COMPETITIVENESS OF SOUTH ASIA’S CONTAINER PORTS

A Comprehensive Assessment of Performance, Drivers, and Costs
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In a globalized world in which technology and know-how can be easily acquired and the constant search for the most efficient supply chain drives international container flows, the performance of a region’s ports relative to that of competing ports is a crucial determinant of growth.

South Asia’s trade almost doubled in the past decade, with trade as a percentage of GDP increasing by 18 percentage points between 2000 and 2014. Since 2000 the region has also enjoyed the second-highest economic growth in the world (after East Asia), growing at an average annual rate of 6.8 percent.

Despite this progress, trade accounted for a smaller share of GDP in South Asia (47 percent) than in East Asia (55 percent) in 2014, and South Asia’s economic competitiveness continued to lag that of other regions. Global indicators, such as the Global Competitiveness Report, point to shortcomings in the institutional, business, and investment environments and highlight concerns that the region may not have the infrastructure needed to compete more successfully in the global economy. In all countries in the region except Sri Lanka, such indicators rank inadequate infrastructure among the most problematic factors for doing business.
WEAK TRANSPORT AND LOGISTICS SERVICES, INCLUDING SLOW EXPANSION OF PORT CAPACITY, CONTRIBUTE TO SOUTH ASIA’S LACK OF COMPETITIVENESS.

On the Logistics Performance Index, South Asia trails both East Asia and middle-income countries, particularly in the infrastructure component. According to the Doing Business report, the average cost of exporting or importing a container in the region as a whole is more than twice the cost in East Asia.

Better port logistics in South Asia could help increase trade, diversify exports, attract more foreign direct investment (FDI), and spur economic growth. Companies that trade internationally depend crucially on supply and export chains that run through ports. About 75 percent of South Asia’s trade by value is transported by sea, and even some intraregional trade goes by sea. How ports perform affects the time, cost, and efficiency of trade, which partly determine the level of global competitiveness and the volume of trade. The effects of port performance extend to the competitiveness of industries in hinterlands, including in the region’s landlocked nations.

As a result of the impressive growth in trade in South Asia since 2000, container traffic in the region increased by a factor of more than four. Capacity also increased, but it grew much more slowly than cargo growth. Indeed, only the economic slowdown wrought by the 2008 global financial crisis eased pressures on capacity.

As container traffic keeps growing and physical expansion is constrained by the limited supply of available land in most ports, increasing productivity of port facilities becomes critical. How to do so to accommodate a large portion of the anticipated increase in container traffic presents an important challenge to port operators and port authorities.
CONTAINER PORT PERFORMANCE IN SOUTH ASIA IS BETTER THAN IT WAS — BUT THERE IS STILL MUCH ROOM FOR IMPROVEMENT, PARTICULARLY AT LAGGING PORTS.

Tariffs and terminal handling charges at most large South Asian container ports are lower than those at ports such as Dubai, Salalah, and Singapore. But the indirect costs associated with delays, loss of markets and customer confidence, and opportunities missed because of inefficient service play a more significant role in shippers’ port choices.

As a consequence of the growth in traffic, congestion at container ports across South Asia increased between 2000 and 2012. Ports have offset longer waiting times by improving the efficiency of their operations at the berthing stage. More efficient use of port facilities, together with improvements in the scale of operations, were the main drivers of increases in total factor productivity (TFP) in South Asia. These increases helped South Asia close the gap on East Asia in terms of efficiency in the use of facilities. On average South Asian container ports experienced the largest improvement in TFP among ports in the Indian and Western Pacific oceans (80 percent versus 55 percent for East Asia) between 2000 and 2010.
South Asia still has significant potential to improve overall efficiency in the container port sector through scale expansion, as demonstrated by the fact that 62 percent of its container ports showed increasing returns to scale between 2008 and 2010. In 2010 the region’s ports could have handled twice the throughput they did with existing facilities.

Port performance varies across South Asia. Some ports, such as Colombo, JNPT, Mundra, and Qasim, improved their facilities between 2000 and 2010. Others, such as Mumbai and Tuticorin, fell farther behind. Colombo—which also improved its operational performance during this period, by almost halving the share of idle time at berth—ranked as one of the top South Asian ports in 2010 in terms of operational and economic performance. Chittagong and Kolkata, which performed well in terms of the use of their facilities in 2010, ranked poorly on operational performance, with the longest vessel turnaround times in the region.
PRIVATE SECTOR PARTICIPATION, GOOD GOVERNANCE, AND STRONG COMPETITION ARE KEY DRIVERS OF PERFORMANCE.
Private sector participation, port governance, and competitive forces all tend to be associated with higher levels of operational and economic performance of ports. Many other factors are also at play, including trade flows, distance to markets, and custom regulations, but these factors are not directly controllable by port authorities or shipping ministries. In contrast, private participation and governance structures are national or local policy choices. The contestability of port services is clearly influenced by the proximity to other ports, but policy choices can either support or inhibit both interport and intraport competition.

