

ASIA-PACIFIC TRADE AND INVESTMENT TRENDS 2021/2022

Trade in Goods Outlook in Asia and the Pacific





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Contents

Highlights	1
1. Trade performance in 2021	3
2. Outlook	9
2.1. Short-term outlook	9
2.2. Longer-term trends	15
References.....	20
Supplementary note : Structure and patterns of trade in Asia and the Pacific (2020).....	24

Highlights

- After a dramatic year for the global economy, economic activity and international merchandise trade rebounded strongly in 2021. Global merchandise exports and imports are estimated to have surpassed pre-pandemic (2019) levels, with nominal growth of 24.6% and 23.8%, respectively. Likewise, growth in the value of exports and imports in Asia and the Pacific is estimated at 23.1% and 22.8%. Nevertheless, removing inflationary pressures, ESCAP finds that Asia and the Pacific actually overperformed the rest of the world with regional real exports and imports growing 10.0% and 9.1%, respectively, year on year, compared with 8.4% and 7.7% globally, respectively, in the same period.
- Inflationary pressures have been experienced worldwide during 2021. The price of commodities such as oil, food and metals surpassed pre-pandemic levels. Supply-chain disruptions, heightened global demand and expansionary fiscal and monetary policies – especially in developed economies – have added further pressure to price levels by widening the mismatch between global demand and supply. Overall, regional export and import prices tended to grow by 13.1% and 13.8%, respectively, in 2021.
- This year has also been characterized by uneven growth between the first and second halves of 2021. The first half of the year observed robust growth in trade, driven by the speedy progress of vaccination campaigns in the developed world, especially in the European Union and the United States. The second half of the year saw the rise of the COVID-19 Delta-variant, forcing many East and South-East Asian economies to impose lockdown measures, thereby disrupting GVCs and hampering trade growth in the region.
- Behind the robust trade performance of Asia and the Pacific is the heterogeneous performance in the region. At one end, the oil, food and metal commodities exporters, most of whom are located in North and Central Asia as well as in South and South-West Asia, have been enjoying higher-than-average regional trade growth driven by increased commodity prices. At the other end, exporters of advanced manufactured goods, particularly semiconductors, in East and North-East Asia performed below the regional average.
- The Asia-Pacific region's prominence in global merchandise trade value has slightly declined in 2021 to 41.0% of the world's exports and 36.8% of global imports, compared to the region's 41.5% and 37.1% share of global exports and imports, respectively, in 2020.

- In 2022, merchandise trade is expected to continue recovering, albeit more moderately than in 2021. With the gradual resolution of supply-side disruptions and easing of expansionary fiscal policies in developed economies, inflationary pressures are expected to ease in 2022: Regional export and import prices are forecast to grow by only 1.4% and 1.7%, respectively, in 2022. As a result, regional nominal exports and imports will grow at 5.5% and 6.8%, respectively, in 2022, whereas real exports and imports will grow at 4.1% and 5.2%, respectively, during the same period.
- However, downside pressures to a robust economic recovery continue to exist. In particular, the incomplete rollout of COVID-19 vaccines in developing economies – especially in lower-middle and low-income ones – as well as increased global financial instability, and scaling back of fiscal stimulus are among the most immediate threats to global output growth. Developing economies are especially exposed to these downside risks since they are often overexposed to foreign creditors and are also battling COVID-19 waves with often lower vaccination rates and fiscal space.
- Due to the supply-chain disruptions and the use of trade for geopolitical leverage, firms may further alter their investment decisions and business models to ensure resilience and reliability. Thus far, diversification of supply sources appears to be the most preferred strategy by firms for hedging against single-supplier dependency. In the Asia-Pacific region, a ‘China+1’ strategy whereby existing supply-chains are replicated in other countries – often in South and South-East Asia – is increasingly evident. Other noteworthy factors that lie at the heart of GVC restructuring include climate change and green transition.

1. Trade performance in 2021

A sharp trade rebound driven by demand and inflation

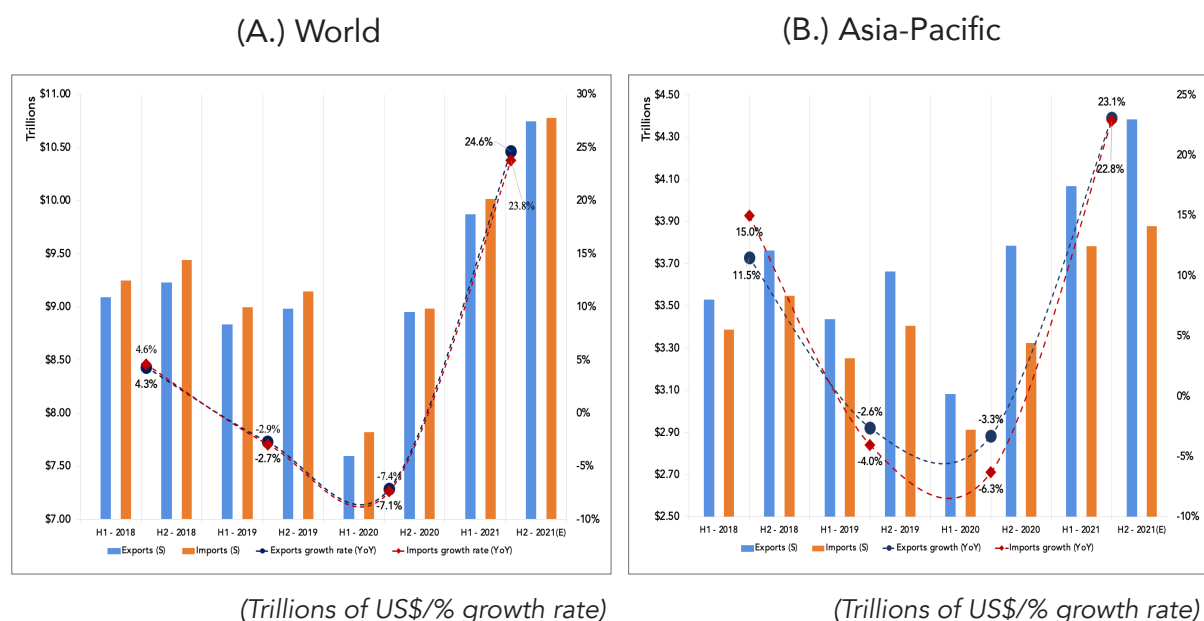
After a dramatic year for the global economy, economic activity and international merchandise trade rebounded strongly in 2021. Indeed, following a 3.1% global GDP fall in 2020, the International Monetary Fund (IMF) estimated that the world economy will grow by 5.9% in 2021 (IMF, 2021b). In Asia and the Pacific, output has performed more robustly, having contracted just 1.5% in the wake of the COVID-19 pandemic (2020) – supported by East and South-East Asia’s early containment of the pandemic (ESCAP, 2020; UNCTAD, 2021) – and is forecast to grow by 7.2% in 2021, as a result of the steady recovery in global demand and exports.

Concomitantly, global trade has also rebounded. ESCAP estimates that global merchandise exports and imports values will surpass pre-pandemic levels, growing by 24.6% and 23.8%, respectively, in 2021 (figure 1A). Trade value growth in Asia and the Pacific is estimated to be slightly below the global average, but still surpassing pre-pandemic levels, with regional exports and imports growing 23.1% and 22.8%, respectively (figure 1B). This is mostly due to base effects wherein higher growth rates are being logged in regions that suffered harsher declines in 2020. As a result, Asia and the Pacific’s prominence in global merchandise trade has tended to decline marginally in 2021 to 41.0% of world exports and 36.8% of global imports. This can be compared to the region’s 41.5% and 37.1% shares of global exports and imports, respectively, in 2020.

This year has also been characterized by uneven growth between the first and second halves of 2021. The first half of the year observed robust trade growth, driven by the speedy progress of vaccination campaigns in the developed world, especially in the European Union and United States. Regional and global exports grew by 12.5% and 20.4%, respectively, relative to their growth in the second half of 2020. Imports rose by 19.1% in Asia-Pacific and by 21.8% worldwide.

¹ Asia and the Pacific’s GDP growth rates in 2020 and 2021 were calculated by using the latest GDP growth data (at constant prices) from the World Bank. The following 18 ESCAP economies were not included due to the lack of data – American Samoa, Bhutan, Cook Island, the People’s Democratic Republic of Korea, French Polynesia, Guam, Japan, Kiribati, Macao China, Marshall Islands, Federated States of Micronesia, New Caledonia, Nauru, Niue, Northern Mariana Islands, Palau, Tonga and Turkmenistan. Together, these economies account for a marginal share of the region’s total GDP; so including them would not produce significant changes in the final estimations.

