flexport.

Southeast Asia and Supply Chains

JULY 22, 2021

Rethinking Asian Supply Chains

As the effects of the COVID-19 pandemic and the accompanying logistics crunch continue to reverberate throughout the global economy, manufacturers are considering their supply chains in a new light. Where production cost was once almost the only concern, the events of the past 18 months have emphasized that supply chain shocks can happen anywhere, anytime, and that **resilience** and **risk diversification** need to be larger considerations in planning business operations.

As companies revisit their supply chains and look for new suppliers to help them manage current and future risks, Southeast Asia is a key region of interest thanks to its low costs, proximity to established suppliers in China, and rapidly developing manufacturing capabilities. This report will consider recent trends in manufacturing in Southeast Asian countries, and challenges and opportunities firms should consider when making their supply chain decisions.

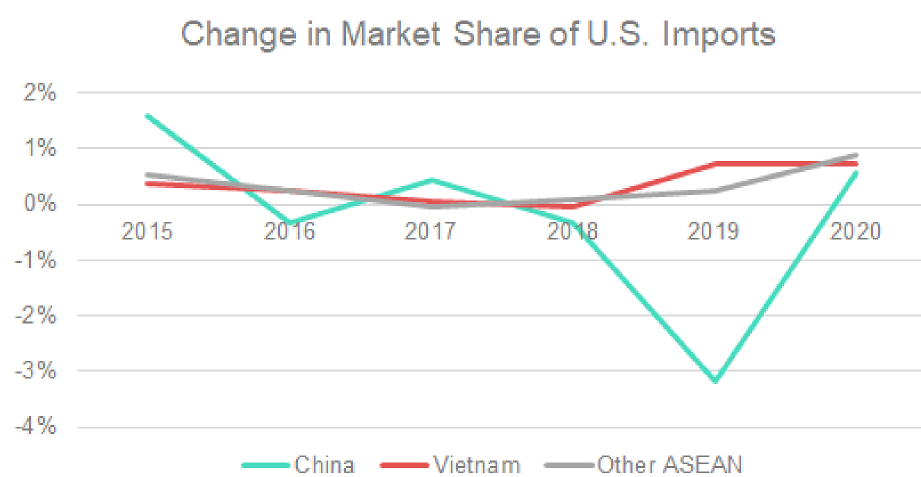
Smart companies are always looking for ways to manage their supply chains to give themselves an edge. In addition to optimizing **production costs**, managing complex **logistics** and navigating changing **trade policies** are key considerations. We will discuss all of these issues in the Southeast Asia context to help you develop a sourcing strategy that makes sense for your products and your business.

Executive Summary

- U.S. imports of Chinese goods plummeted following the introduction of Section 301 tariffs while U.S. imports from Southeast Asia rose, particularly from Vietnam. With the Biden Administration taking a cautious approach to changing the tariff system, some level of tariffs on China is likely to remain in place for the next few years.
- Although the door is open for the United States to rejoin the Trans-Pacific Partnership, the Biden Administration has not made this a priority for 2021.
- The Flexport SEASCI tracks cost trends over time in three key sectors: apparel, furniture, and electronics. Importers are showing decreased tolerance for production cost variation, perhaps linked to the current environment of high logistics costs.
- Many Southeast Asian countries handled initial outbreaks of COVID-19 very successfully, allowing rapid recoveries in manufacturing and exports. However, new variants are having more of an impact and may threaten forecast returns to growth in 2021.
- Manufacturers moving to Southeast Asia from China may be surprised by lengthier and more complex outbound customs procedures. With local Southeast Asia expertise Flexport can help ensure a smooth outbound customs experience.

U.S. Tariffs Push U.S.-Bound Business Out of China, Into Neighboring Countries

The United States' Section 301 tariffs on a wide range of Chinese-made goods had a significant impact on China's exports to the United States following their gradual roll-out beginning in 2018. China's share of total imports into the United States plunged by 3 percent in 2019 as the full suite of tariffs took effect, the largest drop in at least 30 years. A surge in demand from U.S. consumers in 2020 brought China back to market share growth, but the total value of U.S. imports from China remains lower than before the tariffs took effect. At the same time U.S. imports from Southeast Asia rose, as manufacturers adjusted their supply chains to minimize the tariffs' effects on their businesses. Vietnam particularly benefited: after years of incremental growth, Vietnam's exports to the United States almost doubled in just two years from 2018 to 2020.



Source: U.S. Census Bureau

Although the tariffs were a signature policy initiative of the Trump Administration, President Biden's administration has not hurried to dismantle them. U.S. Trade Representative Katherine Tai has said that her office is reviewing the tariffs and plans to make recommendations by the end of 2021. Between the Biden Administration's pledges to pursue a "worker-centered" trade policy and bipartisan concern in Congress about U.S. industry's ability to compete with China's government-subsidized firms, a series of tweaks to the system is a more likely outcome than fully dismantling the tariffs, as some manufacturers had hoped. The strong likelihood that some version of the Section 301 tariffs on China will remain a fact of life for the coming years increases the incentives for companies to find new producers outside of China to supply the U.S. market, and Southeast Asian countries will continue to be popular destinations.

In addition to being wide-reaching the Section 301 tariffs are also complex, with multiple product lists and many different tariff rates, sometimes on similar categories of products. Under the international principle of substantial transformation, a product can take on a new country of origin when it undergoes a fundamental change; this means that - in some cases - you can minimize duties by starting a production process in China and finishing it somewhere else. With many factors to consider, the particulars of specific products are very important. Flexport's customs brokerage team can help you understand how the Section 301 tariffs impact your supply chain and provide insights and advice tailored to your business.

