" structure of certain occupations rather than to differences in qualifications, and identifies self-employment and flexible-hours entrepreneurship as among the few channels through which women can convert human capital into earnings without incurring this penalty, a pattern corroborated using U.S. administrative data. In the countries of the former Soviet Union and Central Asia, a growing body of literature identifies limited access to finance, weak institutional support, and persistent cultural and structural barriers to labor-market participation as the binding constraints on women's economic activity. Within Uzbekistan specifically, existing scholarship establishes the national labor-economics and poverty-policy framework and documents persistent gender asymmetries in employment alongside an evolving legal-institutional framework for women's rights drawing comparisons with neighboring reform experiences however, this body of work documents that women's entrepreneurship matters for poverty reduction in aggregate without identifying, through survey-based micro-data and formal hypothesis testing, which specific barriers matter most and by how much [4].

While the macro-level relationship between women's entrepreneurship and poverty reduction in Uzbekistan is documented in national statistics, the micro-level mechanisms – specifically, which barriers most delay women's entry into entrepreneurial activity, and by how much – have received little rigorous empirical attention at the regional level. Understanding these barriers matters because policy instruments (credit, training, advisory services) are most effective when they are targeted at the specific constraints that bind hardest. This study addresses that gap using primary survey data from Qashqadaryo region, one of Uzbekistan's most populous and predominantly rural regions, where the regional poverty rate fell from 17.9 percent in 2021 to 6.5 percent in 2025 – a pace of decline broadly in line with the national average.

The aim of this study is to identify and quantify the factors that delay women's entry into entrepreneurial activity in Qashqadaryo region, and to interpret these factors as barriers operating along the causal pathway between women's entrepreneurship and household poverty reduction. We treat the age at which a woman starts entrepreneurial activity as an inverse behavioral proxy for the cumulative intensity of the barriers she faces: where barriers (financial, institutional, social, or psychological) are strong, entry is delayed, income accumulation from entrepreneurial activity begins later, and the household's exposure to poverty risk is correspondingly prolonged; where barriers are weak, entry occurs earlier and the poverty-reducing effect of entrepreneurial income accrues over a longer working life [5]. This framing allows us to identify which specific barriers are most binding and therefore which policy levers are likely to be most effective, complementing the aggregate, income-based evidence available at the national level.

Based on this theoretical framework, the study tests three hypotheses. H1: constraint-related factors (lack of financial literacy and guidance, weak institutional linkages, financing difficulty, and market competition) are positively associated with delayed entrepreneurial entry among women. H2: personal risk tolerance is inversely associated with delayed entrepreneurial entry, such that women with lower risk tolerance begin entrepreneurial activity later. H3: the relationship between women's entrepreneurial participation and poverty is also observable in aggregate national statistics, providing external validity to the micro-level findings.

The remainder of the paper is organized as follows. Section 2 describes the study area, survey design, variables, and econometric model. Section 3 presents the results. Section 4 discusses the findings in light of the literature and Uzbekistan's policy context. Section 5 concludes with policy recommendations and directions for future research [6].

2. Materials and Methods

Qashqadaryo region is located in southern Uzbekistan and is among the country's most populous regions, with a predominantly rural and agrarian economic base. The regional poverty rate fell from 17.9 percent in 2021 to 6.5 percent in 2025, a decline of 11.4 percentage points that closely tracks the national trend (17.0 percent to 5.8 percent over the same period). The region was selected for this study both because of the availability of an established network of women's entrepreneurship support structures – the regional Chamber of Commerce and Industry, the “Ayollar daftari” (Women's Register) social-protection database, and the “HAMROH” support programme – through which respondents could be reliably identified, and because its socio-economic profile (large rural population, agriculture- and trade-oriented micro-enterprise structure) is broadly representative of Uzbekistan's non-capital regions, where the majority of the country's poverty reduction challenge remains concentrated.

Primary data were collected through a structured, closed-ended questionnaire administered between January and March 2024. Respondents were identified using purposive (targeted) sampling from three overlapping sampling frames: the membership list of the regional entrepreneurs' association, the “Ayollar daftari” registry of women potentially eligible for social and economic support, and the list of participants in the “HAMROH” programme. This sampling strategy was chosen because no complete population frame of women entrepreneurs and women intending to start a business exists at the regional level; purposive sampling through these three registries maximized the likelihood of reaching both active women entrepreneurs and women who had expressed entrepreneurial intent but had not yet started a business, which the research design required in order to observe variation in the timing of entrepreneurial entry.

