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Current Trends in Container Shipping Industry

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What is it about the container that is so important? Surely not the thing itself. The value of this utilitarian object lies not in what it is, but in how it is used. The container is at the core of a highly automated system for moving goods from anywhere to anywhere, with a minimum of cost and complication.

How much the container matters to the world economy is impossible to quantify, but clearly the container reduced the cost of moving freight. In 1966, in the decade after the container first came into international use, the volume of international trade in manufactured goods grew more than twice as fast as the volume of global manufacturing production, and two-and-a-half times as fast as global economic output.

When containers were gaining share from breakbulk (noncontainerized) cargo, container trade could grow much faster than overall trade. However, the containerization ratio – a measure of seaborne cargo transported in containers – has stabilized at 13 percent since the financial crisis. Some sectors (such as electronics, medicines, and apparel) are entirely containerized; others seem stuck somewhere in the midrange; for instance, the containerization ratios for automobiles and for nonrefrigerated agricultural goods – 25 percent and 12 percent, respectively – have remained more or less static for the past decade. In the absence of tail-winds, achieving container-trade growth that's higher than the growth of GDP and overall trade is harder than ever.

A number of interlocking trends are driving the slowdown in the multiplier – the multiple of container-trade growth over GDP growth [1]:

Growth in emerging markets

China became the world's factory, producing ever-larger shares of global manufacturing output and absorbing enormous amounts of natural resources and intermediate goods. The container-shipping industry supported much of this trade: in 2015, China imported and exported 52 million 20-foot equivalent units, a fourfold increase on the 13 million twenty-foot equivalent units (TEUs) of 2000. China is now moving away from a development model based on investment and the export of goods and toward a consumption- and services-based model. Its annual real GDP growth has fallen from more than 10 percent to 6–7 percent, and its trade in goods with the rest of the world has slackened, as well.

Changing manufacturing footprints

Today's manufacturing sector is in a state of flux as the growing use of digitally enabled technologies (such as advanced robotics and 3-D printing) starts to change the regions where production takes place. According to some analysts, a wave of *reshoring* is imminent as new manufacturing technologies displace labor. However, labor costs are not the sole determinant of manufacturing locations. In fact, sectors in which labor costs are the main driver of location decisions produced only 13 percent of TEUs in 2015. Over half – 55 percent – came from sectors (such as chemicals, food processing, pulp and paper, plastics, and rubber) that treat access to affordable raw materials as a more pressing consideration.

One technology in particular – 3-D printing – could have a novel impact on trade volumes, but not by precipitating a mass localization of production. With this technology, objects are made by adding layers, thus minimizing waste, instead of

by milling down materials. As 3-D printing gets cheaper, faster, and more compatible with metals, ceramics, and other materials, its increasing use may affect trade in raw materials for manufacturing. At the moment, though, the impact is expected to be marginal: one analysis estimates that TEU volumes will fall less than 1 percent by 2035.

Dematerialization of demand

As societies get wealthier, they gradually saturate their demand for goods, and demand for services tends to take over. The global rise in incomes thus has two countervailing effects: on the one hand, expanding the consuming class and, on the other, dematerializing its consumption. Of these two effects, we have reason to believe that dematerialization is gradually winning out. First, China is already evolving toward services-led consumption. Second, incomes are growing in Africa, India, and Latin America more slowly than they did in China over the past three decades, muting the goods-intensive phase of development in these other regions. Third, technology is both miniaturizing products (a smartphone replaces, among other things, a camera, a map, a flashlight, a calculator, a newspaper, and a telephone) and promoting services (say, taking an Uber) at the expense of goods (buying a car).

Uncertainties in geopolitics and policy

The geopolitical and policy environment is now somewhat precarious: a quarter-century of globalization, carried along by a steady stream of trade deals, has stalled. Many such deals remain on the agendas of political leaders, but the future is uncertain.

Taken together, these trends will probably slow down the growth of container trade. So what can we expect in the next five decades? An optimist might envision a world where India reaches an *escape velocity* growth rate by improving infrastructure, reforming markets, and liberalizing trade

barriers – integrating more than one billion people into the global economy and its supply chains.

In that scenario, manufacturers would enjoy a new round of labor-cost savings and start a second wave of offshoring, this time from East Asia to India. Robotics and 3-D printing wouldn't localize most production but rather supplement existing supply chains and create new ones, as Align Technology, for example, does by 3-D printing dental products in Mexico and shipping them to the United States, Europe, and other markets. For the pessimist, on the other hand, China's achievements over the past three decades probably won't be repeated elsewhere. Many supply chains would retrench – nearshoring – as new technologies made labor costs less relevant. Geopolitics might also intervene: tensions between great powers could create incentives to keep suppliers close. Some argue that these trends, in combination, could force global trade into a structural decline. Economic growth goes hand in hand with specialization, which in turn promotes further trade. So long as underlying economic growth is positive, trade too is likely to grow – even if the multiplier is less than one. The real impact may be to shorten the distance between trading partners, thereby limiting the growth of long-distance international trade.

The optimistic and pessimistic views concur that container trade will continue to grow; *peak container* isn't on the horizon. Indeed, the flexibility of the container trade makes it resilient: one product may go out of fashion but another will come along to fill the box.

References:

1. Saxon, S. Container shipping: The next 50 years / S. Saxon, M. Stone. –Travel, Transport & Logistics. – 2017.