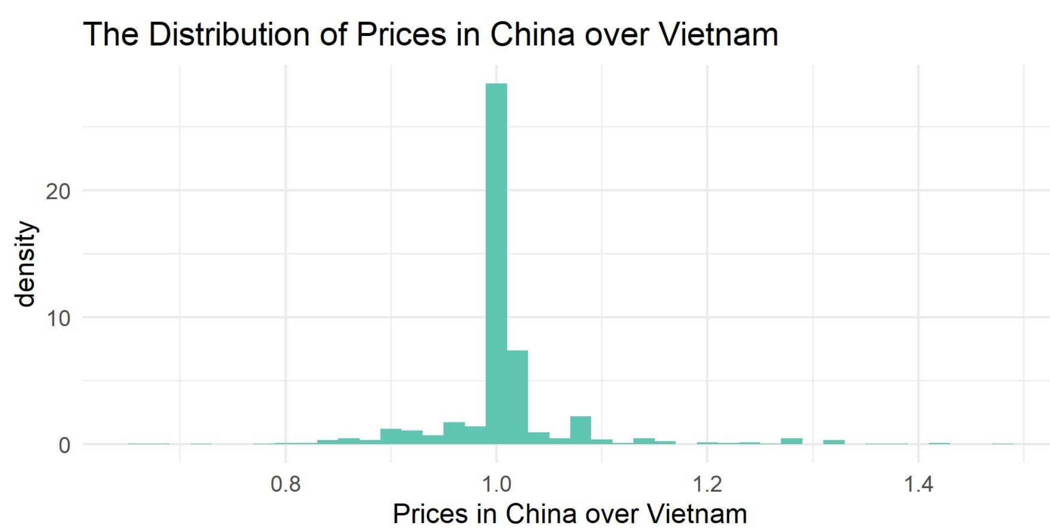
TPP v. 2.0? Maybe Someday, But Not Soon

As originally envisioned, the Trans-Pacific Partnership (TPP) free trade agreement was set to become the world's largest free trade deal, covering 40 percent of the global economy,reducing tariffs and other trade barriers across the Pacific. After President Trump pulled the United States out of the TPP in 2017, the remaining parties - including Vietnam, Malaysia, and Singapore - went ahead with a revised version, The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), and left the door open for the United States to rejoin.

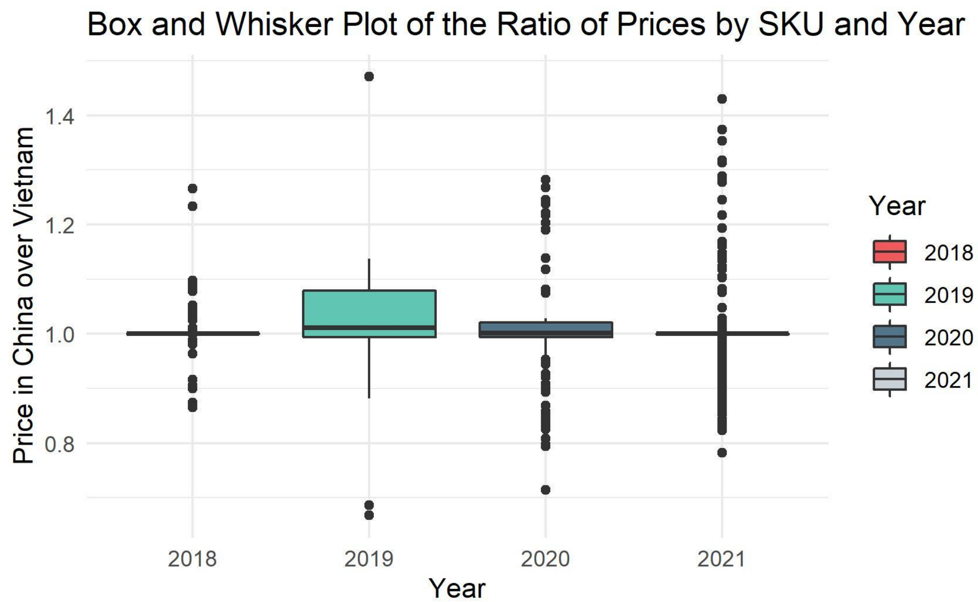
President Biden has said he does not support joining the CPTPP as it stands, but that he might try to renegotiate it to include stronger labor and environmental provisions similar to those included in the U.S.-Mexico-Canada Agreement (USMCA). However, Biden has not placed new trade deals at the top of his 2021 agenda, preferring to focus on the COVID-19 crisis and other domestic issues. The Administration allowed Trade Promotion Authority, a fast-track negotiating power necessary to conclude complex trade deals, to expire on July 1. This means wide-ranging reductions of trade barriers between the United States and CPTPP members are not on the menu at least for the next few years, delaying the potential such an agreement would have for Southeast Asian member countries to increase their exports to the United States.

The Flexport SEASCI: Insights Into Production Costs

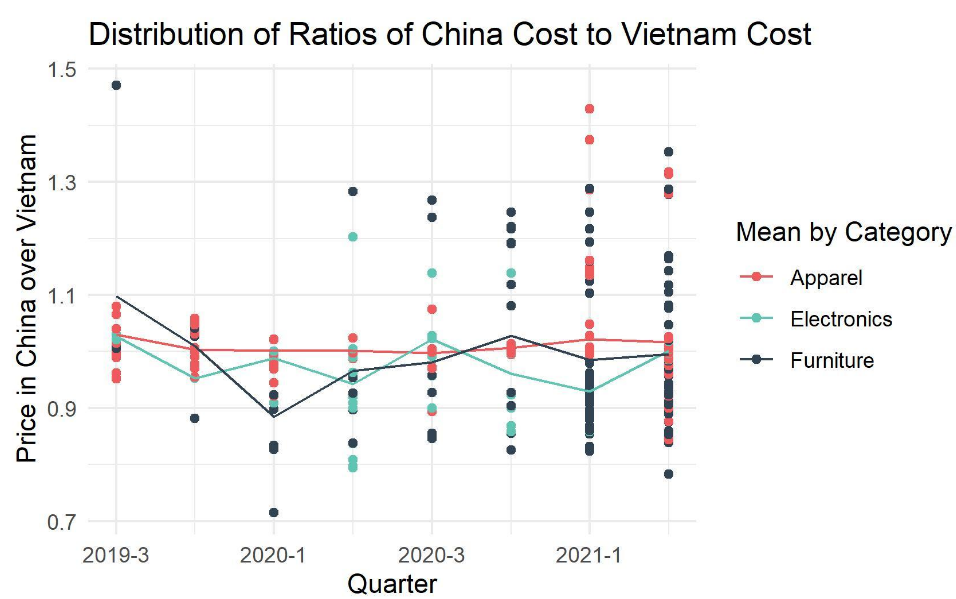
The Flexport Southeast Asia Sectoral Cost Indices (SEASCI) use data from shipments into the United States to compare wholesale prices within and across countries in Southeast Asia as well as China in key sectors for the region: apparel, furniture, and electronics. Tracking the price the importer pays on arrival allows us to infer changes in the costs of production within countries.