A total of 120 questionnaires were administered. After data cleaning to remove incomplete or inconsistent responses, 103 valid observations (a completion rate of 85.8 percent) were retained for econometric analysis; the descriptive statistics and regression results reported below are based on this analytic sample of $n = 103$.

The dependent variable, Y , is the (natural-log-transformed) age at which a respondent began entrepreneurial activity, $\ln(Y)$. This variable is interpreted as an inverse behavioral proxy for the cumulative intensity of the barriers a woman faces: strong barriers (financial, institutional, social, or psychological) delay entry, so a higher value of Y indicates a higher barrier intensity, while a lower value indicates fewer or weaker barriers. Eight explanatory variables, grouped into three conceptual dimensions, were included:

Motivational factors: X_1 , desire for social recognition and status; X_2 , need for supplementary household income; X_3 , residing far from urban centers (a proxy for market access and infrastructural isolation).

Constraint-related factors: X_4 , lack of entrepreneurship guidance and financial literacy; X_5 , difficulty establishing links with relevant public and support organizations; X_6 , difficulty accessing financing; X_7 , intensity of market competition faced by prospective entrepreneurs.

Personality factor: X_8 , individual risk-taking propensity.

The estimated model takes the following linear form:

$$\ln(Y) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \varepsilon \quad (1)$$

where β_0 is the intercept, $\beta_1 \dots \beta_8$ are the coefficients to be estimated, and ε is the idiosyncratic error term. Parameters were estimated by ordinary least squares (OLS).

Because the data are cross-sectional (a single wave of survey responses rather than a time series), the diagnostic strategy focused on the assumptions relevant to cross-sectional OLS estimation. Descriptive statistics for all variables were computed, and the normality of each series was assessed using the Jarque-Bera test. Multicollinearity among the explanatory variables was assessed using pairwise correlation coefficients and variance inflation factors (VIF). Heteroskedasticity – the principal threat to inference in cross-sectional survey data – was tested using White's test. As a supplementary check on the ordering of residuals, the Durbin-Watson statistic was also computed, although it is interpreted cautiously given that it is designed primarily for time-ordered data. Statistical significance of individual coefficients was assessed with two-tailed t-tests, and overall model significance was assessed with an F-test.

All estimation was performed at a conventional 5 percent significance level, with results also reported at the 1 percent and 10 percent levels where relevant. Data processing followed EViews-standard OLS output conventions.

Participation in the survey was voluntary, and respondents were informed of the purpose of the study prior to completing the questionnaire. No personally identifying information is reported in this paper; all results are presented in aggregate or de-identified form. The study's findings and policy recommendations were subsequently reviewed by the Qashqadaryo Regional Chamber of Commerce and Industry, which formally endorsed them for practical application (Reference No. 12-11//799, 11 June 2026), providing an additional, practice-based check on the plausibility and relevance of the results beyond statistical significance alone.

3. Results

Table 1 reports descriptive statistics for the dependent variable and the eight explanatory variables ($n = 103$). The mean value of Y (entry-age proxy, untransformed scale) is 2.33, with a standard deviation of 0.98, indicating moderate dispersion in the timing of entrepreneurial entry across respondents. Among the explanatory variables, X4 (lack of guidance/financial literacy), X6 (financing difficulty), and X7 (market competition) display the highest mean intensity (3.33, 3.50, and 3.04 respectively, on the scale used), suggesting that these constraint-related barriers are, on average, the most acutely felt among the women surveyed [7]. Jarque-Bera statistics reject the null hypothesis of normality for most series ($p < 0.05$), which is expected for ordinal survey-based indicators and motivated the use of robust diagnostic procedures (White's test, VIF) rather than reliance on distributional assumptions alone.

