

MEXICO'S PORT BACKLOG

Stack cargo containers high to save space, but be ready for more complicated retrieval

An increase in trade is the hallmark of a prosperous economy, but it can cause a supply chain challenge – as Mexico's port backlogs show

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Mexico's trade is booming and its ports are buzzing with activity. But a bottleneck threatens to clog the increased flow of goods arriving on its doorstep.

The country's transportation and logistics infrastructure – which includes 117 ports across more than 11,000 miles of coastline – had been functioning fairly well, earning a score of three out of five from the World Bank's Logistics Performance Index in 2014.

Then last year a spike in imports from Asia created a backlog at major entry points in the country, as Craig Mygatt, CEO of Maersk subsidiary Sealand, told a JOC Mexico Trade Forum in August, making it difficult to secure empty boxes for outbound trade – and hampering general issues of flow.

With limited connectivity between ports, rail and roads – as well as fairly common cargo theft from trains and trucks – and demand for port capacity exceeding availability, a heavy reliance on trucking to solve port congestion is not providing the solution.

For five years from 2011, imports into Mexico increased annually by a steady 1.8%, rising in value from US\$326bn to US\$369bn, according to The Economic Complexity Observatory, a tool

developed by the Massachusetts Institute of Technology (MIT). Then a substantial spike of 13.7% year on year from October 2017 was revealed in the latest trade statistics from Mexico's National Institute of Statistics and Geography.

While the US is Mexico's primary import partner, accounting for 46%, Asian exporters are also counted among Mexico's major trading partners, estimated at 35% by some, with China providing 18%, and Japan and South Korea 4% apiece. Figures from *American Shipper* that say shipments from Asia into Mexico increased by 18% in the second quarter of 2018 appear to confirm Mygatt's comment.

The bulk of Mexico's non-oil imported goods are vehicle parts, which according to MIT represent 6.17% of overall imports. Goods from Asia also include vehicle parts – bolstering Mexico's booming automobile manufacturing sector – machines, integrated circuits and electrical appliances.

Unexpected increases in trade, while boosting the national economy, can be troublesome for ports and port infrastructure, causing long queues, delays in processing and a holdup in loading off the dock. But more cargo on the docks doesn't have to lead to congestion, says Alan Burns, principal consultant at

13.7%

Increase in Mexican imports year on year from October 2017 to October 2018

themselves stuck with a problem.” The impact of politics can be difficult to prepare for. The long-term effects of the newly negotiated US-Mexico-Canada Agreement – due to replace the North American Free Trade agreement – remain to be seen, as the legislation needs to be ratified in all three countries.

So, how can ports plan for the unknown? There are a variety of solutions ports can implement to avoid, or at best diminish, backlogs at short notice, says George Kiourktsoglou, University of Greenwich senior lecturer and port management specialist.

When neighbouring ports are operated by the same government-issued contract, the shipments can be diverted there, he says, which may be “the most obvious alternative – not always a palatable alternative”. It's not a solution that's always available, he adds.

Technology could provide a workable solution in the medium term. “The latest trend is computerised shipping,” Kiourktsoglou says. “Blockchain can massively speed up trade flows.”

Cameron adds that changing the stacking configuration is often the easiest fix. Moving from reach stackers, which can only stack one cargo container on top of another, to a rail-mounted gantry configuration, allows for stacking to be five or six containers across, or six containers high. “This is a much higher stacking density, effectively increasing terminal capacity,” he says, but only up to a limit, and it can complicate retrieval.

Off-dock container depots are another solution, he suggests, which requires extra container handling, with additional costs passed on to the consumer. However, unless these areas are connected to railways, it can provide only a temporary measure to alleviate port backlogs.

Burns agrees: “Ports can apply short-term measures, by stacking higher, minimising transit dwell times, increasing overtime, adding contractor support. But these only work for relatively short periods to overcome peaks.

Permanently adding the required capacity and resources is the only viable long-term solution.”

All agree that, ultimately, ports should have a long-term strategy where they can incrementally speed up offloading and processing through customs.

Mexican port authorities did not respond to inquiries about management strategies, but last year the Programa Nacional de Infraestructura announced plans to double port capacity by the end of 2018, to 520 million tons. The largest project is at the Veracruz port, which provides services to Mexican oil firm PEMEX. Second largest is the Port of Tuxpan, which will enlarge capacity to 24 million tons annually. Tuxpan will handle containers, automobiles and general cargo.

The programme also calls for more capacity at the Pacific Coast port of Manzanillo to 44 million tons. This port, Mexico's busiest, is the principal gateway for Asian exports.

Globally, import management has improved, says Cameron. But the move to ultra-large container ships has led to larger containers on the quay and higher costs to consumers. “It's a bit like a snake swallowing a rabbit,” he says. “It takes some time for the rabbit to be digested... which could make parts of the supply chain more expensive.”

35.1%
Portion of Mexico's imported goods coming from Asia



The Port of Manzanillo is Mexico's busiest and the main gateway for Asian exports

Edinburgh-based Burns Ports & Logistics.

“Increased volume is OK as long as this has been forecast and the port has planned for it, allowing different port elements to continue to function within their maximum productivity rates,” he says. “Beyond this, the rough rule of thumb – be it for berth occupancy, cranes, tugs, or storage – is the 80% rule. Once utilisation and productivity reach 80% of capacity, then additional capacity is generally required.”

UNWELCOME SURPRISES

Even countries that have invested in economic forecasts can be caught unaware by changes to trade volume, according to Steve Cameron, ports, shipping and logistics consultant at Independent Port Consultants. “Sometimes a change in oil price brings change to a country's economy,” he explains. “Sometimes it's a change in exchange rates, which leads to more buying capacity or investment in infrastructure, and stimulates growth.”

Political inertia can also affect port capacity issues. It's not unusual in some markets to record several years with steady import and export growth, with very little attention paid to infrastructure capacity, he says. “Then, one day ports find