In this graph, we used Flexport data to compare wholesale costs at the SKU level between China and Vietnam for goods produced in both countries in the same quarter between 2018 Q1 and 2021 Q2. The costs are displayed as a ratio: when the ratio is less than 1 the product was cheaper to produce in China, and when it's greater than 1 it was cheaper to produce in Vietnam. Most of the time the price was the same, which makes sense: after all, if one country had a clear price advantage the product would be unlikely to be made in both places. However, many importers seem to be willing to accept divergence from that price by about 20 percent on either side, which may reflect the fact that other factors - like tariffs and logistics costs - also play a role in the total cost of an import.

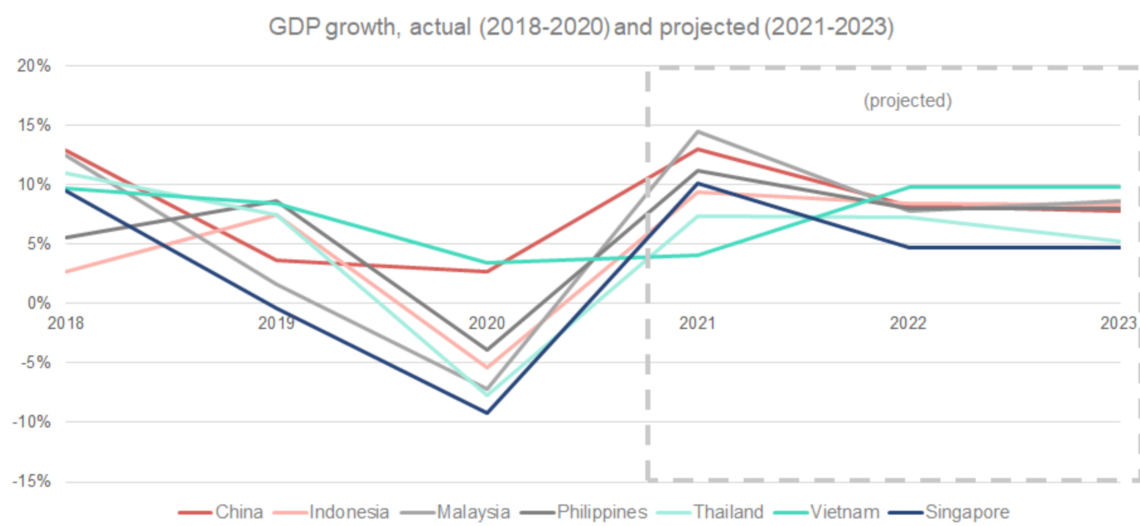


When looking at the price ratios year by year, you can see that the median price ratio of goods made in both countries is staying near one, while the distribution is tightening. The boxes show the range between the 25th and 75th percentiles. By 2021, these are clustered very tightly around 1.0. Despite the scattered dots above and below, that could indicate *decreased* willingness to have a diversified supply chain, unless goods are of comparable cost. In the current environment of record-breaking logistics costs, companies may be particularly price-conscious on the production side.



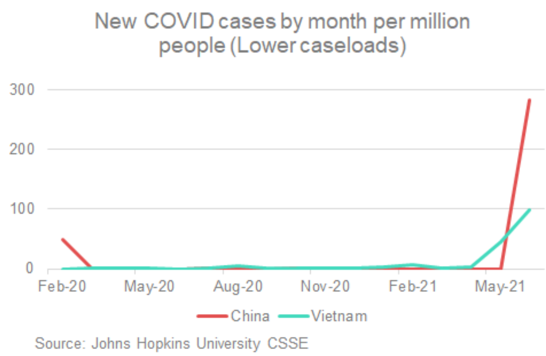
On a quarterly basis, in 2021 average prices are relatively stable across key sectors, and we're seeing decreased tolerance for multisourcing when there are significant price differences. Furniture prices have been particularly stable, while there has been more variation in apparel and electronics. (Additional details and graphs on price trends over time are available in the Appendix).

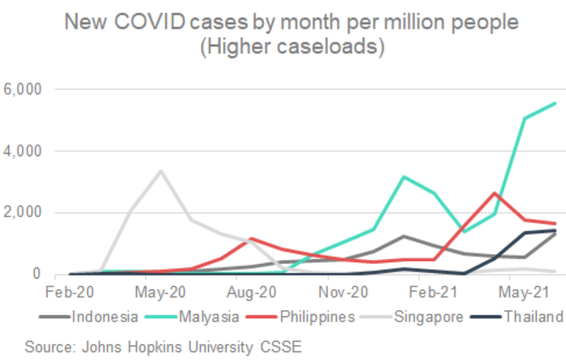
COVID-19: New Waves May Threaten Some Early Economic Recoveries



Source: IMF World Economic Outlook, April 2021

In general, China and Southeast Asian countries responded very successfully to the initial outbreak of COVID-19, with good results not only for the health of their citizens but for the health of their production and exports: by September 2020 all of these countries had returned to or exceeded January 2020 export levels with the exception of Singapore, which also experienced more cases early on. Low caseloads in China and Vietnam allowed them to maintain GDP growth in 2020, a rare achievement. Based on Southeast Asian countries' success in controlling the spread of COVID-19 the International Monetary Fund predicted strong economic recoveries in 2021, though with a high degree of uncertainty.

