

## ATTRACTING FOREIGN DIRECT INVESTMENT (FDI) INTO THE MARITIME SECTOR: STRATEGIES AND POLICY FRAMEWORKS

Danish Aman<sup>\*1</sup>, Syed Waqar Hasan Zaidi<sup>2</sup><sup>\*1</sup>Research Scholar, Netherlands Maritime University College, Malaysia<sup>2</sup>Deputy Vice Chancellor, Netherlands Maritime University College, Malaysia<sup>\*1</sup>danishaman@hotmail.com, <sup>2</sup>hasan@nmuc.edu.myDOI: <http://doi.org/10.5281/zenodo.23185850>**Keywords**

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Corresponding Author: \*

Danish Aman

**Abstract**

Foreign Direct Investment (FDI) has become an important source of capital, technology, managerial expertise, logistics connectivity and international market integration for maritime economies. For Pakistan, the maritime sector presents a particularly significant investment opportunity because of its strategic location along the Arabian Sea, its proximity to major international shipping routes, its ports at Karachi, Port Qasim and Gwadar, and its potential in shipping, logistics, fisheries, coastal tourism, shipbuilding, marine services, port digitalization and the wider blue economy. Despite these advantages, Pakistan has not yet attracted maritime FDI commensurate with its geographical and commercial potential. Regulatory uncertainty fragmented institutional arrangements, infrastructure deficiencies, macroeconomic volatility, security concerns, weak project preparation, limited port-hinterland integration and inconsistent investment facilitation continue to reduce investor confidence. This paper examines the determinants of maritime FDI and develops strategies and policy frameworks for attracting sustainable foreign investment into Pakistan's maritime economy. Drawing on recent academic literature and international policy evidence up to 2026, the paper argues that maritime FDI should be approached not simply as a search for foreign capital but as a mechanism for increasing productive capacity, technology transfer, exports, employment, supply-chain integration and environmental sustainability. The study recommends a dedicated maritime investment framework based on regulatory predictability, bankable project pipelines, public-private partnerships, transparent concession regimes, targeted investment facilitation, port digitalization, green finance, investment screening, local economic linkages and institutional coordination. It concludes that Pakistan can substantially improve its attractiveness to foreign maritime investors by shifting from transaction-based investment promotion toward a stable, sector-specific and development-oriented maritime investment ecosystem.

**INTRODUCTION**

Foreign direct investment has become an important component of global economic integration because it combines capital flows with technology, managerial knowledge, access to markets and participation in global value chains. Its developmental significance can be

particularly strong in infrastructure-intensive sectors where domestic public and private finance may be insufficient to meet investment requirements. Maritime transport and the wider blue economy constitute such sectors because ports, shipping, logistics systems, shipyards, fisheries infrastructure, coastal tourism facilities

and marine energy projects typically require substantial initial capital, long planning horizons and advanced technical capabilities.

The contemporary maritime economy is considerably wider than traditional shipping and port operations. It encompasses port terminals, multimodal logistics, shipbuilding, ship repair, fisheries, aquaculture, seafood processing, coastal tourism, offshore energy, digital maritime services, marine environmental management and other blue-economy activities. This diversification significantly broadens the potential scope of maritime FDI.

Pakistan is strategically positioned to benefit from these developments. Its coastline along the Arabian Sea connects the country with the Persian Gulf, Middle East, East Africa, South Asia and international sea routes linking Asia with Europe. Karachi Port and Port Qasim remain the country's principal commercial gateways, while Gwadar has been positioned as a long-term regional connectivity node under the China-Pakistan Economic Corridor. Gwadar's geographical location and CPEC-related infrastructure have attracted considerable international attention and investment interest (Ahmad, 2024; Khan et al., 2024; Lin & Iftikhar, 2024).

Recent foreign participation also demonstrates that Pakistan's maritime assets can attract major international operators when projects are commercially structured. AD Ports Group entered a long-term concession arrangement for container terminal operations at Karachi Port in 2023 and subsequently expanded into bulk and general cargo operations. Pakistan and Dubai also announced cooperation in 2024 covering a potential dedicated freight corridor, logistics facilities and an economic zone linked with Port Qasim. These transactions illustrate an important distinction. Pakistan does not necessarily lack maritime investment opportunities; rather, the challenge is to convert those opportunities into consistently bankable and investable projects for a wider range of international investors.

