



COVID-19 Trade Watch #4¹ - An uneven recovery

July 31, 2020

- **Real time indicators show merchandise trade recovering in June and July.** Trade data in June, available for 22 countries, show exports were, on average, down 5.8 percent year-on-year (YoY) compared with a 25 percent drop for the same group in May. Ship tracking data show that container capacity was just 2.6 percent below last year's level in mid-July, signaling a rebound of trade and GVC activities. China and East Asia had the strongest recovery patterns; after bottoming out in May, current activity is now at par or higher than last year. In contrast, North and South America continue to record double digit declines.
- **May merchandise trade data show wide variation across regions in depth and direction.** The magnitude of trade contraction differed across regions, with exports from East Asia down 13 percent YoY in May, compared with 37 percent in North America and South Asia. Regional trends also diverged, as the contraction deepened in East Asia and Pacific, Latin America and the Caribbean, and North America, while flattening or recovering in Europe and Central Asia, Middle East and North Africa, South Asia, and Sub-Saharan Africa.
- **Declines in capital and intermediate goods trade accelerated in May, while the decline in consumer goods trade abated.** Trade in transport equipment and fuels continued its severe downturn. Chinese exports of COVID-19 medical goods surged in May, driven by rising prices and shipments of medical masks to high-income countries.
- **The contraction in services trade deepened in April (and May).** Services imports, available through April for most countries, recorded a 33.3 percent decline YoY. Available data show comparable rates of decline in May. The fall was driven by a sharp reduction in trade in travel and transport; the number of international tourist arrivals in April 2020 represented just 3 percent of arrivals relative to 2019. The outperformer has been ICT services trade, which grew 13.5 percent YoY in April, as COVID has enhanced the need for digital communications.
- **The maritime sector demonstrated resilience in terms of delays and connectivity despite logistical challenges caused by to the pandemic.** The median turnaround time for vessels at ports in the first half of 2020 is comparable to that of 2019. Measures of global shipping connectivity suggest limited disruption, unlike the severe disturbances in aviation networks. This could preface a pick-up in trade in the coming months.

¹ This note has been prepared by the Global Trade and Regional Integration Unit of the World Bank, under the guidance of Caroline Freund, Global Director for Trade, Investment and Competitiveness. It is the fourth of a series of monthly bulletins aiming to track trade and logistics information in real time. This note, and its accompanying Annexes, were prepared by a team led by Woori Lee, with contributions from Jean-Francis Arvis, Paul Brenton, Cristina Constantinescu, Karly Dairabayeva, Michael Ferrantino, Ian Gillson, Karen Muramatsu, and Daria Ulybina, with editorial support from Erik Churchill. For further information about this note please contact Woori Lee (Young Professional; wlee10@worldbank.org), or Antonio Nucifora (Practice Manager, Global Trade and Regional Integration Unit, anucifora@worldbank.org). A full list of Trade and Covid-19 briefs is available at <https://www.worldbank.org/en/topic/trade/brief/trade-and-covid-19>. The accompanying Annexes to COVID-19 Trade Watch #4 (July) cover the trends presented in COVID-19 Trade Watch #4 (July) in substantially more detail.

Merchandise and services trade

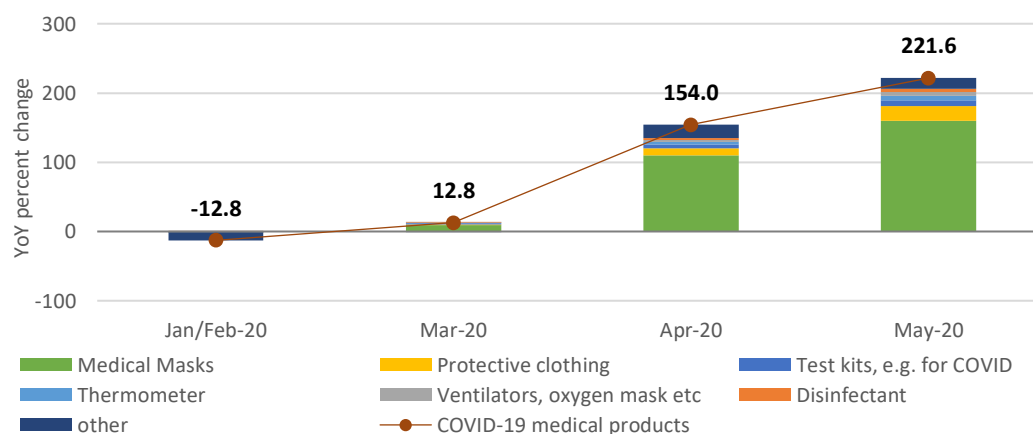
The contraction in merchandise trade continued in May, with global export values down by 25.2 percent year-on-year (YoY) and global imports down by 26.9 percent. While exports and imports declined across all regions in May, regional trends varied (Table A1). In some regions, year-on-year declines in exports were more severe in May than in April: Latin America and the Caribbean and North America declined by nearly 40 percent and East Asia and Pacific by 13 percent. Contractions in other regions eased in May compared to April: Middle East and North Africa by 23 percent, South Asia 37 percent and Sub-Saharan Africa 32 percent. Europe's rate of contraction stayed similar to April at about 30 percent. Trade data in June, for which availability is limited to a handful of countries, show signs of recovery, with countries such as China, Turkey, and Vietnam reporting positive year-on-year growth in exports and imports (Table A3).

Declines in capital and intermediate goods trade accelerated in May, while the contraction in consumer goods trade appears to have slowed down. Exports from China/EU27/Japan/United States show continued but different degrees of disruption according to the various stages of the transport equipment supply chains, down by 63.3 percent for capital goods, 46.0 percent for intermediate goods, and 19.4 percent for consumption goods, YoY in May (Table A4). Trade in all categories in capital and intermediate goods, except food and beverages, showed sharper year-on-year drops in May than in April. Trade in fuels continued to show sharp declines. Disruptions in apparel supply chains appear to have had severe impacts on the export performance of some developing countries, with exports to major economies estimated to have fallen more than 55 percent YoY in May for countries such as Bangladesh, Benin, El Salvador, Haiti, Nepal, and Sri Lanka (Table A11).²

China's exports of COVID-19 medical products soared in May 2020, mirrored by corresponding import surges in advanced countries. China's exports of medical products skyrocketed in May, increasing 221.6 percent year-on-year, after a 154 percent increase in April. This was largely driven by increased exports of medical masks and protective clothing (Figure 1). The surge in export values reflected a sharp increase in prices (unit values), which rose faster than quantities for top contributing products, except for disinfectants, signaling short-term supply constraints (Figure A3). In terms of destinations, exports to advanced countries, such as the United States, EU, and Japan, have driven the dramatic surge (Figure A4).

² Benin's exports decline is largely driven by raw cotton, one of its key exports, unlike other apparel-exporting countries. This exemplifies supply chain contagion impacting LDC producers of primary products.

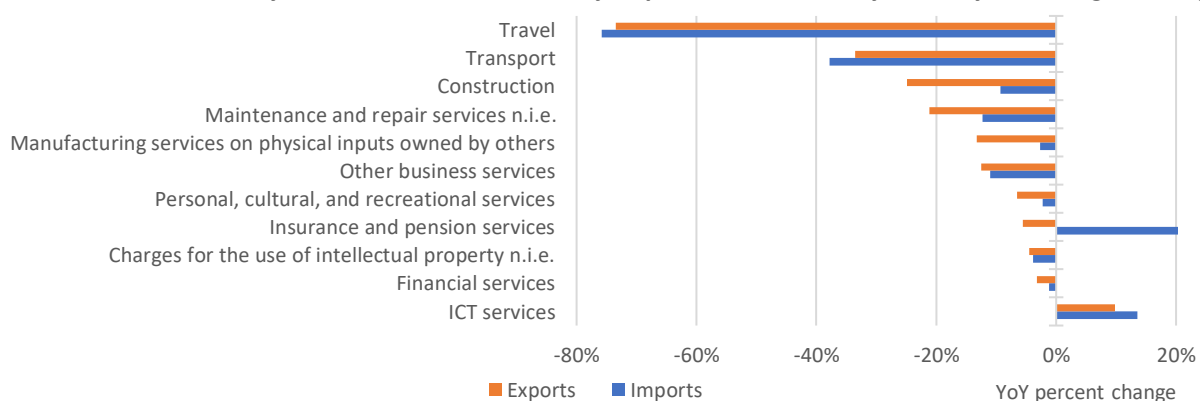
Figure 1. China's exports of COVID-19 medical goods



Source: World Bank staff estimates using data from China Customs.

Global services trade saw deepening contractions in April, as exports fell by 26.7 percent year-on-year and imports by 33.3 percent. Data from China, Germany, Japan, and the United States indicate that the decline continued at a similar rate in May. The impact of the pandemic, however, varied widely across services subsectors, with travel and transport being hardest hit while telecommunications, computer and information services maintained positive growth (Figure 2). The decline in tourism deepened in April, as the number of international tourist arrivals represented merely 3 percent of arrivals relative to 2019. International tourism collapsed in all regions, with monthly declines in April ranging between 94 percent and 98 percent (Figure B6). The number of commercial flights, which hit its lowest level in April, gradually increased in June and July, reaching about half the level of January 2020 in mid-July (Figure B7).

Figure 2. Services trade by sector for China, Germany, Japan, and the U.S., year-on-year change in May



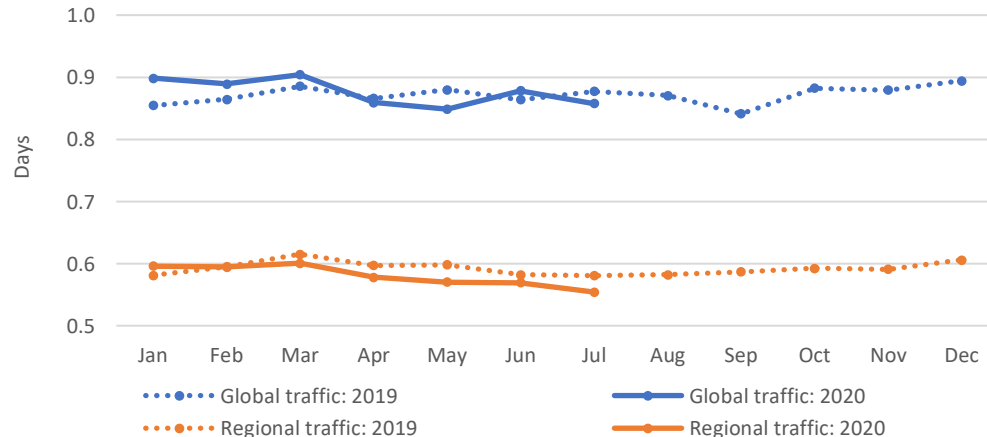
Source: Authors' calculations based on data from the Bureau of Economic Analysis, U.S. Department of Commerce, SAFE, Japan's Ministry of Finance, and Deutsche Bundesbank. Note: Construction excludes Germany and manufacturing services on physical inputs owned by others exclude the U.S.

Logistics

Ship tracking data indicate that container ship capacity further recovered up to mid-July, with levels just 2.6 percent below last year's. The last 4-week period, ending July 19, showed a 3.7 percent increase in global trade carrying capacity compared to the previous 4 weeks (Table C1). China and East Asia had the strongest recovery patterns, with current activity at par or higher than last year: currently about 5 percent above 2019 in China. The positive trends are also notable in Europe and the American West Coast, although capacity has not yet reached the levels of 2019. Among developing regions, the rebound has been strong in South Asia, and milder in Southern and Eastern Africa and in South America. As a leading indicator of merchandise trade, these data indicate an awaited rebound of trade and GVC activities.

The maritime sector demonstrated resilience in terms of delays and connectivity despite logistical challenges caused by to the pandemic. The median turnaround times at ports, time spent by vessels performing operations inside the port (entering, berthing, loading, unloading, departing, etc.), in the first half of 2020 are not substantially different from those observed in 2019 (Figure 3). This suggests that shipping lines and port operators have been able to adjust to the new operational constraints caused by COVID-19 without losses in port performance. Global connectivity, measured by the number of origin-destination pairs in shipping networks, also remained relatively stable with a slight decrease of 6 percent in April and May 2020 compared to 2019 (Figure C5). These disruptions in maritime connectivity are marginal compared to those in aviation networks.

Figure 3. Monthly median turnaround times at ports



Source: Authors' calculation based on AIS data provided by MarineTraffic

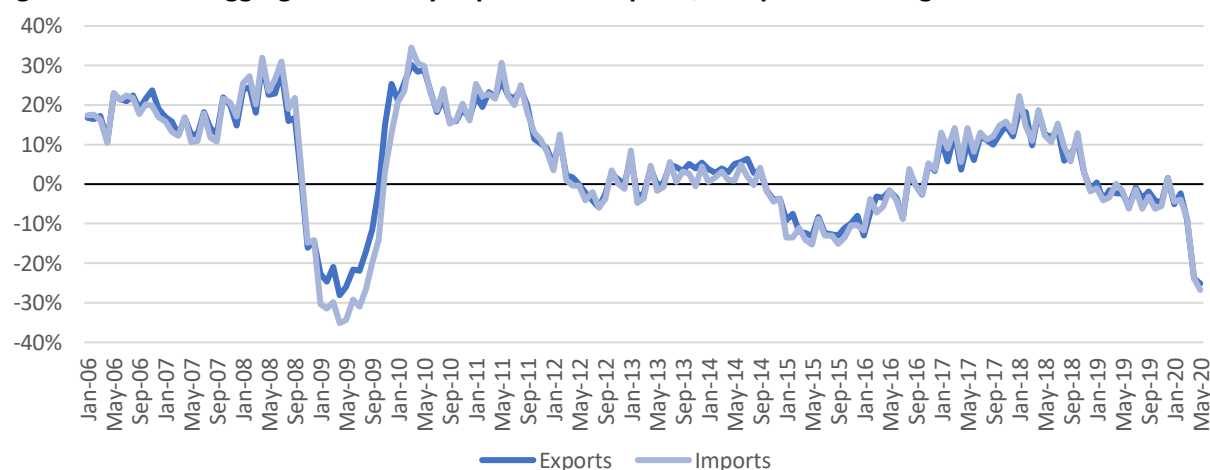
COVID-19 Trade Watch #4 - Annexes

July 31, 2020

Annex A: Merchandise trade data

A.1. Global and regional trade trends

Figure A1. Global aggregate monthly exports and imports, YoY percent change



Source: World Bank staff estimates using Global Economic Monitor and official data from China, Eurostat, Japan, UK, and the United States. **Note:** Mirror data is used when May data is missing.

Table A1. Exports and imports growth by region, Jan-May 2020 (YoY percent change)

	<i>Exports</i>					<i>Imports</i>				
	Jan	Feb	Mar	Apr	May	Jan	Feb	Mar	Apr	May
East Asia & Pacific	-11.6%	-2.3%	-4.8%	-7.9%	-13.1%	-6.6%	-1.7%	-3.0%	-13.1%	-20.4%
Of which China	-17.3%		-6.6%	3.4%	-3.2%	-3.4%		-2.2%	-14.7%	-15.6%
Of which Japan	-2.8%	-0.6%	-8.9%	-19.1%	-26.4%	-3.9%	-13.6%	-2.0%	-3.7%	-24.3%
Europe & Central Asia	-1.9%	-4.1%	-13.3%	-31.5%	-29.1%	-3.1%	-4.8%	-15.1%	-29.1%	-27.8%
Of which EU27	-2.5%	-3.0%	-12.2%	-29.3%	-29.9%	-3.3%	-6.8%	-14.2%	-25.2%	-28.9%
Latin America & Caribbean	-2.3%	-0.3%	-2.4%	-29.6%	-39.4%	-2.6%	-4.3%	-6.3%	-27.2%	-36.9%
Middle East & North Africa	3.1%	1.3%	-25.0%	-31.4%	-27.7%	-7.1%	-9.1%	-24.6%	-34.9%	-28.9%
North America	0.3%	1.5%	-9.2%	-30.9%	-37.6%	-4.0%	-4.1%	-7.2%	-22.9%	-27.3%
Of which U.S.	-0.5%	1.7%	-9.4%	-29.0%	-36.3%	-4.0%	-4.0%	-6.5%	-20.9%	-25.7%
South Asia	-1.7%	3.5%	-33.4%	-57.1%	-37.3%	-2.6%	-6.5%	-26.4%	-55.5%	-51.0%
Sub-Saharan Africa	5.4%	2.2%	-2.7%	-54.9%	-31.8%	-1.5%	-7.2%	-14.6%	-36.0%	-37.7%
World	-5.2%	-2.3%	-9.8%	-23.8%	-25.2%	-4.4%	-3.9%	-10.1%	-23.9%	-26.8%

Source: World Bank staff estimates using Global Economic Monitor and official data from China, Eurostat, Japan, UK, and the United States. **Note:** Mirror data is used when May data is missing. EU27 excludes intra-EU trade. Data for China is aggregated for January and February due to the variable timing of the Chinese New Year.

Table A2. Exports and imports growth by income group, Jan-May 2020 (YoY percent change)

	<i>Exports</i>					<i>Imports</i>				
	Jan	Feb	Mar	Apr	May	Jan	Feb	Mar	Apr	May
High income	-3.2%	-1.2%	-10.2%	-26.9%	-27.5%	-4.8%	-4.2%	-11.6%	-23.3%	-26.0%
Upper middle income	-10.0%	-9.3%	-7.4%	-13.8%	-18.8%	-2.8%	-3.3%	-3.7%	-20.1%	-24.6%
Lower middle income	-4.9%	13.1%	-15.1%	-34.5%	-29.2%	-5.8%	-3.1%	-15.6%	-40.7%	-40.3%

Source: World Bank staff estimates using Global Economic Monitor and official data from China, Eurostat, Japan, UK, and the United States. Insufficient data to calculate average for low-income countries. **Note:** Mirror data is used when May data is missing.

