CHAPTER



Merchandise trade recovery under threat

The recovery of merchandise trade, both in Asia and the Pacific and the world, is under threat due to escalating global trade tensions. Trade value in the region and globally, which was picking up rapidly in 2017, has continued to grow during 2018. Unlike in 2017, however, this year's trade value growth has been driven mainly by price increases. Downside risks are mounting due to growing concerns about the escalating trade conflicts between large economies, rising fuel prices, heightening trade and investment restrictions and tightening monetary conditions in rapid growth economies, and also in the United States.

This chapter discusses the latest trends and prospects of trade in the Asia-Pacific region during 2017-2018. The chapter also includes a comparative overview of sectoral and subregional performance in 2017. The patterns and developments of intraregional trade linkages and trade-related to global value chains (GVCs) are discussed using the available data. After taking full account of major developments, the chapter concludes by examining the near-term prospects of trade in the Asia-Pacific region.

A. OVERVIEW

"Trade value returns to double-digit growth in 2017-2018, but trade volume begins to slow down "

Merchandise trade in Asia and the Pacific picked up momentum in 2017 (figure 1.1). Benefiting from the global recovery of manufacturing activities and capital spending, the region's total exports returned to a double-digit growth rate of 11.5% in 2017 after five years of sluggish growth (figure 1.1). Strong correlation exists between imports and exports. Imports increased more than 15% in 2017. Trade growth in the region overtook the growth of global trade that increased by 10.6%. Therefore, the region increased its share in global trade from the previous period. The share of imports, in particular, increased from 35% to 36.5% of global imports, while the increase in the share of exports was lower, rising from 39.5% to 39.8% of global exports.



Growth of merchandise trade by Asia and the Pacific, 2007-2017



Source: ESCAP calculations based on country data from the World Trade Organization (WTO) Statistics Database (accessed 30 April 2018).

Notably, China has weaker export growth than other developing countries in the Asia-Pacific region. Total exports by developing countries in the Asia-Pacific region increased by 11.6%; however, the export growth rate was nearly 14% when excluding China. Several factors explain the weak export growth of China, which is a major manufacturing exporter: (a) a more rapid increase in the prices and value of commodity exports than manufacturing exports; (b) the appreciation of the Chinese renminbi against the United States dollar. In addition, emerging economies, such as Viet Nam, have recorded dynamic export growth during the past five years.

Trade volume eases in 2018, but prices still increase."

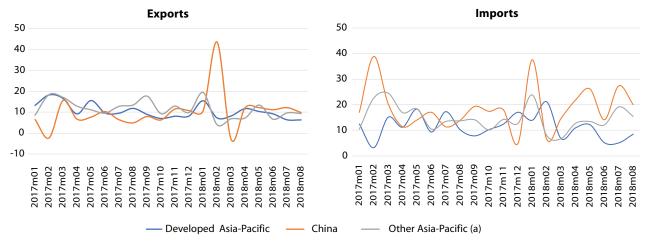
Asia and the Pacific entered 2018 with a steady growth in trade value. The value of exports and imports generally showed a double-digit growth rate during the first eight months of 2018 (figure 1.2). Imports, in particular, grew faster than exports in most of the region's developing countries. However, the increase in trade value was driven by prices more than by trade volume. Upward pressure on global prices was created by rising fuel and energy costs, tightened monetary policy and robust growth of private sector activity in some large economies such as the United States.

Without the upward-price factor, indicators suggest a tendency of the growth of trade volume to slow down in 2018 (figure 1.3). The growth of trade volume softened in early 2018 and declined further entering the second half of the year. The trend in Asia and the Pacific is the same as that in global trade. Since the first quarter of 2018, global export orders have fallen. This situation signals that merchandise trade volume will be further reduced.



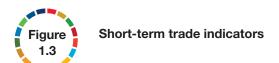
Year-on-year monthly trade growth in Asia and the Pacific, 2017-2018

(Percentage)



Source: ESCAP calculations based on country data from the WTO Short-term-Statistics Database (accessed 25 October 2018).

Note: Data are available for selected countries in the Asia-Pacific region. Group (a) excludes China and developed Asia-Pacific economies. It includes India, Indonesia, Kazakhstan, Malaysia, Philippines, Republic of Korea, Russian Federation, Singapore, Thailand and Viet Nam.







Source: ESCAP compilation using data from CPB Trade Monitor, July 2018 and WTO, World Trade Outlook Indicator news archive (accessed October 2018).

B. SECTORAL PERFORMANCE

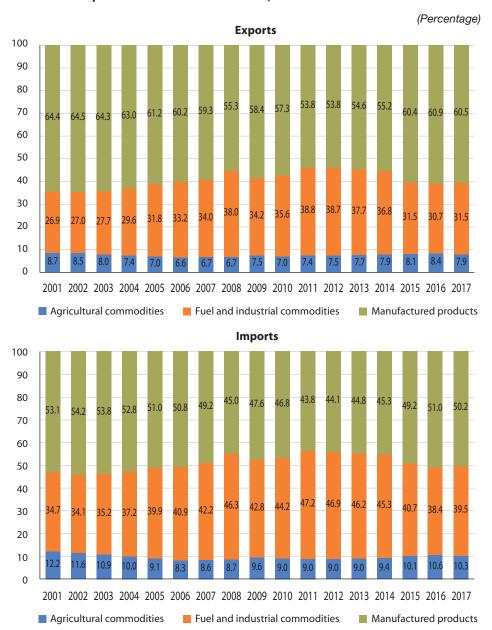
"Manufactured products retain dominance in Asia-Pacific trade."

Trade in manufactured products remained a core element in the region's trade structure. Manufactured products, predominantly led by electrical equipment and machinery, accounted for approximately 60% and 50% of Asia-Pacific's total exports and imports,

respectively, in 2017 (figure 1.4). The sector has maintained its dominant share in the region's trade for much of the period since 2001, although the increase in the price of oil pushed up the share of trade in fuel and industrial commodities dramatically during 2006-2014. Agricultural commodities, on the other hand, sustained their modest trade share at about 10%. After removing the factor of price volatility, the structure of Asia-Pacific's major trade components has remained mostly unchanged during the past 17 years.



Sectoral composition of Asia-Pacific trade, 2001-2017



Source: ESCAP calculations using data from the International Trade Centre (accessed July 2018).