Pakistan's overall FDI performance also demonstrates the need for diversification. Net FDI reached approximately US\$2.46 billion in FY2025 but fell substantially during the first ten months of FY2026 compared with the

corresponding period of FY2025. China continued to represent an important investment source, while investment remained concentrated in a relatively limited number of sectors (State Bank of Pakistan, 2026). The international environment is also becoming more competitive. UNCTAD reported that global FDI reached approximately US\$1.6 trillion in 2025, but investment growth remained highly concentrated geographically and sectorally. Developing economies therefore face increasing competition for internationally mobile capital, particularly investment linked with infrastructure, digitalization, energy transition and strategic supply chains (UNCTAD, 2026). Against this background, attracting maritime FDI requires more than tax concessions or promotional conferences. International investors evaluate regulatory stability, project profitability, infrastructure quality, governance, market access, foreign-exchange arrangements, political risk, dispute-resolution mechanisms and the predictability of long-term policy. This paper therefore examines how Pakistan can develop a comprehensive strategy and policy framework for attracting sustainable FDI into its maritime sector, with particular focus on ports, logistics, shipping, fisheries, coastal industries, maritime services and emerging blue-economy investment opportunities.

### **Understanding Maritime Foreign Direct Investment**

Maritime FDI can be defined as long-term foreign ownership, participation or control in businesses and infrastructure associated with marine transportation, ocean industries and supporting activities. It may take the form of wholly owned subsidiaries, joint ventures with domestic companies, equity acquisitions, public-private partnerships, terminal concessions, logistics facilities, industrial zones or greenfield infrastructure.

The developmental effects of these investment forms are not necessarily identical. Greenfield FDI may generate new productive capacity, employment and infrastructure more directly than mergers and acquisitions. Cross-country evidence indicates that greenfield FDI tends to have stronger positive effects on infrastructure

development than some forms of cross-border acquisition (Akinlo & Oyeleke, 2024).

In maritime sectors, FDI can have particularly important spillovers. Foreign shipping and logistics companies may contribute infrastructure, connectivity, operational capabilities, international customers and logistics technology. Research on Maersk's investment in Vietnam shows that shipping and logistics FDI supported export development by building infrastructure, lowering transaction costs, increasing market connectivity and upgrading export capabilities (Jensen & Whitfield, 2023). The objective of maritime FDI policy should therefore not be to maximize the financial amount of foreign investment alone. It should maximize the economic value generated from that investment.

#### **Theoretical Foundations of Maritime FDI Attraction**

The attraction of FDI is commonly explained through market, resource, efficiency and strategic-asset motives. Market-seeking investors are attracted by large and growing demand, while efficiency-seeking investors prioritize locations that reduce transportation, production or transaction costs. Resource-seeking investors may be interested in fisheries, marine resources, coastal land or energy potential, whereas strategic-asset-seeking investors may invest in ports, terminals or logistics corridors because such assets strengthen access to global transport networks.

Pakistan presents elements of all four motivations. Its domestic market supports cargo and logistics demand, its geographical position can provide transit connectivity, its marine resources support fisheries and aquaculture, and its ports can represent strategic assets connecting regional markets. Nevertheless, geographical advantage by itself does not guarantee FDI. Research consistently demonstrates that infrastructure, institutional quality, regulatory predictability, trade openness and governance influence investors' location decisions. Recent South Asian evidence reinforces the role of governance in shaping FDI inflows (Al-Absye et al., 2024), while broader research shows that transport infrastructure and logistics performance interact strongly with FDI and

economic growth (Saidi et al., 2020). Maritime-investment strategy should therefore combine geographical advantages with institutional credibility.

#### **The Strategic Case for Maritime FDI in Pakistan**

Pakistan's strategic maritime location near the Strait of Hormuz and principal east-west shipping routes provides an important potential advantage. Gwadar is especially relevant because it is positioned near Gulf energy routes and has been conceptualized as a possible gateway between western China, Central Asia, the Middle East and the Arabian Sea (Ahmad, 2024). However, location should not be confused with competitiveness. Ships, cargo owners and investors select ports based on cost, reliability, cargo availability, hinterland connectivity, regulatory efficiency and turnaround time. Pakistan must therefore transform geographical proximity into commercially useful connectivity.

Pakistan also benefits from a large domestic trade base. Karachi Port and Port Qasim function as national trade gateways, and investment in terminal capacity, storage, cold chains, freight corridors and intermodal logistics can serve existing demand rather than relying entirely on speculative future transit volumes. Gwadar represents a different investment proposition because its long-term significance is linked with CPEC, regional transit trade, industrial zones, energy logistics and broader connectivity. Research nevertheless cautions that infrastructure, governance, security and local development challenges influence Gwadar's attractiveness (Khan et al., 2024; Lin & Iftikhar, 2024). This suggests that Gwadar should be marketed through commercially realistic projects rather than geopolitical narratives alone.