Table A3. Exports and imports growth for selected countries that have June data, Mar-Jun 2020 (YoY percent change)

	<i>Exports</i>				<i>Imports</i>			
	March	April	May	June	March	April	May	June
Albania	-37.0%	-46.5%	-25.1%	-11.6%	-22.1%	-39.0%	-26.7%	-4.9%
Bahrain	-2.8%	-17.4%	-21.9%	6.0%	-7.2%	-19.4%	-10.1%	6.7%
Brazil	5.4%	-8.4%	-14.2%	-2.7%	10.5%	-14.8%	-10.5%	-19.8%
Chile	-8.9%	-6.3%	-15.2%	2.3%	-20.0%	-22.7%	-36.4%	-18.5%
China	-6.6%	3.4%	-3.2%	0.5%	-2.2%	-14.7%	-15.6%	3.4%
El Salvador	-14.8%	-51.0%	-60.5%	-45.9%	-12.4%	-32.9%	-44.9%	-18.3%
Georgia					-15.1%	-36.1%	-33.8%	-17.2%
Iceland	-5.1%	-21.6%	-28.4%	-5.8%	-0.3%	-39.3%	-33.8%	-27.0%
India	-34.7%	-60.3%	-36.1%	-12.4%	-28.7%	-59.6%	-52.4%	-47.6%
Indonesia	-2.6%	-6.9%	-29.1%	2.3%	-2.9%	-18.6%	-42.2%	-6.4%
Israel	-30.8%	-19.6%	-6.3%	-9.5%	-14.1%	-26.2%	-19.1%	-9.3%
Japan	-8.9%	-19.1%	-26.4%	-25.8%	-2.0%	-3.7%	-24.3%	-14.1%
Korea, Rep	-1.6%	-25.5%	-23.7%	-10.9%	0.2%	-15.7%	-21.0%	-11.2%
Mongolia	-60.9%	-54.4%	-15.8%	21.7%	-8.2%	-11.6%	-26.0%	-19.2%
Norway	-29.8%	-37.3%	-36.1%	-23.5%	-13.5%	-26.7%	-26.0%	-0.6%
Pakistan	-8.3%	-54.2%	-33.4%	-6.1%	-19.2%	-31.8%	-43.2%	-15.3%
Paraguay	-8.0%	-47.8%	-33.9%	-12.5%	-14.2%	-51.5%	-35.0%	-6.2%
Singapore	-5.4%	-16.8%	-26.5%	-5.8%	-4.1%	-17.2%	-28.7%	-12.0%
Taiwan, China	-0.4%	-1.8%	-4.0%	-3.9%	0.5%	0.4%	-3.4%	-8.5%
Tunisia	-25.5%	-47.0%	-35.0%	2.1%	-23.3%	-44.8%	-32.4%	-21.7%
Turkey	-18.5%	-41.7%	-40.8%	15.1%	1.8%	-28.8%	-28.3%	11.1%
Vietnam	6.0%	-13.9%	-12.3%	5.3%	4.7%	-11.4%	-21.2%	6.4%
Average	-14.2%	-28.3%	-25.1%	-5.8%	-8.7%	-25.7%	-28.0%	-11.4%

Source: Global Economic Monitor.

A.2. Sector/products spotlights³

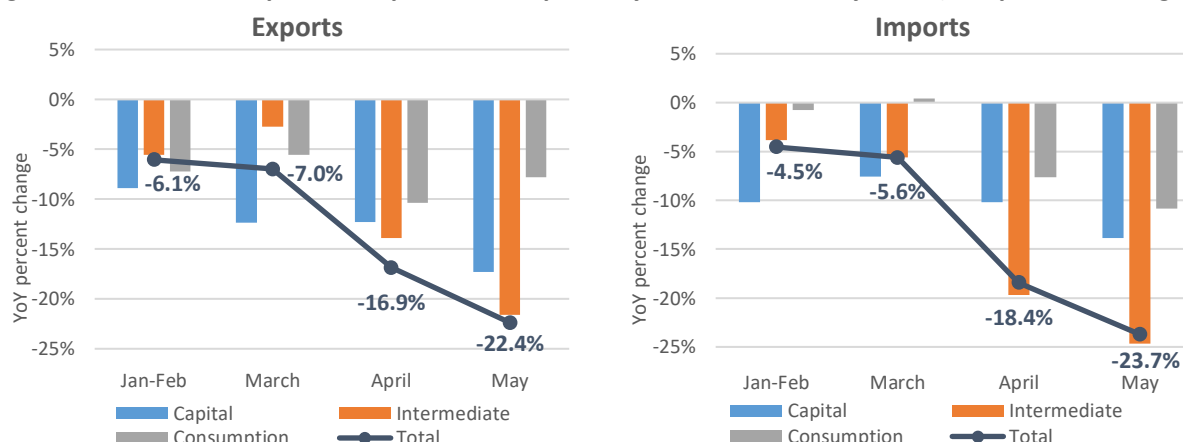
Global value chains

Declines in capital and intermediate goods trade accelerated in May, while the contraction in consumer goods trade appear to have slowed down. For China, EU27, Japan, and the United States as a group, exports in intermediate goods fell by 21.6 percent in May compared to the previous year, following a 13.9

³ The sectoral analysis in this section is based on official product-level data from China, EU, Japan, and the United States.

decline in April. Consumption goods saw more modest declines in exports, by 7.8 percent year-on-year, in May. Imports of all end-use categories dropped further in May, by 13.9 percent for capital goods, by 24.6 percent for intermediate goods, and by 10.8 percent for consumption goods.

Figure A2. China/EU/Japan/US exports and imports by end use, Jan-May 2020 (YoY percent change)



Source: World Bank staff estimates using official data from China, Eurostat, Japan, and the United States. **Note:** Trade flows for EU only include extra-EU trade due to data availability. End use categories are based on UN Broad Economic Categories (Rev 4).

Trade in transport equipment shows continued but different degrees of disruption according to the various stages of the supply chain, down by 63.3 percent for capital goods, 46.0 percent for intermediate goods, and 19.4 percent for consumption goods, YoY in May. Trade in all subsectors in capital and intermediate goods, except food and beverages, showed sharper YoY drops in May than in April. Trade in fuels continue to show sharp declines.

Table A4. China/EU/Japan/US exports and imports by detailed end use, Mar-May 2020 (YoY percent change)

	Exports			Imports		
	March	April	May	March	April	May
Capital -- Capital goods	-9.7%	-6.2%	-10.0%	-4.4%	-4.6%	-6.3%
Capital -- Transport equipment	-30.4%	-54.3%	-63.3%	-30.9%	-58.6%	-71.4%
Intermediate -- Food and beverages	7.7%	8.6%	3.7%	7.2%	-1.1%	12.3%
Intermediate -- Industrial supplies, nes	0.7%	-8.7%	-16.8%	-0.4%	-7.9%	-10.8%
Intermediate -- Fuels and lubricants	-0.5%	-33.4%	-44.0%	-22.3%	-49.3%	-58.4%
Intermediate -- Capital goods	-8.5%	-11.4%	-18.7%	2.0%	-7.5%	-13.3%
Intermediate -- Transport equipment	-11.5%	-40.2%	-46.0%	-10.4%	-38.6%	-48.7%
Consumption -- Food and beverages	2.7%	-2.6%	-11.5%	11.7%	-0.1%	-3.0%
Consumption -- Transport equipment	-34.2%	-40.5%	-19.4%	-12.1%	-30.7%	-19.6%
Consumption -- Consumer goods, nes	-6.7%	-11.3%	-6.5%	-3.4%	-9.8%	-13.4%
Not classified -- Food and beverages	-6.9%	-17.8%	-20.5%	0.1%	-15.5%	-27.4%
Not classified -- Fuels and lubricants	-14.5%	-42.4%	-67.2%	-33.1%	-63.2%	-59.5%
Not classified -- Transport equipment	-16.7%	-65.2%	-62.0%	-6.5%	-53.3%	-69.7%
Not classified -- Goods, nes	-13.5%	-31.0%	-45.1%	-5.0%	-17.2%	-38.5%
TOTAL	-7.0%	-16.9%	-22.4%	-5.6%	-18.4%	-23.7%

Source: World Bank staff estimates using official data from China, Eurostat, Japan, and the United States. **Note:** Trade flows for EU only include extra-EU trade due to data availability. End use categories are based on UN Broad Economic Categories (Rev 4).

COVID-19-related medical products

Trade in COVID-19 medical products showed soaring exports from China in May 2020, mirrored by corresponding import surges in advanced countries. China's exports of medical products skyrocketed in May, increasing 221.6 percent year-on-year, after a 154 percent increase in April.

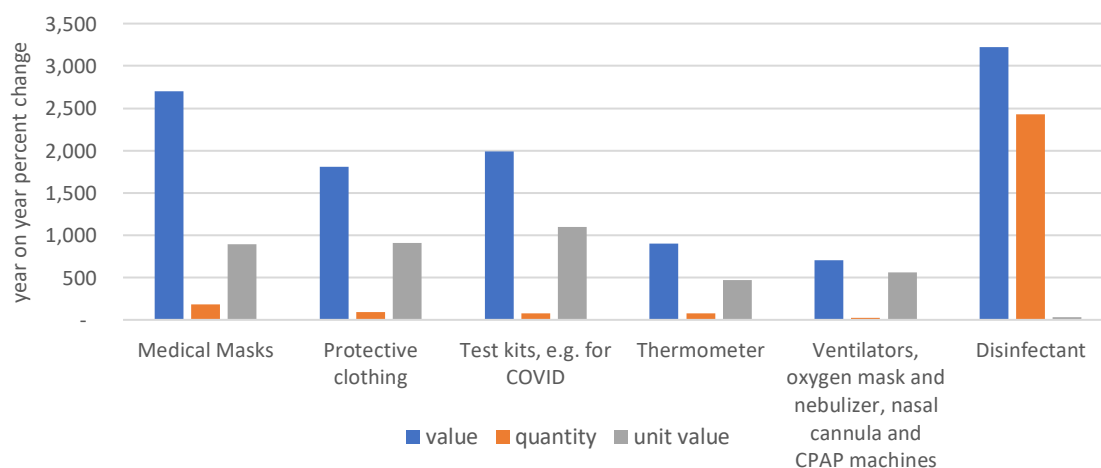
Table A5. Exports and imports of COVID-19 medical products: China, EU, Japan, and the U.S.

	YoY percentage change				
	January	February	March	April	May
Panel A. Exports					
China	-12.8%		12.8%	154.0%	221.6%
USA	1.6%	7.1%	-2.4%	-4.1%	-11.2%
Japan	-2.4%	11.8%	-0.2%	-5.6%	6.3%
EU	5.8%	14.4%	31.7%	-0.3%	-7.7%
Panel B. Imports					
China		6.2%	15.4%	5.6%	-6.4%
USA	1.1%	16.2%	17.8%	12.1%	16.7%
Japan	-2.2%	0.4%	8.3%	50.0%	36.6%
EU	1.6%	3.6%	3.3%	54.1%	71.7%

Source: World Bank staff estimates using official data from China, Eurostat, Japan, and the United States. **Note:** Trade flows for EU include only extra-EU trade for available partners.

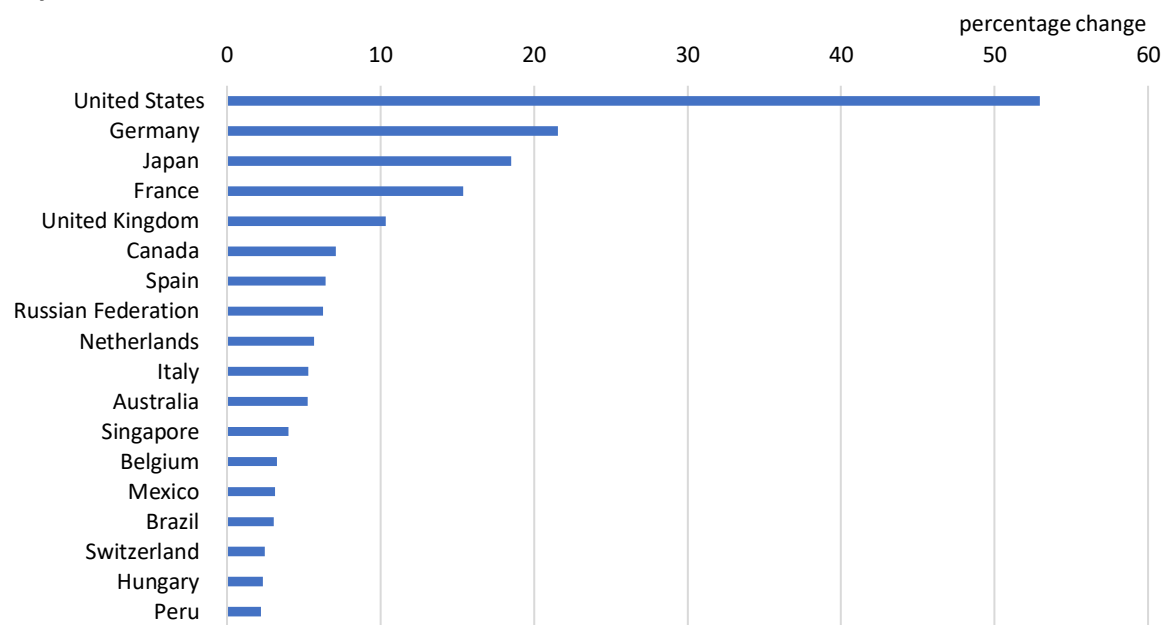
The surge in Chinese exports of medical products in May was largely driven by medical masks and protective clothing. Soaring export values reflected sharp increase in prices (unit values) which rose faster than quantities for top contributing products, except for disinfectants, signaling short-term supply constraints (Figure A3). Medical masks saw YoY increases in unit prices by 895 percent in May, compared to a 181 percent increase in quantities. In terms of destinations, exports to advanced countries, such as the United States, EU, and Japan, have driven the dramatic surge (Figure A4).

Figure A3. China: Export values, unit values and quantities of top contributing medical products in May 2020, YoY growth (%)



Source: World Bank staff estimates using data from China Customs. **Note:** Percent changes are based on trade values in current US dollars and quantities in kilograms or number of items, depending on the product.

Figure A4. China: Top contributions to the YoY growth in exports of medical products by destination, May 2020



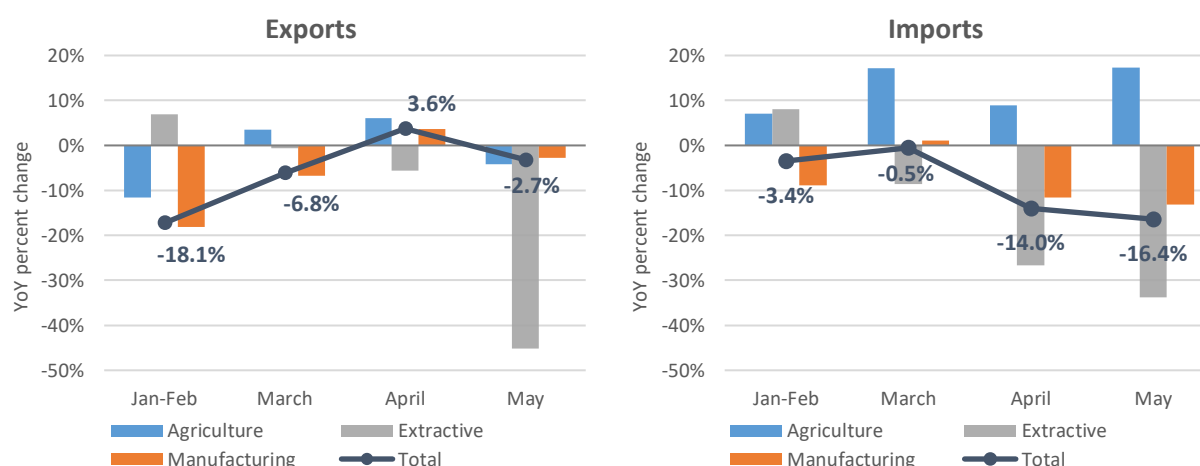
Source: World Bank staff estimates using data from China Customs.

A.3. Country spotlights

China

The positive export growth in April was short lived as exports in May dipped again by 3.2% compared to 2019. Imports also declined further in May, down by 16.4 percent YoY. Drops in imports were most notable for stone and glass, transportation, and textiles and clothing. Agricultural imports, however, continued to increase, 17.3 percent above levels of 2019 in May. Official data released for June show that exports and imports both rebounded and recorded positive YoY growth rates in June (Table A3).