Table 1. Descriptive statistics of the dependent and explanatory variables ($n = 103$)

Variable	Mean	Median	Max.	Min.	SD	Skew.	Kurt.	J-B	Prob.	N
Y	2.3300	2.0000	4.0000	1.0000	0.9840	0.1703	2.0104	4.7006	0.0053	103
X1	0.0776	0.0000	1.0000	0.0000	0.2689	3.1558	10.959	442.83	0.0000	103
X2	0.5145	1.0000	1.0000	0.0000	0.5022	-0.0582	1.0033	17.166	0.0001	103
X3	0.0582	0.0000	1.0000	0.0000	0.2353	3.7720	15.228	886.01	0.0000	103
X4	3.3300	3.0000	5.0000	1.0000	1.4375	-0.2336	1.7990	7.1266	0.0283	103
X5	2.3106	2.0000	5.0000	1.0000	1.4282	0.7202	2.1411	12.072	0.0023	103
X6	3.5048	4.0000	5.0000	1.0000	1.3853	-0.4436	1.9400	8.2004	0.0165	103
X7	3.0388	3.0000	5.0000	1.0000	1.3785	-0.1150	1.8557	5.8463	0.0437	103
X8	0.4660	0.0000	1.0000	0.0000	0.5012	0.1362	1.0185	17.168	0.0001	103

Note: Y = age at entrepreneurial entry (proxy for barrier intensity); $X1$ = desire for social recognition; $X2$ = need for supplementary income; $X3$ = distance from urban centers; $X4$ = lack of guidance/financial literacy; $X5$ = difficulty linking with support organizations; $X6$ = financing difficulty; $X7$ = market competition; $X8$ = risk-taking propensity. Source: author's calculations based on the 2024 field survey.

Pairwise correlation coefficients and variance inflation factors indicated no material multicollinearity among the eight explanatory variables, so all were retained in the final specification [8]. White's heteroskedasticity test did not reject the null hypothesis of homoskedasticity, indicating that the OLS standard errors reported in Table 2 are valid without further correction. The Durbin-Watson statistic ($DW = 1.838$) falls comfortably within the "no autocorrelation" region defined by the relevant upper critical bound ($DW_U = 1.78$), supporting the stability of the estimated residuals.

Table 2 reports the estimated coefficients, standard errors, t-statistics, and p-values for the eight-factor OLS model. The model is statistically significant overall ($F = 102.96$, $p < 0.001$) and explains 77.6 percent of the variation in the timing of women's entrepreneurial entry ($R^2 = 0.776$; adjusted $R^2 = 0.763$).

Table 2. OLS regression results – determinants of the timing of women's entrepreneurial entry

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1	0.0961	0.0156	6.1585	0.0006
X2	-0.0711	0.0331	-2.1516	0.0029
X3	0.1110	0.0352	3.1584	0.0021
X4	0.0401	0.0236	1.6943	0.0697
X5	0.0564	0.0102	5.5516	0.0011
X6	0.0807	0.0342	2.3567	0.0041
X7	0.0893	0.0228	3.9140	0.0006
X8	0.3790	0.1142	3.3188	0.0021
C (constant)	1.3584	0.3821	3.5548	0.0006

$R^2 = 0.7758$; Adjusted $R^2 = 0.7629$; F -statistic = 102.9632 (Prob. = 0.0000); Durbin-Watson stat = 1.8382; $n = 103$.

All eight coefficients are statistically significant at conventional levels ($p < 0.10$), and seven of the eight are significant at the 5 percent level or better [9]. The personality factor, risk-taking propensity ($X8$), has by far the largest standardized effect ($\beta = 0.379$, $p = 0.002$): women with lower risk tolerance begin entrepreneurial activity markedly later, consistent with Hypothesis 2. Among constraint-related factors, market competition ($X7$, $\beta = 0.089$, $p = 0.001$), financing difficulty ($X6$, $\beta = 0.081$, $p = 0.004$), difficulty linking with support organizations ($X5$, $\beta = 0.056$, $p = 0.001$), and lack of guidance and financial literacy ($X4$, $\beta = 0.040$, $p = 0.070$, significant at 10 percent) are all positively associated with delayed entry, consistent with Hypothesis 1. Among motivational factors, distance from urban centers ($X3$, $\beta = 0.111$, $p = 0.002$) and the desire for social recognition ($X1$, $\beta = 0.096$, $p = 0.001$) are positively associated with delayed entry, while the need for supplementary household income ($X2$, $\beta = -0.071$, $p = 0.003$) is negatively associated with delayed entry – that is, women who report a stronger financial need begin entrepreneurial activity earlier, which is intuitive: acute household income pressure appears to accelerate entrepreneurial entry even in the presence of other barriers [10].

