INSTITUTIONAL LOCK-INS AND INNOVATION FAILURE IN TRANSITION ECONOMIES: EVIDENCE FROM UZBEKISTAN'S EXPORT INFRASTRUCTURE

Mukhammadyaminova Shakhzoda
Assistant at the Department of Transnational Programs IMC Krems, TSUE
ORCID: https://orcid.org/0000-0002-9547-3892
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Annotation. Despite significant investment in innovation infrastructure, Uzbekistan shows limited progress in export diversification and innovation outcomes. This study attributes the gap to institutional lock-ins—centralized governance, poor inter-agency coordination, and weak collaboration mechanisms. Using Institutional Theory and the Triple Helix framework, case studies from the textile, logistics, and agro-processing sectors reveal that innovation barriers stem not from lack of resources, but from systemic rigidity. The paper recommends institutional reforms, sector-specific innovation hubs, and the adoption of RegTech tools to enhance adaptive capacity and foster export-oriented innovation.

Keywords: Transition economy, institutional lock-in, innovation policy, export infrastructure, Triple Helix, public-private partnership, RegTech, digital integration, Uzbekistan, export-oriented innovation.

In transitional economies such as Uzbekistan, the disconnect between investment in innovation infrastructure and actual innovation outcomes has become increasingly apparent. Despite significant public funding, the country continues to underperform in global innovation rankings. In 2023, Uzbekistan was positioned 82nd out of 132 countries in the Global Innovation Index, showing only marginal improvement from previous years and still trailing regional peers such as Kazakhstan[1]. The national budget allocated over UZS 1.5 trillion between 2019 and 2023 to develop digital platforms, support start-ups, and modernise export logistics, yet productivity and export diversification remain limited[2].

This paradox can be traced to institutional lock-ins: entrenched governance structures, overlapping mandates, and the limited adaptive capacity of public agencies. Drawing on Institutional Theory[3], the concept of path dependency[4],

[1] WIPO. (2023). Global Innovation Index 2023. World Intellectual Property Organization.
[2] OECD. (2022). Enhancing SME and Entrepreneurship Finance in Uzbekistan. Organisation for Economic Co-operation and Development.
[3] DiMaggio, P. J., & Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. American Sociological Review, 48(2), 147–160.

and a critical reading of the Triple Helix framework[5], this thesis explores how these systemic constraints hinder innovation. Rather than focusing solely on firm-level deficiencies, the paper analyses innovation as an outcome of broader institutional architecture, using case studies from Uzbekistan's textile, logistics, and agro-processing sectors.

Evidence reveals that fewer than 25% of export-oriented enterprises (EOEs) accessed more than one form of state support in 2022[2]. Initiatives such as the establishment of IT Parks and the digitisation of customs procedures have yielded partial benefits. For example, TransAsia Logistics reported reduced paperwork but continued to face delays averaging 11 days in customs clearance due to the incomplete integration of digital platforms[6]. GERMES TEKS implemented ERP systems in collaboration with international donors, yet lacked access to certified textile testing infrastructure and sector-specific R&D. UzAgroExport expanded traceability systems in its supply chains but reported insufficient engagement with university researchers, citing outdated academic outputs and weak incentives for applied collaboration.

These examples highlight a deeper systemic issue. The innovation ecosystem in Uzbekistan functions through a top-down model where ministries often operate in silos, with limited data interoperability or co-financed mechanisms. R&D spending reached 0.31% of GDP in 2023, yet remains below regional benchmarks and continues to favour fundamental research with limited industrial relevance[7]. Public-private-academic partnerships are mostly transactional, lacking the feedback loops and accountability necessary for co-evolutionary governance.

Unlocking innovation potential in Uzbekistan's export sector thus requires institutional transformation. Policy recommendations emerging from this analysis include the creation of inter-ministerial digital innovation coordination units with shared metrics; piloting sector-specific innovation hubs co-governed by industry and academia; and revising funding criteria to prioritise demonstrable collaboration outcomes. Furthermore, regulatory technologies (RegTech), including AI-based risk profiling in customs and blockchain in export certification, could help address bureaucratic inertia while enhancing transparency.

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The findings reframe innovation failure in Uzbekistan not as a result of low ambition or weak entrepreneurship, but as a reflection of institutional inertia and misaligned policy design. These institutional lock-ins, though often embedded within administrative routines and fragmented legal frameworks, substantially reduce the absorptive capacity of EOEs. Only by shifting toward an adaptive, participatory, and learning-oriented governance model can the country realise its export-led innovation ambitions. This perspective aligns with international assessments of innovation in transitional economies and offers a conceptual basis for benchmarking innovation system reform across the post-Soviet space

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