Figure 1. Nominal Global and Asia-Pacific region's merchandise trade performance



Sources: ESCAP calculation, based on quarterly trade data available from the WTO database (accessed October 2021) and annual data from the Economist Intelligence Unit (EIU), (accessed October 2021).

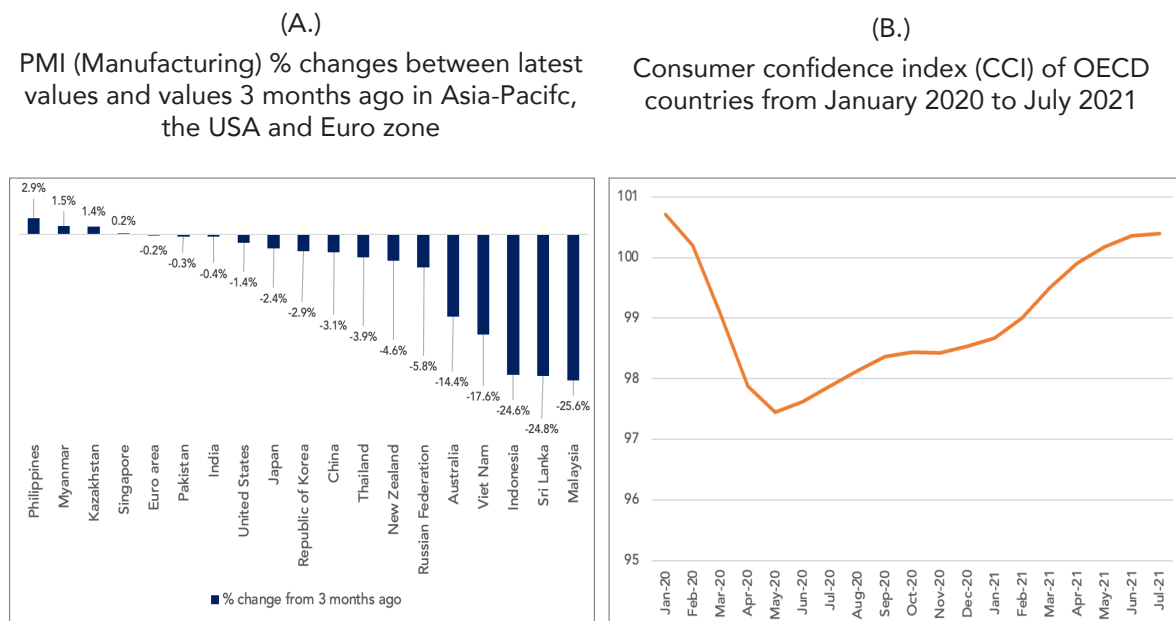
The second half of the year saw the rise of the COVID-19 Delta-variant, which forced many East and South-East Asian economies to impose lockdown measures thereby disrupting global value chains and hampering growth in Asia and the Pacific (box 1). Regional demand for international goods increased by less than the global average, with imports rising by 2.5%, while globally they rose by 7.6%. Regional exports increased by 7.7% compared with a global growth of 8.8% in the same period.

Inflationary pressures have also been experienced worldwide during 2021. The price of commodities such as oil, food and metals rebounded in 2021 after last year's sharp decline. Supply-chain disruptions, heightened global demand, and the aftermath of expansionary fiscal and monetary policies – especially in developed economies – have added further pressure. As a result, regional export and import prices grow 13.1% and 13.8%, respectively, in 2021. This has also boosted nominal growth in trade well beyond real growth. Removing inflationary effects, ESCAP finds that Asia and the Pacific actually overperformed the rest of the world with regional real exports and imports growing 10.0% and 9.1%, respectively, year on year, compared with 8.4% and 7.7% globally, respectively, in the same period.

Box 1. GVCs disruption in Asia and the Pacific, 2021

After a speedy recovery from the initial COVID-19 wave, Global Value Chains (GVCs) are once again facing disruptions in Asia and the Pacific. Looking at the three-month change in the Manufacturing Purchasing Managers’ Index (PMI), most regional economies have experienced sizable dips, while production in the Euro Area and the United States has remained relatively stable (Figure Box 1A). Simultaneously, global demand – herein mirrored by the Consumer Confidence Index (CCI) in OECD countries – has continued to recuperate steadily since May 2020 (Figure Box 1B). This has created a growing mismatch between global demand and supply as well as strong inflationary pressures affecting almost all sectors.

Figure Box 1.
PMI (manufacturing) and CCI of selected economies



Source: The PMI (manufacturing) data were extracted from TheGlobalEconomy.com (accessed August 2021). The CCI data were sourced from the OECD database.

Indeed, as the region became the new global hotspot for COVID-19, many countries were forced to bring back lock-down measures, thereby affecting manufactured goods production. For example, in Viet Nam, since July 2021 66.5% of manufacturers around Ho Chi Minh City have halted production, while Malaysia and Thailand have also gradually re-imposed lockdown measures curbing manufacturing production during July and August 2021. In China, their “zero-tolerance” policy has brought important manufacturing and logistic hubs to a halt since May 2021.

Another severe complication affecting global production capacity is related to maritime shipping logistics, which is responsible for transporting approximately one

quarter of the world's total trade volume. While some aspects can be traced back to longer term trends, lockdown restrictions have limited maritime operations in important logistic hubs: The closure of Yantian and Ningbo cargo ports – two of China's largest international maritime ports – in May and August, respectively, caused a backlog in other ports and limited the supply of necessary inputs. In fact, as of September 2021, China is estimated to represent more than a third of global dry bulk congestion (Miller, 2021). In addition, differing country sanitary protocols and vaccine recognitions have considerably toughened the process for incoming international vessels to port at foreign locations by imposing a web of different requirements for seafarers. As a result, in August 2021, the cost of sending a container from Asia to Europe increased tenfold compared to May 2020 and 547% compared to the five-year seasonal average (Longley and others 2021; Wang and Curran, 2021).

While trade disruptions have been felt across the globe, some industries have experienced a greater impact than others. For example, the semiconductor industry saw the gap between ordering and delivering a semiconductor ballooning from eight days to 20 weeks in August 2021 as cases in Asia and the Pacific – the world's largest producer of semiconductors – soared (Wu et al., 2021). In turn, due to the semiconductor supply crunch, Japan's Toyota Motor Corp. and Korea's Hyundai Motor Co. have both predicted considerable drops in their rest of the year deliveries (Wang and Curran, 2021). Textile supply chains were also affected by the outbreak in Viet Nam. Nike Inc. and Adidas AG suspended production in plants in Viet Nam from late July to early August as authorities imposed restrictions. In addition, more than 90% of the members of the Viet Nam's Leather Footwear and Handbag Association have temporarily halted operation (Jamrisko, 2021).

All in all, the recurrence of COVID-19 waves and supply chain disruptions are creating downside pressure against global economic recovery. As the mismatch between global demand and supply for goods grows wider, prices are expected to continue to rise until the end of 2021. This will be especially true for consumer goods. Moreover, with production capacity constricted, retailers in developed countries may experience difficulties in stocking enough consumer goods to face peak demand during the holiday season. As a result, many firms are already preparing different solutions to face the current supply crunch. For example, finding alternative pathways and modes of transportation, diversifying or duplicating suppliers and production sites, increasing existing inventories, finding input production substitutes and building resilience to country-specific supply shocks are some of the solutions that firms are scrambling to introduce for as many goods as possible (The Economist, 2021a). If these supply chain changes prove to be successful, they could even outlast current disruptions, transforming the landscape of global trade.

Uneven trade performances: Increasing food and commodity prices are benefiting selected countries in the region

Trade performance across the region has been uneven in 2021. More specifically, developing economies have tended to perform more robustly than developed economies. Exports and imports by developing Asia-Pacific (excluding China) are forecast to increase by 25.9% and 26.5%, respectively, in nominal terms, and 10.4% and 13.2% in real terms, respectively. China continues to post strong export and import growth at 20.2% and 17.7% (10.1% and 7.6% in real terms), respectively. In contrast, nominal exports by developed economies are forecast to grow 22.6% and imports by 23.0%, but only 9.0% and 4.1% in real terms, respectively.