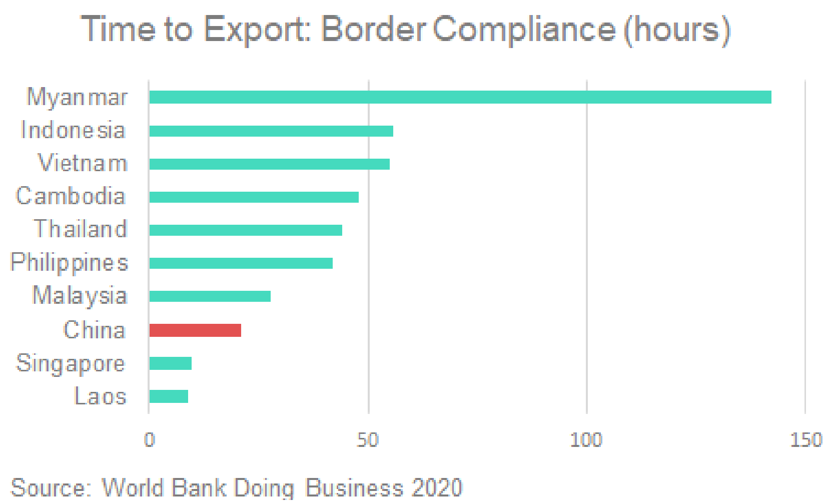




However, as new variants and vaccinations redrew the COVID-19 map in early 2021, countries like Malaysia, Thailand, and the Philippines all saw significant increases in new cases. While the number of cases in Vietnam remains very low, there are concerns that the more-contagious Delta variant will be harder to manage and may have more impact on the manufacturing sector. Finally, localized outbreaks like the one that closed Yantian port in Shenzhen for weeks in May 2021 showed that even small numbers of cases can have an outsized impact on trade. Moving forward, controlling new outbreaks and rolling out effective vaccination campaigns will be critical to maintaining export-driven economic growth.

Be Prepared: Plan for Longer Export Times

Newcomers to Southeast Asia who are used to Chinese business practices may need to adjust to different regulatory regimes. While many of these countries have worked hard to attract foreign investors, they do not have the decades of experience in working with international clientele that China does, and some parts of the export process may be slower and more cumbersome. One example is border compliance, handling customs paperwork and procedures, which can be more complicated and may take more than twice as long in Southeast Asia as in China. (Note: these statistics reflect the situation pre-COVID.) With local, on-the-ground expertise in Southeast Asia, Flexport can help clients set up a set up for a smoother customs clearance experience on the sending as well as the receiving end of the transport journey.



Conclusions

In a world of constantly changing risks and trade policies, Southeast Asia can play a key role as part of a diversified supply chain. However, moving into new operating environments can pose new challenges, and every business has different needs and priorities. Flexport can help you optimize your logistics to support a diversified supply chain. Contact Flexport's Trade Advisory Team for customized expert insights.

A Field Guide to Southeast Asian Supply Chains

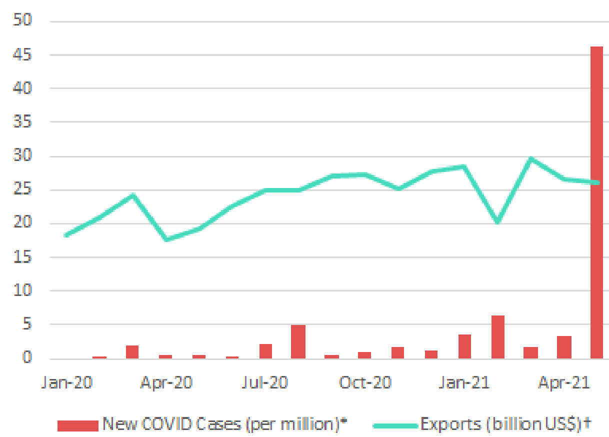
Southeast Asia is not a monolith; each country brings its own unique set of challenges and opportunities. The following field guide provides an overview for each country that includes key economic indicators and analysis of the recent effects of COVID-19 on manufacturing and logistics.

Vietnam

Population: 96,462,106
GDP/capita: $2,715
FDI inflows (% of GDP): 6.2%
GDP growth (actual/*forecast*)

- 2019: 8.4%
- 2020: 3.4%
- *2021: 4.1%*
- *2022: 9.8%*
- *2023: 9.8%*

Manufacturing Output/Employee: $3,825
Doing Business Score/Rank: 69.8/70 of 190
(2019 World Bank, IMF, ADB)



Key Sectors: Electronics, Apparel and footwear, Automotive, Toys and other small consumer goods, Machinery and appliances, Food and beverage, Furniture
Market Advantages: Low-cost labor, Low land and construction costs, Established free trade zones/industrial parks, Close to other suppliers, Tax breaks and other government incentives
Market Disadvantages: Low-quality or insufficient transportation infrastructure, Requires more complex shipping routes

After decades producing footwear and apparel, Vietnam is quickly moving up the value chain into more complex sectors like furniture and electronics. Vietnam has been a significant beneficiary of the U.S.-China trade war: after years of incremental growth, Vietnam's exports to the United States almost doubled in just two years from 2018 to 2020. Vietnam's manufacturing sector thrived in 2020 thanks to a COVID-19 response that has been among the best in the world. Exports slipped below January 2020 levels for only one month, with steady growth throughout the rest of the year. However, caseloads rose sharply in May 2021, resulting in lockdowns in parts of Ho Chi Minh City to contain the spread. Vietnam has also been harder hit than other countries in the region by the global shipping container shortage.