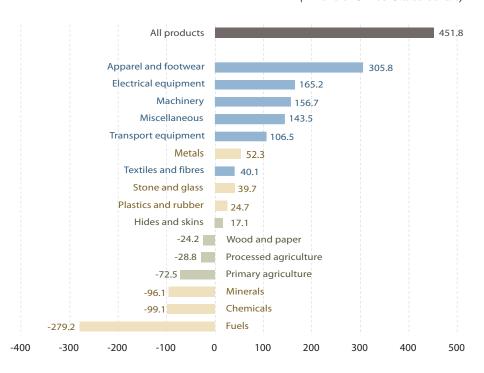
"Electrical equipment is now a core component of trade in the Asia-Pacific region, while apparel and footwear recorded the largest trade surplus."

Electrical equipment remained an important trade sector for Asia and the Pacific, accounting for 23% and 22% of the region's exports and imports, respectively, in 2017. The region's trade in electrical equipment had a strong presence in the global market, registering 59% of the world's exports and 49% of the world's imports of these products. Nonetheless, apparel and footwear contributed more to the region's trade surplus than other sectors. In 2017, apparel and footwear accounted for a net trade surplus of \$313 billion, followed by electrical equipment (\$163 billion), machinery (\$151 billion), miscellaneous manufactured goods (\$139 billion) and transport equipment (\$110 billion), all of which were manufactured products (figure 1.5). Conversely, in the same year, the Asia-Pacific region recorded trade



Merchandise trade balances for the Asia-Pacific region, 2017

(Billions of United States dollars)



Source: ESCAP calculations using data from the International Trade Centre (accessed July 2018).

Note: Mirror data are used for countries with missing data.

deficits in fuel and industrial commodities (\$381 billion) and agricultural commodities (\$104 billion), mainly due to imports of fuels and soybeans.

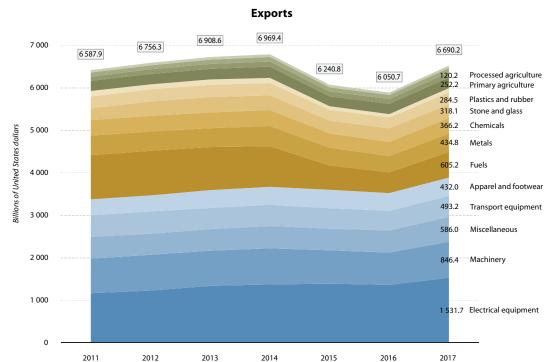
"Trade in most products experienced a good rebound in 2017, but many still lagged behind the historical peak in 2011-2014."

After the slowdown in 2015-2016, Asia-Pacific's trade value rebounded in 2017, with the majority of sectors achieving more than 5% export growth and 10% import growth over the previous year. Products that experienced the most substantial trade recovery in 2017 were fuels and minerals, growing by more than 20% and 30% in the case of exports and imports, respectively. However, the trade increase in 2017 did not bring the region's trade value back to its postcrisis peak (figure 1.6). The trade value of most products in 2017 was still below the post-crisis level recorded during 2011-2014. In fact, despite the rebound in 2017, fuel trade value was only about 60% of its 2012 level due to the dramatic decline in commodity prices in 2015-2016.

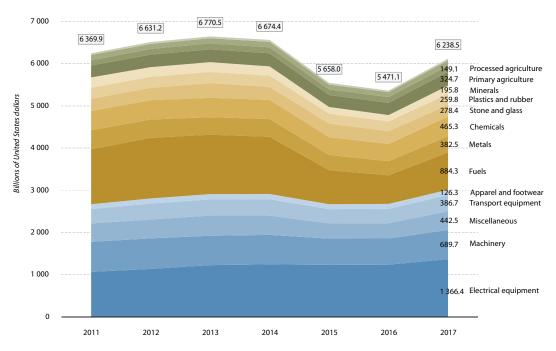
On the other hand, trade in GVC-related sectors was relatively resilient. Electrical equipment in particular suffered a minor decline in trade in 2015-2016. From 2013 to 2017, the trade in electrical equipment grew at a compound annual growth rate (CAGR) of 3.6% for exports and 3.1% for imports. Other GVC-related products, such as apparel and footwear, and processed agricultural products also managed to grow but the rates were slightly lower when compared with electrical equipment.



Trade composition in Asia and the Pacific, 2001-2017



Imports



Source: ESCAP calculations using data from the International Trade Centre (accessed July 2018).

C. SUBREGIONAL PERFORMANCE

"East and North-East Asia represented half of Asia and the Pacific trade in 2017, with trade being concentrated in only a few economies in each subregion."

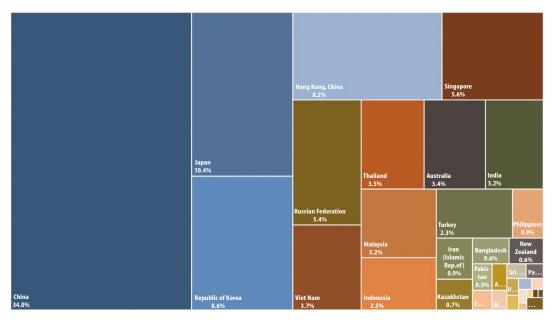
Asia-Pacific's merchandise trade is heavily concentrated within four East and North-East Asian economies, namely, China, Japan, the Republic of Korea and Hong Kong, China, which collectively accounted for more than half of the region's trade value in 2017 (figure 1.7). The dominant position of

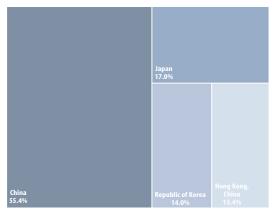
these four economies was associated with (a) their significant share (about 63%) of the region's gross domestic product (GDP) in 2017,1 (b) being producers of high-value and high-tech products in regional value chains, and (c) having a relatively superior logistical capacity to handle large volumes of international trade.2

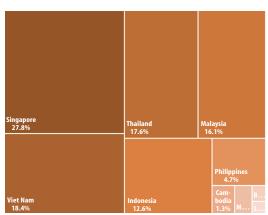
Similarly, at the subregional level, trade tends to be concentrated in the dominant economy of each subregion. The Russian Federation and Australia accounted for more than 80% of trade in their subregions. China represented more than half of East and North-East Asia's merchandise exports. India



Major exporters in Asia and the Pacific and its subregions, 2017

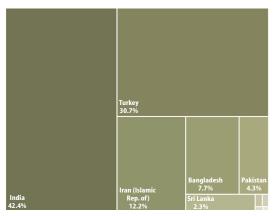


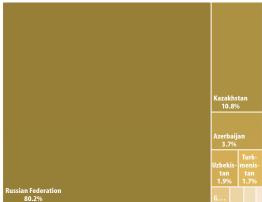


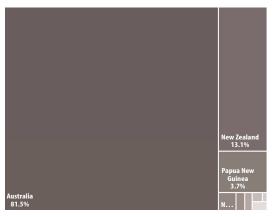




(continued)







Source: ESCAP calculations using data from the International Trade Centre (accessed July 2018).

and Turkey together represented more than 70% of trade in South and South-West Asia. However, South-East Asia appears to have a more even spread of exports within the subregion, with up to five economies each holding more than 10% of subregional exports. In each subregion, countries with special needs, i.e. least developed countries (LDCs), landlocked developing countries (LLDCs) and small island developing States (SIDs) generally have marginal trade shares; however, Bangladesh and Kazakhstan are the exceptions.

