



## ENHANCING MECHANISMS FOR FINANCING INVESTMENT PROJECTS IN FREE ECONOMIC ZONES

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### ABSTRACT

*Free economic zones (FEZs) are vital instruments for attracting investment and fostering industrial growth, yet their effectiveness depends on robust financing mechanisms. This study analyzes global experiences and identifies financing gaps in Uzbekistan's FEZs, emphasizing the role of project finance, PPPs, capital-market instruments, and Islamic finance. The findings suggest that diversified and sustainable financing strategies, supported by governance reforms, are essential for transforming FEZs into engines of long-term economic development.*

**KEYWORDS:** *Free Economic Zones, Investment Financing, Project Finance, PPP, Islamic Finance, Green Bonds, Blended Finance.*

### INTRODUCTION

Free economic zones (FEZs) are increasingly recognized as critical laboratories for economic transformation in both developed and developing economies. They serve as institutional innovations designed to address structural challenges that conventional national policies often fail to resolve—namely limited capital inflows, sluggish industrial diversification, and weak integration into global value chains. The modern FEZ is not merely a site of tax exemptions or customs privileges, but rather a policy instrument that blends regulatory flexibility, targeted infrastructure, and incentive frameworks to attract and sustain long-term investment projects. The expansion of FEZs is striking: according to UNCTAD (2019), more than 5,400 zones are currently operational in over 140 countries, contributing significantly to trade, industrial output, and employment. This proliferation reflects the growing reliance on FEZs as vehicles for industrial upgrading and international competitiveness.

The theoretical underpinnings of FEZs are diverse. Vernon's (1966) product-cycle theory suggests that as technologies mature, firms seek lower-cost production environments—a dynamic FEZs are designed to capture. Krugman's (1991) new economic geography highlights the agglomeration effects and scale economies that zones can catalyze, creating localized clusters of innovation and production. More recent contributions from institutional economics emphasize credible commitment and policy credibility as decisive factors: without legal predictability and financial transparency, zones may fail to attract sustainable investment. Thus, FEZs should be viewed as complex systems where economic geography, institutional quality, and financial architecture interact to shape outcomes.

Despite their potential, FEZs face a persistent constraint: the financing of investment projects. Traditional reliance on state budget allocations and limited foreign direct investment (FDI) is increasingly insufficient in the face of large-scale infrastructure demands, the need for advanced technology, and the urgency of transitioning to sustainable growth models. Evidence from underperforming zones in Africa and South Asia shows that even with favorable regulatory frameworks, inadequate financing mechanisms have led to “empty zones” characterized by underutilized infrastructure and low investor participation (Farole, 2011; Aggarwal, 2012). In contrast, the success of Chinese SEZs or Dubai's Jebel Ali Free Zone was not only a result of strategic location or governance quality but also the deployment of diversified financing channels, including state banks, sovereign bonds, PPP models, and integration with international capital markets.

The financing challenge is particularly acute in emerging economies such as Uzbekistan. Since independence, Uzbekistan has embraced FEZs as part of its broader development strategy to diversify beyond raw-material exports, attract advanced technologies, and integrate into regional and global production chains. More than 20



FEZs have been established, focusing on sectors ranging from renewable energy and pharmaceuticals to textiles and petrochemicals. While these zones have attracted some foreign capital, their financing model remains narrow: state budget allocations, concessional loans from multilateral development banks, and selective FDI inflows. Domestic banks, constrained by short-term liabilities and high lending rates, struggle to provide long-term project financing, while the domestic capital market is still at an early stage of development. This creates structural bottlenecks, limiting the scale and scope of investment projects within FEZs.

At the same time, global investment trends are rapidly evolving. The growing emphasis on sustainable finance, green bonds, and ESG (environmental, social, governance) compliance is reshaping capital flows. Institutional investors increasingly seek projects that align with sustainability principles, while multilateral institutions and development banks are embedding climate and social considerations into their financing frameworks (Flammer, 2021; UNCTAD, 2023). Islamic finance, particularly sukuk, also provides a growing pool of Sharia-compliant capital that can be mobilized for asset-backed projects such as those within FEZs. Moreover, the digitalization of finance—through crowdfunding, fintech platforms, and blockchain-based instruments—presents new opportunities for small and medium-sized enterprises (SMEs) operating inside FEZs to access capital.