Growing investment engagement with the United Arab Emirates and other Gulf economies creates further opportunities. The Karachi port concessions involving AD Ports Group and the Pakistan-Dubai agreements demonstrate that Gulf-based global logistics companies view Pakistan as commercially relevant. Such investments could form the basis of a broader Gulf-Pakistan maritime investment

strategy encompassing ports, ship repair, maritime logistics, warehousing, coastal industrial zones and energy infrastructure.

### Principal Determinants of Maritime FDI

Macroeconomic stability is one of the most important determinants of long-term maritime investment because major port and infrastructure concessions may operate for several decades. Investors therefore require confidence that revenues can be converted, obligations serviced and profits repatriated. Pakistan already maintains a generally liberal investment regime, including substantial foreign ownership rights and provisions for the repatriation of capital and profits. The policy challenge is not merely formal permission but predictable implementation.

Institutional quality is equally important because it affects both perceived risk and transaction costs. Investors prefer transparent licensing, clearly defined government responsibilities, effective contract enforcement and predictable dispute settlement. Recent research on institutional quality and FDI reinforces the importance of governance, regulatory effectiveness and macroeconomic conditions for attracting international capital (Khan & Saleem, 2025). In Pakistan, maritime governance involves federal ministries, port authorities, customs, provincial governments, environmental agencies, security organizations and several other bodies. Without effective coordination, investors may face multiple approval processes and institutional uncertainty. Infrastructure and hinterland connectivity also shape FDI decisions. Port competitiveness cannot be evaluated independently from roads, railways, dry ports, warehouses and logistics networks. Empirical research finds strong relationships among transport infrastructure, logistics capability, FDI and economic growth in developing countries (Saidi et al., 2020). Recent work in Saudi Arabia also demonstrates that transportation infrastructure and institutional conditions influence FDI attraction, although the contribution varies by transport mode (Alotaibi et al., 2025). Pakistan therefore needs to market port investment together with inland connectivity.

Market size and cargo availability are another critical determinant. Infrastructure investors are more interested in predictable revenue streams than infrastructure symbolism. Ports require cargo, warehouses require customers and terminals require throughput. Deep-water port research confirms that stronger port capabilities can substantially influence merchandise trade, but port infrastructure must connect with actual commercial flows (Blonigen & Wilson, 2025). Foreign investors should therefore receive credible cargo forecasts, demand scenarios and hinterland analyses rather than excessively optimistic projections.

Security and political risk also influence foreign-investment decisions. Ports are strategically sensitive infrastructure, and for Pakistan, particularly Gwadar and Balochistan, investor confidence depends partly on physical security and political stability. Khan et al. (2024) emphasize that maritime security must be treated as an integrated component of Gwadar's development. At the same time, security policy should avoid imposing unnecessarily complex operating conditions on legitimate commercial investors.

### Major Constraints to Maritime FDI in Pakistan

One major constraint is policy discontinuity. Infrastructure projects often outlive several governments, and investors therefore require confidence that contracts, tariffs, concession arrangements and regulatory rules will remain reasonably stable. Pakistan's Investment Policy 2023 aims to attract higher-quality FDI, increase participation in global value chains, create high-value employment, strengthen local linkages and improve economic complexity. These objectives provide an appropriate foundation, but maritime investment requires a more detailed sectoral framework.

A second constraint is fragmented maritime governance. Fragmented governance can delay approvals and create inconsistent requirements. Comparable evidence from the Global South shows that fragmented decision-making among ports, transport agencies and hinterland institutions can significantly weaken maritime transport governance (Nur et al., 2024). Pakistan therefore requires stronger institutional

coordination between the Ministry of Maritime Affairs, Board of Investment, port authorities, customs, provincial agencies and investment-facilitation bodies.

Weak project preparation represents another serious challenge. Investors require structured projects rather than broad sector descriptions. A credible maritime investment project must include commercial feasibility, traffic forecasts, land availability, environmental studies, risk allocation, tariff mechanisms, concession structure, expected returns, foreign-exchange arrangements, government obligations and dispute-resolution provisions. Projects lacking this level of preparation frequently remain investment opportunities only in name rather than becoming transaction-ready assets.

Foreign-exchange and repatriation concerns also matter. Legal rights to repatriate profits are necessary but insufficient if macroeconomic or foreign-exchange constraints create uncertainty about practical implementation. For large international infrastructure investors, convertibility and payment mechanisms must therefore be incorporated into project design.

Contract enforcement and dispute resolution are equally important. Port and shipping investment contracts are frequently complex and long term, so international arbitration clauses, contractual stabilization mechanisms and transparent concession documentation can reduce perceived risk.

Security and geopolitical exposure also require careful management. Foreign ownership or operation of ports can raise legitimate national-security concerns. Research on international port investment increasingly emphasizes the strategic implications of foreign control over critical port infrastructure (Doppen et al., 2025; Moura et al., 2023). Pakistan therefore requires a framework that both encourages investment and protects strategically sensitive infrastructure.

