# Women entrepreneurs in transition economies: digital barriers and financial inclusion

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**Abstract:** Women's entrepreneurship is widely acknowledged as a crucial catalyst for equitable economic growth, especially in transition nations experiencing digital revolution. Notwithstanding regulatory reforms and increased access to digital technology, women entrepreneurs persistently encounter socio-cultural, institutional, and financial obstacles. This study examines how women entrepreneurs manoeuvre through these limitations while capitalising on opportunities in the digital economy. The study employs a mixed-method approach that integrates secondary statistical analysis, policy evaluation, and survey-derived evidence. The theoretical foundations encompass Financial Inclusion Theory, Prospect Theory, and the Triple Bottom Line paradigm. The results demonstrate that while digital platforms improve flexibility and market accessibility, structural obstacles - such as restricted financial access, gendered labour market segmentation, and socio-cultural norms - persistently hinder women's involvement in high-value sectors. The study indicates that focused policy interventions, digital skill enhancement, and inclusive financial frameworks are essential for bolstering women's entrepreneurship and promoting sustainable economic development.

**Keywords:** women entrepreneurship, digital economy, financial inclusion, socio-cultural barriers, sustainability, transition economies, ESG, gender equality

Introduction. In the last ten years, transition economies have seen substantial structural changes marked by market liberalisation, institutional reforms, and fast digitalisation. These modifications have generated novel prospects for entrepreneurship and private sector advancement. In this changing landscape, women's entrepreneurship has become an essential driver of inclusive economic growth, diminishing inequality, and advancing gender equality.

Notwithstanding these prospects, women persistently encounter significant obstacles that restrict their entrepreneurial potential. These obstacles encompass socio-cultural norms that perpetuate conventional gender roles, restricted access to financial resources, and bureaucratic inefficiencies. Women frequently shoulder an inequitable share of unpaid caregiving responsibilities, which hinders their capacity to participate fully in economic endeavours.

The digital economy simultaneously offers novel options to surmount these limitations. Digital platforms, financial innovations, and online marketplaces facilitate adaptable business structures and lower entry barriers. Nonetheless, unequal access to digital

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competencies, infrastructure, and financial resources perpetuates discrepancies in entrepreneurial results.

This study seeks to analyse the interplay between limitations and opportunities encountered by women entrepreneurs in the digital economy. This research examines the subsequent enquiries:

1. What socio-cultural and structural obstacles impede women entrepreneurs?
2. In what ways does financial inclusion impact entrepreneurial endeavours?
3. What function does digitalisation serve in broadening opportunities?
4. In what ways do women entrepreneurs facilitate sustainable development?

Literature Review

The literature on women's entrepreneurship in transition economies emphasises the interplay between institutional change and enduring socio-cultural norms. Foundational research by Ruta Aidis, Friederike Welter, and David Smallbone highlights that in post-socialist environments, formal institutional reforms frequently coexist with informal limitations that influence entrepreneurial conduct.

In Central Asia, studies indicate that women entrepreneurs function within institutional voids characterised by unequal access to resources, networks, and markets. Research indicates that while women exhibit resilience and adaptation, they are frequently confined to low-value industries due to institutional limitations.

Uzbek experts have made substantial contributions to this domain. Umida Nazarova (2024) examines policy support mechanisms and emphasises the increasing significance of state-led initiatives in fostering women's entrepreneurship. Likewise, Umida Maksumova (2024) analyses the evolution of business settings and recognises institutional reforms as key catalysts for the advancement of female entrepreneurship.

Empirical research conducted by Dilnoza Ruzimuratova (2024) investigates how women entrepreneurs navigate socio-cultural obstacles using adaptation techniques and informal networks.

The digital economy has emerged as a crucial facilitator of women's entrepreneurship. Global research highlights that digital platforms diminish entrance barriers and facilitate adaptable business structures, especially for women managing familial obligations.

Research conducted by international entities, like the United Nations Development Programme, underscores that digital instruments - such as fintech, e-commerce, and mobile platforms - enhance access to markets and financial services for women entrepreneurs.

In Uzbekistan, researchers like Feruza Qanoatova (2025) examine the impact of digital transformation on women's entrepreneurship, highlighting the significance of legal frameworks and governmental policies. These studies illustrate that digitalisation generates new opportunities while simultaneously engendering new inequities around digital knowledge and access.