"Trade rebounded across subregions in 2017, especially in North and Central Asia, due to fuel prices."

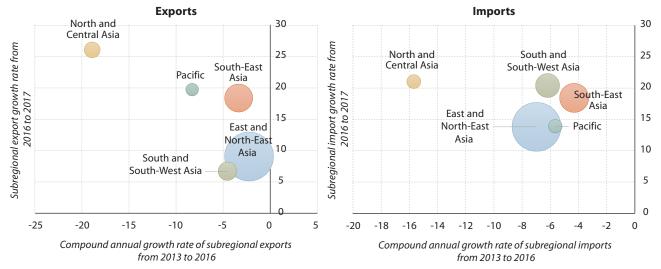
All the Asia-Pacific subregions that were hit by the global demand slowdown during 2013-2016 experienced a trade rebound in 2017. Rising commodity prices, especially for fuel, pushed trade growth of North and Central Asian economies in 2017 to reach 26% and 21% for exports and imports, respectively (figure 1.8). Consequently, trade in North and Central Asia fluctuated more than in the other regions due to a high reliance on exports of fuel and industrial commodities. In addition, the economic sanctions imposed by the European Union and the United States on the region's dominant economy, the Russian Federation, caused a considerable trade decline in 2015 and 2016, and hence the significant rebound in 2017.

Trade in subregions that primarily export manufactured products, such as East and North-East Asia, and South-East Asia, tends to be relatively resilient to the global demand fluctuation.3 Additionally, in the case of South-East Asia, the robust export growth of Viet Nam, Cambodia and Lao People's Democratic Republic shows the increased



Subregional performance of Asia-Pacific merchandise trade, 2013-2017

(Percentage)



Source: ESCAP calculations using data from the International Trade Centre (accessed July 2018).

Note: The bubble size represents the trade shares of each subregion in total trade by Asia and the Pacific in 2017.

competitiveness of those countries in labourintensive manufacturing industries. In 2017, the dynamic trade growth of emerging economies in the Association of Southeast Asian Nations (ASEAN) was an important factor in the strong trade rebound of the subregion, while trade growth of the larger economies in this subregion (Singapore, Thailand, Malaysia and Indonesia) was relatively modest.4

D. INTRAREGIONAL TRADE

"East and North-East Asia, and South-East Asia mainly produce manufactured goods, while other subregions supply commodities."

Examining intraregional merchandise-trade patterns among subregions in the Asia-Pacific region, distinct roles and specialization of each subregion in the regional supply chains can be observed (table 1.1). Intraregional-trade patterns reflect a combination of comparative advantage and intra-industry trade in regional value chains. East and North-East Asia primarily exports manufactured products to other subregions, and imports industrial commodities. South-East Asia played a similar role as a producer of manufactured products, while at the same time supplying fuel to other subregions. North and Central Asia mainly exports fuels and other mined resources in exchange for manufactured and agricultural products from other subregions. Similarly, the Pacific - specifically Australia - exports mineral commodities plus dairy products, beef and wheat in exchange for manufactured products from East and North-East Asia, and South-East Asia. Export patterns of the South and South-West Asian economies appear to be relatively diverse. For example, India maintains a strong competitive edge in precious stones and jewellery, while the Islamic Republic of Iran mainly exports fuels, and Bangladesh is a top exporter of apparel and footwear.

"More than half of the region's trade was intraregional, yet North and Central Asia, and South and South-West Asia remained less integrated in intraregional trade networks."

About 54% of the Asia-Pacific region's exports and 57% of its imports in 2017 were trade within the region. However, trade with partners outside the region remained significant. The major non-Asia-Pacific trade partners in 2017 were the European Union (16% of exports and 13% of imports) and the United States (14% of exports and 8% of imports). Intraregional trade intensity was higher in South-East Asia and the Pacific than that in other subregions, as more than 60% of their trade was with other Asia-



Types of products traded between Asia-Pacific subregions, 2017

| Exporter | | | Importer | | |
|--|------------------------------------|--|---|---|---|
| | ENEA | SEA | SSWA | NCA | Pacific |
| East and North-East Asia (ENEA) | Electrical equip. Machinery | Electrical equip. Machinery Metals | Electrical equip. Machinery Metals | Apparel and footwear Machinery Electrical equip. Transport equip. | Transport equip. Electrical equip. Machinery |
| South-East Asia (SEA) | Electrical equip. Fuels | Electrical equip. Fuels Machinery | Primary Agri. Electrical equip. Fuels | Electrical equip. Primary agri. Apparel and footwear Machinery | Fuels Transport equip. Miscellaneous Machinery |
| South and South-West Asia (SSWA) | Fuels Stone and glass | Fuels Primary agri. Metals | Fuels Textiles and fibres Primary agri. | Primary agri. Apparel and footwear Chemicals Machinery | Apparel and footwear Fuels |
| North and Central Asia (NCA) | Fuels | Fuels | Fuels Metals Miscellaneous Primary agri. | Metals Fuels Primary agri. | Fuels Transport equip. Wood and paper |
| Pacific | Minerals Fuels Primary agri. | Primary agri. Fuels Metals | Fuels Primary agri. Stone and glass | Primary agri. Machinery | Stone and glass Processed agri. Primary agri. |

Source: ESCAP calculations using data from the International Trade Centre (accessed June 2018).

Note: Products shown in the table are products that have an export share of 10% or more between the subregions.

Pacific economies (tables 1.2 and 1.3). South-East Asia traded substantially with East and North-East Asia and within itself. The high level of intraregional trade was driven by the interconnectedness of South-East Asian economies with East and North-East Asian economies through GVCs. For the Pacific, commodity exports by Australia to China accounted for a major portion of intraregional trade in the Pacific. Notably, the small Pacific islands also traded substantially with China. Exports by those countries were mainly to China (22%), Japan (19%) and Australia (18%), while their imports mainly came from the Republic of Korea (25%), China (16%) and Singapore (14%).