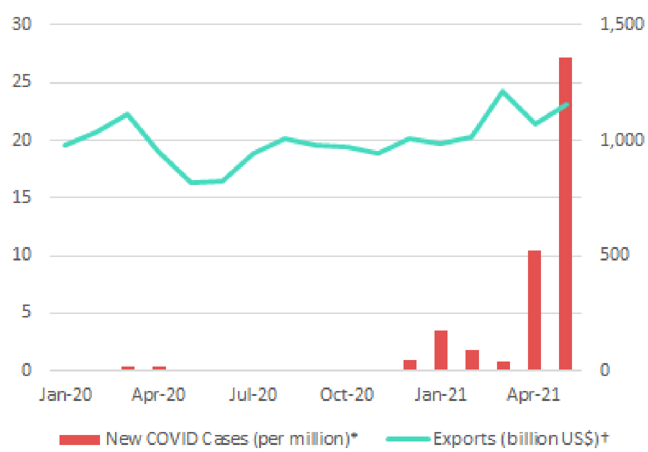
*Source: Johns Hopkins University CSSE via Our World in Data
†Source: General Department of Vietnam Customs

Thailand

Population: 69,625,582
GDP/capita: $7,807
FDI inflows (% of GDP): 0.8%
GDP growth (actual/*forecast*)

- 2019: 7.5%
- 2020: -7.8%
- *2021: 7.3%*
- *2022: 7.3%*
- *2023: 5.2%*

Manufacturing Output/Employee: $22,475
Doing Business Score/Rank: 80.1/21 of 190
(2019 World Bank, IMF, ADB)



Key Sectors: Electronics, Apparel and footwear, Automotive, Toys and other small consumer goods, Chemicals and pharmaceuticals, Machinery and appliances, Furniture
Market Advantages: Highly skilled labor, Established free trade zones/industrial parks, High-quality transportation infrastructure
Market Disadvantages: Far from other suppliers, Requires more complex shipping routes

Thailand has benefited from integration into regional electronics and automotive supply chains, as well as lower-cost labor that makes it an attractive destination for goods like footwear and apparel. The country was initially successful in limiting the pandemic's effect on manufacturing, with exports returning to January 2020 levels by August. However, export growth stalled over the following six months as the sharp decline in air passenger traffic and the concentration of ocean shipping to Chinese ports made it more challenging to get Thai products to foreign consumers. Exports returned to a growth trajectory in February 2021, but minimizing further outbreaks will be essential to maintaining manufacturing productivity. Over the longer term, there are concerns that existing port, airport, warehousing, and land transportation infrastructure will be hard pressed to handle growing export volumes.

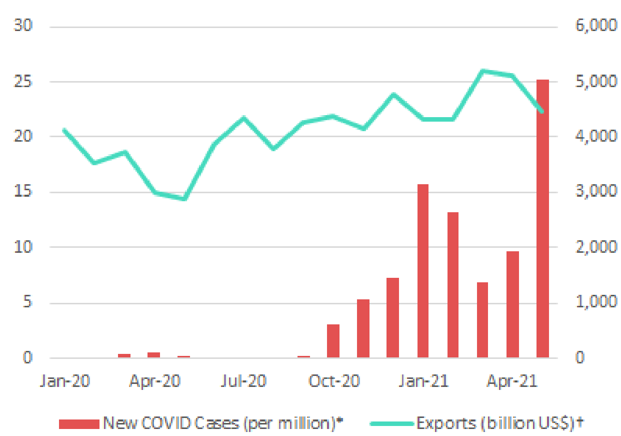
*Source: Johns Hopkins University CSSE via Our World in Data
†Source: Bank of Thailand

Malaysia

Population: 31,949,777
GDP/capita: $11,414
FDI inflows (% of GDP): 2.5%
GDP growth (actual/*forecast*)

- 2019: 1.7%
- 2020: -7.2%
- *2021: 14.4%*
- *2022: 7.8%*
- *2023: 8.6%*

Manufacturing Output/Employee: $29,192
Doing Business Score/Rank: 81.5/12 of 190
(2019 World Bank, IMF, ADB)



Key Sectors: Electronics, Apparel and footwear, Automotive, Toys and other small consumer goods, Chemicals and pharmaceuticals, Machinery and appliances, Food and beverage, Furniture, Rubber, Oil & Gas
Market Advantages: Established free trade zones/industrial parks, Tax breaks and other government incentives, Favorable shipping routes
Market Disadvantages: Complicated government regulations and procedures

In addition to strong electronics exports, Malaysia also has a strong oil and gas sector and in-demand agricultural commodities like palm oil and rubber. After initial success in controlling the spread of COVID-19 Malaysia returned to January 2020 export levels in July, but export growth since then has been uneven. With cases rising in 2021, containing further outbreaks will be important to maintaining manufacturing productivity and export growth. Reduced ocean and air capacity have also hurt exports, with shippers resorting to complex land transportation options to get goods to ports that have more capacity.