Methods. This research utilises a mixed-method design to thoroughly investigate the dynamics of women's entrepreneurship in the digital economy. The integration of quantitative and qualitative methodologies facilitates a comprehensive knowledge of structural trends and behavioural patterns that impact entrepreneurial activities.

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The study mostly relies on secondary data analysis and policy evaluation. Statistical data were gathered from national and international sources, encompassing labour market indicators, entrepreneurial statistics, and financial inclusion metrics from 2016 to 2024. The data were utilised to discern trends in female labour force participation, sectoral employment distribution, and the expansion of women-owned firms. Furthermore, policy documents, governmental plans, and reports from international organisations were examined to evaluate institutional support mechanisms and regulatory frameworks influencing women's entrepreneurship.

The study integrates qualitative evidence from survey reports, expert evaluations, and current empirical research to enhance the quantitative analysis. This qualitative aspect facilitates a comprehensive knowledge of the socio-cultural limitations, behavioural reactions, and institutional obstacles encountered by women entrepreneurs. A comparative approach is employed by referencing patterns seen in other transition economies, facilitating a fuller contextualisation of the findings.

The study's analytical framework is based on three principal theoretical approaches. Theory of Financial Inclusion is employed to assess access to financial services and its influence on entrepreneurial development. Prospect Theory offers a behavioural framework for understanding decision-making with uncertainty and risk, especially concerning socio-cultural influences. The Triple Bottom Line approach is utilised to evaluate the economic, social, and environmental impacts of women-led firms.

The data analysis employs descriptive and comparative methodologies. Descriptive statistics are utilised to encapsulate trends and discern significant patterns, whilst comparative analysis is employed to investigate disparities among sectors and gender categories. Policy analysis is utilised to assess the efficacy of institutional initiatives and pinpoint existing deficiencies.

The study offers significant insights, however it is constrained by specific restrictions. The dependence on secondary data may limit the thoroughness of empirical study, and the accessibility of gender-disaggregated data is still restricted in certain areas. The lack of primary survey data may hinder the ability to capture individual-level behavioural dynamics. Notwithstanding these constraints, the study presents a comprehensive analytical framework for comprehending women's entrepreneurship within the digital economy and establishes a basis for subsequent empirical investigations.

Results. The analysis indicates that women's engagement in the labour market has progressively improved during the investigated period; yet, substantial gender gaps remain. Female employment rates consistently lag behind those of males, although unemployment rates among women are quite elevated. These data demonstrate that structural disparities persistently restrict women's access to steady and formal work opportunities.

Sectoral study reveals a significant concentration of women in historically female-dominated industries, including education, healthcare, trade, and services. These sectors, however crucial for societal development, are typically marked by reduced productivity and income levels relative to high-value industries. Conversely, women are markedly under-represented in fields such as information and communication technology (ICT), banking, construction, and transportation. The restricted involvement of women in these

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high-value areas hinders their opportunities for income enhancement, career progression, and leadership positions.

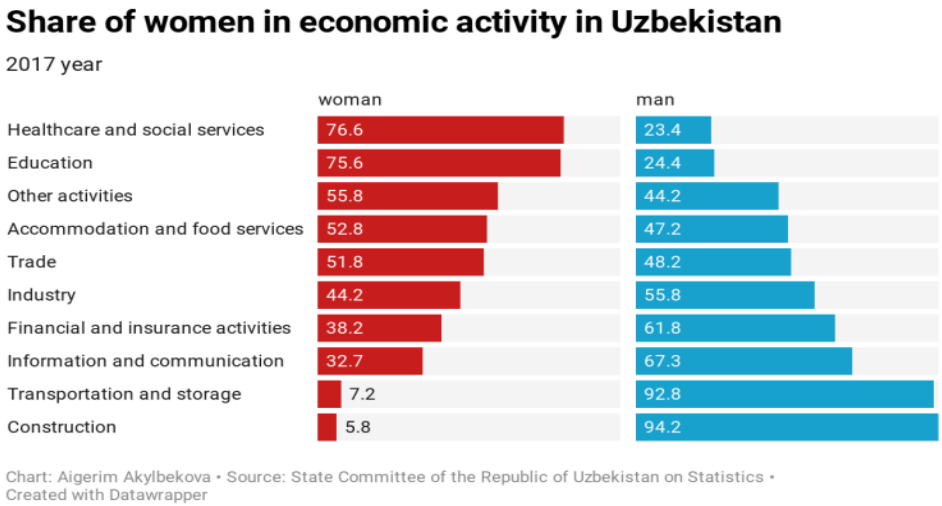



Figure 1. Share of women and men in economic activity by sector[1]

Figure 1 illustrates the sectoral distribution of women and men in economic activities. The figures unequivocally indicate that women are predominantly represented in social sectors, particularly healthcare and education, where their involvement surpasses 75%. Simultaneously, women continue to be markedly under-represented in high-value and capital-intensive industries, including construction (5.8%), transportation (7.2%), and technology and communication (32.7%). This sectoral disparity illustrates systemic gender inequities and restricts women's access to higher earning prospects and leadership roles.