Trade growth is heterogeneous across subregions.² South and South-West Asia (SSWA) has performed the best, with its nominal exports and imports forecast to grow 27.9% and 29.1%, respectively, during 2021. This excellent performance comes after significant export (13.0%) and import (14.4%) declines in 2020 and the consequent base effect, yielding a larger rebound in 2021. The subregion's performance will be mostly driven by an export surge in India (29.7%) and Turkey (29.4%), two major subregional players, with Indian exports growing on the back of its commodities production (food and metals), and Turkish trade boosted by exports of manufactured goods. There has also been a significant pick-up in export growth in the Islamic Republic of Iran (24.6%) and Bangladesh (16.5%). Import growth in that subregion is driven by the solid growth of India (39.4%), the largest importer of the subregion, while significant import increases have also been recorded by other important importers in that subregion, such as Turkey (14.7%) and Pakistan (41.6%).

Benefitting from the recovery of crude oil prices, North and Central Asia (NCA) has tended to register the sharpest export expansion in the region, with a growth rate of 33.5%, along with strong import growth of 21.4%. This trend was mostly shaped by the performance of the subregion's largest economy, the Russian Federation, whose export and import values grew by 29.9% and 19.2%, respectively.

South-East Asia (SEA) shows a positive, albeit less pronounced export increase (25.3%) than the aforementioned regions due to subregional outbreaks of the Delta-variant outbreaks. Export growth is most significant in Singapore (31.9%), given its

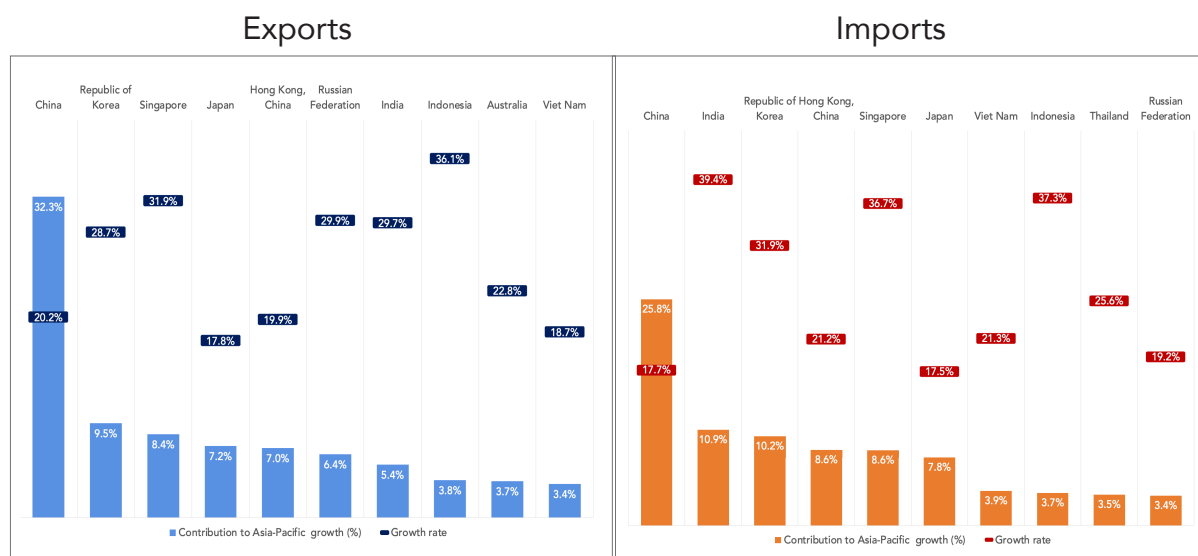
²The trade data available for each subregion from EIU are: **South and South-West Asia** – Bangladesh, India, the Islamic Republic of Iran, Pakistan, Sri Lanka and Turkey; **North and Central Asia** – Azerbaijan, Kazakhstan and the Russian Federation; **South-East Asia** – Indonesia, Malaysia, the Philippines, Singapore, Thailand and Viet Nam; **the Pacific** – Australia and New Zealand; and **East and North-East Asia** – China, Hong Kong, China, Japan and the Republic of Korea.

significance as a transshipment hub, as well as in resource-rich Indonesia (36.1%), boosted by food, fuel and metal commodities, and in Viet Nam (18.7%), where exports of consumer goods, such as garments and footwear, have fueled the expansion. On the other hand, subregional imports are estimated to have expanded by 28.7%, the second-largest rise of all the subregions. Singapore, the major transportation hub amid a merchandise trade recovery, leads the subregion's improvement in import performance with growth of 36.7%. Viet Nam and Indonesia registered import growth of 21.3% and 37.3%, respectively, in contrast with last year's 3.8% rise and 18.1% drop, respectively.

The Pacific subregion follows the Asia-Pacific region's average growth, with exports and imports expanding by 22.1% and 20.9%, respectively. This significant growth is mostly driven by Australia, the subregion's most prominent economy, with growth of 22.8% and 21.2% in exports and imports, respectively. The export recovery has been driven by increased demand in Asia for Australian energy commodities as well as the commodity price boom in metals. The growth in imports, in contrast, is driven by motor vehicles, crude oil and intermediate goods such as pharmaceuticals and electronics (Australian DFAT, 2021). East and North-East Asia has registered the lowest growth in trade (20.8% for exports and 19.9% for imports) in the subregion, driven mainly by China's trade performance.

Figure 2 highlights the top contributors in terms of export and import growth in Asia and the Pacific. Among them, China, the Republic of Korea, Singapore, Japan, the Russian Federation and Hong Kong, China accounted for more than half of the increase in the region's export earnings. Likewise, China, India, the Republic of Korea, Singapore, Japan and Hong Kong, China, together represent more than 70% of the increase in Asia and the Pacific's import expenditures.

Figure 2. Ten largest contributors to merchandise trade growth in the Asia-Pacific region, 2021



Source: The authors, based on EIU data (accessed October, 2021).

2. Outlook

While trade has recovered to pre-pandemic levels, sustained growth will continue to depend on the pandemic's development and on government responses. This section reviews short-run prospects for growth in 2022 and longer-term trends for the Asia-Pacific region, taking into account factors such as the COVID-19 pandemic, GVC restructuring and other continuing pressures.

2.1. Short-term outlook

A recovery from rock bottom, but fragile

In 2022, global and regional merchandise trade is expected to continue recovering, albeit more moderately than in 2021. Indeed, the World Trade Organization (WTO, 2021b) now estimates that the global trade volume will grow by 4.7% year-on-year. For Asia and the Pacific, ESCAP anticipates the volume of merchandise exports and imports to grow 4.1% and 5.2%, respectively (table 1). As supply-side complications are resolved, and with the scaling down of large fiscal stimulus packages in developed economies, inflationary pressures are expected to ease in 2022: Regional export and import prices are forecast to grow only 1.4% and 1.7%, respectively, during 2022.

Accordingly, nominal export and import growth in Asia-Pacific will drop from double-digit growth to 5.5% and 6.8%, respectively, in 2022.

In line with previous years, developed and developing economies will post disparate performances throughout 2022. In particular, developing economies are expected to continue expanding more vigorously than developed ones. Export and import values will see a 6.1% and 7.5% rise, respectively, in developing economies (6.8% growth in exports and 7.2% growth in imports when excluding China). In developed economies, export and import growth of 3.3% and 4.5% is forecast (table 1). This performance can be attributed to developing economies' longer struggle with COVID-19 – i.e., many will not see their recovery fully materialize before 2022 – and with their faster structural pre-pandemic growth.

Looking at trade volume, the growth gap between developed and developing Asia and the Pacific grows even wider – especially import-wise. In real terms, developing economies (excluding China) are expected to post a 5.8% and 7.1% expansion in export and import volumes, dwarfing the 2.2% and 1.0% increases in export and import volumes experienced in the developed countries of Asia-Pacific. These estimates take into account the 1.1% export price increase experienced in both developed and developing economies (excluding China), as well as the 3.5% and 0.1% import price rises, respectively. While developed economies are set to experience an export price growth stemming from enduring supply bottlenecks in high value-added sectors – such as that of semiconductors –, the almost unchanged price level in developing economies reflects the normalization prices in other sectors, such as commodities, as well as these countries' continued struggle to achieve a vigorous economic recovery.

As the fallout of the pandemic remains highly unpredictable, so do the forecasts presented in this report. Indeed, with the progress of vaccination campaigns in high-income economies, demand for goods produced in Asia and the Pacific has picked up significantly. However, vaccine rollout and deployment must become more widespread if the region is to witness a sustained a short-term picking up of commodity trade (box 2). As of October 2021, from 6.39 billion vaccine doses administered globally, 74% were received in high- or upper-middle-income countries, with only 0.4% reaching low-income economies (Mathieu and others, 2021). Regionally, the same trend can be identified (Figure 3). For instance, as of October 2021, 80% of the population in Singapore is fully vaccinated, 75% in the Republic of Korea, and 72% in Japan. This is in contrast with India's 23%, Pakistan's 18%, Bangladesh's 12% or Myanmar's 10%.