### Priority Maritime Sectors for Foreign Investment

Port terminals remain among the most obvious opportunities for maritime FDI. Container, bulk, general cargo and liquid-bulk terminals can attract global operators, and the Karachi concession model demonstrates the feasibility of long-duration foreign participation while

preserving underlying public ownership. Future concessions should be competitively awarded, commercially transparent and linked with measurable investment and performance obligations.

Multimodal logistics is another major opportunity. Investment in ports will produce greater economic impact when connected with logistics parks, freight railways, warehouses and inland terminals. Pakistan's cooperation agreements with Dubai explicitly recognize this opportunity by linking port development with freight corridors and economic zones.

Shipping services also offer potential. Pakistan's dependence on foreign shipping creates opportunities for joint ventures, feeder services, specialized shipping and maritime logistics platforms. Policies should focus on commercially viable activities rather than creating protected capacity without adequate cargo.

Shipbuilding and ship repair can benefit from foreign technical partnerships that modernize domestic capabilities. Potential investors may be attracted through joint ventures involving technology transfer, local manufacturing, maintenance contracts and regional repair services.

Fisheries and aquaculture can also attract significant foreign investment in cold chains, processing, certification, aquaculture technology and international marketing. Such investment, however, must prevent unsustainable extraction and protect coastal livelihoods. Blue-economy investment should combine commercial objectives with ecological limits and community participation (Voyer et al., 2024).

Coastal and maritime tourism represent additional opportunities. Foreign hotel operators, cruise businesses, marina developers and recreational service companies could participate in selected coastal areas, provided environmental carrying capacity and local-community benefits are incorporated into project approval.

Digital maritime infrastructure is becoming another important field of investment. Port community systems, cargo visibility platforms, cybersecurity, artificial intelligence, Internet of Things systems and automation are increasingly central to port competitiveness. The emergence

of Port 4.0 demonstrates that digital transformation is becoming a core element of global port development (Behdani, 2023).

Green shipping and ports also create new investment possibilities. Decarbonisation is increasing demand for shore power, renewable port energy, alternative fuels, energy-efficient equipment, waste treatment and green bunkering. Green-port development can improve both environmental performance and investor attractiveness (Lin et al., 2025).

### **Public-Private Partnerships as an FDI Mechanism**

Port investment is particularly well suited to public-private partnership models because governments typically retain ownership of strategic maritime land and infrastructure while private firms contribute financing, equipment and operational expertise. Landlord-port models and concession arrangements have become common internationally.

Research specifically examining port PPPs shows that project design strongly influences investor participation. Government initiation, concession-fee structures and appropriate public financial involvement can affect attractiveness to both foreign and domestic investors (Xiao & Lam, 2022). Pakistan should therefore develop a standardized maritime PPP framework in which construction risk, operating risk, demand risk, environmental responsibility, foreign-exchange risk and political-force-majeure risk are allocated transparently. Excessive transfer of uncontrollable risks to private investors raises financing costs, while excessive government guarantees can create fiscal exposure. Balanced risk allocation is therefore essential.

### **From Tax Incentives to Investment Fundamentals**

Developing countries frequently attempt to attract FDI through tax holidays, customs exemptions or preferential treatment. Such incentives can influence marginal investment decisions, but they cannot compensate permanently for weak institutions, poor infrastructure or policy uncertainty. Pakistan's current economic-policy framework is also moving toward greater scrutiny of broad fiscal

incentives and the long-term effectiveness of special economic zones.

This shift creates an opportunity to redesign maritime investment promotion. Instead of generalized fiscal concessions, the government should place greater emphasis on predictable regulation, reliable utilities, fast customs processing, commercially viable concessions, serviced industrial land, efficient transport connections, digital systems, security and rapid dispute resolution. Where incentives remain justified, they should be targeted, time-bound and linked to measurable outcomes such as exports, capital expenditure, employment, technology transfer or environmental improvements.

### **A Dedicated Maritime Investment Policy Framework**

Pakistan's Investment Policy 2023 provides a broad national framework but does not substitute for a specialized maritime investment strategy. A maritime investment framework should establish sector-specific priorities and institutional responsibilities. Its central objective should be to attract commercially sustainable, technologically advanced and environmentally responsible foreign investment that strengthens Pakistan's maritime competitiveness, exports, employment and domestic industrial linkages.

Regulatory predictability should form the first pillar of such a framework. Foreign investors require stable rules, so maritime laws, concession policies, tariff principles, customs procedures and environmental requirements should be published and accessible. Major regulatory changes affecting existing investors should follow transparent consultation, and long-term concession contracts should include clear change-in-law provisions.