Figure A5. China export and import summary, Jan-May 2020 (YoY percent change)



Source: China Customs

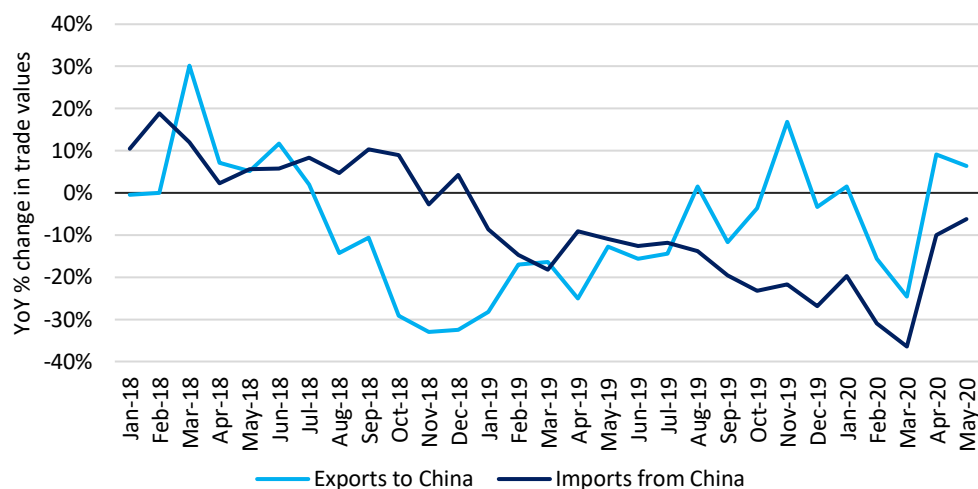
Table A6. China export and import growth by product group, Mar-May 2020 (YoY percent change)

	Exports			Imports		
	March	April	May	March	April	May
01-05 Animal	-15.8%	-14.9%	-22.0%	71.8%	36.2%	23.6%
06-15 Vegetable	13.2%	16.2%	9.2%	1.8%	-2.5%	23.7%
16-24 Foodstuffs	5.5%	9.1%	-4.8%	-18.9%	2.7%	-7.9%
25-27 Minerals	-0.6%	-5.5%	-45.1%	-8.6%	-26.6%	-33.7%
28-38 Chemicals	12.3%	19.7%	1.9%	3.6%	-12.6%	-15.8%
39-40 Plastic / Rubber	7.8%	6.4%	-4.2%	-3.4%	-13.0%	-12.2%
41-43 Hides, Skins	-19.9%	-39.9%	-43.9%	-25.3%	-42.3%	-33.9%
44-49 Wood	1.5%	-1.7%	-13.8%	1.1%	-19.3%	-27.5%
50-63 Textiles, Clothing	-13.0%	12.2%	25.0%	2.1%	-25.6%	-41.1%
64-67 Footwear	-18.6%	-36.2%	-39.9%	4.6%	-8.1%	-9.0%
68-71 Stone / Glass	-10.2%	-9.4%	-20.9%	-50.1%	-72.6%	-60.0%
72-83 Metals	-2.8%	-3.9%	-17.8%	6.8%	-8.9%	-9.8%
84-85 Mach/Elec	-8.2%	8.5%	0.0%	12.8%	5.9%	-0.2%
86-89 Transportation	-12.2%	-5.7%	-21.8%	-31.3%	-56.8%	-48.8%
90-97 Miscellaneous	-10.8%	-4.2%	-3.2%	-4.3%	-3.8%	-12.5%
98-99 Special	43.9%	76.7%	87.7%	-34.0%	-32.4%	-39.1%
Total	-6.1%	3.7%	-3.2%	-0.5%	-14.0%	-16.4%

Source: China Customs

United States' exports to China in May remained higher than the levels in 2019, after the surge in April. U.S. imports from China extended the upward trend, just 6 percent below last year's levels in May, after a long period of contraction due to the trade war.

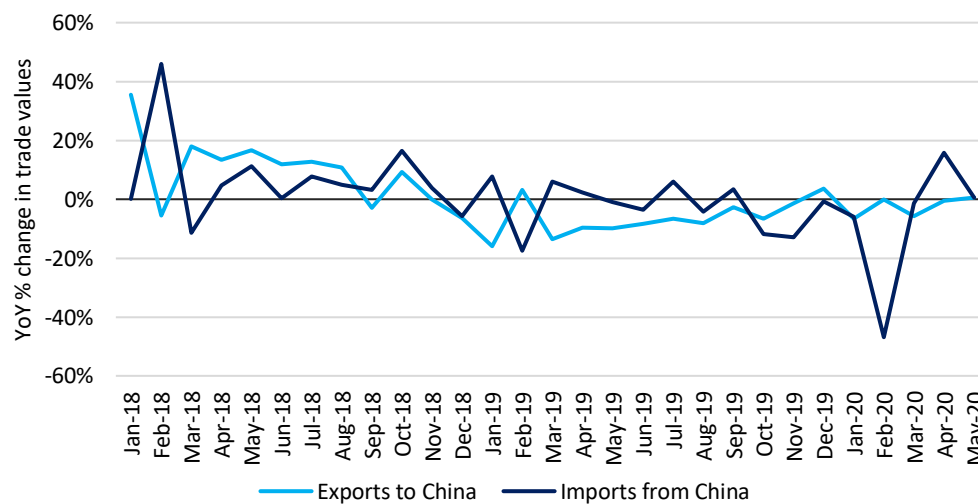
Figure A6. U.S. trade with China, YoY percent change



Source: U.S. Census

Japan's trade with China stabilized in May to levels similar to 2019.

Figure A7. Japan trade with China, YoY percent change

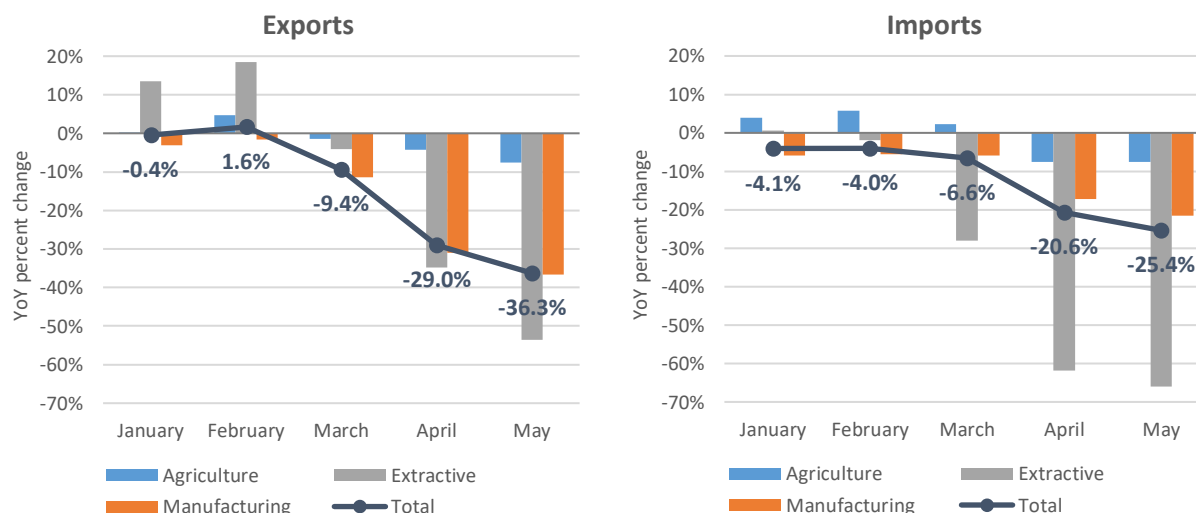


Source: Japan Customs

United States

The United States recorded sharp export contractions in May, down by 36.3 percent YoY, deeper than the rate of decline in April at 29.0 percent. Exports in sectors such as minerals, leather, footwear, and transportation have fallen more than 50 percent YoY in May. Declines in imports also accelerated in May, down by 25.4 percent YoY, most notably in transportation and minerals.

Figure A8. U.S. export and import summary, Jan-May 2020 (YoY percent change)



Source: U.S. Census

Table A7. U.S. export and import growth by product group, Mar-May 2020 (YoY percent change)

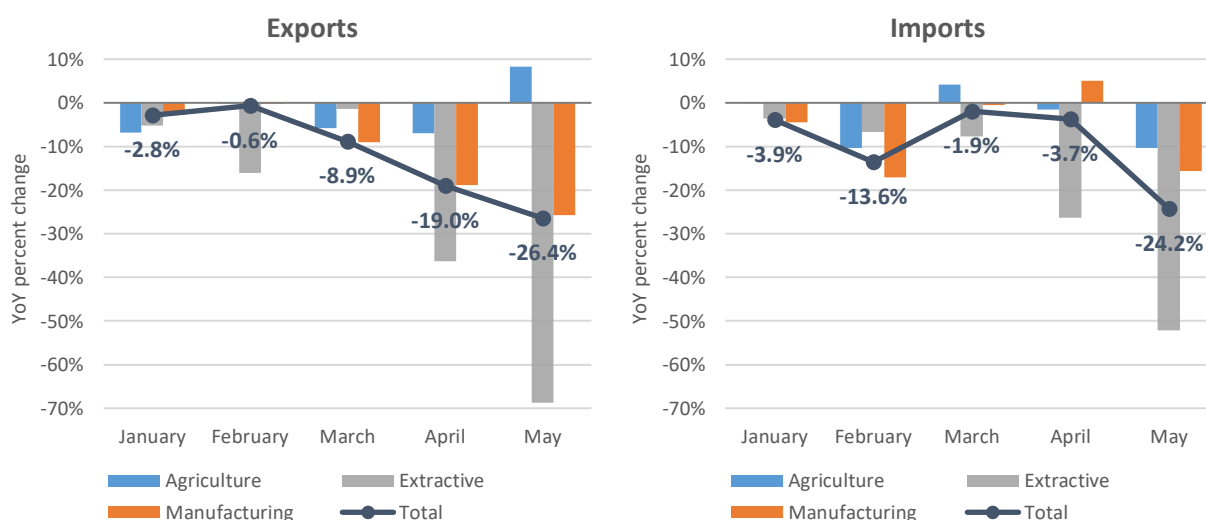
	Exports			Imports		
	March	April	May	March	April	May
01-05 Animal	9.6%	4.6%	-9.7%	-3.0%	-16.0%	-15.1%
06-15 Vegetable	-7.0%	-4.9%	-0.6%	5.7%	-7.0%	-2.0%
16-24 Foodstuffs	-0.4%	-9.1%	-15.4%	1.8%	-4.4%	-8.2%
25-27 Minerals	-4.1%	-34.8%	-53.5%	-28.1%	-61.8%	-66.0%
28-38 Chemicals	-2.1%	-7.1%	-12.3%	14.2%	0.6%	-2.8%
39-40 Plastic / Rubber	-3.0%	-22.6%	-27.1%	-7.5%	-8.3%	-18.4%
41-43 Hides, Skins	-23.6%	-53.5%	-54.1%	-14.6%	-40.8%	-53.5%
44-49 Wood	-10.5%	-19.5%	-18.5%	-11.7%	-13.8%	-15.7%
50-63 Textiles, Clothing	-14.8%	-44.6%	-40.2%	-13.6%	-15.1%	-10.8%
64-67 Footwear	-16.0%	-59.1%	-51.4%	-21.6%	-25.5%	-48.6%
68-71 Stone / Glass	-16.6%	-30.3%	-32.0%	34.2%	148.3%	140.5%
72-83 Metals	-10.9%	-35.2%	-40.2%	-13.1%	-23.8%	-23.1%
84-85 Mach/Elec	-8.3%	-24.0%	-29.8%	-9.7%	-18.2%	-20.5%
86-89 Transportation	-19.3%	-61.4%	-66.6%	-9.6%	-54.1%	-70.1%
90-97 Miscellaneous	-16.2%	-24.5%	-33.2%	-12.8%	-29.9%	-32.4%
Total	-9.4%	-29.0%	-36.3%	-6.6%	-20.6%	-25.4%

Source: U.S. Census. Note: Growth rates for previous months are available in earlier issues of the Trade Watch.

Japan

Japan's trade contraction deepened in May, as exports declined by 26.4 percent and imports by 24.2 percent, compared to 2019. While agricultural exports recovered to a positive year-on-year growth, extractives and manufacturing saw shaper drops in exports, most notably in transport equipment. Imports fell across all sectors in May, except textiles and clothing which recorded 20 percent year-on-year growth. Data released for June show that exports continued year-on-year declines at a similar rate (26 percent) while drops in imports slowed down (14 percent).

Figure A9. Japan export and import summary, Jan-May 2020 (YoY percent change)



Source: Japan Customs

Table A8. Japan export and import growth by product group, Mar-May 2020 (YoY percent change)

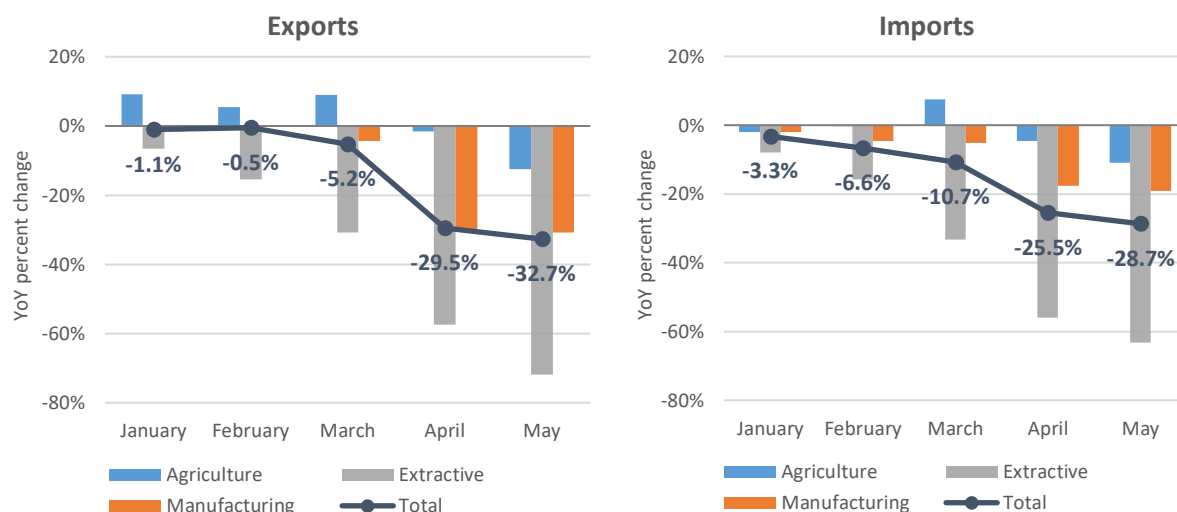
	Exports			Imports		
	March	April	May	March	April	May
01-05 Animal	-21.0%	-29.3%	-4.7%	-0.3%	-5.6%	-13.5%
06-15 Vegetable	1.1%	-1.9%	5.5%	5.2%	2.7%	-5.9%
16-24 Foodstuffs	-0.4%	2.7%	15.5%	7.3%	-0.6%	-11.5%
25-27 Minerals	-1.4%	-36.4%	-68.7%	-7.7%	-26.3%	-52.1%
28-38 Chemicals	-2.5%	-3.7%	-3.4%	5.2%	20.4%	-1.1%
39-40 Plastic / Rubber	-1.7%	-5.3%	-15.8%	-5.8%	2.9%	-15.3%
41-43 Hides, Skins	-2.3%	1.8%	-15.0%	-10.0%	-30.4%	-46.3%
44-49 Wood	-9.7%	-8.1%	-11.8%	-6.9%	-10.7%	-24.6%
50-63 Textiles, Clothing	-11.9%	-18.6%	-25.4%	0.1%	29.7%	19.7%
64-67 Footwear	-11.7%	-5.4%	12.9%	-7.0%	-8.1%	-24.4%
68-71 Stone / Glass	-11.4%	1.4%	12.8%	29.6%	15.5%	-14.8%
72-83 Metals	4.5%	-9.7%	-21.3%	-9.8%	-10.7%	-27.5%
84-85 Mach/Elec	-9.0%	-14.2%	-16.3%	2.0%	3.1%	-11.4%
86-89 Transportation	-15.4%	-43.3%	-59.3%	-5.2%	1.9%	-55.0%
90-97 Miscellaneous	-11.0%	-11.3%	-18.0%	-9.1%	-2.3%	-21.2%
Total	-8.9%	-19.0%	-26.4%	-1.9%	-3.7%	-24.2%

Source: Japan Customs

EU27

The European Union's trade with non-EU countries also continued to fall sharply in May, recording 32.7 percent below levels of 2019 for exports and 28.7 percent for imports. Similar to other major economies, deepest contractions were in sectors such as minerals, leather, and transportation. Extra-EU exports and imports of vegetables held up with positive YoY growth rates in the last three months, despite trade collapses in most other sectors.

Figure A10. EU export and import summary (extra-EU trade), Jan-May 2020 (YoY percent change)



Source: Eurostat. **Note:** This Figure represents only extra-EU trade due to data availability. EU refers to EU27.