Conversely, North and Central Asia, and South and South-West Asia traded relatively less with other Asia-Pacific economies. The lower intraregional trade intensity can be explained by trade patterns of some large countries in their respective subregions. In particular, trade by the Russian Federation and Turkey tends to concentrate in economies within the European Union. Meanwhile, India has quite a diverse profile of main export destinations, i.e. the European Union (17%), the United States (16%), East and North-East Asia (12%), and South-East Asia (12%); as a result, its intraregional trade is only 36% for exports and 44% for imports.

"East and North-East Asia, particularly China, served as a regional hub in 2017."

Despite different levels of intraregional-trade intensity, a commonality exists where each subregion traded more with East and North-East Asia, especially China, than with other economies in the Asia-Pacific region. In fact, 19 economies in the Asia-Pacific region



Share of intraregional merchandise exports, by subregion, 2016-2017

(Percentage)

| | Destination of exports | | | | | | | | | |
|-------------------|------------------------|-----------------------------|-------|------|------|------|-----|---------|------------------|-------------------------|
| Subregion | Year | ENEA exclulding China | China | ENEA | SEA | SSWA | NCA | Pacific | Asia- Pacific | Rest of the world |
| East and North- | 2017 | 17.4 | 14.1 | 31.6 | 12.9 | 5.2 | 2.1 | 2.6 | 54.4 | 45.6 |
| East Asia (ENEA) | 2016 | 18.2 | 14.1 | 32.3 | 12.4 | 5.0 | 1.9 | 2.3 | 53.9 | 46.1 |
| South-East Asia | 2017 | 18.8 | 14.9 | 33.7 | 22.8 | 5.5 | 0.6 | 3.4 | 65.9 | 34.1 |
| (SEA) | 2016 | 19.2 | 12.5 | 31.7 | 24.0 | 5.3 | 0.5 | 3.6 | 65.1 | 34.9 |
| South and South- | 2017 | 6.8 | 6.2 | 12.9 | 7.0 | 10.0 | 2.3 | 1.1 | 33.2 | 66.8 |
| West Asia (SSWA) | 2016 | 5.2 | 4.0 | 9.2 | 5.6 | 8.4 | 2.2 | 1.0 | 26.4 | 73.6 |
| North and Central | 2017 | 6.1 | 12.1 | 18.1 | 1.9 | 7.7 | 7.7 | 0.0 | 35.5 | 64.5 |
| Asia (NCA) | 2016 | 6.2 | 11.3 | 17.6 | 1.7 | 8.2 | 7.8 | 0.1 | 35.3 | 64.7 |
| Pacific | 2017 | 18.8 | 28.2 | 46.9 | 9.2 | 5.2 | 0.1 | 6.9 | 68.3 | 31.7 |
| | 2016 | 21.4 | 30.0 | 51.4 | 9.9 | 4.5 | 0.2 | 7.9 | 74.0 | 26.0 |

Source: ESCAP calculations using data from the International Trade Centre (accessed July 2018).



Share of intraregional merchandise imports, by subregion, 2016-2017

(Percentage)

| | Source of imports | | | | | | | | | |
|-------------------|-------------------|-----------------------------|-------|------|------|------|------|---------|------------------|-------------------------|
| Subregion | Year | ENEA exclulding China | China | ENEA | SEA | SSWA | NCA | Pacific | Asia- Pacific | Rest of the world |
| East and North- | 2017 | 14.4 | 18.5 | 32.9 | 13.3 | 2.3 | 2.4 | 5.1 | 56.0 | 44.0 |
| East Asia (ENEA) | 2016 | 14.7 | 15.9 | 30.6 | 13.0 | 2.1 | 2.1 | 4.4 | 52.2 | 47.8 |
| South-East Asia | 2017 | 18.4 | 20.8 | 39.1 | 22.4 | 3.1 | 1.0 | 2.4 | 68.0 | 32.0 |
| (SEA) | 2016 | 18.3 | 20.7 | 39.0 | 22.1 | 2.3 | 0.8 | 2.3 | 66.5 | 33.5 |
| South and South- | 2017 | 7.3 | 17.3 | 24.6 | 8.7 | 7.1 | 4.2 | 2.3 | 46.9 | 53.1 |
| West Asia (SSWA) | 2016 | 7.3 | 18.1 | 25.4 | 8.7 | 7.2 | 3.9 | 1.7 | 46.9 | 53.1 |
| North and Central | 2017 | 6.1 | 20.3 | 26.4 | 4.0 | 5.1 | 11.2 | 0.3 | 46.9 | 53.1 |
| Asia (NCA) | 2016 | 6.3 | 19.3 | 25.6 | 3.7 | 5.5 | 11.2 | 0.3 | 46.3 | 53.7 |
| Pacific | 2017 | 15.9 | 21.0 | 36.8 | 15.3 | 2.3 | 0.2 | 6.2 | 60.9 | 39.1 |
| | 2016 | 14.9 | 22.3 | 37.1 | 15.7 | 2.4 | 0.1 | 6.9 | 62.2 | 37.8 |

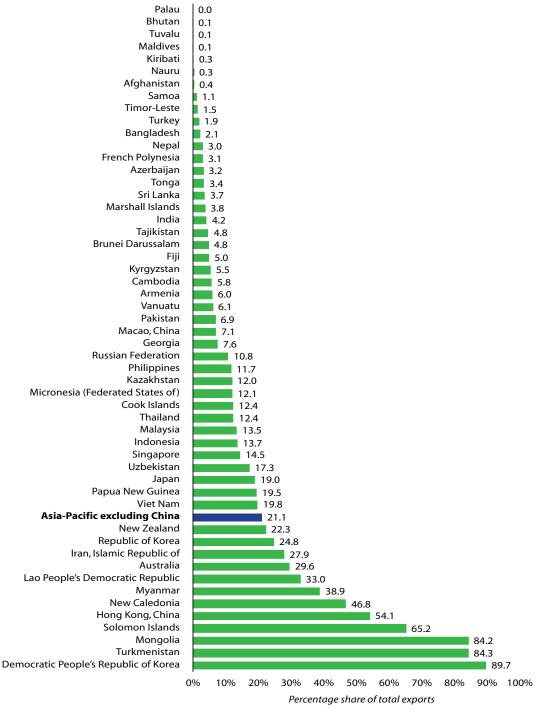
Source: ESCAP calculations using data from the International Trade Centre (accessed July 2018).

reported China as their the first- or second-largest export markets in 2017, and for 12 economies 20% or more of their exports were destined for China alone (figure 1.9). In particular, economies relying on commodity exports tend to be highly dependent on exports to China; thus, those economies are highly vulnerable due to fluctuations in commodity markets as well as consumption and production changes in China.