A second pillar should be single-window maritime investment facilitation. A dedicated facilitation mechanism operating jointly between the Board of Investment and the Ministry of Maritime Affairs could coordinate project information, licensing, port-authority permissions, environmental approvals, tax matters, company registration, foreign-exchange requirements, land-related issues and provincial coordination. Pakistan already has investment-facilitation institutions, so the objective should

be better sectoral coordination rather than creating unnecessary bureaucracy.

A third pillar should be the creation of a bankable maritime project pipeline. Pakistan should publish a regularly updated portfolio of transaction-ready projects containing clear information on location, investment size, ownership structure, development stage, revenue mechanism, land status, regulatory approvals, environmental requirements and procurement schedule. International investors should be able to distinguish immediately between conceptual projects and projects ready for investment.

Transparent port-concession policy should form another pillar. Port concessions are attractive because they allow long-term commercial participation without privatizing sovereign port assets. Pakistan should develop model concession principles governing duration, performance requirements, capital commitments, tariff regulation, competition, subleasing, termination, environmental obligations and dispute resolution. Competitive bidding should normally be preferred, while unsolicited proposals should be considered only through transparent value-for-money procedures.

The development of maritime economic zones should complement port investment. Port-adjacent industrial areas can host warehousing, food processing, ship repair, marine engineering, cold storage, export assembly, petrochemicals, renewable-energy services and logistics. Such zones are particularly relevant to Port Qasim and Gwadar, but their success will depend on real markets, infrastructure and domestic supply-chain integration rather than fiscal incentives alone.

Strengthening port-hinterland connectivity is also essential. Modern ports compete as logistics systems rather than isolated waterfront facilities. Pakistan should therefore integrate maritime FDI promotion with railway, highway, dry-port and logistics investment. Infrastructure evidence from developing regions demonstrates that port improvements can reduce trade costs and improve wider economic competitiveness (Sahoo et al., 2025). Deep-water capacity will produce limited gains if hinterland congestion prevents efficient cargo movement.

### **Digitalization as an Investment-Attraction Strategy**

Digitalization can improve transparency, reduce transaction costs and make ports more attractive to global investors. Ports that use electronic documentation, appointment systems, single windows, cargo tracking and integrated customs processes are more competitive and predictable. Behdani (2023) describes this shift as Port 4.0, where digital technology integrates multiple port processes.

Digitalization can also reduce opportunities for discretionary intervention and improve investor confidence. Pakistan should therefore accelerate port-community systems, electronic documentation, automated customs interfaces, cargo visibility, gate automation, cybersecurity standards and interoperable data exchange. Digital transformation should be considered part of investment policy rather than merely an information-technology initiative.

### **Sustainable and Green Maritime FDI**

The maritime investment environment is rapidly changing because of decarbonisation. Global shipping and ports face increasing pressure to reduce greenhouse-gas emissions and support cleaner fuels, while foreign investors increasingly evaluate infrastructure against environmental, social and governance requirements.

Green-port development should therefore become part of Pakistan's maritime investment proposition. Potential areas include solar-powered terminals, shore-side electricity, electric cargo-handling equipment, alternative-fuel infrastructure, green warehouses, wastewater treatment, ship-waste reception and low-emission freight corridors. Research indicates that green infrastructure can improve investor confidence and reduce information asymmetry by signalling efficient and future-oriented port development (Lin et al., 2025). Government policy also matters because both regulation and subsidies can influence green-port investment, although their effects vary according to investment efficiency (Xie & Zhou, 2025).

### **Blue Finance as a Complement to FDI**

Maritime FDI does not have to rely solely on conventional multinational-company equity. New financial instruments can support projects

involving foreign institutional investors, development banks and private capital. Blue bonds, green bonds, sustainability-linked loans and blended-finance structures can mobilize investment for ports, fisheries, marine conservation and sustainable coastal infrastructure.

Rogge (2025) identifies blue bonds as an increasingly relevant financing mechanism around the Indian Ocean, while Gavalas (2025) highlights the growing importance of green and blue financial frameworks for shipping and maritime development. International experience from Seychelles demonstrates that blue bonds and related financial innovation can help mobilize resources for sustainable marine development (Schutter et al., 2024). Pakistan could therefore establish a national taxonomy identifying eligible blue investments and develop standards for monitoring the use of proceeds.

### Green Shipping Corridors

A newer investment opportunity involves green shipping corridors connecting ports that develop compatible low-carbon infrastructure. Such corridors can reduce uncertainty by creating coordinated demand for cleaner fuels and technologies. Research from Asia suggests that green-corridor approaches can improve project bankability by aggregating demand, reducing regulatory uncertainty and supporting climate-aligned finance (Rao & Sarasan, 2026). Pakistan could explore such corridors with Gulf and Asian ports. Karachi-Jebel Ali, Port Qasim-Abu Dhabi and selected Gwadar-linked routes could eventually provide pilot opportunities depending on cargo volumes and commercial viability.