Entrepreneurship has become a significant alternate avenue for women's economic engagement. The results demonstrate a significant surge in women-owned businesses, especially in sectors aligned with digital technologies, such as e-commerce, online education, and home-based services. Digital platforms have lowered entrance barriers and facilitated women's participation in business endeavours while managing home obligations.

Notwithstanding these favourable trends, access to finance continues to be a significant barrier. Female entrepreneurs persistently encounter obstacles with collateral prerequisites, restricted asset ownership, and gender discrimination in lending processes. Despite the proliferation of microfinance institutions and digital financial services enhancing financial accessibility, these mechanisms have not adequately resolved structural inequities.

The digital economy has significantly transformed by offering adaptable company models, broadening market access, and alleviating regional and mobility limitations. Nonetheless, inequalities in digital literacy, technological access, and professional networks persistently hinder the scalability and sustainability of women-led firms.

[1] National statistics committee. of the Republic of Uzbekistan

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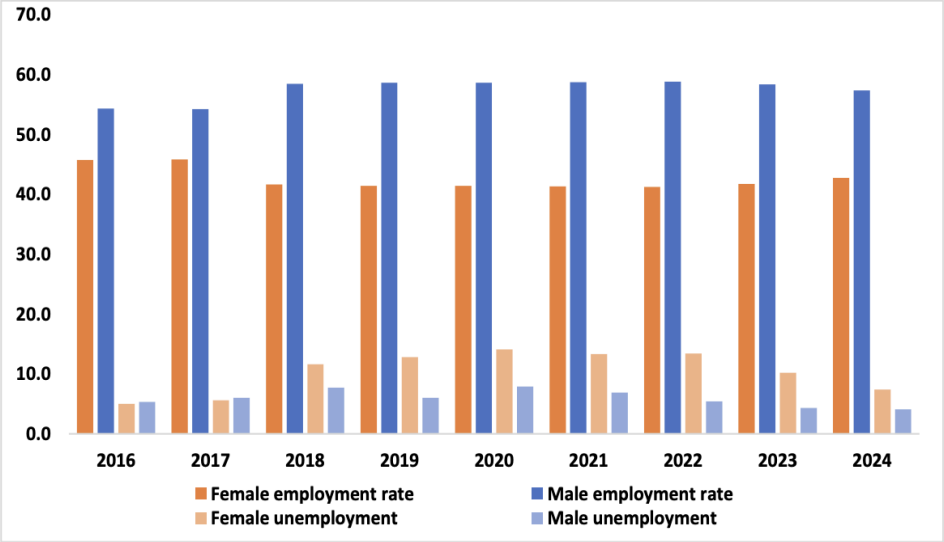



Figure 2. Comparison of male and female employment and unemployment rates, 2016-2024[2]

Figure 2 depicts the comparison of employment and unemployment rates between males and females from 2016 to 2024. The data indicate that female employment rates constantly lagged behind those of males, varying between around 41% and 46%, whilst male employment averaged around 55% to 58%. Simultaneously, female unemployment rates were consistently elevated, reaching a zenith around 2020 before progressively diminishing. This trend underscores persistent structural inequities in the labour market, revealing that women have more significant obstacles in securing secure work prospects.