Apart from China, the European Union and the United States remain important trade partners of economies that are exporters of manufactured products. Also, trade within subregions is quite significant for East and North-East Asia, and South-East Asia. Such trade linkages reflect the importance of demands within and outside the region, in particular demands from China, Europe and the United States (figure 1.10). In addition, the linkages reflect the significance of



Share of exports from Asia-Pacific economies to China, 2017



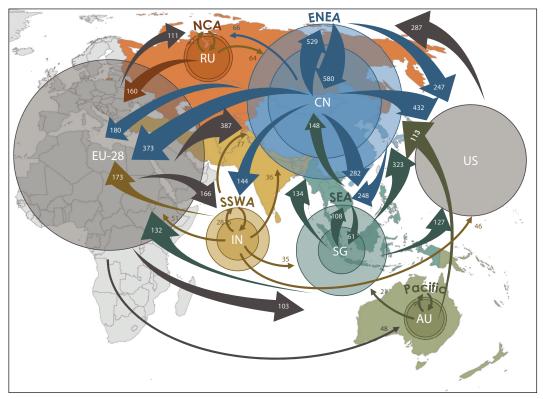
Source: ESCAP calculations using data from the International Trade Centre (accessed July 2018).

trade within and between Factory Asia, Factory Europe and Factory America. Such intraregional and

interregional trade was driven mainly by the participation of economies in GVCs.



Major trade linkages of Asia and the Pacific, 2017



Source: ESCAP calculations using data from the International Trade Centre (accessed July 2018).

Notes: The circle size represents the relative trade value of each country/region in 2017. Numbers in arrows represent the 2017 export value in billions of United States dollars. Arrows originating from an inner circle represent export flows from the hub country.

Arrows originating from an outer circle represent export flows from countries in the region other than the hub.

For simplicity and presentation, not all trade flows are presented in this figure.

E. GVC-RELATED TRADE⁵

"The Asia-Pacific region had an increasingly prominent role in the trade of GVC-related products.6"

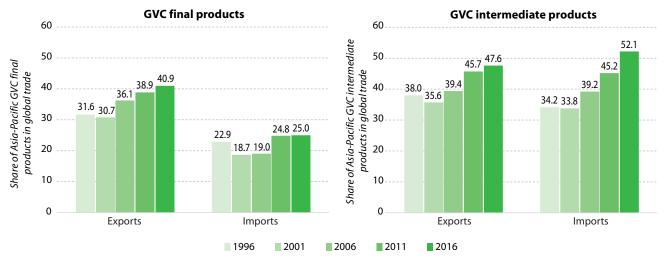
The cross-border movements of intermediate and final products of five industries, namely, apparel and footwear, automotive, electronics, primary agriculture and processed agriculture, are the major elements of trade related to GVCs in the Asia-Pacific region. The exports of GVC-related products by these five industries have been playing a significant role in Asia-Pacific's trade for decades. They have generally accounted for about 40%-50% of the region's total exports, but the share has varied over time as the prices of fuel and industrial commodities, which contribute 30%-40% to the region's exports, have fluctuated.

Despite a small dip around 2001, the Asia-Pacific region has gradually gained a higher presence in the global market during the past two decades, especially in global trade of intermediate products (figure 1.11). The increasing importance of exports from the region was driven by the export growth of developing East and North-East Asian, and South-East Asian economies, particularly in the electronics industry. In 2016, around half of the world's exports of GVC-related intermediate goods and 41% of GVCrelated final goods were in Asia and the Pacific. Nevertheless, the Asia-Pacific region has not yet become the major source of final demand. The whole



Share of the Asia-Pacific region in the global trade of GVC-related products, 1996-2016

(Percentage)



Source: ESCAP calculations using data from the United Nations Comtrade database (accessed through the World Bank World Integrated Trade Solution (WITS) database in June 2018).

region's share in global imports of final products produced by GVCs has remained relatively low at 25%, while the majority of global demand for those products has come from the European Union (37%) and the United States (21%).

'GVC-related trade in Asia and the Pacific is dominated by the electronics industry."

Trade in the electronics industry appears to be the most important element of GVC-related trade in the Asia-Pacific region. The sector accounted for approximately 60%-70% of intermediate goods traded by the region (figure 1.12). The automotive industry's export share has gradually increased, partly due to the surge in exports of vehicle parts from China, the Republic of Korea and Turkey to the European Union around 2005-2008.

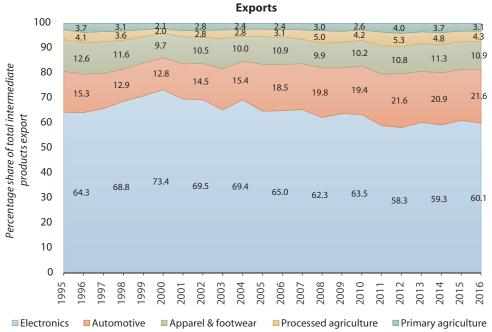
"The importance of intraregional markets as a source of final demand has gradually increased."

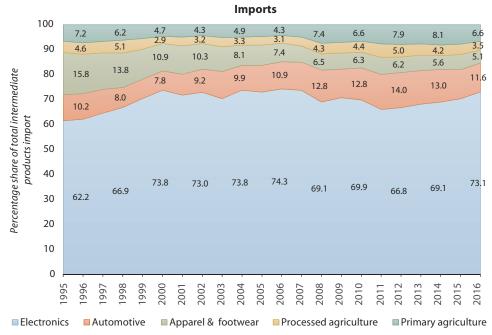
Intraregional demand for GVC-related final products has increased its importance. Intraregional exports accounted for about 40% of the total exports of final goods in 2016, which was a significant increase from 31% in 2001 (figure 1.13). The pattern was shared across industries. Intraregional-trade intensity of final goods exports was higher in agriculture-related products, including processed agriculture and primary agriculture, than other industries. A possible reason for the high intraregional-trade intensity of agriculture-related GVCs was that the trade costs of these products tend to be relatively sensitive to geographical distance, as they are generally perishable, bulky, heavy, and require special certification and special shipping facilities (e.g. cold chain).

In contrast, intraregional markets accounted for a dominant share in the region's export of intermediate products. Such a pattern suggests that the Asia-Pacific region plays a role as the manufacturing factories that integrate parts and components sourced substantially from countries within the region - into final goods for export mainly to the advanced economies outside the region. However, the Asia-Pacific economies are still relatively less integrated into automotive GVCs compared with GVCs of other sectors. The majority of final assembly by the global automotive industry is still dominated by the United States and advanced economies in the European Union, especially Germany. Therefore, the Asia-Pacific region's exports of automotive parts and components are still destined more for markets outside the region.