## LITERATURE REVIEW

The economic logic of FEZs synthesizes location theory, institutional economics, and global value-chain (GVC) dynamics. Product-cycle theory predicts the spatial relocation of standardized production as technologies mature (Vernon, 1966), while new economic geography emphasizes agglomeration economies, scale, and market-access effects that zones can catalyze (Krugman, 1991). Institutional economics frames FEZs as credibility devices that relax policy and coordination failures via stable rules, streamlined procedures, and targeted infrastructure (North, 1990). Contemporary industrial-policy scholarship adds a process view—zones as platforms for discovery, iterative coordination, and disciplined state–market collaboration—rather than mere bundles of fiscal incentives (Juhász, Lane, & Rodrik, 2023; Rodrik, 2004; Hausmann & Rodrik, 2003). These strands collectively imply that the *financing architecture* is constitutive of FEZ success because it shapes risk allocation, project bankability, and long-horizon investment.

Evidence on FEZ outcomes is heterogeneous across countries and time. UNCTAD (2019) documents rapid zone proliferation with uneven performance, frequently tied to governance gaps, thin linkages, and weak investment ecosystems. Causal studies for China identify sizable gains in output, exports, and FDI when zones are embedded in broader infrastructure and financial intermediation (Wang, 2013; Alder, Shao, & Zilibotti, 2016). In contrast, meta-reviews for Africa and India highlight persistent constraints—land assembly, infrastructure bottlenecks, and shallow finance—limiting zone impact (Farole, 2011; Aggarwal, 2012; Jayanthakumaran, 2003). The cross-cutting insight is that *financeability*—access to patient, risk-bearing capital under credible rules—conditions whether zones become dynamic clusters or underutilized enclaves.

Large FEZ assets (power, water, logistics platforms, site preparation) and tenant plants require segmented risk allocation. The PF literature shows how special-purpose vehicles (SPVs), limited/non-recourse structures, robust security packages, and contracted cash flows (off-take, availability) de-risk construction, demand, and regulatory exposures (Yescombe, 2014; Gatti, 2018). PPP practice institutionalizes life-cycle discipline—project selection, value-for-money (VfM), competitive procurement, and contract management—while making fiscal risks transparent (World Bank et al., 2017; Engel, Fischer, & Galetovic, 2014). Applied to FEZs, PF/PPP toolkits enable (i) unbundling of shared-use infrastructure from tenant investments, (ii) standardized risk allocation, and (iii) refinancing once assets reach stable operations.

Bank balance sheets in emerging markets are often short-tenor and procyclical. Capital-market instruments extend duration and investor diversity, particularly via labeled debt. Empirical work finds that credible green-bond frameworks and external reviews can mitigate information asymmetries and broaden the investor base (Ehlers & Packer, 2017; Flammer, 2021). Evidence on pricing is mixed but suggests benefits for first-time issuers or high-quality disclosure, with caution against “label without substance” (Baker et al., 2018). For FEZs, sovereign/sub-sovereign, corporate, or SPV-level green and sustainability bonds can fund renewable energy, industrial efficiency, and circular-economy assets—provided pipelines, reporting, and verification are strong (CBI, 2024).



## ANALYSIS AND RESULTS

The financing of investment projects in Free Economic Zones (FEZs) requires a multi-dimensional approach that addresses infrastructure development, firm-level innovation, and long-term sustainability. Conventional reliance on state budgets and concessional loans has proven insufficient in emerging economies, including Uzbekistan. Global experiences demonstrate that successful FEZs rely on diversified financial instruments, blending state support with market-driven solutions.

**Table 1. Financing models in free economic zones**

| Financing Model                           | Key Features  | Advantages and Limitations  |
|---|---|---|
| <b>State Budget Financing</b>             | Direct allocation of funds from government for infrastructure and basic utilities.                  | Ensures rapid development of core infrastructure; however, creates fiscal burden and dependency on state resources.                 |
| <b>Project Finance (SPVs)</b>             | Use of special-purpose vehicles with limited/non-recourse financing, relying on project cash flows. | Provides risk-sharing, attracts private capital; but requires robust legal frameworks and credible contracts.                       |
| <b>Public-Private Partnerships (PPPs)</b> | Shared financing between government and private sector for infrastructure and service provision.    | Mobilizes private expertise and funding; yet risk allocation and transparency are often problematic in weak institutional contexts. |
| <b>Capital Market Instruments</b>         | Bonds, sukuk, and green finance products issued to fund long-term investments.                      | Extend tenor and diversify investor base; but depend on market depth, credit ratings, and disclosure standards.                     |