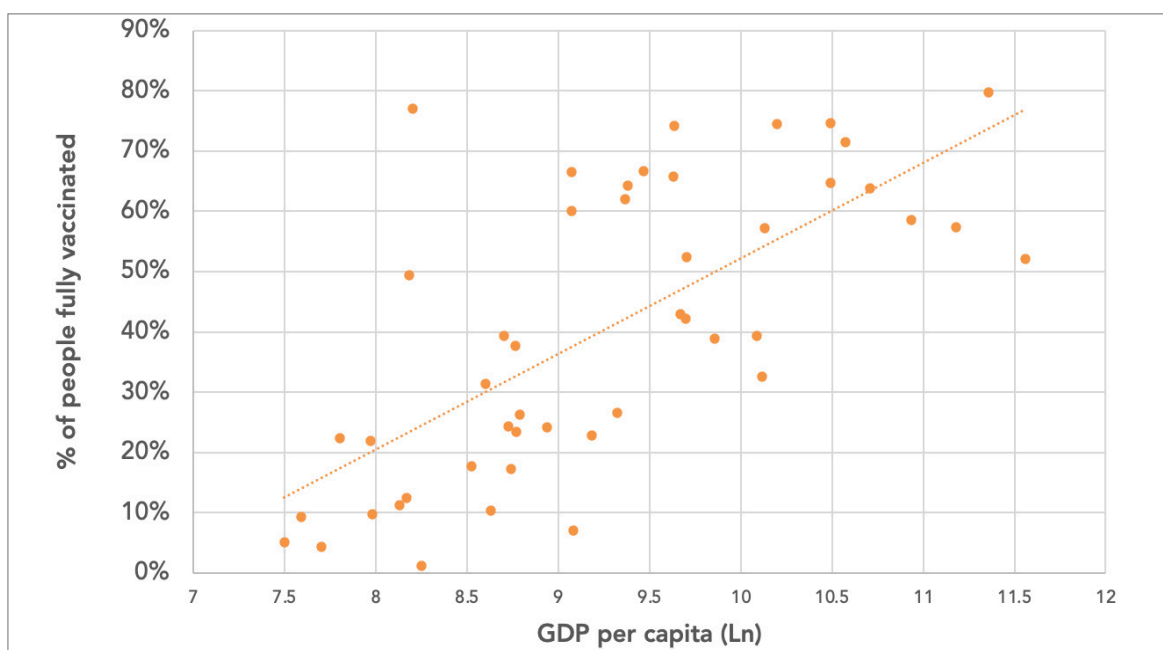
Table 1. Merchandise exports and imports growth for selected Asia-Pacific economies, 2020/2022

	Exports									Imports								
	2020			2021(a)			2022 (a)			2020			2021(a)			2022(a)		
	Value	Price	Volume	Value	Price	Volume	Value	Price	Volume	Value	Price	Volume	Value	Price	Volume	Value	Price	Volume
Australia	-7.5	-3.6	-4.0	22.8	22.1	0.6	4.0	0.3	3.7	-5.6	-4.2	-1.5	21.2	18.5	2.3	5.6	1.8	3.7
Bangladesh	-16.2	4.1	-19.5	16.5	5.0	11.0	9.8	5.0	4.6	-10.7	1.1	-11.6	21.0	2.0	18.6	5.0	2.0	2.9
China	4.6	-3.9	8.9	20.2	9.1	10.1	5.1	1.8	3.3	-0.6	-1.9	1.3	17.7	9.4	7.6	7.9	2.1	5.6
Hong Kong, China	0.8	0.4	0.4	19.9	6.4	12.7	4.7	1.1	3.6	-1.0	0.3	-1.3	21.2	7.6	12.7	6.0	0.4	5.6
India	-15.0	-6.0	-9.6	29.7	13.5	14.2	3.0	1.3	1.7	-22.9	-3.1	-20.4	39.4	15.5	20.7	9.1	0.7	8.4
Indonesia	-3.0	-4.7	1.8	36.1	16.4	16.9	1.5	0.0	1.5	-18.1	-9.0	-10.0	37.3	16.2	18.2	5.5	1.0	4.5
Iran (Islamic Rep. of)	-16.1	-11.2	-5.5	24.6	-4.2	30.0	55.2	11.6	39.1	-10.8	26.0	-29.2	10.0	4.8	5.0	10.0	-3.5	14.0
Japan	-9.2	-1.1	-8.2	17.8	7.0	10.1	2.5	0.8	1.6	-13.1	-8.4	-5.2	17.5	14.9	2.3	3.4	2.5	0.9
Kazakhstan	-19.7	-6.9	-13.7	50.0	43.8	4.3	15.3	1.5	13.6	-9.6	9.8	-17.6	37.2	15.4	18.9	11.3	0.8	10.4
Malaysia	-6.0	-1.8	-4.3	20.7	12.8	7.0	5.6	4.0	1.5	-8.9	1.1	-9.9	21.8	10.5	10.2	4.4	0.9	3.5
New Zealand	-2.6	-0.2	-2.4	17.4	20.4	-2.5	5.3	-2.3	7.8	-12.7	-2.6	-10.4	18.6	14.6	3.5	5.4	-0.1	5.5
Pakistan	-11.5	1.6	-12.9	23.6	11.1	11.2	4.5	1.4	3.1	-8.7	-8.1	-0.7	41.4	24.6	13.5	6.2	0.2	6.0
Philippines	-11.3	-0.4	-11.0	15.0	2.0	12.8	6.6	-0.4	7.0	-22.9	4.0	-25.9	26.6	8.0	17.2	14.8	0.2	14.5
Republic of Korea	-7.2	-6.4	-0.9	28.7	15.1	11.8	3.7	1.7	2.0	-8.8	-9.8	1.1	31.9	22.6	7.6	5.4	5.7	-0.3
Russian Federation	-20.6	-17.0	-4.3	29.9	26.6	2.6	5.9	-0.8	6.7	-5.6	7.4	-12.1	19.2	6.5	11.9	0.5	1.0	-0.5
Singapore	-6.7	-7.0	0.3	31.9	21.1	8.9	6.3	2.4	3.8	-7.7	-7.0	-0.7	36.7	18.0	15.8	8.5	-2.0	10.7
Sri Lanka	-15.9	0.4	-16.2	14.3	12.3	1.8	5.4	-4.1	9.9	-19.5	-5.8	-14.5	19.3	14.0	4.7	5.7	0.6	5.1
Thailand	-6.5	-0.1	-6.4	19.9	10.2	8.8	8.2	1.9	6.2	-13.8	-2.7	-11.4	25.6	13.4	10.7	6.3	-0.7	7.1
Turkey	-7.6	-1.4	-6.3	29.4	15.6	12.0	5.5	8.1	-2.4	3.7	-6.2	10.5	14.7	13.4	1.1	6.7	0.8	5.9
Viet Nam	7.0	-1.9	9.1	18.7	5.6	12.4	10.7	-1.8	12.7	3.8	-3.3	7.3	21.3	8.9	11.4	12.1	0.6	11.5
Asia-Pacific (b)	-3.6	-4.1	0.5	23.1	13.1	10.0	5.5	1.4	4.1	-6.7	-3.5	-3.2	22.8	13.8	9.1	6.8	1.7	5.2
Developed Asia-Pacific (b)	-8.0	-3.3	-4.7	22.6	13.6	9.0	3.3	1.1	2.2	-10.5	-7.8	-2.7	23.0	18.9	4.1	4.5	3.5	1.0
Developing Asia-Pacific (b)	-2.3	-4.5	2.3	23.2	12.9	10.3	6.1	1.4	4.6	-5.6	-2.3	-3.3	22.8	12.1	10.7	7.5	1.0	6.5
Developing Asia-Pacific excluding China (b)	-7.7	-5.0	-2.7	25.9	15.5	10.4	6.8	1.1	5.8	-8.9	-2.3	-6.7	26.5	13.3	13.2	7.2	0.1	7.1

Source: ESCAP, based on data from the EIU (accessed October 2021).

Note: Volume growth rates have been estimated based on constant prices (in 2010 terms).