Sectoral structure of intermediate trade by Asia-Pacific economies, 1995-2016

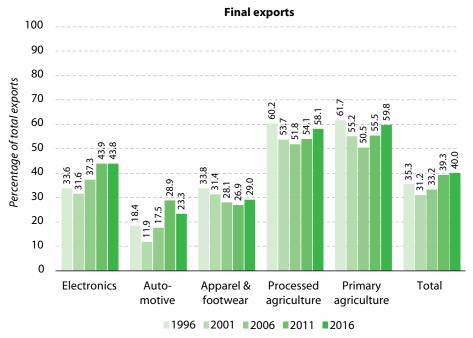




Source: ESCAP calculations using data from the United Nations Comtrade database (accessed through the World Bank WITS database in June 2018).



Share of intra-Asia-Pacific exports of final and intermediate GVC-related products, 1996-2016





Source: ESCAP calculations using data from the United Nations Comtrade database (accessed through the World Bank WITS database in June 2018).

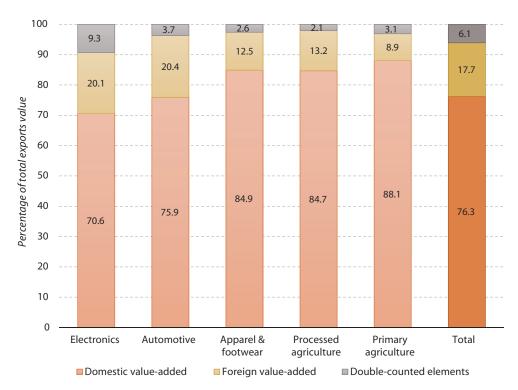
"Imported components accounted for about 20% of the GVC-related exports of the Asia-Pacific region."

The total export value of GVC-related products can be disaggregated into three main components. The first component is the domestic value-added (DVA) created by the exporting country. The second component is the foreign value-added (FVA) created by a country other than the exporting country and embedded in the exported product. The remainder (double-counted elements) is the statistical discrepancy between the gross and value-added trade statistics, which mainly results from the double counting of semi-finished goods that cross the same border more than once at different stages of production, as listed for 2017 by the Asian Development Bank (ADB) in its Key Indicators for Asia and the Pacific database.

On aggregate, the export value of GVC-related products from the Asia-Pacific region is mainly the domestic value-added; yet, about 17.7% of the export value in 2016 was attributable to the foreign value-added (figure 1.14).7 The importance of the foreign value-added was especially pronounced by GVCs in the electronics and automotive industries. These high-tech manufacturing industries recorded higher percentages of FVA in comparison to a relatively more rudimentary industry such as primary agriculture. They also have a relatively high percentage of double-counted elements, because their value chains involve several back-and-forth movements of the semi-finished goods across the borders.



Value-added components of Asia-Pacific GVC-related exports, 2016



Source: ESCAP calculations using data from ADB (accessed May 2018).

Notes: As the ADB dataset is structured based on its Multi-Region Input-Output Database (ADB MRIO), the industry classification may be slightly different from datasets used in other figures in this section.

The ADB Multi-Regional Input-Output dataset, version 2016, contains detailed data for only 60 economies, 25 of which are Asia-Pacific economies (the rest are simply labelled as "Rest of the World").

The Asia-Pacific economies included are Australia, Bangladesh, Brunei Darussalam, Bhutan, Cambodia, China, Fiji, India, Indonesia, Japan, Kazakhstan, Kyrgyzstan, Lao People's Democratic Republic, Mongolia, Malaysia, Maldives, Nepal, Pakistan, Philippines, Republic of Korea, Russian Federation, Sri Lanka, Thailand, Turkey and Viet Nam.



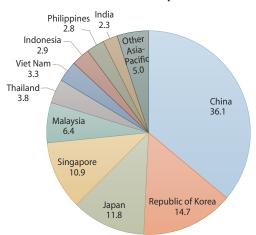
Major exporters of GVC-related products in the Asia-Pacific region, 2016

(Percentage of GVC-related exports from the region)

Final products

Indonesia 2.1 Other Turkey Asia-Pacific 10.0 Singapore Bangladesh 3.9 China India 4.1 Thailand Republic of Korea Viet Nam 7.1 Japan

Intermediate products



Source: ESCAP calculations using data from the United Nations Comtrade database (accessed through World Bank WITS database in June 2018).

"GVC-related trade is concentrated in a small number of Asia-Pacific region economies."

The geographic structure of GVCs in Asia and the Pacific has not changed from what was given in the Asia-Pacific Trade and Investment Report 2015 (ESCAP, 2015). China and a few other East and North-East Asian, and South-East Asian economies are the main players in the Asia-Pacific GVC-related trade (figure 1.15). The concentration is strikingly high in the export of manufactured products, where the top 10 exporters in each market held more than 95% of the total export share. Such a high concentration is a worrisome sign because many economies, especially those with special needs, are not sufficiently integrated into the regional manufacturing supply chains. Only Bangladesh and Cambodia are integrated in GVCs of manufactured products. The two countries held significant shares in final apparel and footwear product exports, but they are net importers of intermediate apparel and footwear products.

China is indeed the largest exporter in most cases. The only exceptions are final automotive goods, intermediate processed agricultural goods and intermediate primary agricultural goods, with Japan, Indonesia and Australia as the leading exporters. China also exhibited remarkably high export growth rates prior to the 2008 global economic crisis.

Despite a slight slowdown after 2008, China's post-crisis export growth rates remained remarkable. Meanwhile, there also appears to have been a shift towards China in the demand for final products. China's imports of final goods have been thriving during the past two decades, whereas final product imports by the United States and the European Union slowed down after the crisis. One of the sectors with the most dramatic increase in demand was automotive, where China's final import value grew from \$28.9 billion in 2010 to \$50.1 billion in 2017.

Among other major economies, Viet Nam has made the most remarkable progress. From twelfth-largest exporter of GVC-related intermediate products in 2013, the country became the seventh-largest exporter of such products in 2016. Japan appears to have lost its share to the Republic of Korea and Singapore, particularly in the electronics market. Nonetheless, it is still able to register a large export share and a moderate growth rate in the automotive market. The Republic of Korea is doing relatively well in the electronics and automotive export, except that its exports of final electronics products have lessened since the crisis.