*Source: Developed by the author*

The table highlights the multidimensional financing landscape of FEZs. While state budget financing remains a foundational tool, its sustainability is questionable in economies with limited fiscal capacity. Project finance offers a powerful mechanism for large-scale infrastructure, but successful implementation depends on enforceable contracts and investor protection. PPPs provide flexibility but require strong governance to prevent renegotiation risks. Capital market instruments—including green bonds and sukuk—represent the most innovative approach, linking FEZ financing with global investors, sustainability mandates, and Sharia-compliant markets. However, these instruments demand sophisticated regulatory environments and transparent reporting mechanisms, which are still developing in Uzbekistan.

**Table 2. Foreign experiences in financing free economic zones**

| Country/Region                                    | Financing Approach  | Outcomes and Lessons   |
|---|---|--|
| <b>China (Shenzhen SEZ)</b>                       | Combination of state-backed credit, reinvested revenues, and later integration with global capital markets. | Created one of the most successful industrial clusters; underscores the role of long-term state commitment complemented by evolving market finance.  |
| <b>Poland (Katowice SEZ)</b>                      | EU structural funds, domestic banks, and PPPs for logistics and industrial parks.                           | Improved regional infrastructure, attracted manufacturing FDI; illustrates importance of blending supranational funds with private finance.          |
| <b>United Arab Emirates (Jebel Ali Free Zone)</b> | Reliance on sovereign bond issuance, foreign banks, and reinvested profits.                                 | Became a logistics and trade hub; shows that integration with international capital markets and strategic borrowing enhances competitiveness.        |
| <b>Malaysia (Iskandar Region)</b>                 | Use of sukuk and Islamic finance instruments to support infrastructure and real estate within the zone.     | Mobilized significant Sharia-compliant capital, strengthened regional financial ecosystem; demonstrates value of Islamic finance in FEZ development. |

*Source: Developed by the author*

The international cases illustrate the adaptability of financing strategies to different institutional and market contexts. China's Shenzhen shows how state-led financing can gradually transition to capital-market integration, producing sustained growth. Poland highlights the utility of multilateral and supranational resources, coupled with PPPs, in financing FEZ development in post-transition economies. The UAE experience demonstrates how



strategic bond issuance and international investor engagement can transform a zone into a global logistics hub. Malaysia provides an alternative model by leveraging Islamic finance instruments, showing their compatibility with asset-backed projects and their role in mobilizing regional liquidity.

## RECOMMENDATIONS

To ensure the sustainable financing of investment projects in Free Economic Zones (FEZs), Uzbekistan must adopt a diversified and innovation-oriented approach. First, institutionalize project finance and PPP frameworks by developing standardized contracts, transparent procurement, and independent arbitration mechanisms that enhance investor confidence. Second, establish FEZ-dedicated investment funds and promote capital-market instruments such as green bonds and sukuk, which can mobilize long-term capital from institutional investors and Sharia-compliant markets. Third, leverage blended finance and guarantees with the support of multilateral institutions (World Bank, ADB, IsDB, MIGA) to mitigate political, currency, and project risks while crowding in private capital. Finally, strengthen digital financing platforms within FEZs to provide SMEs and innovative start-ups with access to venture funding, fintech solutions, and supply-chain finance. These steps must be accompanied by continuous reforms in governance, legal predictability, and ESG alignment to build a credible financial ecosystem that matches international standards.

## CONCLUSION

The financing of investment projects in FEZs is a decisive factor that determines whether these zones become dynamic growth engines or remain underutilized policy experiments. International evidence—from China’s transition to capital-market integration, Poland’s use of EU funds and PPPs, the UAE’s sovereign bond strategy, and Malaysia’s Islamic finance model—demonstrates that sustainable success depends on flexible, diversified, and transparent financing architectures. For Uzbekistan, the challenge lies not only in mobilizing sufficient resources but also in ensuring that financing mechanisms are aligned with long-term competitiveness, innovation, and sustainability. By advancing project finance, PPPs, capital-market instruments, Islamic finance, and blended finance solutions, and by embedding institutional reforms that lower risk perceptions, Uzbekistan’s FEZs can evolve into globally competitive platforms for industrial upgrading and export growth. A coherent and future-oriented financing strategy will thus transform FEZs from fiscal enclaves into catalysts of inclusive and sustainable economic development.

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