Figure 3. Percentage of people fully vaccinated and GDP per capita in the Asia-Pacific region, October 2021



Source: ESCAP, based on data from Mathieu and others (accessed, October 2021).

Note: The percentage of people fully vaccinated is the total number of people who have received all doses prescribed by the vaccination protocol divided by the total population of the country (accessed October 31st). GDP per capita (Ln) is the natural logarithm of gross domestic product at purchasing power parity (constant 2011 US dollars), most recent year available is 2021.

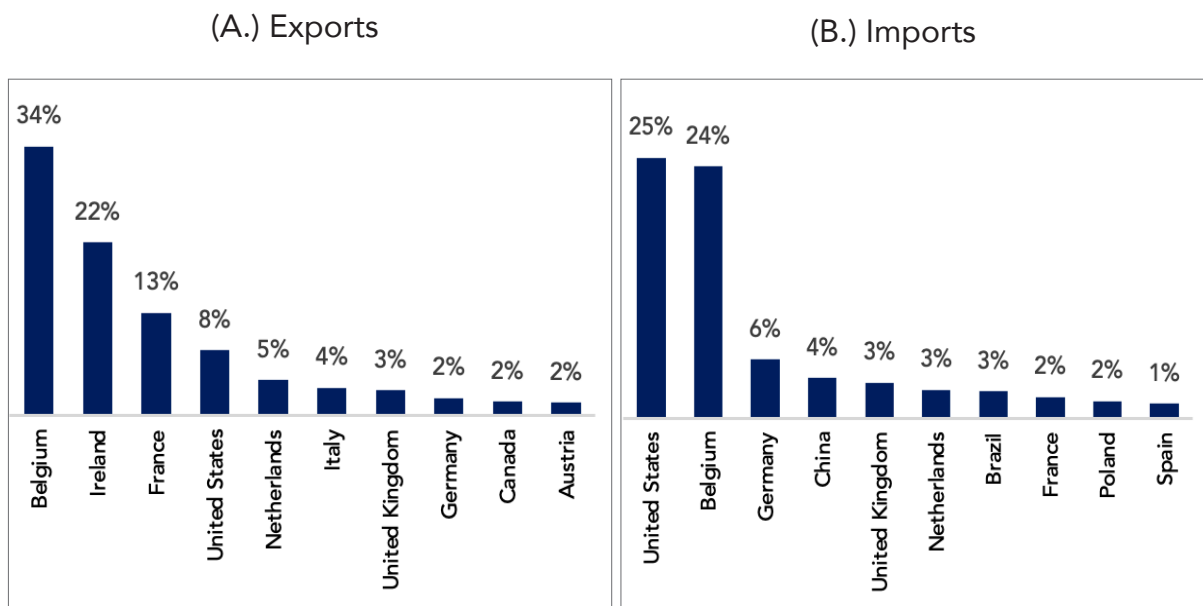
Box 2. Vaccine Global Supply Chains – challenges in the production and distribution of COVID-19 vaccines

The global economic recovery and normalisation of international trade depend significantly upon the rapid and effective vaccination of the global population.* While vaccination has already helped restore some of the lost momentum in international trade, this growth has been segregated along vaccination rate differences. Therefore, fixing the gap in vaccines' supply – whether concerning production, trade facilitation, distributional hurdles, and regulatory harmonisation – will have a profound impact not only on the global economy's recovery but also in alleviating existing inequalities. In this box, four main challenges in vaccine supply chains are identified: (1) the concentration of production and vaccine nationalism (2) logistics, transportation and deployment (3) varying regulatory requirements, and (4) vaccine hierarchies.

(1) **Concentration of production and vaccine nationalism:** One of the main factors behind vaccine supply chain disruptions is the shortage and concentration of vaccine-inputs such as equipment and reagents that are necessary for their production. Indeed, vaccine-inputs and infrastructure are mostly concentrated in Europe and the US, which naturally hinders production capacity elsewhere (Figure Box 2). In addition, many countries have put export restrictions on vaccine related inputs in order to ramp up production domestically. These include restrictions on raw materials such as active and master cell banks, inactive ingredients etc., along with requiring special licensing for exporting syringes, needles, nitrile gloves used for administering vaccines. This has further contributed to limiting global production and distribution capacity. More broadly, vaccine nationalism – the phenomena where governments force vaccine manufacturers to supply their populations first – is among the most substantial threats to the efficient production and deployment of vaccines globally. Especially in a context where low-risk demographics are already being vaccinated in many developed economies, while many developing economies are still waiting to vaccinate key personal.

2) **Logistics, transportation and deployment:** There are numerous logistical challenges involved in the global deployment of vaccines. For example, some vaccines such as Pfizer-BioNTech need to be stored at low temperatures (-70° Celsius for long-term storage), thus requiring adequate storage capacity during transportation, at borders and local storage facilities. A trained workforce – drivers, technicians and vaccinators – is also a part of this last-mile delivery challenge. The lack of adequate infrastructure and human resources for vaccine deployment has been a cause of concern for the United Nations COVAX programme, which deals mostly with developing countries. In addition, transporting vaccines internationally has proven to be a challenge.

Figure Box 2
Share of top ten Vaccine Importers and Exporters in the World, 2020



Source: Authors' compilation using WITS – UNComtrade data

This is due to countries' different sanitary protocols and vaccines recognition, which is forcing transport workers to be inoculated with specific brands of vaccines even when these might not be widely available at home.

(3) Regulatory divergence, indemnity and intellectual property rights: Emergency Use Authorisation (EUA) of vaccines allows both national regulatory authorities and WHO to provide expeditious approval of vaccines for human application during public health emergencies such as the COVID-19 pandemic. However, the EUA regulatory mechanism is still underdeveloped, with standards varying from country to country. Moreover, for vaccines to cross borders and be accepted worldwide, approval from regulatory bodies of advanced economies such as the United States' FDA and European Union's Medicines Agency is still considered as the gold standard. The implication is that many countries will not accept non-western sources of vaccines, even when they may be both cheaper and abundantly available. Sputnik, Sinovac, Covaxin, and AstraZeneca have faced such authorisation challenges in foreign markets.

Other regulatory concerns, such as indemnity from harm for foreign vaccines, divergent safety standards and intellectual property rights (IPRs) also create obstacles in the vaccine supply chain. Safety standards and indemnity clauses are often the primary cause behind the delay in the rollout of foreign vaccines in domestic markets. Proposals to provide for a Trade-Related Aspects of Intellectual Property Rights

(TRIPS) waiver are under discussion, albeit with many advanced economies opposing such a move as it may set a bad precedent for intellectual property rights protection in the future. Extending licenses of Western IPRs on Covid-19 vaccines to developing countries will help to diversify production and distribution of these life-saving drugs.

(4) Vaccine hierarchy leading to inequality of access: Another rising challenge is the emergence of a vaccine hierarchy based on efficacy rates, perceived safety, and the economic, regulatory and political power of the countries involved. The brand of the vaccine being used to inoculate populations is slowly emerging as a new safety standard being imposed on travel and transport, which then also affects cross-border flows of goods and services.**

Spurring global trade requires the resolution of existing bottlenecks as fast possible. Among others, unhindered and transparent trade in vaccines could significantly reduce vaccine inequality. To ramp up vaccine production, knowledge-sharing from countries with technical know-how and partnering with local firms could mobilize existing private resources for vaccination efforts.

While a TRIPS waiver for COVID-19 vaccines could be another important step in this direction, it will not work in isolation from complementary measures. Countries should streamline their regulatory requirements according to WHO guidelines in order to reduce the regulatory and bureaucratic obstacles to effective production, movement and distribution of vaccines. Digital technologies can also help considerably to reduce wastage, enable an efficient movement of vaccines across borders and ensure their last-mile delivery. Last, countries should prioritise equitable access to vaccinations, and establish a transparent and evidenced-based mutual vaccines recognition to prevent this from becoming a new non-tariff barrier.

Another potentially downside pressure on the global economy is the emergence of persistent inflation beyond 2021. Indeed, should persistent inflation pick up in the global economy, or if significant price corrections occur in sectors such as that of crypto assets, financial conditions could deteriorate and threaten global financial stability (IMF, 2021a). Developing economies are especially exposed to these downside risks since they are often overexposed to foreign creditors, and have been continually battling consecutive COVID-19 waves with limited vaccination rates and

* As The Economist puts it (2021c), inoculating the world against COVID-19 could be the deal of the century with estimated returns at 17,900%.