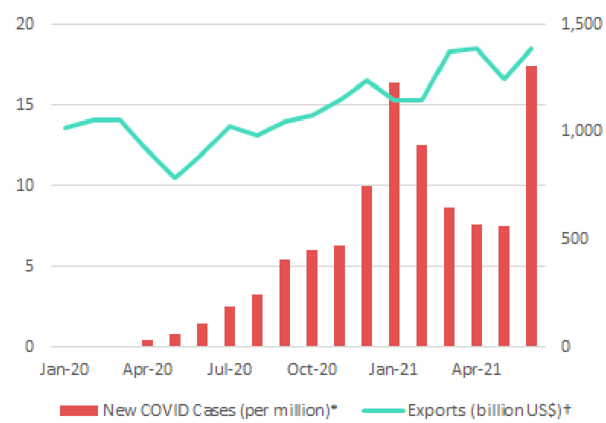
*Source: Johns Hopkins University CSSE via Our World in Data
†Source: Department of Statistics Malaysia

Indonesia

Population: 270,625,568
GDP/capita: $4,136
FDI inflows (% of GDP): 2.2%
GDP growth (actual/*forecast*)

- 2019: 7.4%
- 2020: -5.4%
- *2021: 9.4%*
- *2022: 8.4%*
- *2023: 8.3%*

Manufacturing Output/Employee: $11,650
Doing Business Score/Rank: 69.6/73 of 190
(2019 World Bank, IMF, ADB)



Key Sectors: Electronics, Apparel and footwear, Automotive, Chemicals and pharmaceuticals, Machinery and appliances, Food and beverage, Furniture, Cosmetics
Market Advantages: Low land and construction costs, Established free trade zones/industrial parks, High-quality transportation infrastructure, Tax breaks and other government incentives
Market Disadvantages: High taxes, Complicated government regulations and procedures, Requires more complex shipping routes

Long an exporter of raw materials and agricultural commodities, Indonesia is diversifying its economy by moving into manufacturing. Indonesia's manufacturers work in a variety of sectors, mainly in low-tech, labor-intensive processes. After the initial slowdown from the COVID-19 pandemic, Indonesia returned to January 2020 export levels by September and continued to grow thereafter; however, controlling higher caseloads in 2021 will be essential to Indonesia's economic recovery. Although Indonesia is made up of more than 17,000 islands it only has 11 container ports, which can make logistics particularly challenging and expensive. Indonesia is the fourth-most populous country in the world, and a growing middle class makes it an important regional market for goods as well as a producer.

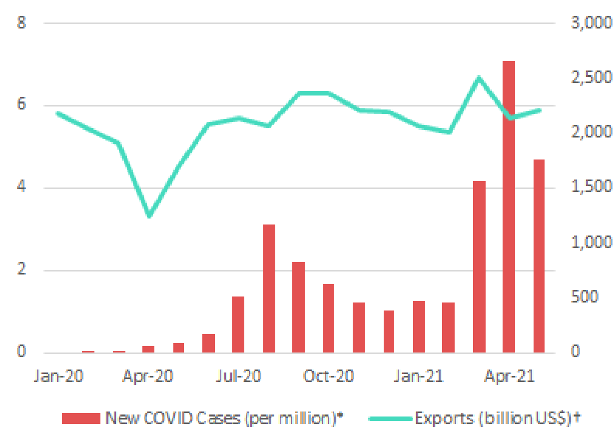
*Source: Johns Hopkins University CSSE via Our World in Data
†Source: Statistics Indonesia

Philippines

Population: 108,116,615
GDP/capita: $3,485
FDI inflows (% of GDP): 2.0%
GDP growth (actual/*forecast*)

- 2019: 8.6%
- 2020: -3.9%
- *2021: 11.2%*
- *2022: 8.0%*
- *2023: 8.0%*

Manufacturing Output/Employee: $19,228
Doing Business Score/Rank: 62.8/95 of 190
(2019 World Bank, IMF, ADB)

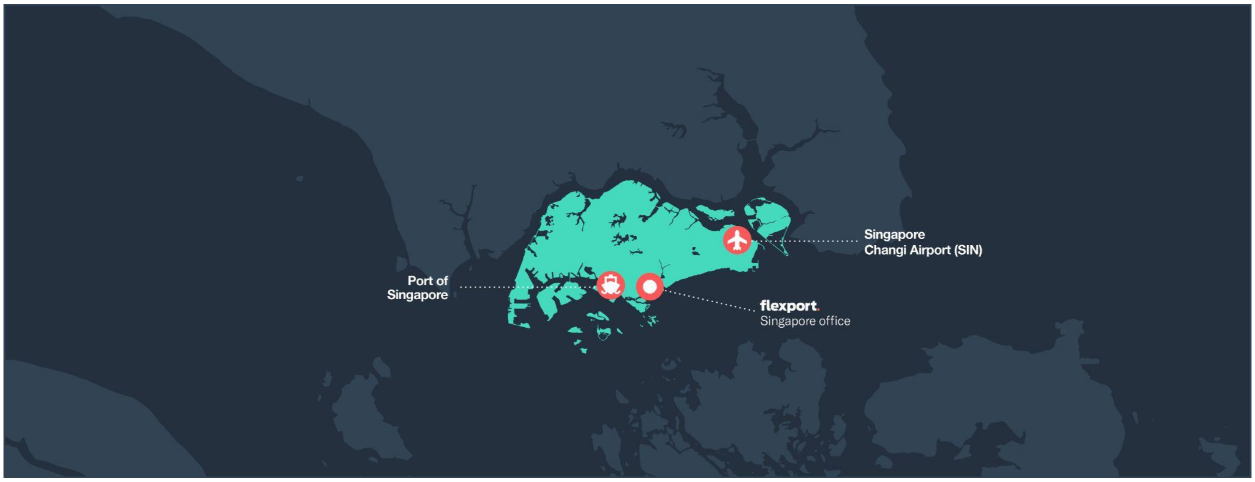


Key Sectors: Electronics, Apparel and footwear, Toys and other small consumer goods, Machinery and appliances, Furniture
Market Advantages: Highly skilled labor, Established free trade zones/industrial parks, Close to other suppliers
Market Disadvantages: High land and construction costs, High taxes, Complicated government regulations and procedures, Requires more complex shipping routes

The Philippines is a key player in Asia's regional electronics supply chain, with electronics accounting for more than half of the country's total exports. The Philippines has been more affected by COVID-19 than some other countries in the region, which has had consequences for manufacturing: the country returned to January 2020 levels of exports in September, but has been unable to maintain consistent export growth. As an island nation, the Philippines has also been particularly affected by decreases in passenger air travel and concentration of ocean shipping towards China, without land transportation options to move its goods to more frequented ports. Nevertheless, the IMF expects the economy to rebound in 2021 and to return to previous patterns of high GDP growth in the following years.