Among the small emerging economies, Viet Nam has successfully emerged as an important exporter of manufactured GVC-related products. It showed remarkable export growth rates, both before and after

the 2008 crisis, and became a significant exporter in almost every GVC-related industry. A few other emerging economies have also been doing well although their export growth rates cannot match that of Viet Nam. India and Turkey have recorded considerable growth rates of GVC-related exports in almost every GVC-related industry except for electronics. Indonesia and Thailand have also exhibited reasonably good export growth rates in the automotive and processed agricultural markets.

"Going forward: Global demand is recovering but risks remain ahead."

While GVCs play a crucial role in the Asia-Pacific region's trade structure, the future development of GVC-related trade in the region faces some uncertainties. The technological advancements, such as 3-D printing and automated manufacturing, may change the landscape of GVC-related trade. The more intensive application of automation and robotic technologies means that labour costs will become less relevant, while the availability of robotic engineers will become a more significant factor when making an investment decision. It also means that some production technologies will gradually become obsolete as new technologies come into play, and new types of intermediate goods may then be needed. For example, the emergence of electric cars means that the production of lithium batteries may eventually replace the production of combustion engines. Countries that are not ready to develop competitiveness under the new sets of technologies will soon lose ground.

Another factor that might affect the development of GVCs is the shift in China's economic structure and policy. On the one hand, the Chinese leadership has reaffirmed its commitment to liberalization under unilateral, plurilateral and multilateral agendas. In particular, the country has developed a sophisticated regionalism strategy. (Chapter 4 discusses this issue in detail.) On the other hand, rapid economic growth has driven the wage level up dramatically in China and has had an enormous impact on the country.

Over recent decades, China has developed its domestic capacity to upgrade from low value-added downstream manufacturing to the higher value-added upstream productions of parts and components. In its 2016 report, Asia-Pacific Trade and Investment Report 2016: Recent Trends and Developments, ESCAP (2016) revealed the continuous increases in

China's domestic value-added in its manufacturing exports during the past two decades. Hence, in the future, China may replace some of its imports of intermediate goods from South-East Asian economies with its domestic production. Meanwhile, multinational companies may relocate labour-intensive manufacturing activities to lower wage economies such as Viet Nam and some LDCs, but then these countries would need to compete with inland Chinese provinces where the labour cost remains low and infrastructure is improving.

On a separate note, the quick evolution in the trade policies of the United States and retaliatory actions by its large trade partners are the most critical threats at the present time. The policy changes that challenge the spirit of the multilateral trading system will create major uncertainties for economies in the Asia-Pacific region, especially those countries integrated with China through the production in GVCs (chapter 4 discusses this issue in detail). The growing trade tensions, if followed by higher trade restrictions globally, could disrupt the ongoing process of global economic recovery.

The increasing tendency towards another global trade crisis has demand-side and supply-side implications for developing economies in the Asia-Pacific region. On the demand side, the potential slowdown of global demand and increasing restrictiveness in important export markets outside the region means that regional-market integration would become more pressing than ever. Competition in the global as well as regional markets will be fierce. This has a supply-side implication that will require developing Asia-Pacific economies to urgently eliminate any inefficiency in their business processes. This can be accomplished by minimizing trade costs as well as addressing cumbersome regulatory procedures and documentation requirements. The WTO Trade Facilitation Agreement (TFA) and regional initiatives for facilitating the electronic exchange of information along international supply chains, such as the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific, are then crucial. According to WTO (2018), the economic impacts of full implementation of TFA would be more than the impact of complete elimination of tariffs in the world. In this regard, ESCAP (2017a) revealed in its latest biennial report, UN Global Survey on Trade Facilitation and Paperless Implementation in Asia and the Pacific, that many developing economies in the region have made good progress in implementing the agreement (see box 1.1).



Significant progress made in trade facilitation, but more cooperation needed on digitalization of trade processes

Reducing trade cost is critical in determining whether an economy can effectively participate in GVCs and can tap its potential for trade as a main engine of growth and sustainable development. According to the latest data from the ESCAP-World Bank International Trade Cost Database, there is still room to improve the efficiency of trade procedures in order to reduce trade costs. Costs of trade within Asia-Pacific country groups are still considerably higher than costs of trade within the major European countries (42%). Within the Asia-Pacific region, the intraregional trade cost was lowest among three East Asia economies (53%); while trading among and with North and Central Asia, South Asia as well as Pacific island developing economies still involved very high trade costs. In terms of trading with large external partners, East Asia registered the lowest trade costs with the European Union (85%) and the United States (64%), followed by the middle-income members of ASEAN.

Table A. Intra- and extraregional comprehensive trade costs in the Asia-Pacific region (excluding tariff costs), 2011-2016

(Percentage)

| | | | | | | 1- | oroomago) |
|-------------------------------------|-----------------|-----------------|--------------------------------|--|-----------------|-----------------|----------------|
| Simple average | ASEAN-4 | East Asia-3 | North and Central Asia-4 | Pacific island developing economies | SAARC-4 | AUS-NZL | EU-3 |
| ASEAN-4 | 76.2 (3.4) | | | | | | |
| East Asia-3 | 77.6 (6.0) | 53.3 (2.9) | | | | | |
| North and Central Asia-4 | 342.2 (0.2) | 170.1 (-4.6) | 115.4 (-3.8) | | | | |
| Pacific island developing economies | 167.6 (-9.6) | 166.1 (-4.9) | 367.4 (24.8) | 127.5 (-7.3) | | | |
| SAARC-4 | 131.6 (4.6) | 123.3 (-1.9) | 304.0 (8.6) | 289.5 (-7.4) | 119.4 (10.8) | | |
| AUS-NZL | 101.2 (2.4) | 86.8 (-4.7) | 357.2 (-0.9) | 83.8 (-4.3) | 136.7 (-6.3) | 54.1 (-0.9) | |
| EU-3 | 105.1 (-3.2) | 84.7 (-1.1) | 149.2 (-6.4) | 197.7 (-8.4) | 113.6 (-0.3) | 107.4 (-2.9) | 42.1 (-6.9) |
| United States | 86.7 (7.2) | 64.3 (3.0) | 176.0 (-2.8) | 159.8 (-4.8) | 113.1 (5.7) | 100.9 (1.7) | 66.9 (0.4) |

Source: ESCAP-World Bank Trade Cost Database, updated June 2018. Available at http://databank.worldbank.org/data/views/variableselection/selectvariables.aspx?source=escap-world-bank-international-trade-costs and http://www.unescap.org/tid/artnet/trade-costs.asp.