Table A9. EU export and import growth by product group, Mar-May 2020 (YoY percent change)

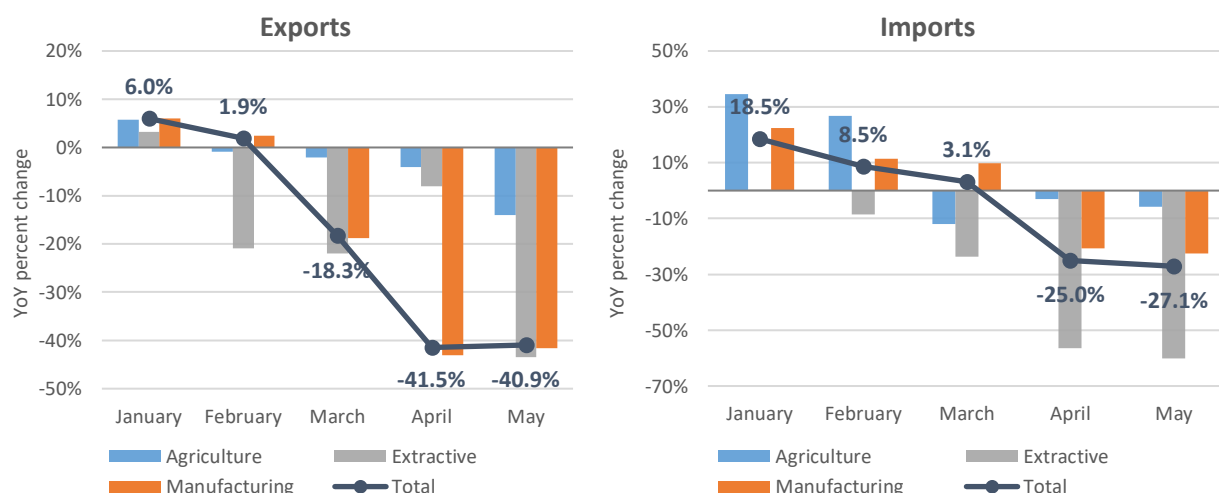
	Exports			Imports		
	March	April	May	March	April	May
01-05 Animal	13.2%	10.2%	1.0%	-2.2%	-27.6%	-28.1%
06-15 Vegetable	22.0%	10.2%	2.8%	10.9%	2.2%	1.5%
16-24 Foodstuffs	0.8%	-11.9%	-23.6%	8.4%	0.1%	-18.5%
25-27 Minerals	-30.7%	-57.5%	-71.8%	-33.2%	-56.0%	-63.2%
28-38 Chemicals	26.2%	2.0%	-10.0%	3.1%	3.8%	-2.7%
39-40 Plastic / Rubber	0.6%	-17.0%	-29.0%	-4.5%	-14.7%	-21.4%
41-43 Hides, Skins	-33.5%	-71.4%	-50.5%	-27.6%	-50.5%	-50.8%
44-49 Wood	-6.8%	-12.9%	-18.5%	-7.4%	-19.8%	-22.9%
50-63 Textiles, Clothing	-18.3%	-52.3%	-43.9%	-9.5%	16.9%	35.9%
64-67 Footwear	-24.0%	-60.3%	-44.6%	-19.9%	-44.3%	-35.5%
68-71 Stone / Glass	-7.6%	-35.6%	-38.8%	27.4%	-17.0%	-38.3%
72-83 Metals	-11.5%	-30.6%	-32.0%	-16.2%	-29.4%	-32.9%
84-85 Mach/Elec	-5.8%	-26.5%	-27.8%	-5.1%	-18.6%	-16.9%
86-89 Transportation	-27.5%	-71.0%	-55.2%	-11.6%	-44.1%	-55.3%
90-97 Miscellaneous	-6.5%	-28.3%	-32.0%	-5.8%	-24.7%	-22.9%
98-99 Special	5.2%	-3.2%	-45.7%	4.1%	-25.2%	-36.6%
Total	-5.2%	-29.5%	-32.7%	-10.7%	-25.5%	-28.7%

Source: Eurostat. **Note:** This table represents only extra-EU trade due to data availability. EU refers to EU27.

Turkey

Turkey's exports declined by 40.9 percent YoY in May, after a similar rate of contraction in April. Exports fell across all sectors, and most notably in textile, apparel, leather, minerals, and transport equipment. Imports also fell in May, by 27.1 percent, compared to last year.

Figure A11. Turkey export and import summary, Jan-May 2020 (YoY percent change)



Source: Turkstat via Haver Analytics and World Bank staff calculations. **Note:** Sectors based on ISIC Rev. 4 classification.

Table A10. Turkey export and import growth by sector, Mar-May 2020 (YoY percent change)

	Exports			Imports		
	March	April	May	March	April	May
Agriculture, forestry, fishing	-2.1%	-4.0%	-14.1%	-12.0%	-2.9%	-5.9%
Mining, quarrying	-21.9%	-8.0%	-43.5%	-23.6%	-56.4%	-60.1%
Food, beverage, tobacco	6.7%	4.2%	-20.0%	-1.3%	-8.8%	0.9%
Textile, apparel, leather	-24.0%	-61.7%	-50.1%	7.5%	-44.0%	-43.7%
Wood and cork	-11.2%	-37.0%	-24.6%	32.0%	-6.9%	-24.8%
Paper, printing, publishing	-8.1%	-12.9%	-25.8%	7.6%	10.7%	-9.6%
Coke, petroleum products	-49.3%	-63.1%	-65.6%	-39.4%	-57.8%	-73.0%
Chemicals	3.2%	0.8%	-27.6%	4.5%	-3.3%	-23.1%
Rubber, plastics	-9.6%	-31.1%	-35.9%	6.9%	-26.4%	-28.9%
Other non-metallic minerals	2.1%	-25.4%	-31.7%	13.3%	-20.4%	-27.8%
Basic metals	-14.2%	-23.2%	-14.2%	26.3%	-30.2%	26.7%
Fabricated metal products	-9.0%	-26.5%	-37.1%	9.7%	-27.7%	-27.9%
Computer, electronic, optical	-27.9%	-30.3%	-33.5%	-2.0%	-6.2%	-25.3%
Electrical equipment	-13.5%	-37.6%	-39.0%	-2.1%	-25.9%	-34.5%
Machinery and equipment	-11.7%	-28.4%	-44.8%	15.8%	-9.5%	-6.4%
Transport equipment	-33.3%	-76.2%	-56.9%	46.0%	-19.5%	-47.8%
Other	-31.9%	-73.4%	-67.4%	-19.3%	-39.9%	-38.5%
Total	-18.3%	-41.5%	-40.9%	3.1%	-25.0%	-27.1%

Source: Turkstat via Haver Analytics and World Bank staff calculations. **Note:** Sectors based on ISIC Rev. 4 classification. This is different from the other countries' tables, which report product groups based on HS classification, due to data availability.

Other developing countries

Reported official data at monthly frequency is less available for developing countries but mirrored data from major economies provide a good approximation. Table A11 lists a selection of developing countries that saw the sharpest YoY declines in exports to China, EU, Japan, and the United States in May, and the product groups that contributed most to the decline. Disruptions in apparel supply chains and reduced demand appear to have had severe impacts on the export performance of many developing countries. Exports to major economies are estimated to have fallen more than 55 percent YoY in May for countries such as Nepal, Benin, Haiti, El Salvador, Sri Lanka, and Bangladesh, largely driven by textiles and clothing industry. Benin's exports decline is largely driven by raw cotton, one of its key exports, unlike other apparel-exporting countries. This exemplifies supply chain contagion impacting LDC producers of primary products. Mexico's exports also fell by more than 50 percent YoY in May, with the biggest contributor to the decline being transportation and machinery.

Table A11. Selected developing countries' May 2020 mirror exports to China, EU, Japan and the U.S., YoY percent change, by main contributing product groups

exporter	YoY change in exports (mirrored)	Product groups with largest negative contributions to YoY growth			
		Product group 1		Product group 2	
		name	contrib. (percentage points)	name	contrib. (percentage points)
Nepal	-83.5%	50-63 Textiles, Clothing	-50.6%	72-83 Metals	-6.1%
Benin	-82.3%	50-63 Textiles, Clothing	-56.7%	72-83 Metals	-22.2%
Haiti	-67.2%	50-63 Textiles, Clothing	-64.4%	06-15 Vegetable	-1.1%
El Salvador	-59.8%	50-63 Textiles, Clothing	-59.1%	84-85 Mach/Elec	-3.7%
Sri Lanka	-59.6%	50-63 Textiles, Clothing	-38.1%	39-40 Plastic / Rubber	-7.0%
Bangladesh	-56.0%	50-63 Textiles, Clothing	-52.0%	64-67 Footwear	-2.1%
India	-54.2%	68-71 Stone / Glass	-11.9%	50-63 Textiles, Clothing	-10.6%
Mexico	-50.6%	86-89 Transportation	-23.2%	84-85 Mach/Elec	-16.2%
Pakistan	-50.0%	50-63 Textiles, Clothing	-32.3%	86-89 Transportation	-4.6%
Lebanon	-48.5%	72-83 Metals	-15.7%	68-71 Stone / Glass	-12.5%
Morocco	-46.5%	50-63 Textiles, Clothing	-14.7%	84-85 Mach/Elec	-14.2%
Mauritius	-43.7%	50-63 Textiles, Clothing	-16.7%	68-71 Stone / Glass	-11.1%

Source: World Bank staff estimates using official data from China, Eurostat, Japan, UK, and the United States. **Note:** Countries selected from non-oil exporters with more than 40 percent YoY reductions in May 2020 exports to China, EU, Japan and the U.S.

Table A12. Year-on-year changes in merchandise exports and imports by country, Mar-May 2020

country	Exports			Imports		
	March	April	May	March	April	May
Albania	-37.0%	-46.5%	-25.1%	-22.1%	-39.0%	-26.7%
Argentina	-15.7%	-18.9%	-31.0%	-19.7%	-30.1%	-44.1%
Australia	-0.3%	-11.9%	-18.1%	-11.0%	-14.2%	-23.1%
Austria	-6.0%	-25.3%	-18.7%	-10.1%	-27.1%	-17.3%
Azerbaijan	-8.5%	-78.1%	-59.6%	0.1%	-9.4%	-32.3%
Bahrain	-2.8%	-17.4%	-21.9%	-7.2%	-19.4%	-10.1%
Bangladesh	-20.4%	-23.4%	-56.0%	-17.0%	-51.1%	-44.7%
Belarus	-16.3%	-31.8%	-26.1%	-11.4%	-39.4%	-27.1%
Belgium	-7.7%	-30.4%	-25.9%	-10.2%	-32.1%	-27.3%
Bolivia	-12.3%	-62.4%	-47.2%	-22.4%	-64.6%	-29.0%
Bosnia and Herzegovina	-16.2%	-35.0%	-30.2%	-18.2%	-37.5%	-36.3%
Brazil	5.4%	-8.4%	-14.2%	10.5%	-14.8%	-10.5%
Bulgaria	-9.8%	-22.3%	-23.3%	-8.2%	-33.1%	-30.1%
Canada	-11.7%	-38.1%	-42.9%	-11.8%	-33.7%	-37.8%
Chile	-8.9%	-6.3%	-15.2%	-20.0%	-22.7%	-36.4%
China	-6.6%	3.4%	-3.2%	-2.2%	-14.7%	-15.6%
Colombia	-27.1%	-51.7%	-40.3%	-16.9%	-32.7%	-40.8%
Costa Rica	10.3%	-11.5%	-20.1%	-10.9%	-18.7%	-27.6%
Croatia	-11.6%	-26.4%	-27.0%	-14.3%	-39.4%	-31.1%
Cyprus	35.4%	0.4%	-8.6%	2.4%	-36.0%	-38.6%
Czech Republic	-13.8%	-39.3%	-31.5%	-8.2%	-30.9%	-26.1%
Denmark	-0.2%	-16.5%	-18.7%	-6.1%	-17.2%	-18.7%
Dominican Republic	-9.6%	-39.7%	-26.7%	-11.9%	-41.6%	-35.5%
Ecuador	-18.6%	-0.6%	-38.0%	-17.0%	-38.0%	-43.3%
Egypt, Arab Rep	-18.0%	-32.3%	-40.5%	-30.6%	-40.1%	-11.1%
El Salvador	-14.8%	-51.0%	-60.5%	-12.4%	-32.9%	-44.9%
Estonia	-2.1%	-20.0%	-26.7%	-3.3%	-24.5%	-26.2%
Finland	-10.3%	-22.5%	-33.2%	-6.3%	-29.2%	-28.2%
France	-17.9%	-44.7%	-43.5%	-20.5%	-41.1%	-33.5%
Germany	-9.7%	-33.6%	-31.6%	-6.4%	-24.3%	-23.7%
Greece	-13.6%	-31.3%	-34.4%	-15.4%	-33.0%	-40.4%
Guatemala	-5.6%	-8.7%	-5.3%	-9.7%	-16.0%	-27.1%
Honduras	1.0%	-41.5%	-49.9%	-10.7%	-52.3%	-45.1%
Hong Kong, SAR China	-4.8%	-2.6%	-6.3%	-10.1%	-5.6%	-11.2%
Hungary	-10.8%	-39.1%	-31.2%	-7.5%	-31.7%	-27.6%
Iceland	-5.1%	-21.6%	-28.4%	-0.3%	-39.3%	-33.8%
India	-34.7%	-60.3%	-36.1%	-28.7%	-59.6%	-52.4%
Indonesia	-2.6%	-6.9%	-29.1%	-2.9%	-18.6%	-42.2%
Ireland	40.3%	-15.1%	-9.3%	-8.4%	-24.4%	-22.8%
Israel	-30.8%	-19.6%	-6.3%	-14.1%	-26.2%	-19.1%
Italy	-15.3%	-43.5%	-32.2%	-19.8%	-35.9%	-36.8%
Japan	-8.9%	-19.1%	-26.4%	-2.0%	-3.7%	-24.3%
Jordan	-19.7%	-38.7%	-36.1%	-21.8%	-46.9%	-23.8%
Kazakhstan	40.5%	-14.0%	-48.9%	-7.0%	-16.0%	-21.7%
Kenya	18.1%	-15.9%	-3.8%	13.3%	-24.2%	-33.8%
Korea, Rep	-1.6%	-25.5%	-23.7%	0.2%	-15.7%	-21.0%

Latvia	-2.9%	-17.5%	-20.5%	-10.2%	-29.8%	-31.8%
Lebanon	-25.7%	-35.8%	-21.3%	-62.1%	-45.1%	-72.6%
Lithuania	-2.7%	-22.8%	-23.8%	-6.0%	-31.0%	-36.0%
Luxembourg	-28.9%	-45.9%	-21.7%	-26.9%	-44.0%	-26.1%
Malaysia	-9.5%	-28.1%	-28.4%	-7.6%	-12.8%	-33.1%
<i>Malta</i>	<i>-10.0%</i>	<i>-19.1%</i>	<i>-40.4%</i>	<i>-61.0%</i>	<i>-28.7%</i>	<i>-7.0%</i>
<i>Mauritius</i>	<i>-8.7%</i>	<i>-49.3%</i>	<i>-43.7%</i>	<i>-21.4%</i>	<i>-60.2%</i>	<i>-54.2%</i>
Mexico	-1.7%	-40.9%	-56.7%	-6.7%	-30.5%	-47.1%
Moldova, Rep	-18.2%	-30.5%	-26.0%	-6.2%	-44.6%	-31.6%
Mongolia	-60.9%	-54.4%	-15.8%	-8.2%	-11.6%	-26.0%
Morocco	-30.5%	-49.8%	-23.1%	-16.9%	-36.2%	-35.7%
Netherlands	-9.2%	-22.4%	-23.8%	-9.6%	-22.7%	-23.3%
New Zealand	-8.0%	-13.5%	-12.9%	-5.6%	-30.8%	-31.1%
Norway	-29.8%	-37.3%	-36.1%	-13.5%	-26.7%	-26.0%
<i>Oman</i>	<i>-7.3%</i>	<i>-22.8%</i>	<i>-58.0%</i>	<i>-9.7%</i>	<i>-4.7%</i>	<i>-36.3%</i>
Pakistan	-8.3%	-54.2%	-33.4%	-19.2%	-31.8%	-43.2%
<i>Panama</i>	<i>14.4%</i>	<i>79.8%</i>	<i>-15.4%</i>	<i>-22.6%</i>	<i>1.1%</i>	<i>-19.4%</i>
Paraguay	-8.0%	-47.8%	-33.9%	-14.2%	-51.5%	-35.0%
Peru	-27.9%	-51.7%	-46.9%	-21.2%	-33.4%	-38.3%
Philippines	-24.7%	-49.9%	-35.6%	-26.2%	-65.3%	-40.6%
Poland	-8.0%	-31.9%	-23.7%	-5.4%	-31.2%	-30.6%
Portugal	-14.9%	-42.1%	-40.6%	-13.9%	-41.5%	-41.7%
Romania	-13.2%	-48.7%	-41.6%	-3.9%	-36.2%	-37.1%
Russian Federation	-20.0%	-34.5%	-35.5%	-2.5%	-20.3%	-13.5%
Singapore	-5.4%	-16.8%	-26.5%	-4.1%	-17.2%	-28.7%
Slovakia	-20.8%	-47.0%	-35.5%	-12.5%	-42.0%	-37.8%
Slovenia	-1.8%	-31.4%	-24.0%	-4.7%	-41.8%	-26.4%
South Africa	-3.7%	-61.7%	-27.7%	-19.2%	-37.4%	-38.1%
Spain	-15.6%	-42.3%	-36.6%	-17.0%	-39.1%	-41.9%
Sri Lanka	-42.3%	-64.7%	-38.9%	-30.3%	-29.6%	-44.3%
Sweden	-7.0%	-22.8%	-26.7%	-6.8%	-26.8%	-25.2%
Switzerland	8.2%	-7.9%	-7.3%	11.2%	9.7%	-2.1%
Taiwan, China	-0.4%	-1.8%	-4.0%	0.5%	0.4%	-3.4%
Thailand	4.2%	2.1%	-22.5%	6.2%	-16.7%	-33.7%
Tunisia	-25.5%	-47.0%	-35.0%	-23.3%	-44.8%	-32.4%
Turkey	-18.5%	-41.7%	-40.8%	1.8%	-28.8%	-28.3%
Ukraine	-4.3%	-6.1%	-24.1%	-5.2%	-27.8%	-33.1%
United Kingdom	-21.6%	-17.3%	-16.2%	-20.1%	-34.1%	-33.3%
United States	-9.4%	-29.0%	-36.3%	-6.5%	-20.9%	-25.7%
Uruguay	-18.0%	-22.0%	-13.9%	9.3%	-18.8%	-23.0%
Vietnam	6.0%	-13.9%	-12.3%	4.7%	-11.4%	-21.2%

Source: World Bank staff estimates using Global Economic Monitor and official data from China, Eurostat, Japan, UK, and the United States. **Note:** Data in *italics* are missing from Global Monitor for May 2020, and estimated using mirrored data based on US, China, Japan and EU. These data are subject to revisions, which may in some cases be substantial.