*Source: Johns Hopkins University CSSE via Our World in Data
†Source: Philippine Statistics Authority

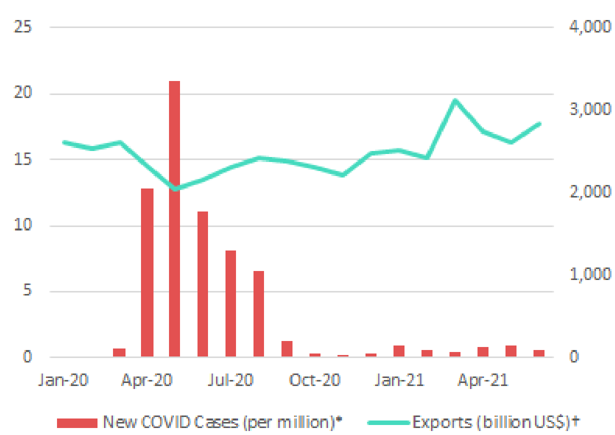
Singapore



Population: 5,703,569
GDP/capita: $65,233
FDI inflows (% of GDP): 28.3%
GDP growth (actual/*forecast*)

- 2019: -0.4%
- 2020: -9.2%
- *2021: 10.1%*
- *2022: 4.7%*
- *2023: 4.7%*

Manufacturing Output/Employee: $343,657
Doing Business Score/Rank: 86.2/2 of 190
(2019 World Bank, IMF, ADB)



Key Sectors: Electronics, Apparel and footwear, Automotive, Toys and other small consumer goods, Chemicals and pharmaceuticals, Machinery and appliances, Food and beverage, Furniture
Market Advantages: Highly skilled labor, Established free trade zones/industrial parks, High-quality transportation infrastructure, Favorable shipping routes
Market Disadvantages: Far from other suppliers, high-cost labor, High land and construction costs

A small and densely populated country, Singapore nevertheless has a vibrant manufacturing sector specializing in high-tech production processes. Singapore is also a regional leader in establishing a carbon pricing regime. Singapore's domestic exports were particularly affected by an early surge in COVID-19 cases; exports did not return to January 2020 levels until March 2021, but the IMF expects strong growth in 2021. Singapore is also increasingly important as an ocean and air transshipment hub. Already a popular choice to set up branch offices, Singapore may become an even more attractive destination for multinational Asia HQs in the coming years as the unstable political situation in Hong Kong makes companies rethink their regional footprints.

*Source: Johns Hopkins University CSSE via Our World in Data
†Source: Department of Statistics Singapore

Cambodia

Population: 16,486,542
GDP/capita: $1,643
FDI inflows (% of GDP): 13.5%
GDP growth (actual/*forecast*)

- 2019: 9.7%
- 2020: -*1.8%*
- *2021: 6.1%*
- *2022: 8.1%*
- *2023: 8.7%*

Doing Business Score/Rank: 53.8/144 of 190
(2019 World Bank, IMF)

In recent years garments and footwear have come to dominate Cambodia's exports as low-cost labor has made it an attractive destination for labor-intensive, low-margin manufacturing. Despite a very successful COVID-19 response early in the pandemic, like many of its neighbors Cambodia began to see cases surge in 2021. If not controlled, this may impact Cambodia's trade and manufacturing.

Laos

Population: 7,169,456
GDP/capita: $2,545
FDI inflows (% of GDP): 4.1%
GDP growth (actual/*forecast*)

- 2019: 7.2%
- 2020: *5.7%*
- *2021: 11.5%*
- *2022: 9.7%*
- *2023: 9.0%*

Doing Business Score/Rank: 50.8/154 of 190
(2019 World Bank, IMF)

Laos has a diverse export portfolio, including apparel, food and beverages, and electronics, as well as agricultural products and raw materials. A landlocked country, Laos is heavily dependent on road connections with Thailand and Vietnam to facilitate trade. Laos's neighbors implemented stricter land border controls as part of the effort to control the spread of COVID-19; the potential for additional restrictions as cases in the region rise may damage Laos's ability to export, particularly with air capacity likely to remain limited.

Myanmar

Population: 54,045,422
GDP/capita: $1,400
FDI inflows (% of GDP): 2.2%
Doing Business Score/Rank: 46.8/165 of 190
(2019 World Bank)

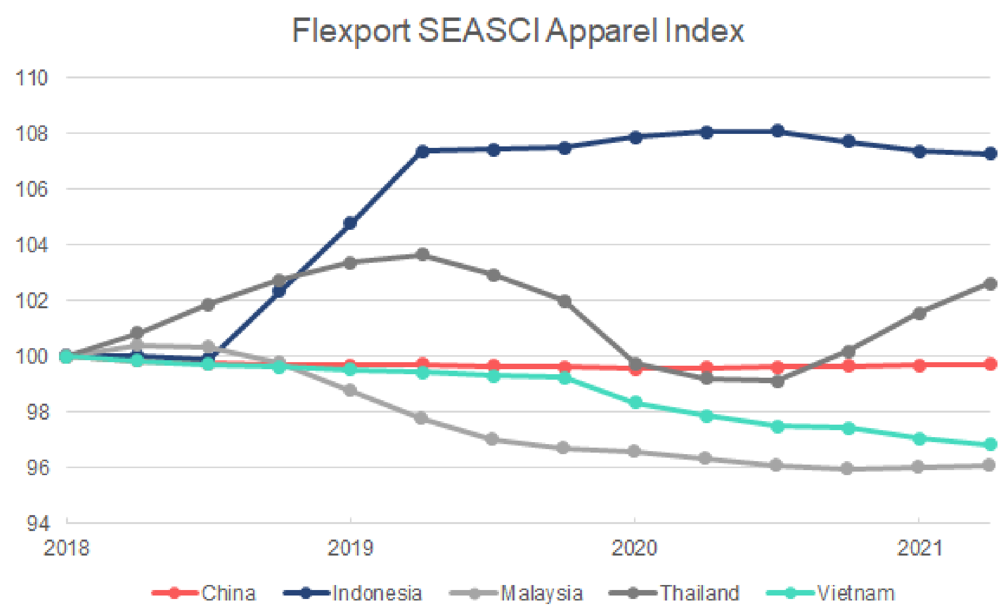
Myanmar has drawn interest from apparel manufacturers looking for a new source of low-cost labor; garments are now almost one third of Myanmar's total exports. However, a military coup in February 2021 injected considerable uncertainty into the market.