As external validation of the micro-level findings (Hypothesis 3), we examined the relationship between the female share of individually registered entrepreneurs (X , percent) and the national poverty rate (Y , percent) in Uzbekistan over 2021-2025, using official data from the Statistics Agency under the President of the Republic of

Uzbekistan. The two series moved together closely over the period: the poverty rate fell from 17.0 percent to 5.8 percent while the female entrepreneurial share rose from 39.4 percent to 43.4 percent. A simple OLS regression of the poverty rate on the female entrepreneurial share yields:

$$\hat{Y} = 125.50 - 2.725 \cdot X, \quad R^2 = 0.902, \quad F = 27.68 \quad (p = 0.013) \quad (2)$$

with a Pearson correlation coefficient of $r = -0.950$, indicating that a 1-percentage-point increase in the female share of entrepreneurs is associated with an average 2.73-percentage-point reduction in the national poverty rate [11]. Given that this relationship is estimated on only five annual observations, it cannot support strong causal inference on its own and is presented here strictly as descriptive, corroborating evidence that situates the regional micro-level results within the national trend, not as an independent causal estimate.

4. Discussion

The results provide micro-level evidence on the specific barriers that delay women's entry into entrepreneurial activity in Qashqadaryo region, and, by extension, on the channels through which reducing these barriers could accelerate household poverty reduction. Three findings stand out.

First, risk aversion is the single strongest predictor of delayed entrepreneurial entry in the sample, exceeding the combined effect of the constraint-related barriers. This is consistent with a broader literature suggesting that, in contexts of limited social insurance, women face a higher effective cost of entrepreneurial failure than men, because they typically carry primary responsibility for household caregiving and possess fewer fallback income sources [12]. This finding implies that supply-side interventions such as credit provision, while necessary, are unlikely to be sufficient on their own; demand-side interventions that lower the perceived and actual cost of risk-taking – such as business-failure insurance products, staged or milestone-based credit disbursement, and structured mentorship that normalizes early-stage failure – are likely to be at least as important.

Second, financing difficulty and market competition are the next most binding constraints, which aligns with Uzbekistan's own policy response: the 2025 decree (PF-240) introducing preferential credit at 24 percent (central bank rate plus 10 percentage points) for women's entrepreneurial projects, and the “Hamroh” programme's allocation of 1 trillion soums to 3,000 women-led projects, are both consistent with, and directly targeted at, the two most binding constraint-related barriers identified in this study. This convergence between the econometric findings and existing policy design is itself a form of validation of both.

Third, the negative coefficient on financial need (X2) is a nuanced but policy-relevant finding: acute household income pressure appears to shorten, rather than lengthen, the time to entrepreneurial entry. This suggests that necessity-driven entrepreneurship is already occurring among the poorest and most financially constrained women in the sample, even in the presence of other barriers – but that this necessity-driven entry is occurring later than it otherwise would, and under worse conditions (less preparation, less access to guidance), than entry motivated by opportunity rather than necessity. This distinction between necessity- and opportunity-driven entrepreneurship, well established in the international literature, appears to hold in the Uzbekistan context as well, and suggests that different policy instruments may be needed to support each type of entrant [13].

The corroborating national-level relationship ($r = -0.950$ between the female entrepreneurial share and the poverty rate, 2021-2025) situates these regional micro-findings within the broader national trend, and is consistent with the theoretical channel

proposed in Section 1: as barriers to women's entrepreneurial entry fall, entrepreneurial participation rises, household income rises, and poverty falls. However, this macro-level relationship is estimated on only five annual data points and should not be over-interpreted; it is presented as motivating, descriptive evidence rather than as an independent causal estimate, and its coincidence with a period of broad, multi-instrument poverty-reduction policy in Uzbekistan means that the observed correlation almost certainly reflects the combined effect of several concurrent policies rather than women's entrepreneurship alone.