Annex B: Services trade

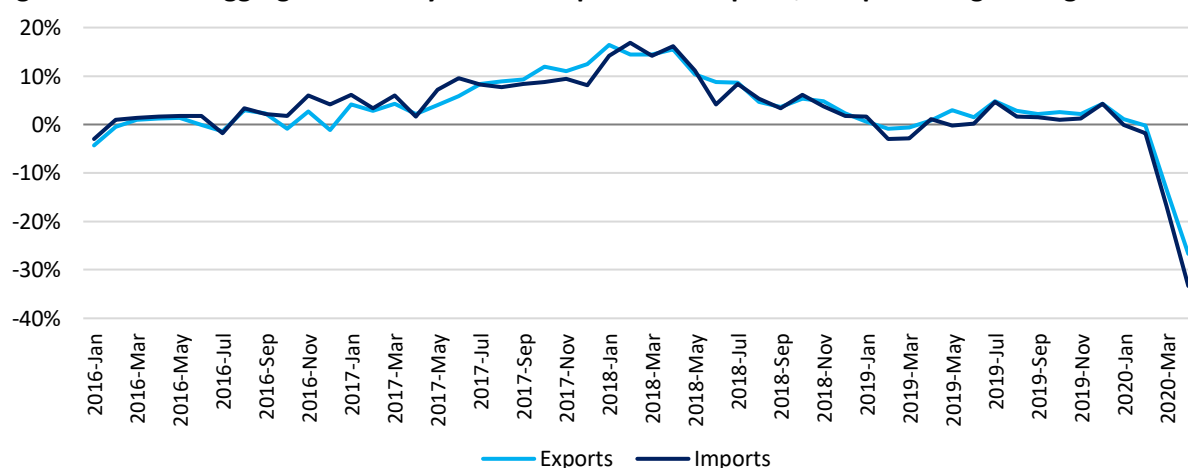
Global services trade declined further in April relative to March (Figure B1 & Table B1) as COVID-19 cases continued to increase and countries maintained or tightened quarantine measures which particularly affected transport and tourism services. In April, services exports declined 26.7 percent and services imports declined 33 percent relative to the same month in the previous year.

Extra-EU27 services trade declined 30.9 percent in April. For the euro area countries⁴ for which more disaggregated sectoral level data is available, there were large declines in travel and increases in telecommunications, computer, and information services (Figure B2 and B3). Similarly, commercial services exports declined 24.3 percent, and imports declined 31.1 percent in May (for China, Germany, Japan, and the United States as a group). A closer look at the services categories most affected reveals that travel (exports: -73.5 percent, imports: -75.8 percent) and transport (exports: -33.6 percent, imports: -37.8 percent) were the hardest hit. In contrast, trade in TCI increased (exports: 9.8 percent, imports: 13.5 percent) as people have become increasingly dependent on these services for teleworking, education, and other remotely supplied activities (Figure B4).

International tourism reached their lowest in April, with a monthly decline of 97 percent YoY compared to April 2019. The number of international tourist arrivals in April 2020 represented just 3 percent of arrivals relative to 2019 (Figure B5). The collapse in international tourism significantly affected every region (year to date)—Europe (-44 percent), Asia and Pacific (-51 percent), America (-36 percent), Africa (-35 percent), and Middle East (-40 percent).

Air travel remains highly limited, although the number of commercial flights has been increasing gradually throughout June and July. The number of flights in mid-July reached about half the level of January 2020 (Figure B7). U.S. airline passenger traffic has also been slowly picking up in June and early July, reaching nearly 30 percent of the levels in 2019, before showing signs of another dip in mid-July (Figure B8).

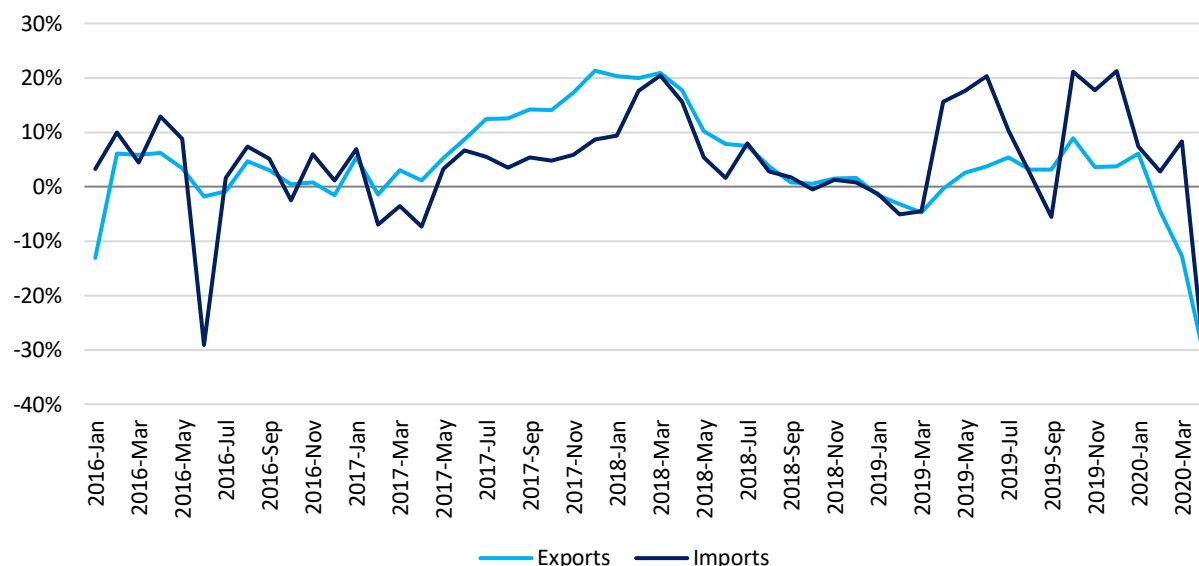
Figure B1. Global aggregate monthly services exports and imports, YoY percentage change



⁴ Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Slovakia, Slovenia and Spain.

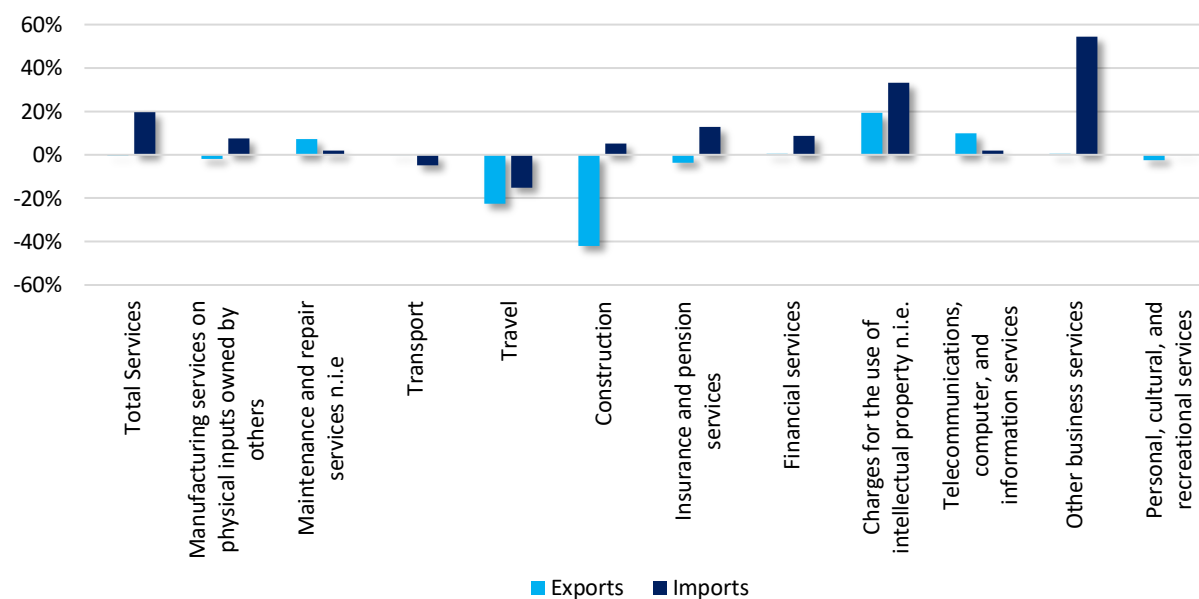
Note: The global aggregate monthly services exports and imports data includes 36 economies that reported in April which accounted for a total of approximately 59 percent of global services exports and 58 percent of global services imports in 2017 (UNCTAD). Data for China in January was calculated based on data reported by the State Administration of Foreign Exchange (SAFE). The value was converted from RMB into USD using the monthly average exchange rate. **Source:** Estimates based on WTO data, SAFE, Bank of Italy, and Banco de Portugal.

Figure B2. Extra-EU monthly services trade (YoY percentage change)



Source: Authors' calculations based on data from WTO.

Figure B3. Euro area Q1 2020 services trade by category (YoY percentage change)



Source: Authors' calculations based on data from the ECB. **Note:** Quarterly- Neither seasonally adjusted nor calendar adjusted data- Euro area 19 (fixed composition) as of 1 January 2015 vis-a-vis Rest of the World

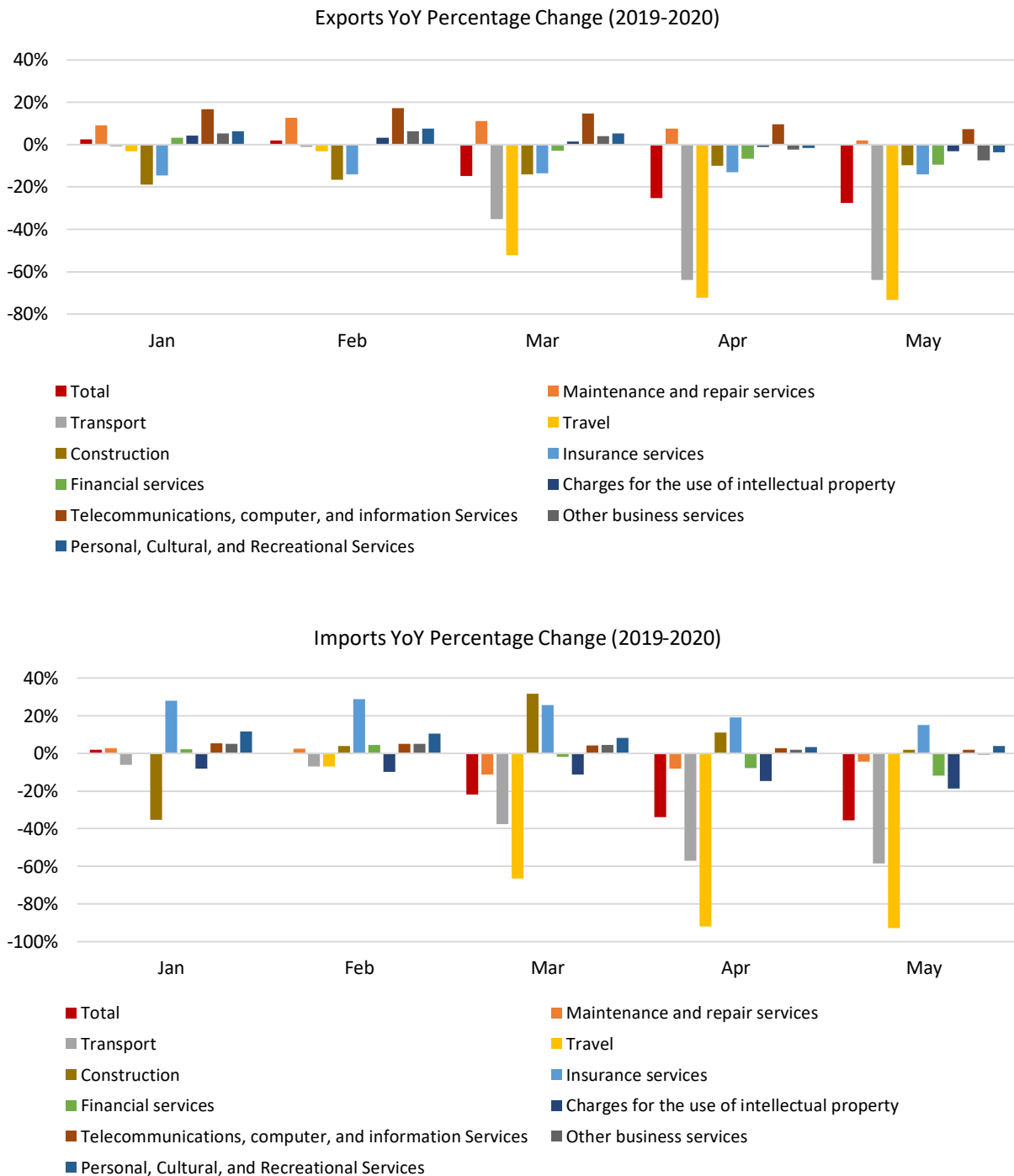
Table B1. Services exports and imports (YoY percentage change)

	Services							
	Exports				Imports			
	January	February	March	April	January	February	March	April
Australia	0.8%	-12.0%	-26.5%	-34.4%	-2.8%	-9.5%	-31.8%	-60.4%
Belarus	5.0%	121.6%	0.9%	-14.3%	1.6%	110.9%	-11.4%	-20.5%
Belgium	6.7%	-1.9%	-9.4%	-17.4%	5.0%	-5.4%	-17.1%	-27.2%
Brazil	2.8%	-12.2%	-7.2%	-22.0%	-1.6%	-5.4%	-14.7%	-45.1%
Bulgaria	-0.3%	-11.2%	-20.4%	-58.7%	-5.3%	-16.6%	-24.7%	-60.9%
Canada	4.7%	3.1%	-9.9%	-26.8%	3.3%	2.6%	-13.2%	-43.5%
China	-33.3%	-3.1%	-5.4%	-1.8%	-11.9%	-22.9%	-18.3%	-35.9%
Czech Republic	7.0%	0.5%	-13.5%	-30.9%	21.2%	18.4%	-13.5%	-34.3%
Denmark	3.5%	-6.8%	-8.5%	-19.7%	1.6%	8.6%	-6.2%	-17.0%
Estonia	-0.3%	0.0%	-9.5%	-38.5%	0.7%	2.3%	-22.8%	-45.5%
Finland	3.1%	-4.2%	-11.3%	-17.7%	-8.5%	1.5%	-6.1%	-24.3%
France	4.5%	7.2%	-13.6%	-23.2%	-2.0%	7.8%	-11.1%	-14.6%
Germany	0.7%	-2.3%	-9.4%	-26.4%	-0.5%	-2.9%	-10.0%	-29.4%
Greece	-2.8%	2.2%	-17.8%	-31.3%	2.0%	10.5%	-10.1%	-26.5%
Hungary	4.9%	1.6%	-35.9%	-72.8%	6.3%	5.3%	-31.7%	-70.2%
India	7.0%	6.9%	1.2%	-8.9%	8.8%	12.8%	-2.2%	-18.4%
Italy	-2.2%	-6.4%	-40.3%	-65.2%	-3.5%	-4.8%	-26.9%	-57.8%
Japan	-6.9%	-17.9%	-24.0%	-37.4%	-6.5%	-3.1%	-15.0%	-18.7%
Korea, Republic of	1.6%	-4.4%	-18.4%	-29.6%	-7.5%	-5.9%	-21.4%	-24.5%
Latvia	-5.8%	-6.4%	-15.7%	-32.8%	-1.5%	-3.1%	-15.9%	-36.9%
Lithuania	-4.2%	-0.3%	-8.0%	-18.2%	0.3%	1.6%	-12.3%	-37.0%
Luxembourg	-1.8%	1.2%	-7.6%	-4.6%	-0.03%	-0.7%	-9.7%	-7.2%
Malta	-0.4%	-2.0%	-8.8%	-22.1%	-2.2%	-4.0%	-4.5%	-11.8%
Mongolia	50.0%	-4.2%	-48.8%	-47.0%	-25.0%	-46.3%	-57.1%	-60.0%
Netherlands	6.7%	-7.9%	-8.2%	-23.0%	0.3%	-4.6%	-10.1%	-18.9%
Pakistan	1.2%	7.2%	-8.5%	-6.5%	-3.7%	26.0%	-18.6%	-30.9%
Poland	3.3%	2.8%	-12.5%	-42.6%	-0.7%	4.1%	-16.5%	-45.7%
Portugal	0.7%	-2.0%	-25.9%	-64.8%	-1.2%	5.2%	-19.7%	-49.7%
Romania	17.2%	-16.5%	-6.5%	-30.7%	20.0%	-19.5%	-33.5%	-45.5%
Russia	10.0%	-5.1%	-16.6%	-52.9%	8.9%	4.8%	-18.6%	-60.7%
Serbia	29.6%	22.5%	11.8%	-11.6%	23.4%	23.0%	-3.9%	-21.6%
Slovak Republic	1.9%	0.0%	-19.2%	-45.5%	1.5%	-0.2%	-23.4%	-38.6%
Slovenia	3.1%	0.3%	-17.5%	-42.9%	6.4%	-7.6%	-14.6%	-31.3%
Turkey	15.2%	14.1%	-19.3%	-65.2%	10.7%	2.8%	-1.8%	-14.5%
Ukraine	11.8%	2.7%	2.7%	-17.0%	4.5%	-1.5%	-21.6%	-50.5%
United Kingdom	3.3%	-21.9%	-22.4%	-40.8%	16.3%	10.3%	-25.1%	-53.5%
USA	1.7%	-14.8%	-10.7%	-20.6%	2.8%	0.1%	-21.5%	-32.2%

Source: Estimates based on WTO data, SAFE, Bank of Italy, and Banco de Portugal.