** For more details, please see ESCAP's Quick guide on digital COVID-19 certificates, Re-enabling Cross-Border Travel, available at <https://www.unescap.org/kp/2021/quick-guide-digital-covid-19-certificates>

modest government stimuli. Finally, global and regional geopolitical frictions and trade wars remain standing pressures to the recovery of trade and investment in the region.

2.2. Longer-term trends

While merchandise trade has successfully rebounded since the beginning of the pandemic, COVID-19-induced supply chain disruptions have lent producers valuable lessons regarding the future of GVCs. More specifically, resilience has been at the centre of the GVC debate as firms seek to hedge against increasingly frequent supply chain disruptions. ESCAP (2020) and others (Betti and Hong, 2020; Javorcik, 2020; Price, 2020; UNCATD, 2020) expected two main restructuring trends to persist beyond the current economic environment: (1) shortening and (2) diversification. This section draws on pandemic and post-pandemic insights to follow up on these trends and provide further insights about the future of GVCs.

Shortening GVCs in selected 'strategic' sectors

Longer GVCs are often seen as a potential risk for suppliers as the longer a GVC is, the higher the potential for bottlenecks and upstream disruptions. Furthermore, geopolitical and natural disaster risks are harder to control in faraway production lines, leaving producers more exposed to exogenous factors. Following the initial supply-chain crunch in 2020 – caused by China's closure of important production-hubs – shorter and more regionalized GVCs were put forward as a potential solution to developing more resilient supply chains.

Almost two years into the pandemic, GVCs appear to be adjusting differently from what was first anticipated. Contrary to expectations, during the COVID-19 pandemic, GVCs have actually become longer than before. In 2020, imported goods for the world's 37 largest economies were found to be travelling longer distances than in previous years (OECD, 2021). While this short-term adjustment can be explained by the concomitant closure of production hubs around the globe and East and South-East Asia's early deconfinement from the first wave of the virus, this pattern provides a valuable insight into how companies are looking to strengthen their GVCs. Indeed, a survey conducted by APEC (2021a) states that only 6% of large businesses are reporting to be considering the shortening of GVCs as a solution to strengthening resilience, while the World Bank's MNCs survey set this figure at 14% (Saurav and others, 2020). Accordingly, GVC shortening is most likely to occur only in specific industries, rather than across sectors, affecting the entire production landscape.

In particular, key industries of high strategic value such as pharmaceuticals, communication equipment and semiconductors are most exposed to nearshoring. Often, non-economic arguments of self-reliance, strategic dependency and national security are used to justify higher production costs and inefficiencies. For example, the United States, Japan and the European Union have put forward significant incentives to support the domestic manufacturing of semiconductors, which is currently heavily concentrated in the Asia-Pacific region – i.e., more than 80% of the global semiconductors are produced in that region (The Economist, 2021b; Lund and others, 2020). Furthermore, it is estimated that between 40% and 60% of pharmaceutical value chains could shift geographically in the coming years in order to make sure that key medicines and medical equipment can be produced self-sufficiently for facing a future public health emergency (Lund and others, 2020).

From 'just-in-time' to 'just-in-case' - exploring new global production modes

Instead, most firms are considering expanding their supply-chain bases by diversifying the number of producers and locations involved in sourcing key inputs. Compared to shortening, 27% of large businesses and 25% of SMEs surveyed by APEC (2021a and 2021b) reported their intentions to diversify their sources of supply. By enhancing existing alternative production routes or by replicating GVCs at the expense of redundancy costs, companies are seeking supply-chain diversification as a way to reduce single-supplier dependency – especially from China.

Indeed, as the largest manufacturing producer in the world, China is still indispensable to most GVCs. For that reason, firms and Governments seeking to hedge against high reliance on Chinese manufacturers have increasingly adopted the 'China+1' strategy. This strategy replicates GVCs via alternative routes, often located in South and South-East Asia. According to a recent survey from April to June 2021, the share of United States-based companies that listed China as one of their top-three sourcing countries fell from 96% in 2019 to 77% in 2021 (Kalish, 2021). For Europe-based companies, this figure has dropped from 100% to 80% during the same period. On the other hand, 43% of United States-based respondents consider Viet Nam to be among their top three sourcing regions, which is twice the figure for 2019. Consistent with the risk-opportunity analysis by Anukoonwattaka, Romao and Lobo (2021), the 'China+1' strategy was already extremely robust in dealing with increased uncertainties. In particular, from January to March 2020 when China initially struggled with the first wave of COVID-19, many United States textile firms shifted their imports from China to Viet Nam and Bangladesh, which enabled them to continue production and face less impact from ongoing disruptions (Heise, 2020).

As supply-chain disruptions and the use of trade for geopolitical leverage become increasingly more frequent, firms and Governments are looking for solutions to increase supply-chain resilience and reliability. Apart from GVC shortening and diversification, increasing the inventory of critical products (shifting from ‘just-in-time’ to ‘just-in-case’) or reducing the number of Stock-Keeping Units (SKUs) in their portfolio are other ways that firms are adjusting current production flows (Lund and others, 2020). Regardless of which restructuring path is pursued, it is important to acknowledge that sizable transitioning costs lie ahead, both for Governments and firms – especially when non-market goals are pursued.

The best hope for dealing with the increased pressures on trade and supply chains is regional cooperation in maintaining an open trading system while facilitating cross-border movement of critical goods. Among others, accelerating the implementation of the WTO Trade Facilitation Agreement, especially digital trade facilitation, helps to reduce trade costs and enhance supply-chain agility (box 3).

Box 3. Digital trade facilitation implementation during the COVID-19 pandemic

According to the 2021 UN Global Survey on Digital and Sustainable Trade Facilitation,³ despite supply chain difficulties triggered by the pandemic, the Asia-Pacific region continued progress in streamlining trade procedures. The implementation rate of 31 general and digital trade facilitation measures increased to 64.9% in 2021, six percentage points higher than in 2019. All countries across the region have further implemented trade facilitation measures, although a varying state of implementation is still noticeable.

In general, WTO TFA-related measures are well-implemented in the region, with an implementation rate of 60-80%. In addition, the pandemic has contributed to the acceleration of digital transformation. Implementation of ‘Paperless Trade’ stands at 62.4%. However, the implementation for ‘Cross-Border Paperless Trade’ only stands

³ The 2021 survey reviews the progress of trade facilitation reforms across 46 countries in the Asia-Pacific region. It is based on 58 trade facilitation measures that are classified into four groups – General Trade Facilitation, Digital Trade Facilitation, Sustainable Trade Facilitation and Other Trade Facilitation – and a further 11 subgroups covering both binding and non-binding WTO TFA measures as well as measures beyond the scope of WTO TFA.

at 38.5%, with implementation of bilateral and subregional paperless trade systems remaining mostly in pilot stage.

The COVID-19 pandemic has exposed many weaknesses of the trading system. The survey result shows that most countries have implemented a number of short-term crisis measures. Yet, the overall implementation level of measures in the 'Trade Facilitation in Times of Crisis' section only stands at 55.7%, essentially because many countries still lack long-term trade facilitation plans to enhance preparedness for future crises. Continued and sustained efforts should be made to further enhance cooperation, make trade information transparent, strengthen the capacity of countries to contribute to recovery and prepare to adequately safeguard against future crises.

Digital trade facilitation measures can result in significant benefits for the countries in the Asia-Pacific region. Full digital trade facilitation implementation beyond the WTO TFA could cut the average trade cost in the region by more than 13%, seven percentage points more than could be expected from implementation of the WTO TFA measures (ESCAP, 2021c).

Moving forward, trade facilitation implementation may be seen as a step-by-step process, based on the groups of measures included in the survey – i.e., enhancing the institutional arrangement, establishing transparency, implementing efficient trade formalities and development of paperless trade systems, followed by enabling trade data and documents within these systems, including national Single Windows, to be safely and securely used and reused by authorized stakeholders along the international supply chain. Especially in the case of paperless and cross-border paperless trade, countries need to work together to develop and implement the legal and technical protocols needed for the seamless exchange of regulatory and commercial data and documents within and between countries. In this regard, the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific⁴ could support countries in gradually moving to “less-paper” and then to paperless and cross-border paperless trade by providing a dedicated, inclusive and capacity-building intergovernmental platform.

⁴ More information on the CPTA, a United Nations treaty aimed at accelerating inclusive trade digitalization, is available at <https://www.unescap.org/kp/cpta>

Other pressures reshaping the GVC landscape

Beyond COVID-19, climate change and green transition are among other megatrends at the heart of GVC restructuring. As with COVID-19, companies will be forced to rethink their supply base to diminish single-supplier – and even single-region – dependency, with a push for more geographically distributed GVCs.