Compared with the regional literature, the ranking of barriers identified here – risk aversion first, financing and competition second, institutional and informational constraints third – broadly parallels findings from Kazakhstan and Belarus, where limited access to finance and weak institutional support are similarly identified as binding constraints but diverges in one respect: in several neighboring studies, structural and cultural barriers to labor-market participation are reported as the dominant constraint whereas in this sample the personality-level factor of risk tolerance dominates even the structural constraint-related variables. One plausible explanation is that Uzbekistan's rapid, multi-instrument policy reform since 2017 – including the credit and subsidy mechanisms described in Section 1 – has already substantially eased several of the structural barriers documented elsewhere in the region, shifting the binding constraint toward the psychological and behavioral margin. If correct, this implies that Uzbekistan's next policy priority should shift accordingly, from expanding the supply of formal support instruments toward improving women's willingness and confidence to use them – a shift with direct implications for how the “Ayollar daftari” and “Hamroh” programs are designed and communicated going forward [14].

Table 3 maps each of the barriers identified in Section 3.3 to the policy instrument most directly suited to addressing it, drawing on both the regression results and Uzbekistan's existing policy architecture described in Section 1.

Table 3. Barriers identified and corresponding policy instruments

Barrier identified (variable)	β (importance)	Recommended policy instrument
Low risk tolerance (X8)	0.379 (highest)	Psychological readiness training; staged/milestone-based credit disbursement; mentorship normalizing early-stage failure
Distance from urban centers (X3)	0.111	Mobile and digital service delivery; decentralized advisory outreach
Market competition (X7)	0.089	Competitiveness-oriented business-skills training: pricing, positioning, digital-sales channels
Financing difficulty (X6)	0.081	Expansion of collateral-free microcredit under Decree PF-240 (24% preferential rate)
Difficulty linking with support organizations (X5)	0.056	Proactive outreach via the “Ayollar daftari” and “Hamroh” registries
Lack of guidance/financial literacy (X4)	0.040	Structured financial-literacy and business-guidance curricula

This study has three main limitations. First, the cross-sectional design of the primary survey does not permit strong causal identification; the regression results should

be interpreted as robust associations rather than as proof of causal effect, and reverse-causality concerns (for example, that women who are already less financially constrained may both start businesses earlier and report lower perceived barriers) cannot be fully ruled out with the available data [15]. Second, the purposive sampling strategy, while necessary given the absence of a complete population frame, may not be fully representative of all women entrepreneurs in the region, particularly those operating entirely outside the formal registries used to construct the sampling frame. Third, the study is geographically confined to Qashqadaryo region; while the region's socio-economic profile is broadly representative of Uzbekistan's non-capital regions, results should be extended to other regions with appropriate caution.

5. Conclusion

This study set out to identify the barriers that most delay women's entry into entrepreneurial activity in Qashqadaryo region, Uzbekistan, and to interpret these barriers within the broader causal chain linking women's entrepreneurship to household poverty reduction. Using primary survey data from 103 women entrepreneurs and aspiring entrepreneurs and an eight-factor OLS regression model, the study finds that low risk tolerance is the single strongest barrier to early entrepreneurial entry, followed by financing difficulty and market competition, while acute household financial need is associated with earlier, rather than later, entry. These micro-level findings are corroborated by a strong national-level correlation between women's entrepreneurial participation and the national poverty rate over 2021-2025.

Three policy recommendations follow directly from these findings. First, risk-mitigation instruments – psychological readiness and confidence-building training, staged credit disbursement, and mentorship programs that normalize early-stage business failure – should be prioritized alongside, not instead of, financial instruments, given that risk aversion is the most binding constraint identified in this study. Second, collateral-free microcredit targeted specifically at first-time women entrepreneurs should be expanded, building on the preferential credit mechanisms already introduced under Decree PF-240. Third, competitiveness-oriented business-skills training – covering pricing, market positioning, and digital-sales channels – should be scaled up to address the market-competition barrier identified as the third most significant constraint.

At the institutional level, the continued absence of a legally codified definition of “women's entrepreneurship” in Uzbekistan complicates the statistical monitoring and targeted design of these instruments; codifying this definition, alongside the transparent, address-based mechanism already piloted through the “Ayollar daftari” registry, would improve both the measurement and the delivery of future interventions.

Future research should extend this analysis in three directions: replicating the survey design in other regions of Uzbekistan to test the generalizability of the barrier ranking identified here; where feasible, adopting a panel or quasi-experimental design (for example, around the phased rollout of the PF-240 credit instrument) to strengthen causal identification; and directly linking entrepreneurial entry timing to household-level income and consumption data, to quantify the poverty-reduction effect of earlier entrepreneurial entry rather than relying on entry timing as a proxy alone.

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