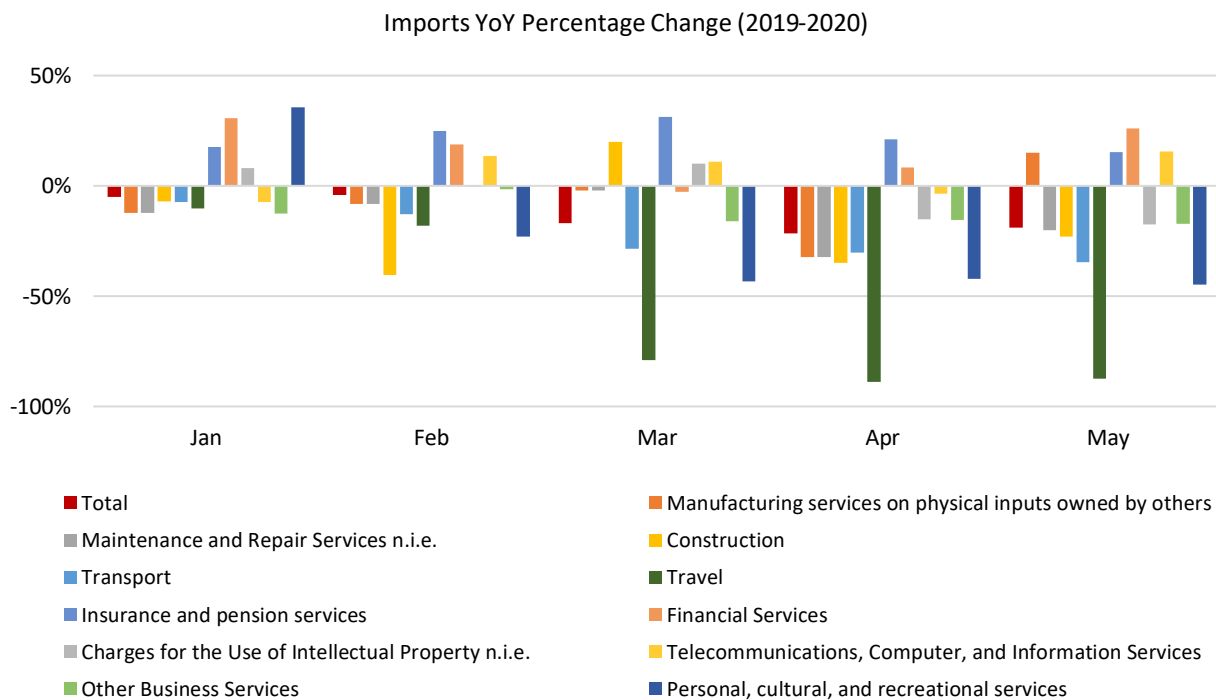
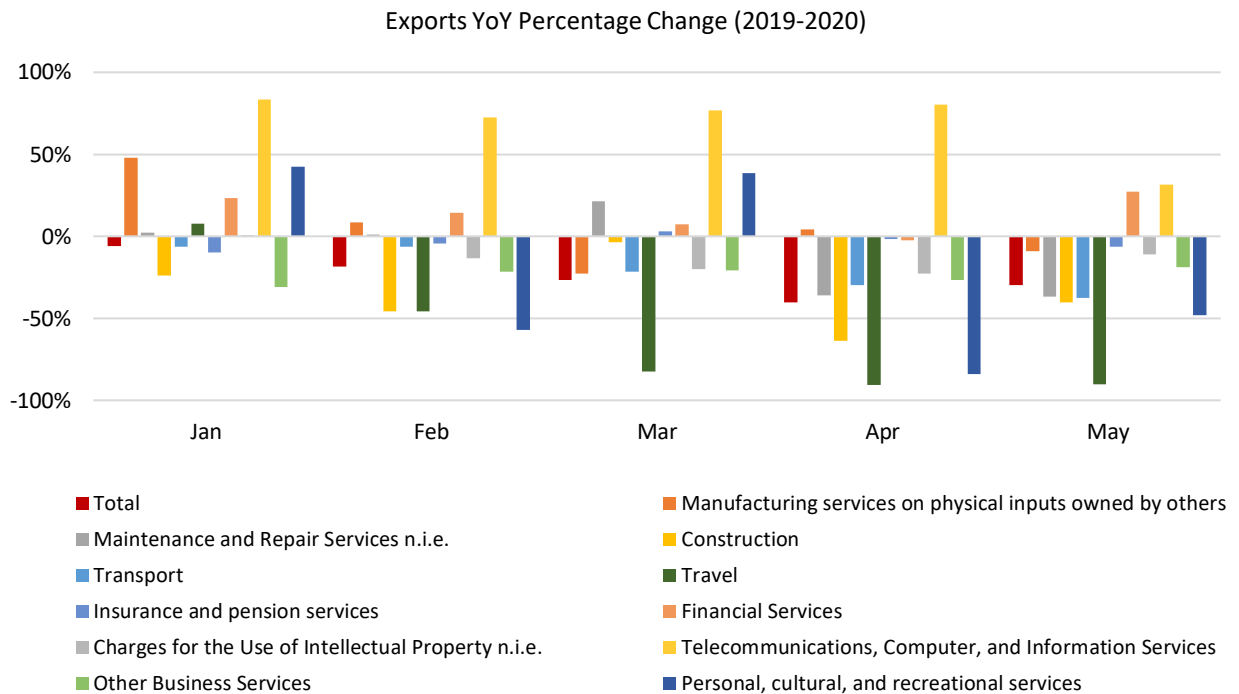
Figure B4. Monthly commercial services trade by category

United States monthly services trade (YoY percentage change)



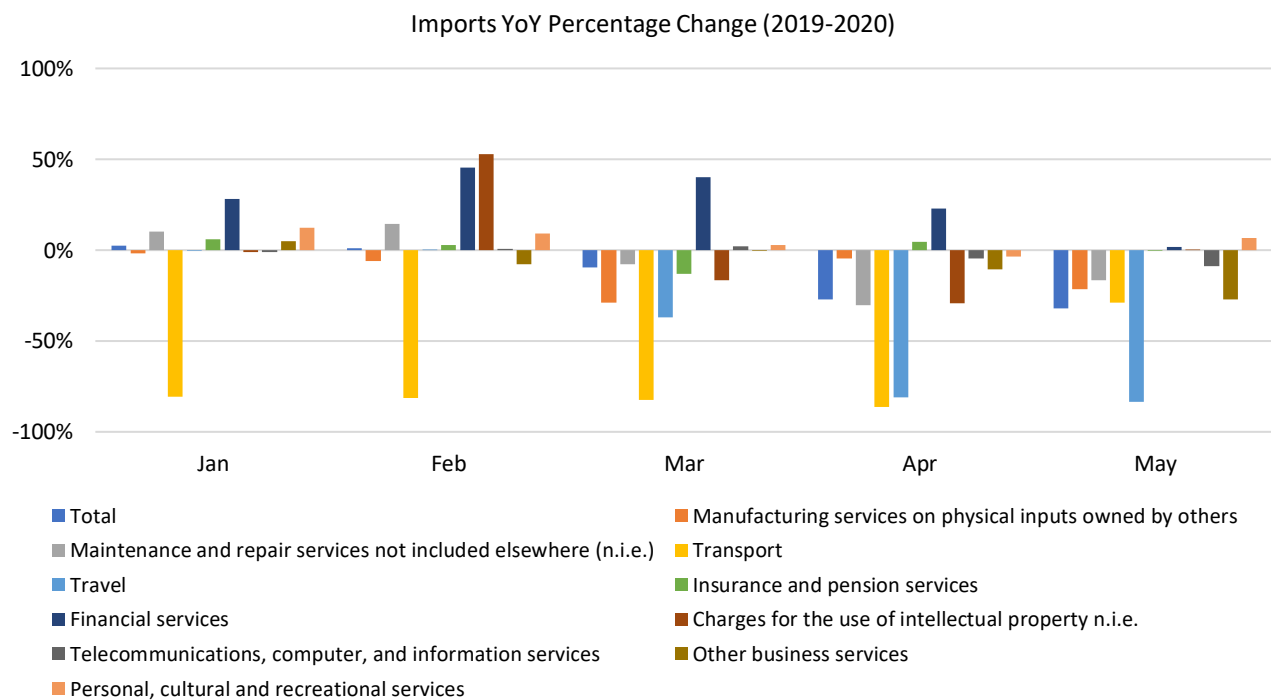
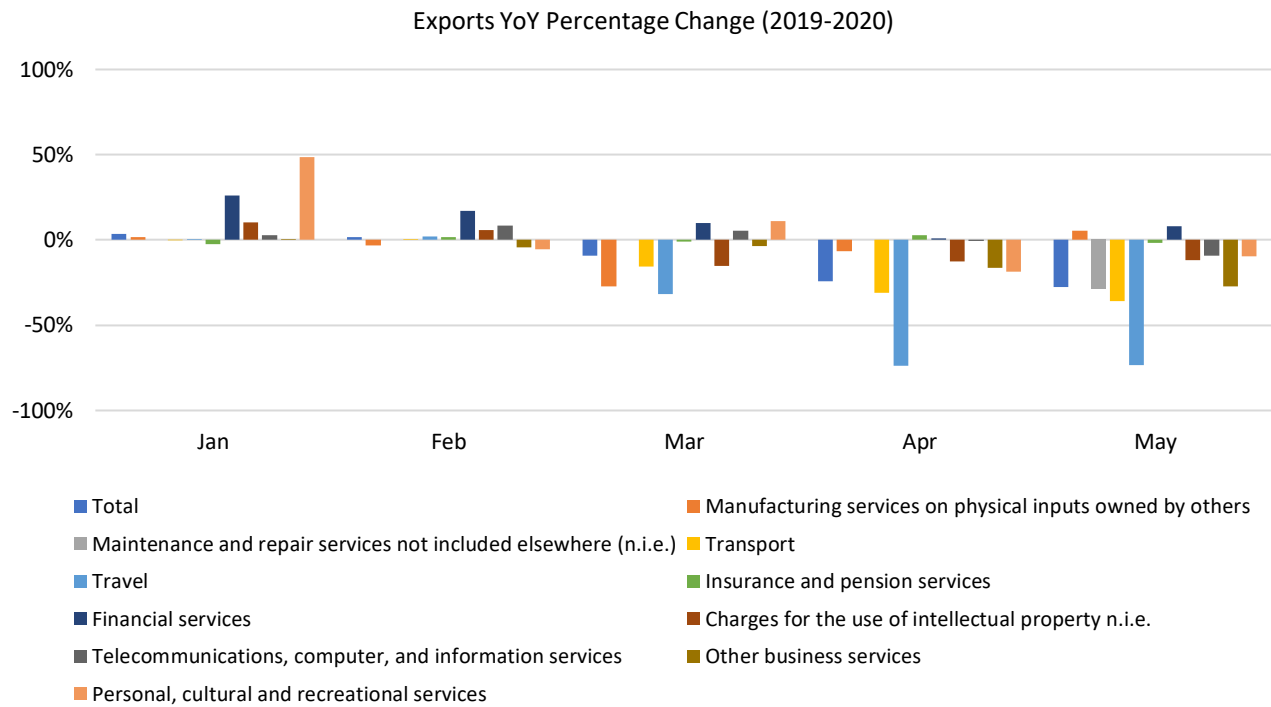
Source: Authors' calculations based on data from the Bureau of Economic Analysis, U.S. Department of Commerce

Japan monthly services trade (YoY percentage change)



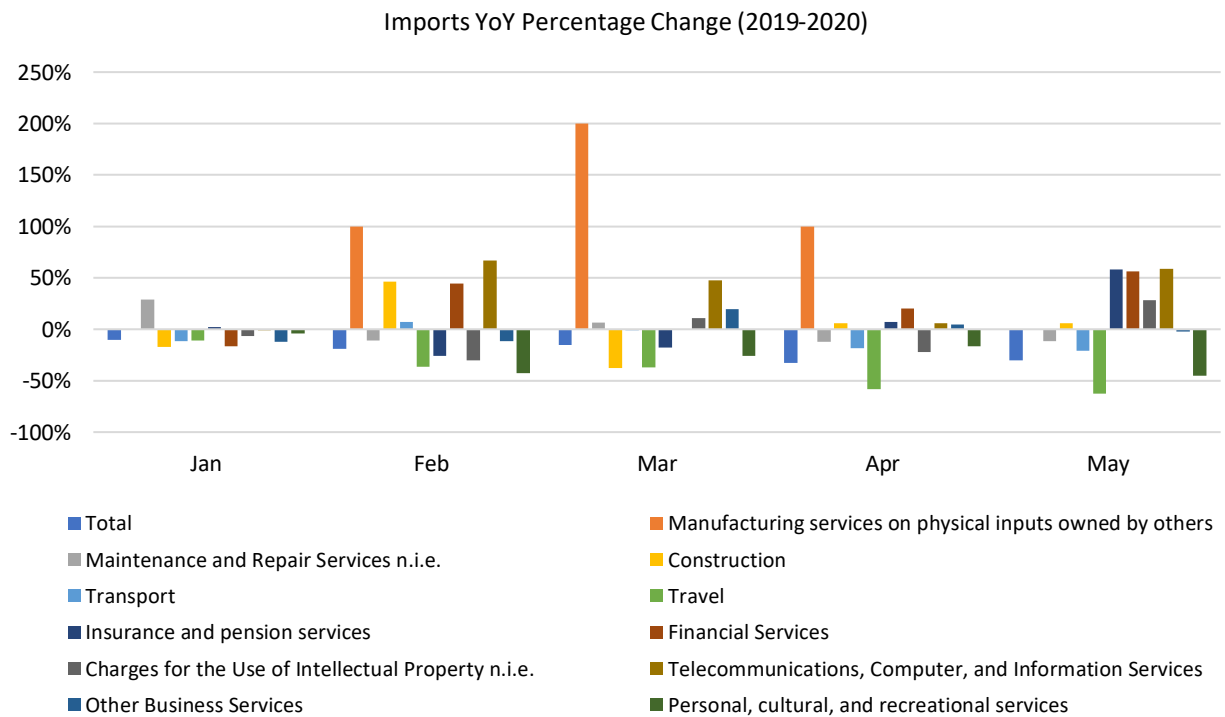
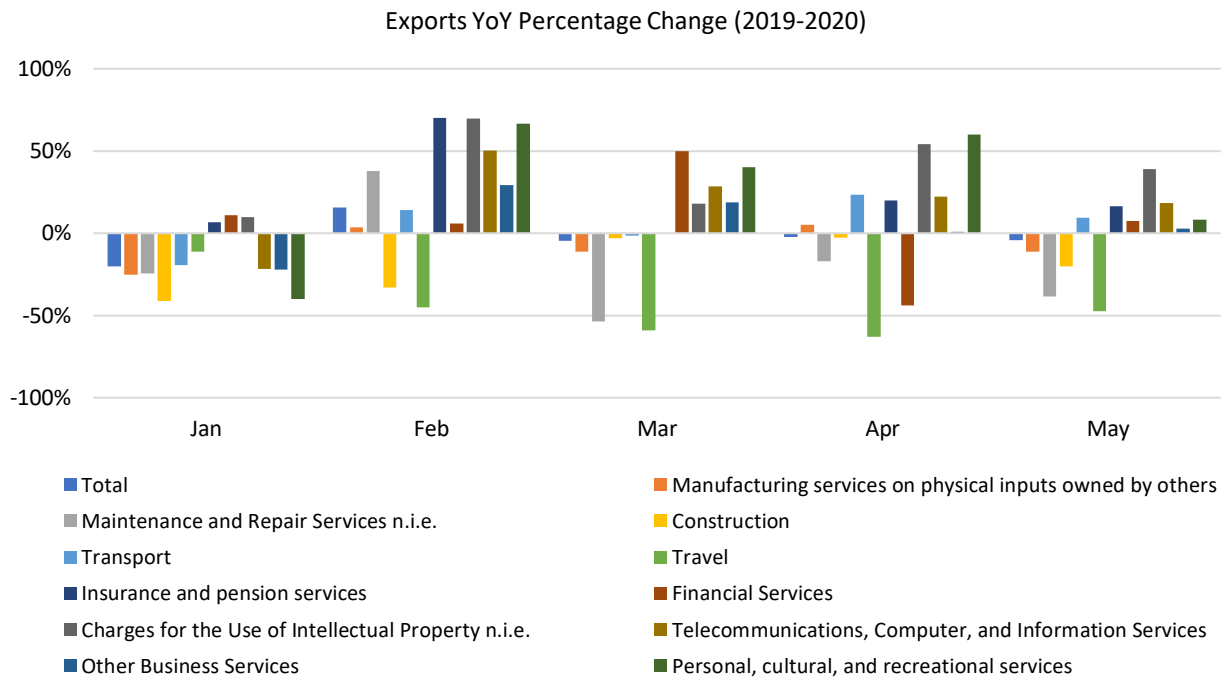
Source: Authors' calculations based on data from Japan's Ministry of Finance.