### Investment Screening and National Security

An effective FDI framework must balance openness with national security because ports are critical infrastructure and should not be treated identically to ordinary commercial assets. Recent European research demonstrates increasing use of investment screening in ports because of their strategic role in trade, energy and logistics (Doppen et al., 2025).

Pakistan should therefore establish clearly defined screening criteria for strategic maritime

assets. Such screening should consider control over critical terminals, access to sensitive operational data, ownership concentration, cybersecurity, military-commercial dual use, market dominance and national resilience. However, screening should remain transparent and rules-based because ambiguous national-security intervention can deter legitimate investors. The purpose should be to manage strategic risk rather than discourage foreign participation.

### Diversifying Sources of Maritime FDI

Pakistan's maritime investment relationships should become geographically diversified. China will remain important because of CPEC and Gwadar, but Gulf countries offer strong potential in ports, logistics, shipping, energy and infrastructure. Singaporean, Malaysian and Korean investors may offer expertise in terminals, shipbuilding and logistics, while European investors may be particularly relevant to green-port infrastructure, renewable energy and maritime technology. Japanese companies possess extensive experience in logistics, industrial infrastructure and marine engineering.

A diversified investor base can reduce dependency and increase access to different technological and financial capabilities. Investment promotion should therefore identify actual strategic investors rather than advertise generically to countries. For each project category, Pakistan should map relevant global terminal operators, cold-chain firms, shipyard groups, marine technology providers, hotel and cruise operators, renewable-energy developers and development-finance institutions, and then present project-specific opportunities to these entities.

### Domestic Linkages and Technology Transfer

FDI creates its greatest economic value when it develops relationships with local firms. Pakistan's Investment Policy 2023 already identifies domestic linkages and economic complexity as important investment objectives. Maritime concessions should therefore encourage local supplier development, technical training, internships, research partnerships,

technology transfer and domestic procurement where commercially reasonable.

Rigid local-content requirements can discourage investment if imposed unrealistically. A better approach is to create supplier-development programmes that progressively enable Pakistani firms to meet international standards. In this way, maritime FDI can help build domestic capabilities rather than operate as an isolated enclave.

### Human-Capital Development

Global maritime companies require skilled employees, so Pakistan should align maritime education with international investment priorities. Training should increasingly cover port management, maritime logistics, marine engineering, shipbuilding, refrigeration, customs compliance, digital-port systems, cybersecurity, environmental management and maritime finance.

Universities should also partner with foreign maritime investors in research, professional education and technology development. FDI can then become a source of capability creation rather than capital alone.

### Improving the Investment Proposition of Gwadar

Gwadar should be approached with a differentiated investment strategy rather than promoted through one overarching narrative. Potential opportunities include transshipment, regional logistics, warehousing, fisheries, cold-chain infrastructure, ship services, industrial-zone development, tourism, renewable energy and digital port systems.

Each project should be independently evaluated for commercial feasibility. The experience of Gwadar demonstrates that strategic significance cannot substitute indefinitely for actual cargo, utilities, connectivity and local socioeconomic integration. Investment promotion should therefore be evidence-based, phased and commercially transparent.

### Karachi and Port Qasim as Immediate FDI Platforms

While Gwadar represents long-term strategic potential, Karachi and Port Qasim offer established cargo demand and are therefore

particularly suitable for near-term FDI. Existing UAE-backed terminal investments confirm investor interest.

Future opportunities could include terminal modernization, rail freight, logistics parks, automated warehouses, marine-engineering facilities, ship repair, renewable power, cold chains and digital freight systems. Pakistan should distinguish between mature port investment opportunities and longer-term greenfield projects when approaching foreign investors.

### Fisheries and Blue-Economy FDI Safeguards

FDI in marine resources requires particular environmental safeguards because overinvestment in harvesting capacity can damage fish stocks and reduce long-term economic value. Blue-economy policy should therefore attract investment into value addition rather than simply increasing resource extraction.

Priority foreign investment should focus on aquaculture technology, hatcheries, cold chains, quality control, seafood processing, certification, traceability and export marketing. The broader literature increasingly emphasizes that blue-economy development requires integrated economic, environmental and social objectives (Voyer et al., 2024). Investment approval should reflect these objectives.

### Environmental, Social and Governance Standards

Environmental, social and governance performance increasingly affects infrastructure financing. Pakistan can strengthen maritime investment attractiveness by establishing predictable ESG requirements aligned with international practices. Investors should know environmental-impact requirements before entering bidding processes, and community-consultation procedures should be standardized. Environmental monitoring should become digital where possible.