Ever more frequent and intense extreme climate events are threatening GVCs virtually everywhere. However, climate change will disproportionately affect the Asia-Pacific region. For example, 13 out of the top 20 cities in the world with the highest projected costs of flooding are in the region. The Pearl River Delta in China, one the largest manufacturing hubs in the world, is projected to be one of the regions bearing the highest costs from flooding, with potential disruptions expected to be far-reaching (Asia Business Council, 2018). For that reason, firms are increasingly seeking to internalize climate-risks into investment and production decisions in order to build climate-resilience in established networks. This will pose an opportunity for new locations and firms to welcome international trade by providing insurance against climate disasters, even if at a slightly higher production cost.

Furthermore, as the climate crisis mutates the face of our planet, major logistical and transportation routes may have to be reconfigured (Dellink, 2017). Naturally, coastal areas will bear most of the costs associated with rising sea levels, while the Transpolar Passage will be a competitive advantage for economies like the Russian Federation, China, Japan and the Republic of Korea, which will benefit from a quicker and cheaper pathway to the consumption centres of the North Atlantic. In addition, the green transition and the push to decarbonize the economy add an incentive for shorter value chains if firms are to incorporate carbon costs into their logistics and transportation costs.

Finally, the European Union and several other large markets have taken steps to tax carbon emissions at borders, in an effort to reduce carbon leakage whereby, for reasons of costs related to climate policies, businesses transfer production to other countries with laxer emission constraints.

Such border adjustment mechanisms as well as the implementation of climate-smart trade and investment policies may reshape the GVC landscape, with a diminished role for those countries that have not taken steps to reduce carbon emissions (ESCAP, 2021).

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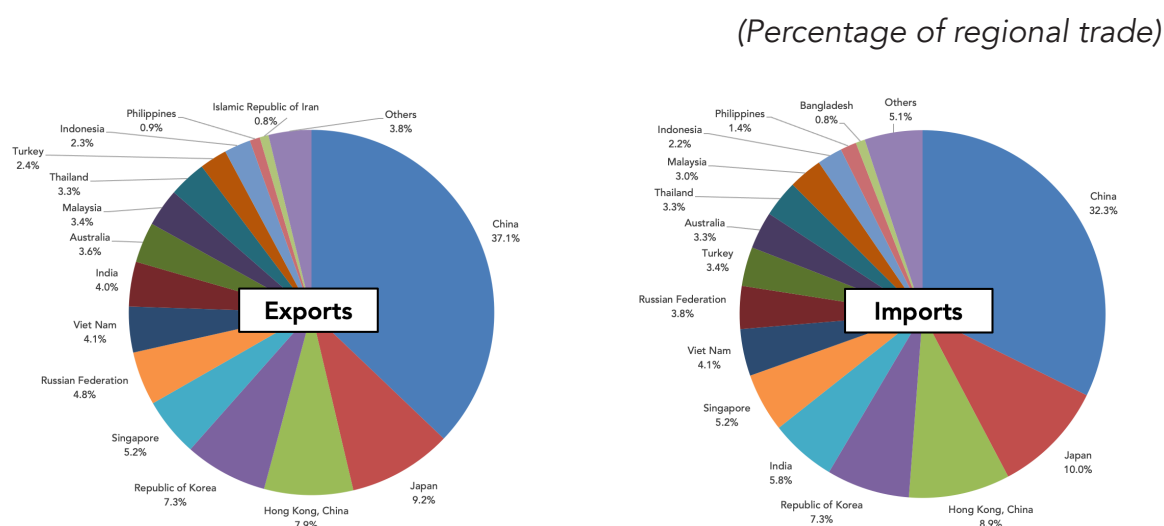
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Supplementary note

Structure and patterns of trade in Asia and the Pacific (2020)

In 2020, a few economies continued to dominate trade in Asia and the Pacific. Indeed, in 2020, the region's 15 largest trading economies accounted for 96.2% and 94.9% of total exports and imports, respectively. In particular, China, Japan, Hong Kong, China and the Republic of Korea (by share of total trade) – all East and North-East Asian economies – contributed to more than 55% of total regional trade (figure A.1). ASEAN economies such as Singapore, Thailand, Malaysia and Viet Nam, as well as subregional hubs such as India, the Russian Federation and Australia, also played a sizable role as important trading nations.

Figure A.1. Asia-Pacific's major exporters and importers in 2020



Source: ESCAP calculations, based on country data from the WTO statistics database (accessed 3 June 2021).

Compared with 2019, the trend of trade concentration across regional economies has intensified further. In particular, China and Hong Kong, China have seen their regional shares of trade increase the most. These economies benefited from relaxing initial lockdown measures ahead of most other nations, while responding to heightened demand for medical supplies and electronic components. Likewise, Viet Nam also saw its trade share in the region increase after avoiding prolonged lockdowns affecting manufacturing industries throughout the year (Yen, 2021). On the contrary, most other big trading economies lost ground in terms of their share of total trade. Japan, India, the Republic of Korea and the Russian Federation, in particular, dipped the most as the result of the COVID-19 pandemic's hindering economic impact.

In 2019 – the latest year for which data are available – intraregional trade accounted for 54.2% and 56.3% of total exports and imports in the region, respectively (table A.1). China, in particular, continued to represent a crucial market for the remaining regional economies. In fact, in 2019, this economy alone was responsible for absorbing 21.9% of all the Asia-Pacific region exports (excluding China), while sourcing 24.9% of its imports. Outside Asia and the Pacific, the European Union accounted for 19.9% and 13.9% of regional exports and imports, respectively, while the United States accounted for 16.2% and 8.0%, respectively.

Table A.1. Trade partners of Asia and the Pacific (2019)

(Percentage of total trade)

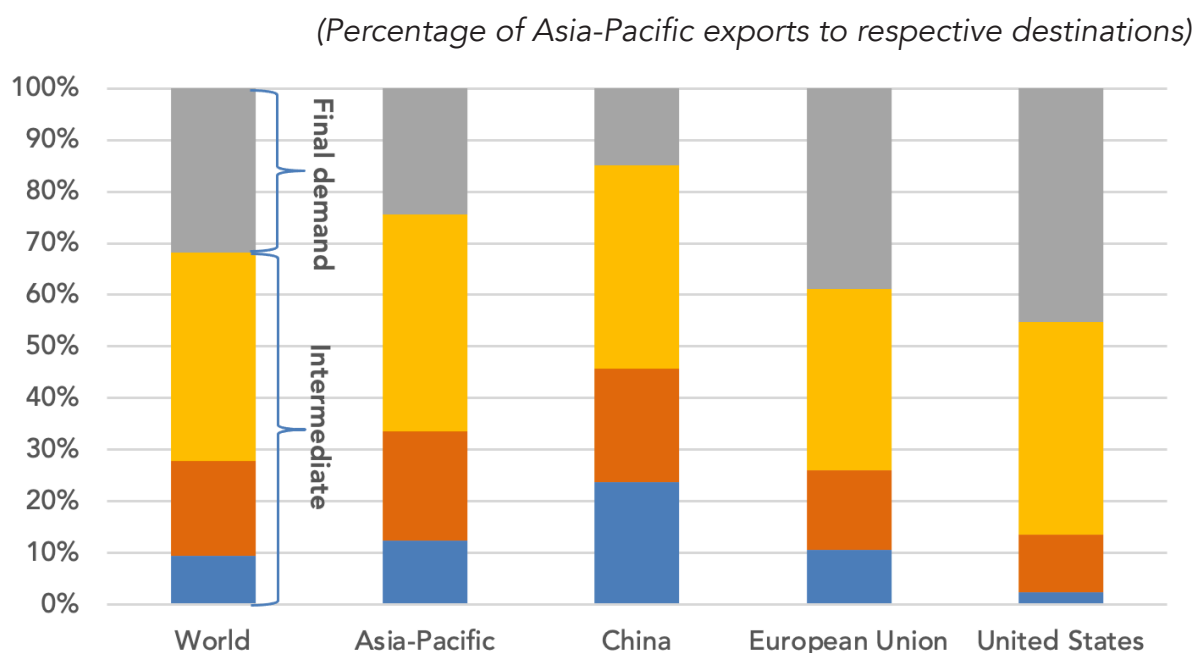
Trade partner	Asia-Pacific (excluding China)			Asia-Pacific		
	Exports (to)	Imports (from)	Trade (with)	Exports (to)	Imports (from)	Trade (with)
Intra-Asia-Pacific	58.9	60.1	59.5	54.2	56.3	55.2
China	21.9	24.9	23.5	14.0	17.3	15.6
Other Asia-Pacific	37.0	35.2	36.1	40.3	38.9	39.6
European Union (EU 25)	18.9	13.7	16.2	19.9	13.9	17.0
United States	13.9	8.7	11.3	16.2	8.0	12.2
Rest of the world	8.2	17.5	13.0	9.6	21.7	15.6

Source: ESCAP calculations, using United Nations Comtrade data from the World Bank's WITS database (accessed 3 June, 2021).