Germany monthly services trade (YoY percentage change)



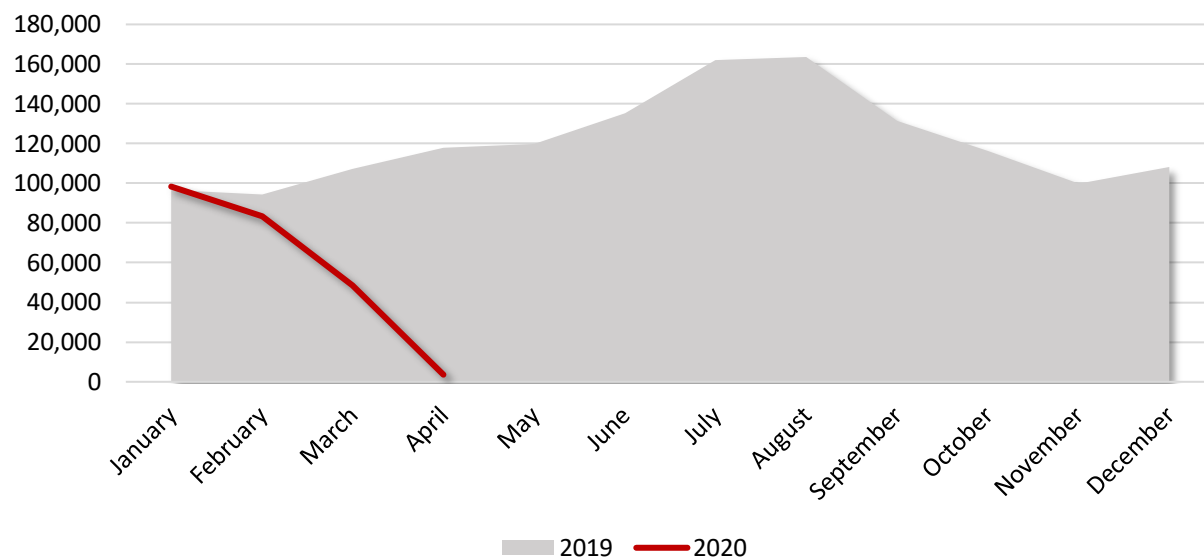
Source: Authors' calculations based on data from Deutsche Bundesbank.

China monthly services trade (YoY percentage change)



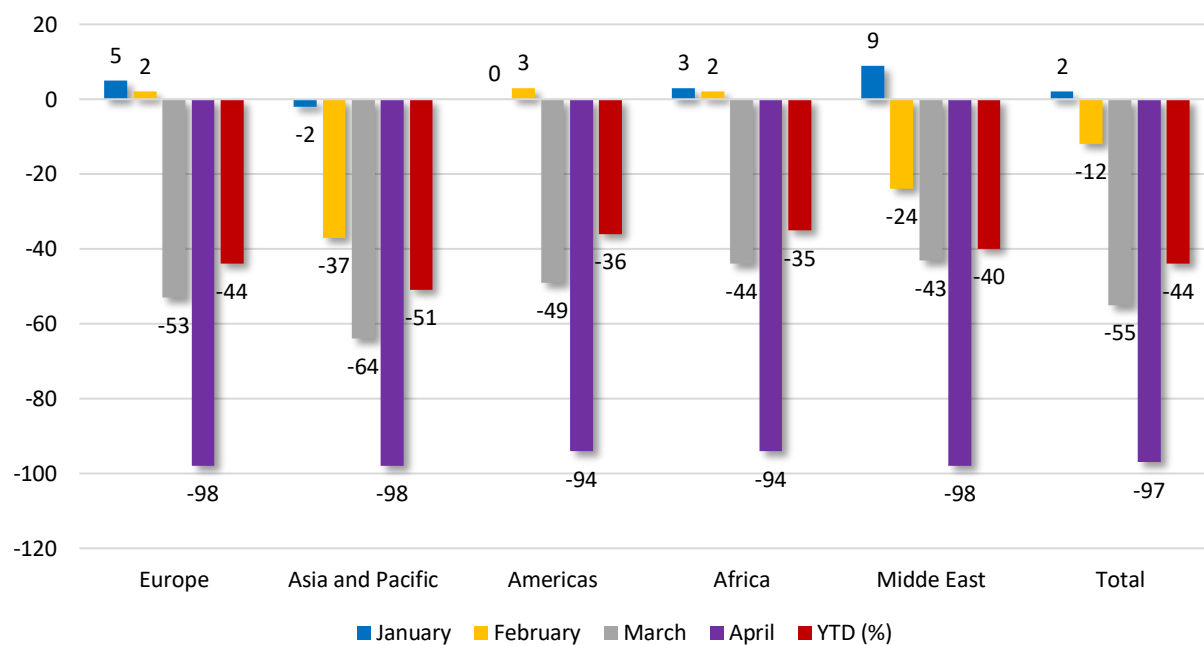
Source: Authors' calculations based on data from the State Administration of Foreign Exchange (SAFE).

Figure B5. International tourist arrivals (thousands)



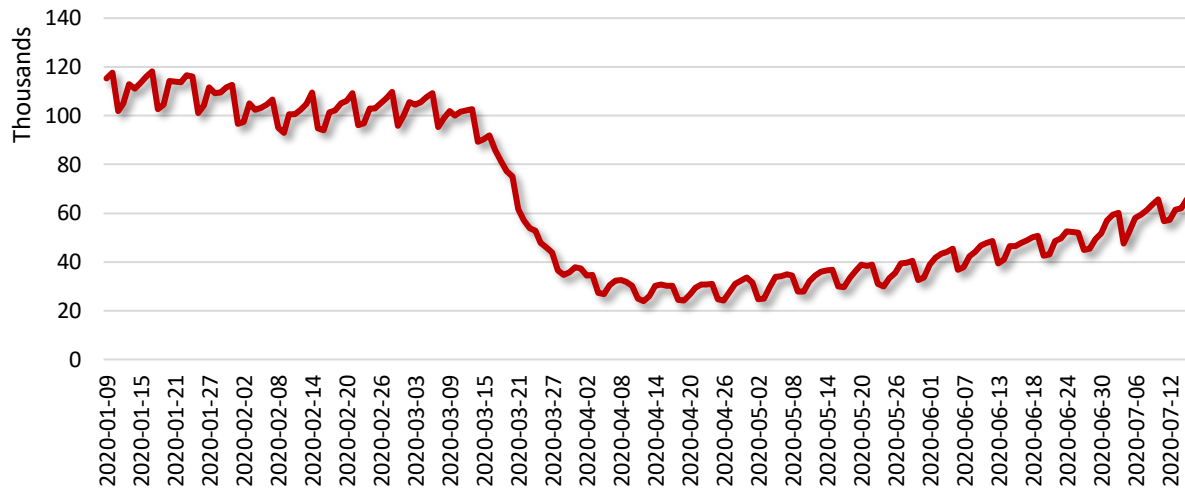
Source: UNWTO

Figure B6. Monthly change in international tourism by region (%)



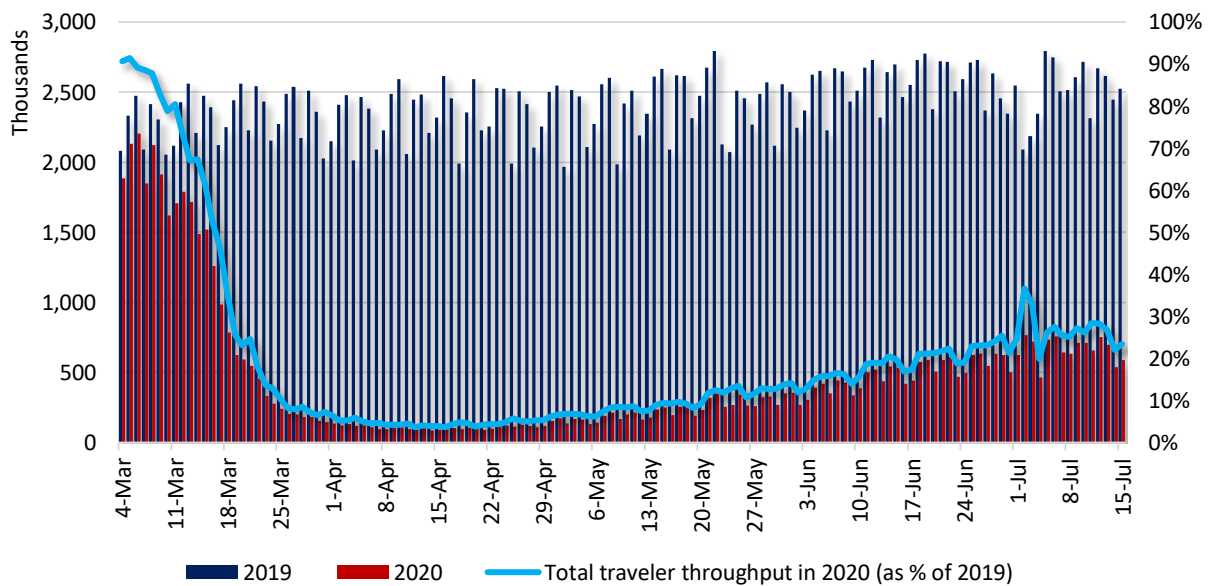
Source: UNWTO

Figure B7. Number of commercial flights



Source: Flightradar24. **Note:** Commercial flights include commercial passenger flights, cargo flights, charter flights, some business jet flights.

Figure B8. TSA checkpoint passengers



Source: Authors' calculations based on data from Transportation Security Administration, Department of Home-land Security

Annex C: Ship tracking

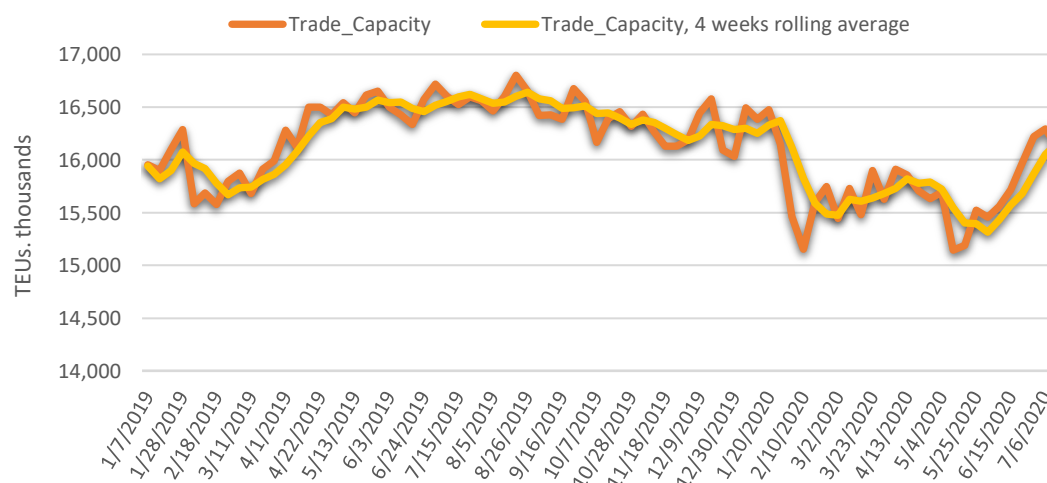
This annex presents the most recent global and regional trends in container shipping activities, based on the analysis of real-time ship tracking data, Automated Identification System (AIS). In addition, it investigates whether the COVID-19 pandemic has caused connectivity losses and delays in maritime shipments. Finally, it includes updated data on container throughput for major ports.

C.1. Ship tracking data: recent regional trends in trade capacity⁵

Ship tracking data for AIS reveals information on maritime trade in motion. Real-time data on container shipping is especially informative on trade trends given the prevalence of containerization for manufactured goods and its role in the logistics of global value chains. The main indicator is instant (weekly) capacity calling countries or regions, measured in capacity units of Twenty Foot Equivalent (TEU) boxes. The following analysis is based on tracking data from January 1st, 2016 to July 19th, 2020.

Trade carrying capacity shows positive trends, up by 3.7 percent in the last 4 weeks (ending July 19, 2020) compared to the previous 4 weeks. Although the global trade carrying capacity is currently still 2.6 percent below last year's level, the recent positive trends show strong signs of recovery from the low levels between late February and April.

Figure C1. Trade Capacity (TEU): Global



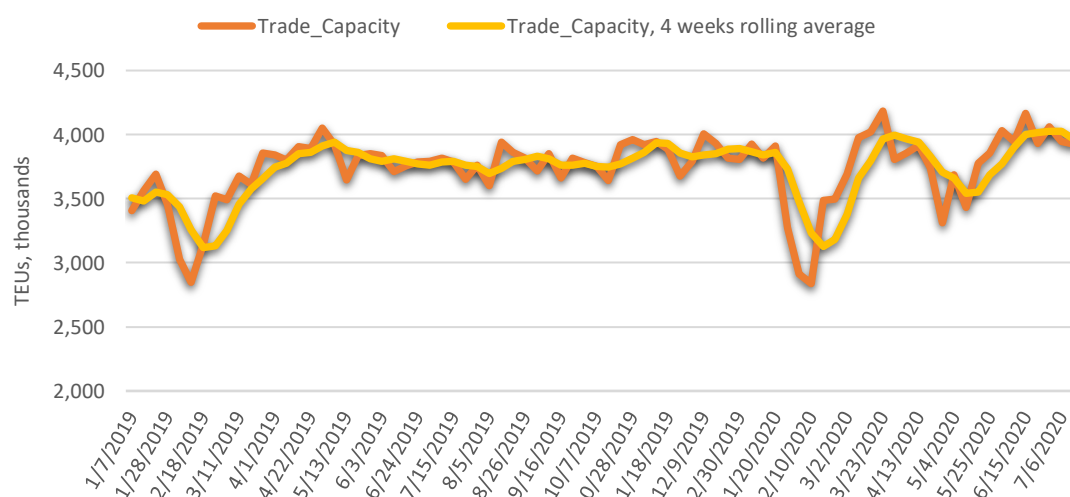
Source: Authors' calculation based on AIS data provided by MarineTraffic

The speed of recovery varied across regions. China and East Asia had the strongest recovery patterns, with current activity at par or higher than last year: currently about 5 percent above 2019 in China (Figure C2).

⁵ Weighing port calls events by ship capacity, real-time ship tracking data yields indicators of current trade carrying capacity, available at country and region levels. The analysis has been conducted using a calling event database prepared for the World Bank by MarineTraffic, covering over 5000 ships calling at over 1000 ports worldwide. The focus is on container shipping, as opposed to commodity freight in bulk. Container shipping carries manufactured goods and is representative of GVCs. Shipping lines adjust moving capacity to the current or anticipated demands through bookings.

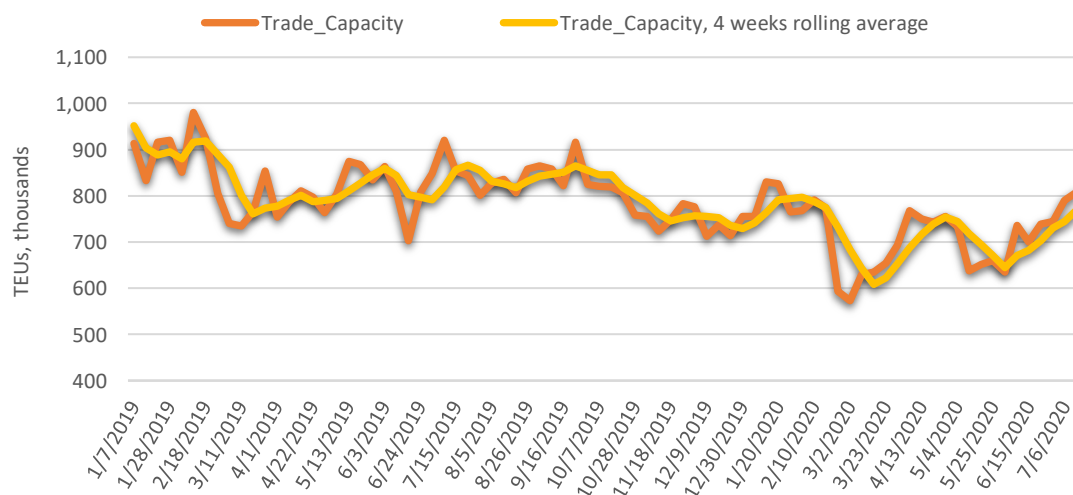
The positive trends are also notable in Europe (North Sea) and the American West Coast, about 10 percent or more in the last four weeks. However, the level of activity remains markedly lower than in 2019. In North America, West coast capacity seems to recuperate faster than on the Atlantic side. Among developing regions, the rebound has been strong in South Asia: 12 percent increase in the last four weeks bringing the activity close to 2019 level. South and East Africa, and South America continue to experience the largest drop compared to last year, in the 10 percent range. Table C1 provides estimate of year-on-year trends for the last 4-week periods.