Transparent ESG standards can reduce reputational risk for international investors and enable projects to access green and sustainability-linked finance.

**Managing Investor Risk**

Foreign maritime investors typically evaluate construction risk, demand risk, currency risk, regulatory risk, political risk, security risk, environmental risk and operational risk. Pakistan cannot eliminate every risk, but it can allocate each risk to the party best able to manage it.

Terminal operators can manage operational efficiency, while governments are better positioned to manage sovereign regulatory risk. Foreign-exchange risk may require contractual mechanisms rather than transferring unlimited exposure to either side. Transparent and balanced risk allocation can reduce the cost of capital and improve project bankability.

**Avoiding the Race for Excessive Incentives**

Countries competing for maritime FDI sometimes enter costly fiscal competition. Morita and Okoshi (2025) show that interactions between fiscal incentives, infrastructure investment and FDI location can be complex. Pakistan should therefore avoid evaluating success simply by the generosity of incentives offered.

A foreign investor receiving extensive concessions but creating little employment, exports or technology transfer may provide less development benefit than an investor receiving fewer incentives but establishing a strong domestic supplier ecosystem. Investment evaluation should therefore incorporate wider economic impact.

**Proposed Policy Framework**

Pakistan's maritime FDI framework should operate through interconnected dimensions of investment environment, sector governance, project development, investment facilitation, sustainability, security and developmental impact. Macroeconomic stability, foreign-exchange predictability, legal protection and efficient dispute resolution should form the foundation. Responsibilities among ministries, port authorities and investment agencies should be clearly defined, and government agencies should prepare commercially credible and technically feasible projects before approaching investors.

Foreign investors should receive coordinated regulatory services through a single institutional interface. Environmental standards and national-security screening should be incorporated from the beginning rather than introduced unpredictably after an investment decision. Projects should also be evaluated according to their contribution to exports, employment, technology transfer, domestic linkages, resilience and environmental performance.

**Recommended Institutional Architecture**

Pakistan should establish a Maritime Investment Facilitation and Coordination Mechanism rather than necessarily creating a large new organization. The Ministry of Maritime Affairs could provide sector leadership, the Board of Investment could manage investor facilitation, port authorities could prepare and execute specific projects, the Ministry of Finance and State Bank could address financial and foreign-exchange matters, and provincial governments could coordinate land, fisheries and local infrastructure. Environmental agencies would supervise sustainability requirements, while security institutions would address critical-infrastructure risks.

The mechanism should maintain a digital project-management system showing project status, approval timelines, institutional responsibilities and unresolved issues. Such coordination can significantly reduce administrative uncertainty.

**Strategic Priorities for Attracting Maritime FDI**

Pakistan should first create an investable pipeline rather than merely an opportunity catalogue. Port and maritime regulations should be consolidated and made predictable, while concession and PPP procedures should be standardized. Karachi and Port Qasim should be promoted for immediate brownfield and expansion investments, while Gwadar should be marketed through commercially differentiated project packages.

Investor outreach should also be segmented according to the comparative strengths of Chinese, Gulf, Southeast Asian, European and East Asian investors. Port digitalization should

be accelerated to improve transparency and operating efficiency, while green infrastructure should become a major component of maritime investment promotion. Local supplier and workforce development should be incorporated into major foreign-investment projects, and transparent strategic-investment screening should protect critical infrastructure without creating arbitrary restrictions.

### **Lessons from International Maritime Investment**

International experience offers several important lessons for Pakistan. Vietnam demonstrates that foreign logistics investment can contribute to export competitiveness when investors are integrated into manufacturing and trade ecosystems rather than confined to port operations (Jensen & Whitfield, 2023). The Seychelles demonstrates how innovative blue-finance structures can complement traditional investment. European port experience demonstrates the growing importance of national-security screening while maintaining openness to international capital (Doppen et al., 2025).

Recent African evidence also emphasizes that blue-economy strategies require governance capacity and implementation mechanisms rather than broad policy declarations alone (Okafor-Yarwood et al., 2024). Port PPP research further demonstrates that government involvement must be carefully structured to improve investor attractiveness without unnecessarily crowding out private participation (Xiao & Lam, 2022). The broader lesson is that successful maritime-investment destinations combine infrastructure, institutions, market access and credible policy.

### **Maritime FDI and Export Competitiveness**

One of the strongest arguments for maritime FDI is its potential effect on exports. Foreign terminal operators and logistics companies can reduce turnaround time, improve reliability and connect domestic exporters with global networks.

Empirical research from ASEAN demonstrates links among maritime connectivity, foreign investment and export performance, although these relationships vary by country (Siautama et

al., 2026). Pakistan should therefore judge maritime investments partly according to whether they reduce national logistics costs. An investment that increases terminal capacity without improving end-to-end cargo movement may generate smaller economic benefits than a coordinated logistics investment.