Note: Calculations are based on 2019 trade statistics, due to better data coverage.

Commercial exchanges between countries integrated in GVCs have become a key element of regional trade. Currently, about 68% of the region's exports are used as inputs in production processes elsewhere. The most important are machinery and equipment (i.e., capital goods), followed by intermediate goods and raw materials (figure A.2). The remaining 32% of exports represent foreign final demand, i.e., consumer goods. Intraregional trade follows a rather similar distribution, with 76% of exports being used as inputs in the production of other goods. In China, this pattern is even more accentuated, with this figure rising to 85%. In contrast, Asia and the Pacific exports going to the European Union and the United are primarily consumer goods. These types of goods represent approximately 39% and 45% of all regional exports arriving in these two markets, respectively. This pattern reflects the Asia-Pacific region's deep economic integration through regional value chains. However, it also highlights that, despite the growth in intraregional demand, final demand still significantly comes more from the United States and the European Union.

Figure A.2. Asia-Pacific exports by end use: Important destinations



Source: ESCAP calculations using mirror techniques, based on United Nations Comtrade data from the World Bank's WITS database (accessed 9 June 2021).

Note: Calculations are based on 2019 trade statistics, due to better data coverage.

Region-wide, transport and machinery equipment (including parts and components) are the most important sectors, representing 43.4% of regional exports, immediately followed by other manufactured products (25.9%) such as footwear, furniture and textiles. East and North-East Asia hosts most major Asia-Pacific exporters in total traded volume. In turn, these economies largely rely on manufactured products. Conversely, most of the developing economies belonging to North and Central Asia and the Pacific strongly rely on exports of agricultural products and fuel (tables A.3 and A.4). South and South-West Asian economies, instead, depend primarily on agricultural commodities as well as labour-intensive manufacturing industries such as footwear and garments.

Table A.3. Export share per sector – Asia-Pacific, and individual economies in East North-East Asia, South-East Asia, South South-West Asia, North Central Asia

(Percentage of total exports)

		Agriculture	Fuel	Ore and metals	Chemicals	Transport and machinery	Other Manufactures	Misc.
Asia-Pacific		6.0	9.8	4.1	8.1	43.4	25.9	2.7
East North-East Asia	China	2.5	1.4	1.2	6.4	53.5	34.0	1.0
	DPR Korea	1.8	4.2	8.1	10.0	16.5	57.1	2.3
	Hong Kong, China	2.3	0.4	4.4	3.9	39.7	29.3	20.1
	Japan	1.6	1.6	2.5	11.8	61.1	19.2	2.2
	Macao	6.6	0.2	4.2	6.9	16.0	62.4	3.7
	Mongolia	5.0	47.4	37.3	0.1	0.1	1.1	9.0
	Republic of Korea	2.2	7.0	2.3	13.4	57.1	16.8	1.2
South-East Asia	Brunei Darussalam	0.2	93.7	0.6	3.5	0.7	1.1	0.2
	Cambodia	6.7	0.0	0.8	0.4	4.7	73.7	13.7
	Indonesia	21.4	20.6	5.5	7.1	15.9	26.4	3.1
	Lao PDR	24.6	22.5	20.4	5.1	11.4	9.8	6.2
	Malaysia	6.8	15.5	2.6	5.8	54.3	14.2	0.9
	Myanmar	16.1	21.3	10.3	1.0	1.5	42.5	7.3
	Philippines	8.0	1.3	5.3	1.8	68.1	13.0	2.6
	Singapore	4.3	16.4	1.0	19.0	40.9	12.3	6.0
	Thailand	15.5	2.3	1.7	9.2	48.8	18.8	3.7
	Viet Nam	8.4	1.0	1.1	2.0	48.2	36.7	2.6
South South-West Asia	Afghanistan	45.9	4.0	3.9	0.1	0.6	3.1	42.4
	Bangladesh	2.8	0.0	0.2	0.4	0.6	95.7	0.2
	Bhutan	5.7	0.4	14.4	6.3	2.5	70.6	0.2
	India	10.0	9.5	4.1	18.2	18.4	38.7	1.2
	Iran (Islamic Rep. of)	7.3	50.9	9.3	18.6	0.6	6.2	7.1
	Maldives	80.9	12.8	2.0	0.2	2.0	1.4	0.7
	Nepal	42.3	0.0	1.6	4.5	0.9	48.9	1.9
	Pakistan	15.8	1.8	4.4	3.9	1.4	72.0	0.8
	Sri Lanka	20.6	0.3	0.8	1.8	8.1	67.8	0.5
	Turkey	8.8	3.7	4.2	6.2	33.1	41.6	2.4
North and Central Asia	Armenia	17.8	0.1	46.9	1.3	1.0	21.1	11.7
	Azerbaijan	5.0	89.1	1.1	1.7	0.4	1.1	1.6
	Georgia	28.3	5.9	20.6	11.9	3.8	26.0	3.6
	Kazakhstan	5.1	58.3	20.7	5.3	1.4	8.4	0.8
	Kyrgyzstan	13.4	2.4	19.3	2.8	5.6	12.0	44.6
	Russian Federation	8.3	58.2	7.8	5.7	3.6	10.4	6.1
	Tajikistan	14.5	3.4	44.5	0.8	0.5	15.6	20.7
	Turkmenistan	1.1	92.7	0.5	2.5	0.5	2.6	0.1
	Uzbekistan	9.3	11.6	10.8	6.1	1.6	14.2	46.4

Source: ESCAP calculations using mirror techniques. The raw data are based on United Nations Comtrade data from the World Bank's WITS database (accessed 9 June 2021).

Note: Calculations are based on 2019 trade statistics, due to their better data coverage. The table only shows economies for which data were available.

*Table A.4. Export share per sector – Asia-Pacific
and individual economies in the Pacific*

(Percentage of total exports)

		Agriculture	Fuel	Ore and metals	Chemicals	Transport and machinery	Other manufactures	Misc.
Asia-Pacific		6.0	9.8	4.1	8.1	43.4	25.9	2.7
Pacific	American Samoa	67.5	0.4	5.9	3.1	12.0	10.8	0.3
	Australia	13.5	32.6	36.6	3.0	2.6	3.2	8.6
	Cook Islands	60.6	0.0	0.2	0.7	24.6	4.8	9.0
	Fiji	71.8	1.0	1.3	1.5	1.7	14.1	8.5
	French Polynesia	22.2	0.0	0.5	1.7	7.2	51.7	16.7
	Guam	11.2	2.0	23.9	5.6	31.4	8.9	16.9
	Kiribati	92.1	0.0	0.3	0.1	5.9	0.9	0.6
	Marshall Islands	8.7	2.3	0.2	1.3	86.6	0.7	0.3
	Micronesia (F. S.)	98.4	0.0	0.2	0.0	0.4	0.3	0.6
	Nauru	45.3	0.1	32.9	0.6	13.3	7.6	0.2
	New Caledonia	0.6	0.0	45.5	1.2	1.2	50.4	1.2
	New Zealand	75.1	1.9	2.8	5.8	5.5	6.2	2.6
	Niue	0.5	0.0	0.0	0.3	97.5	1.4	0.2
	Northern Mariana Islands	2.6	0.4	63.2	1.5	10.3	5.5	16.5
	Palau	56.3	0.2	2.1	0.6	39.2	0.6	1.0
	Papua New Guinea	16.9	46.8	13.7	0.1	0.4	0.3	21.9
	Samoa	49.6	0.0	2.9	2.1	29.0	10.7	5.7
Solomon Islands	89.5	0.0	8.6	0.0	0.2	1.1	0.5	
Tonga	73.1	0.0	1.9	0.8	5.9	12.5	5.8	
Vanuatu	83.3	0.0	0.3	0.1	14.8	1.4	0.1	

Source: ESCAP calculations using mirror techniques. The raw data are based on United Nations Comtrade data from the World Bank's WITS database (accessed 9 June 2021).

Note: The calculations are based on 2019 trade statistics, due to their better data coverage. The table only shows economies for which data are available.

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