Figure C2. Trade Capacity (TEU): China; Hong Kong, SAR China; Taiwan, China



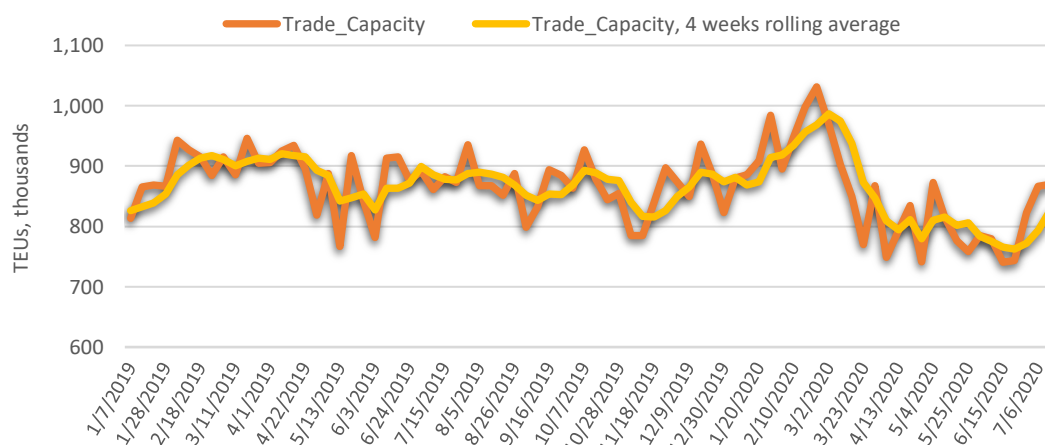
Source: Authors' calculation based on AIS data provided by MarineTraffic

Figure C3. Trade Capacity (TEU): North America West Coast



Source: Authors' calculation based on AIS data provided by MarineTraffic

Figure C4. Trade Capacity (TEU): North Sea*



Source: Authors' calculation based on AIS data provided by MarineTraffic. ***Note:** Ports of Germany, Benelux representative of trade of core EU countries.

Table C1. Year-on-year change in trade capacity by regions, 4-week periods

Maritime Region	Mar 30-- Apr 26	Apr 27-- May 24	May 25-- Jun 21	Jun 22-- Jul 20	Recent trend
Atlantic Europe*	-1.8%	-8.5%	-11.1%	-2.0%	19.6%
North Sea	-11.4%	-5.3%	-11.3%	-6.2%	7.8%
British Isles	-11.4%	-9.3%	-14.2%	-1.0%	10.7%
Baltic	-10.9%	4.9%	-8.3%	-12.8%	-1.0%
Scandinavia	-2.2%	-10.2%	3.5%	8.1%	-4.3%
West Med Europe*	-11.0%	-11.7%	-14.5%	-3.9%	10.2%
Black Sea	10.8%	16.1%	22.7%	-1.5%	-16.0%
East Med	-1.5%	-10.3%	-10.0%	-4.1%	1.7%
China; Hong Kong, SAR, China; Taiwan, China	-0.7%	-8.2%	5.4%	4.6%	-0.9%
Japan Korea	-3.2%	-0.8%	-0.6%	1.1%	1.6%
South East Asia	-0.6%	-9.7%	-6.9%	-3.9%	5.2%
Australia NZ	-9.4%	-8.2%	0.3%	0.8%	-3.2%
Oceania	3.5%	10.0%	-8.5%	-16.4%	-3.9%
North America East Coast	-9.9%	-5.2%	-14.9%	-16.9%	1.9%
North America West Coast	-6.6%	-15.6%	-16.3%	-9.1%	12.7%
Caribbean Sea & Central America*	4.6%	3.0%	-6.6%	-6.3%	3.5%
South America West Coast	-2.6%	4.6%	-18.5%	-13.5%	1.7%
South America East Coast	-1.2%	-2.8%	-6.9%	-5.3%	0.5%
North Africa	15.3%	-4.8%	-0.3%	-4.1%	-5.4%
West Africa*	3.8%	12.0%	-3.5%	4.9%	5.5%
S&E Africa/Indian Ocean	-9.2%	-18.9%	-8.5%	-9.7%	2.9%
Red Sea	10.3%	6.6%	0.2%	1.2%	2.1%
Persian Gulf	-12.3%	-4.7%	-11.3%	-1.9%	9.6%
South Asia	-10.9%	-8.8%	-16.6%	-3.3%	15.9%
World	-3.3%	-6.6%	-5.6%	-2.6%	3.7%

Source: Authors' calculation based on AIS data provided by MarineTraffic. **Note:** Indicators estimated on a weekly basis from Monday to Sunday. Recent trend captures the growth rate between the last 4 weeks and the previous 4 weeks. **Atlantic Europe:* France, Spain, Portugal. *West Med Europe:* France, Spain, Italy, Malta. *Caribbean Sea & Central America:* Central American countries, Caribbean, Venezuela, Guyanas. *West Africa:* Mauritania to Angola.

C.2. Connectivity changes and maritime delays during the pandemic

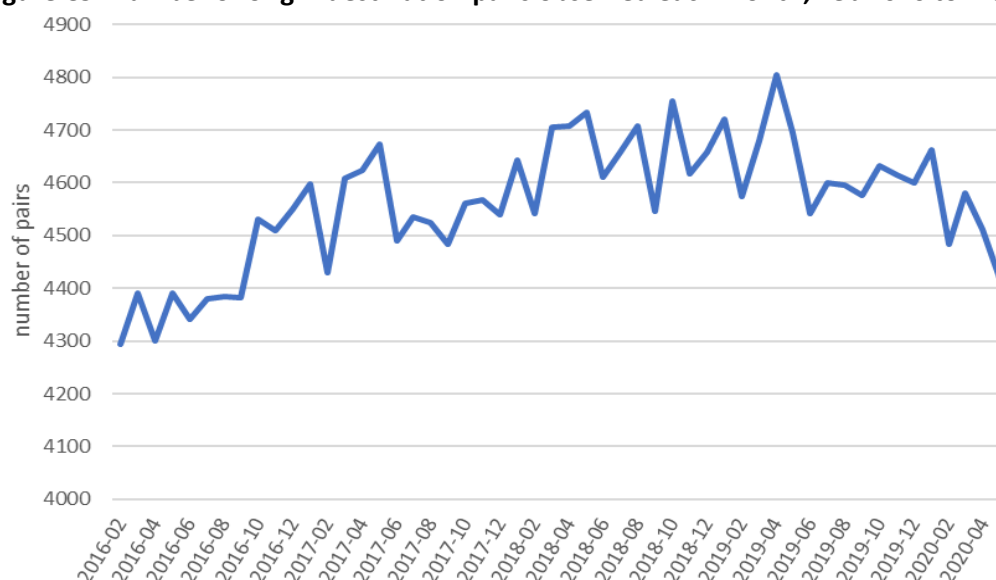
The COVID-19 pandemic raised concerns about the resilience of supply-chain and freight systems. Health issues and safety procedures with crews or operation staff, and ports and multimodal facilities could have been disruptive for the maritime sector.⁶ However, data shows no evidence of major disruptions in the maritime sector. Shipping lines and port operators seem to have adjusted to new operational constraints without losses in port performance. This resilience is confirmed by the AIS data.

Another concern is that the reduction of capacity by shipping lines, in response to lower demand, may have resulted in loss of connectivity. The loss of connectivity has been massive in the aviation sector, resulting in a much sparser network. The network data generated from tracking suggest that connectivity loss have been marginal in the maritime sector.⁷

Connectivity changes

Global connectivity can be measured by the number of origin-destination (OD) pairs of ports observed in a given month.⁸ Data from February 2016 to May 2020 show a positive but volatile trend in the number of port pairs per month until mid-2019. The COVID-19 crisis has coincided with a slight drop in this connectivity metric. The number of pairs in April and May 2020 are down by 6 percent from 2019.

Figure C5. Number of origin-destination pairs observed each month, Feb 2016 to May 2020



Source: Authors' calculation based on AIS data provided by MarineTraffic

⁶ For instance, crew changes are more complex today given restriction to travel and health standards on board.

⁷ Network (adjacency matrices), and time metrics have been generated on monthly basis from the original AIS data.

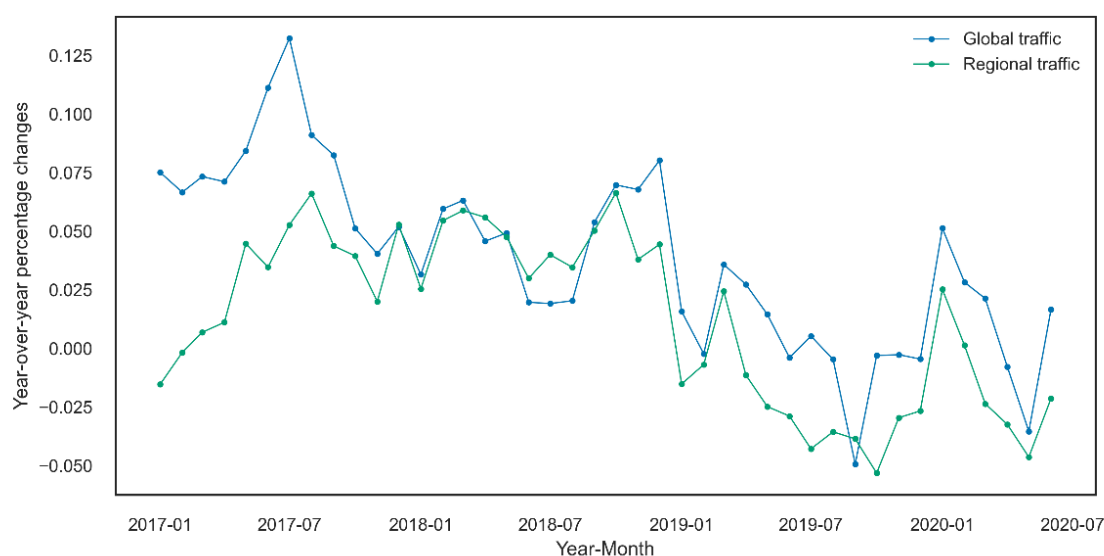
⁸ The convention is to count a pair in a month according to the date of arrival at destination. We consider only ports with regular activity to make the comparisons over time more relevant, given that lines operate typically on weekly schedules. The threshold has been taken as on ship calling at least every two days (180 per year). However, the results are not very sensitive to the exact value of the threshold.

Turnaround time at ports

The “time-in-port” or “turnaround time” (Ducruet et al. 2014) is defined as the time spent by vessels performing operations inside the port (entering, berthing, loading, unloading, departing etc.) during its port call. A pair of observations that make a valid “port call” for any given ship consists of two sequential data points. The first observation is strictly defined as arrival and the second one as departure, both events happening within the same port. The indicator is computed as a time difference between timestamps of those two consecutive events and converted to days. Finally, the global and regional turnaround times are aggregated using medians.⁹

The global average of turnaround times for 2018 is 0.708 days which is consistent with findings published by UNCTAD in the Review of Maritime Transport 2019 (0.7 day for containerships). Figure 3 in the main report, of monthly time series for global and regional traffic types, show that the port turnaround times in the first half of 2020 are not substantially different from those observed in 2019. Figure C6 further shows that year-on-year changes has not been far from 0 percent in the first half of 2020. This suggests that both shipping lines and port operators have been able to adjust to the operational constraints due to COVID-19 without strong adverse impacts on port performance.¹⁰

Figure C6. Year-on-year percentage changes of median turnaround time



Source: Authors’ calculation based on AIS data provided by MarineTraffic

⁹ The average time is systematically longer due to outliers – there are a few cases in which a vessel has spent months in port.

¹⁰ This observation does not apply to possible disruption in clearance of landed containers.

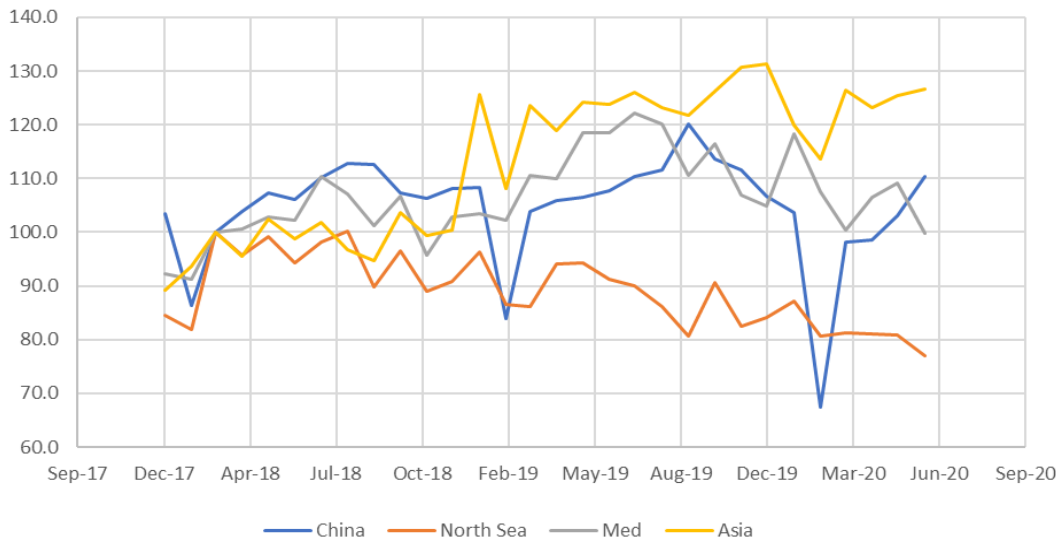
C.3. Container throughputs in ports: COSCO and Long Beach statistics

Available port data largely confirm the trends evidenced from ship tracking data (section C.1). Although container throughput statistics are typically not available on a monthly basis, two important exceptions are the COSCO terminal in China and the port of Long Beach, the major US West Coast gateway.

COSCO

COSCO, the major Chinese shipping and port company, operates most terminals in China and has a strong presence in Asia (Korea, Singapore), the Mediterranean and the North Sea.¹¹ June data confirms a robust rebound of container activity in Asia, with levels of container throughput in June 2020 is higher than in 2019. In contrast, North European and Mediterranean activities are significantly lower (10 to 15 percent) than last year, and do not yet show clear trends of recovery.

Figure C7. Trend in COSCO throughput by region (base 100 March 2018)¹²



Source: COSCO

Table C2. Quarterly COSCO throughput (thousands of TEU)

1000 TEUs	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	% yearly change
China	16,795	18,382	19,451	18,648	17,167	18,548	19,818	19,243	15,616	18,082	-2.5%
North Sea	1350	1465	1460	1401	1363	1418	1302	1304	1263	1,210	-14.7%
Med	2781	2998	3127	2995	3102	3404	3461	3220	3200	3,093	-9.1%
Asia	1673	1756	1734	1795	2114	2171	2194	2298	2129	2,220	2.3%

Source: COSCO

¹¹ COSCO global statistics are available mid-month for the previous month.

¹² Unfortunately, the data does not break containers between exports, imports and empties.

Table C3. Year-on-year change in monthly throughput 2020 vs 2019

	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
China	-4.3%	-19.6%	-5.4%	-7.0%	-3.1%	2.5%
North Sea	-9.5%	-6.8%	-5.5%	-13.9%	-14.4%	-15.8%
Med	14.4%	5.2%	-9.3%	-3.2%	-7.9%	-15.8%
Asia	-4.5%	4.9%	2.3%	3.6%	1.0%	2.2%

Source: COSCO

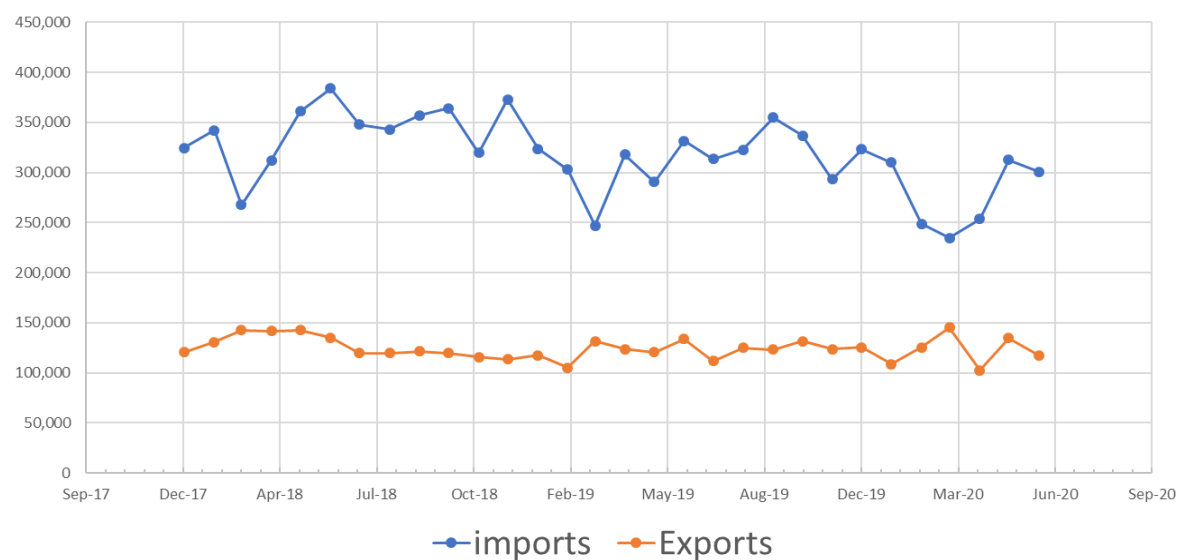
Long Beach

Throughput in the port of Long Beach remained relatively stable in June, after a strong rebound in May. Activity in June is about 11 percent lower than last year, while the second quarter is about 7 percent down from last year.

Table C4. Throughput of containers at Long Beach

1000 TEUs	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	% yearly change
imports	935	1,058	1,048	1,057	874	940	991	954	793	867	-7.8%
exports	394	419	361	349	354	378	360	381	380	355	-6.2%
total full	1,329	1,477	1,409	1,406	1,228	1,318	1,351	1,334	1,173	1,221	-7.3%
empties	566	581	660	663	579	561	642	619	510	529	-5.7%
Total	1,895	2,058	2,069	2,069	1,807	1,879	1,993	1,954	1,683	1,750	-6.9%

Source: Port of Long Beach

Figure C8. Throughput of loaded containers at Long Beach Terminal January 2018 to June 2020


Source: Port of Long Beach