Appendix: More Insights From the Flexport SEASCI

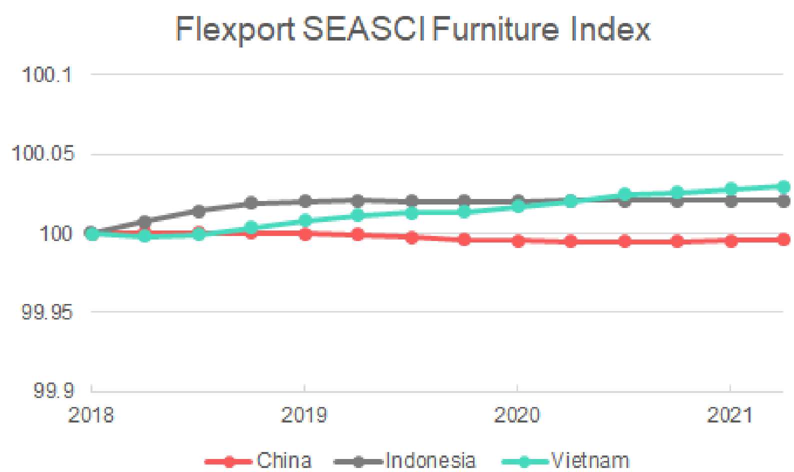
In addition to the cost comparisons discussed earlier in this report, the Flexport SEASCI uses data from shipments into the United States to track quarterly price movements in three key sectors for the region: apparel, electronics, and furniture. We use 2018 Q1 as our baseline; scores above 100 mean that prices have increased, and scores below 100 show that prices have decreased.

These are wholesale cost indices; they track the rise and fall of the prices of repeat purchases from importers. The index is smoothed over nearby quarters to illuminate broader pricing trends. Tracking the price the importer pays on arrival allows us to infer changes in the costs of production within countries over time.

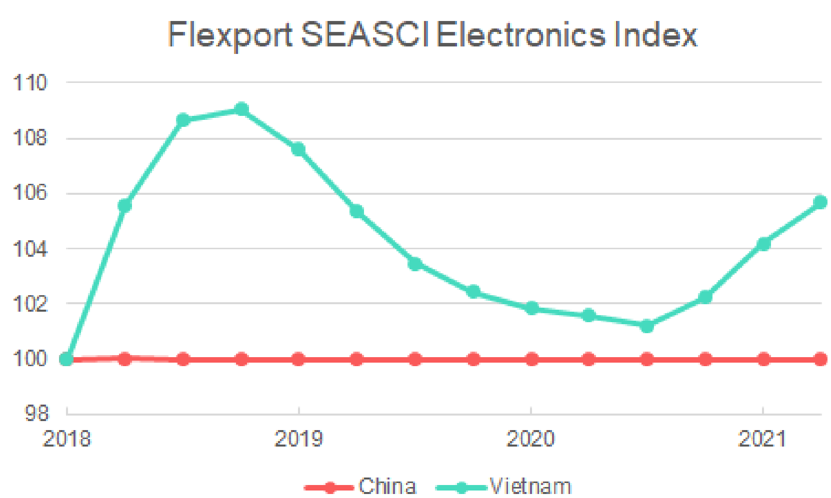
Apparel - Apparel costs in China have remained stable over time, while costs in Vietnam and Malaysia have steadily fallen. In Indonesia, costs rose sharply in the second half of 2018 before settling into a more stable pattern. Thailand's costs have been more volatile over this time period. With relatively short-term manufacturing agreements based on seasonal product runs, apparel costs are more sensitive than other industries to short-term changes in the market.



Furniture - In contrast, furniture manufacturing is organized with contracts that may cover several years, resulting in more stable prices. You can see this effect in the Flexport SEASCI Furniture Index, where costs in Indonesia and Vietnam have risen slightly since 2018 and costs in China have remained almost flat – note that the scale is zoomed in, so the variation is very slight.



Electronics - When the first round of Section 301 tariffs went into effect in 2018 Vietnam was the first-choice alternative for many electronics companies, as its proximity to China minimized disruptions to their supply chains. However, Vietnam's more limited electronics production facilities and smaller skilled labor force were overwhelmed by the sudden surge in demand, raising costs in the short term until the market stabilized. Costs rose again in the second half of 2020. By comparison, in China's larger and more developed electronics sector costs have remained very stable since 2018, despite the tariffs and COVID-19-related trade upheavals.



For more information on the Flexport SEASCI and other insights from Flexport data, contact the Trade Intelligence Team at trade.intelligence@flexport.com.

About Flexport

We believe trade can move the human race forward. That's why it's our mission to make global trade easy for everyone. Flexport is building the platform for global logistics—empowering buyers, sellers and their logistics partners with the technology and services to grow and innovate. Today, companies of all sizes—from emerging brands to Fortune 500s—use Flexport technology to move more than $10B of merchandise across 112 countries every year.

Learn more at **flexport.com**