Table 1. Sectoral distribution of women's employment (2016-2024)[3]

| Indicators | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|---|---|---|
| Agricultural forestry and fisheries | 26.3 | 26.3 | 27.8 | 27.3 | 27.1 | 25.9 | 26.6 | 24.7 | 23.0 |
| Industry | 12.7 | 13 | 13.7 | 14.3 | 14.3 | 14.2 | 13.6 | 13.7 | 12.3 |
| Construction | 1.2 | 1.2 | 1.3 | 1.5 | 1.5 | 1.5 | 1.4 | 2.0 | 1.8 |
| Trade | 12.3 | 12.4 | 12.8 | 13.2 | 12.7 | 13.5 | 12.9 | 13.4 | 12.2 |
| Transportation and storage | 0.8 | 0.8 | 1.0 | 0.8 | 0.8 | 0.8 | 0.8 | 1.4 | 1.2 |
| Accommodation and catering services | 2.7 | 2.7 | 2.8 | 2.9 | 2.9 | 3.1 | 3.1 | 3.2 | 3.0 |
| Information and communication | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 |
| Financial and insurance activities | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 |
| Education | 13.8 | 13.5 | 13.6 | 15.3 | 15.8 | 16.1 | 16.3 | 15.8 | 15.4 |
| Health care and social services | 7.6 | 7.5 | 8.7 | 8.4 | 9.3 | 9.0 | 9.1 | 8.9 | 8.5 |
| Art entertainment and recreation | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 |
| Other activities | 21.4 | 21.4 | 17.0 | 14.9 | 14.2 | 14.4 | 14.6 | 15.4 | 21.0 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

The table illustrates the sectoral allocation of women's employment from 2016 to 2024. The figures reveal that women are mostly concentrated in the agricultural, education, healthcare, and trade sectors, which collectively represent the biggest proportion of female employment. Despite a gradual decrease in the proportion of women in agriculture, it continues to be one of the predominant sectors. Conversely, engagement in high-value industries such as technology and communication, financial services, and construction remains persistently low. This pattern demonstrates ongoing structural segmentation in the labour market, restricting women's access to higher-income and innovation-oriented sectors.

[2] National statistics committee. of the Republic of Uzbekistan

[3] National statistics committee. of the Republic of Uzbekistan

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Discussion. This study's findings underscore the intricate and multifaceted characteristics of women's entrepreneurship in transitional economies. Digitalisation and policy reforms have generated new prospects for women's participation in economic activity. Conversely, entrenched socio-cultural norms and institutional obstacles persist in influencing and limiting business results.

According to Financial Inclusion Theory, access to financial resources is a crucial factor in entrepreneurial success. Despite advancements in financial infrastructure enhancing access to credit and digital financial services, women continue to encounter structural disadvantages stemming from restricted asset ownership and enduring gender bias. This indicates that financial inclusion initiatives should extend beyond merely increasing access and tackle fundamental inequities inside financial systems.

Prospect Theory elucidates the behavioural aspects of entrepreneurship. Women entrepreneurs in socially limited situations frequently demonstrate increased risk aversion, shaped by economic uncertainty and the possible social repercussions of business failure. This behavioural trend may constrain innovation, investment choices, and corporate growth, especially in high-risk, high-reward sectors like ICT and banking.

The implementation of the Triple Bottom Line paradigm demonstrates that women entrepreneurs enhance economic growth as well as social and environmental results. Numerous women-led firms incorporate social responsibility, community development, and sustainable practices into their business frameworks. This underscores the extensive developmental influence of women's entrepreneurship beyond conventional economic metrics.

Comparative research from other transition economies corroborates that analogous patterns of sectoral segregation, financial limitations, and socio-cultural obstacles endure across various country contexts. This indicates that the concerns revealed in this study are not isolated but rather indicative of broader systemic issues need coordinated policy responses.

Conclusion. This study illustrates that women's entrepreneurship is essential for fostering inclusive economic growth and sustainable development in transitional economies. Although digital change has generated new chances for women to pursue entrepreneurial endeavours, substantial structural impediments persist, hindering their complete involvement.

The enduring gender gaps in labour market participation, sectoral allocation, and financial access highlight the necessity for comprehensive and targeted policy initiatives. Confronting these difficulties necessitates a multifaceted strategy that incorporates economic, social, and institutional reforms.

Specifically, bolstering financial inclusion mechanisms, broadening access to digital and entrepreneurial competencies, and fostering women's engagement in high-value industries are crucial for improving the efficacy and sustainability of women's entrepreneurship. Moreover, enhancing social infrastructure - such as childcare services and support systems - can alleviate the strain of unpaid care work and facilitate increased economic involvement.

The results underscore the significance of acknowledging women entrepreneurs as essential contributors to sustainable development. Their contributions encompass not only

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economic growth but also social inclusion, community development, and environmental sustainability.

Future study ought to emphasise the integration of primary data, longitudinal analysis, and econometric modelling to further investigate the dynamics of women's entrepreneurship. This research would yield profound insights into causal linkages and facilitate evidence-based policymaking.

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