The evidence on South Asia supports global findings that ports at which the private sector provides services to shipping companies (so-called landlord ports) attain higher levels of operational performance and economic efficiency than ports run based on other models. Beginning in the late 1990s/early 2000s India, Pakistan, and Sri Lanka reformed their port sectors, introducing private sector participation. Bangladesh is the only country on the Indian subcontinent that has not adopted the landlord model.

Large and medium-size landlord ports performed better than other types of port on average. Application of the landlord model has varied, however, as have performance and investment experiences. Understanding the particular aspects behind implementation of the landlord model at each port is key to designing concrete actions.

Ports that have better-governed port authorities with more transparent appointment processes and independent members also perform better. The boards of the best-performing South Asian ports exhibit high levels of professionalization, and the ports they serve have higher levels of private sector investment. Even at landlord ports, port authorities’ boards generally have responsibility (either directly or through service contracts) for ancillary services, such as tugging, pilotage, facilities for freight forwarders and customs inspections, and road and rail connections to the port. When performed well, all of these roles facilitate better operational performance. The more effective boards understand the interlinked nature of the public and private contributions to ensuring timely and efficient movement of cargo through the port.

A more competitive environment is also associated with better performance of container ports in South Asia. Competition is stimulated at the initial concession stage—through open bidding—and through port policy objectives that introduce new operators as a port expands. In contested hinterlands, such as northwest India, interport competition is a powerful force for improving port choice and investment.

In South Asia, ports that operated in more competitive environments during 2000–10 were, on average, more efficient in the use of their facilities. Ships at ports in more competitive environments also spent less time on average at port. These results support the notion that ports operating in more competitive environments need to operate at higher levels of economic and operational performance to attract traffic.
A THREE-PRONGED APPROACH THAT STRENGTHENS PRIVATE SECTOR PARTICIPATION, GOVERNANCE, AND COMPETITION PROMISES TO YIELD THE GREATEST IMPROVEMENT IN SOUTH ASIA’S CONTAINER PORTS.

Ports in South Asia have modernized, but more needs to be done to meet the growth and competitiveness challenge. Experience from across the globe, including in South Asia as discussed in this report, indicates that a comprehensive approach that tackles several interrelated angles yields greater benefits than isolated improvements. A promising three-pronged approach for improving performance in the region would (a) encourage private sector participation through a well-developed enabling environment, including further adoption of the landlord port model; (b) strengthen governance of port authorities’ boards; and (c) promote competition between and within ports, in part through transparent and competitive concession bidding.

Strong governance and capacity of port authorities are essential for the successful implementation of the landlord port model. Moving from a public sector monopoly to an unregulated private sector monopoly will not bring efficiency gains. Increases in private sector participation should go hand in hand with increased competition for the market and in the market. Where competition in the market is limited because of large economies of scale relative to the size of the market, efficiency gains should come through adequate regulation.
IF THE PORT SECTORS OF BANGLADESH, INDIA, AND PAKISTAN HAD BEEN AS EFFICIENT AS THE PORT SECTOR OF SRI LANKA THE RESULTS WOULD HAVE BEEN:

UP TO 8.8% – LOWER MARITIME TRANSPORT COSTS TO THE US

UP TO 7.0% – HIGHER VALUE OF EXPORTS TO THE US
IMPROVING PERFORMANCE OF EXISTING CONTAINER PORTS WOULD INCREASE SOUTH ASIA’S GLOBAL COMPETITIVENESS.

Governments interested in increasing the competitiveness of their exports need to improve the performance of their transport networks in order to reduce overall trade and transport costs, including the indirect costs caused by delays and unreliability. Countries with more efficient port sectors incur lower maritime transport costs in their exports. A 0.1 unit increase in the average efficiency score of a country’s port sector (on a scale on which 0 is most inefficient and 1 is most efficient) would reduce the maritime transport cost of its exports by 2.3 percent, leading to a 1.8 percent increase in exports.

If the port sectors of Bangladesh, India, and Pakistan had been as efficient as the port sector of Sri Lanka during 2000–07, their average maritime transport costs to the United States would have been 0.6–8.8 percent lower. As a consequence, the average value of exports by Bangladesh, India, and Pakistan to the United States would have been 0.5–7.0 percent higher. The potential gains associated with improving port performance are thus huge.
NOTES:
5: ‘33/34 days to import/export compares to 20/22 in East Asia.
13: *Score on a scale on which 0 is the most inefficient and 1 is the most efficient.

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