### **Maritime FDI and Regional Connectivity**

Pakistan's position creates opportunities beyond domestic trade. Central Asian countries seek multiple routes to international markets, China continues to develop diversified trade corridors, and Gulf states are expanding investments in logistics and ports.

Pakistan can potentially connect these interests through its ports, but transit potential depends on customs agreements, reliable land routes, efficient border systems and political relations. Infrastructure must therefore be accompanied by regional trade diplomacy. Foreign investors should see Pakistan not only as a port location but as a possible logistics gateway.

### **Investment in Smart and Green Ports**

The next generation of maritime infrastructure will increasingly combine digital and environmental performance. Homayouni et al. (2025) highlight the potential of digital twins to improve the sustainability and management of seaports. Almeida and Okon (2024) find that port digitalization can support sustainable development objectives, while Yang et al. (2025) demonstrate that green-port investment decisions depend on competition, externalities and governance structures.

These developments suggest that Pakistan should avoid investing heavily in outdated port systems that will require expensive retrofitting. Foreign partnerships can help the country leapfrog toward smarter and cleaner infrastructure.

### **Maritime Decarbonisation as an Investment Opportunity**

The international maritime sector is moving toward significant emissions reductions. This transition requires enormous investment in new fuels, port infrastructure, clean technology and energy systems.

The Asian Development Bank has consequently proposed substantial financing support for sustainable and resilient maritime infrastructure in Asia and the Pacific. Pakistan should position its ports to participate in this emerging investment market. Possible projects include green bunkering, solar terminals, shore power and low-carbon freight systems. Recent research on sustainable port strategy also emphasizes port modernization, low-carbon fuel infrastructure and coordinated port-shipping programmes as central priorities for maritime decarbonisation.

### Future Research Directions

There remains limited empirical research specifically examining maritime FDI in Pakistan. Future studies should estimate the sector-wise foreign investment requirements of Karachi Port, Port Qasim and Gwadar. Research should also analyze investor perceptions through interviews with global terminal operators, shipping companies, Gulf investment funds and development-finance institutions.

Comparative studies could examine why investors select competing ports in India, Sri Lanka, the UAE and Oman instead of Pakistani ports. Research should also investigate whether existing foreign-operated terminals have improved productivity, technology transfer and domestic supplier development. Further work is required on foreign-exchange risk in long-term maritime concessions, security-related investment screening, blue bonds, climate finance and green shipping corridors as mechanisms for attracting international maritime capital.

### Conclusion

Foreign direct investment can play a major role in transforming Pakistan's maritime sector from a largely traditional port-and-shipping system into a more diversified, technologically advanced and internationally integrated maritime economy. Pakistan possesses significant underlying advantages, including its strategic Arabian Sea location, substantial domestic market, established ports, Gwadar, CPEC connectivity, fisheries resources and proximity to Gulf economies. Recent foreign participation in Karachi Port and logistics-related agreements with the UAE demonstrate

that international investors will commit capital when commercially structured opportunities are available.

However, geographical advantage does not automatically generate investment. International investors evaluate regulatory stability, institutional effectiveness, infrastructure, cargo demand, foreign-exchange predictability, security, environmental requirements and commercial returns. Pakistan's principal challenge is therefore not simply promoting the maritime sector. It is making maritime projects investable.

A successful maritime FDI strategy should move away from generalized investment promotion toward bankable projects, transparent concessions, strong port-hinterland connectivity, digital systems, environmental sustainability and institutional coordination. Public-private partnerships should remain important, but risk allocation must be commercially realistic. Fiscal incentives should support rather than substitute for good investment fundamentals.

Pakistan should also diversify foreign-investment sources while establishing appropriate screening for strategically sensitive maritime infrastructure. China will continue to play an important role, particularly through CPEC and Gwadar, but greater Gulf, East Asian, European and institutional investment can broaden Pakistan's financial and technological partnerships.

The next phase of maritime investment should also be aligned with global structural changes. Smart ports, green shipping, alternative fuels, digital logistics, blue finance and climate-resilient infrastructure are increasingly shaping international capital allocation. Pakistan can use these transitions to attract investment into new activities rather than competing only for conventional terminal infrastructure.

The appropriate objective is therefore not maximum FDI at any cost. It is high-quality maritime FDI that creates productive capacity, lowers logistics costs, increases exports, develops domestic suppliers, transfers technology, creates skilled employment and protects maritime resources. If supported by predictable policy, transparent governance and commercially credible projects, maritime FDI can become one

of the principal mechanisms through which Pakistan converts its geographical location into long-term geo-economic and blue-economy value.

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