Notes: Trade costs may be interpreted as tariff equivalents. Percentage changes in trade costs between 2005-2010 and 2011-2016 are given in parentheses. ASEAN-4: Indonesia, Malaysia, Philippines, Thailand; AUS-NZL: Australia and New Zealand; East Asia-3: China, Japan, Republic of Korea; EU-3: Germany, France, United Kingdom; North and Central Asia-4: Georgia, Kazakhstan, Kyrgyzstan, Russian Federation; SAARC-4: Bangladesh, India, Pakistan, Sri Lanka; Pacific island developing economies: Fiji, Papua New Guinea.

Improvements in trade facilitation can substantially reduce trade transaction costs. Modernizing ports, upgrading logistics systems, simplifying customs procedures and introducing automated clearances, can significantly cut down trade costs, while also maintaining effective levels of government control. Based on the results of the United Nations Global Survey on Trade Facilitation and Paperless Trade Implementation in Asia and the



(continued)

Pacific, it is encouraging that significant progress has been made by Asia-Pacific economies in trade facilitation. Collectively, the implementation rate by the Asia-Pacific region increased from 44.8% in 2015 to 50.4% in 2017. As shown in figure A, the greatest progress was observed in the institutional arrangements and cooperation categories, where the implementation rate increased 7.3 percentage points, from 48.7% in 2015 to 56.1% in 2017. The transparency and formalities categories also recorded an increment of about 7 percentage points. However, the progress made on paperless trade and cross-border paperless trade was less remarkable, with the implementation level rising by 4 percentage points only.

100 ■ 2015 ■ 2017 80 Percentage 60 40 20 0 Transparency **Formalities** Institutional Paperless trade Cross-border arrangement and paperless cooperation trade

Figure A. Implementation of different groups of trade facilitation measures in the Asia-Pacific region, 2015 and 2017

Source: ESCAP (2017a), figure 6.

Empirical examination has been conducted on the impact of trade facilitation among the Asia-Pacific economies (table B). Partial implementation of measures limited to binding provisions under the WTO TFA results in trade costs reduction of about 4.1%, whereas full implementation of these measures reduces trade costs about 9.0%. In contrast, implementation of both binding and non-binding measures of TFA would reduce trade costs by about 15.0% under full implementation scenario. When digital trade facilitation is fully implemented, covering all measures of TFA and measures concerning paperless and cross-border paperless trade, the average trade costs reduction across Asia-Pacific economies increases to 26.2% for the region, which highlights the need for countries to be as ambitious as possible in trade facilitation reform.

Moving forward, cross-border paperless trade offers immense potential for enhancing trade facilitation and further reduction of trade costs in Asia and the Pacific. Digitalizing trade processes towards paperless trade would not only improve transparency, streamline formalities, and facilitate institutional cooperation and coordination among different domestic government agencies, but would also build the foundation for effecting cross-border paperless trade within the region and beyond. Governments in the Asia-Pacific region need to develop a legal and technical framework to support paperless trade as well as enable electronic exchanges and legal recognition of trade data and documents between public and private actors located in different countries along international supply chains. To this end, the recently adopted Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific offers a valuable platform for bringing different countries and stakeholders together in order to synchronize their efforts towards realizing cross-border paperless trade and maximizing the contribution of trade to sustainable development.



(continued)

Table B. Changes in international trade costs of the Asia-Pacific region as a result of trade facilitation improvements

(Percentage)

| Trade cost reduction from trade facilitation | WTO TF | A (binding) | WTO TFA non-bi | (binding + inding) | WTO TFA + (binding + non- binding + other paperless and cross-border paperless) | | |
|--|---|-------------|-----------------------|-----------------------|---|-------------------|--|
| (TF) implementation | (TF) implementation Partially Fully implemented implement | | Partially implemented | Fully implemented | Partially implemented | Fully implemented | |
| Model 1 | | | | | | | |
| Overall TF | -4.07 -8.98 | | -7.20 | -14.98 | -16.47 | -26.17 | |
| Model 2 | | | | | | | |
| General TF | -3.84 | -8.38 | -5.61 | -12.22 | -6.67 | -13.40 | |
| Paperless and cross-border paperless trade | n.a. | n.a. | -1.65 | -2.78 | -8.81 | -12.47 | |

Source: ESCAP (2017b).

Source: Adapted from ADB and ESCAP (2017); ESCAP (2017a; 2017b).

F. NEAR-TERM PROSPECTS

"Export growth will grow by 3.8% in real terms in 2018, while import growth will increase by about 5.5%. In 2019, export and import growth may be down to 2.3% and 3.5%."

Despite rising uncertainties, trade expansion at both the global and the regional levels is likely to continue in 2018. Exports by the Asia-Pacific region are expected to grow moderately by about 3.8% in volume this year, and imports by 5.5% (table 1.4). The demand recovery and rising fuel and commodity prices will accelerate price increases faster than the trade volume; therefore, trade value will continue to grow at double-digit rates in 2018. Trade in developing Asia-Pacific economies is expected to grow faster than in developed economies. The volume of exports and imports in developing Asia-Pacific economies may grow by 4.2% and 6.2%, respectively.

Rising prices of fuel, industrial commodities and gold will contribute to the dynamic export value growth for countries exporting those products. India's dynamic export performance in 2018 is driven by its robust performance in petroleum, chemical and pharmaceutical exports. In contrast, economic sanctions are a major obstacle to the Islamic Republic of Iran and the Russian Federation being able to reach their full oil-exporting potential.

Unless global trade tensions ease, the region's trade performance in 2019 will decelerate. China may see real export stagnation in 2019. Other countries integrated with China through the international supply chains of manufactured products would also see export growth soften in 2019. Rising economic uncertainty will also threaten foreign direct investment (FDI) and capital investment, which have been an important factor in global demand recovery thus far (chapter 4 discusses the issue in detail). Imports, therefore, will also slow down because of suppressed domestic and external demand. These factors suggest that 2019 may see only modest trade growth unless tensions are eased. The ESCAP forecast is that the export volume of the Asia-Pacific region will grow by 2.3% while imports will increase by 3.5%. Suppressed global economic activity will create downward pressure on price levels. Therefore, the

Asia-Pacific region may not be able to maintain its double-digit growth in trade value in 2019.

The prospect of a long-term trade decline has significant implications for the region's progress towards sustainable development. Many of the main export industries in the region remain relatively labour intensive. A decline in the rate of growth of trade, particularly a contraction of exports, could spell potential hardship for workers, with a downward pressure on wages leading to a fall in demand for domestically produced goods and services. Slower economic growth would in turn hamper the ability of governments in developing countries of the region to address social and environmental concerns and achieve the Sustainable Development Goals by 2030.



ESCAP forecast for merchandise trade growth, by selected Asia-Pacific economy, 2018-2019

(Annual percentage change)

| | Exports | | | | | | Imports | | | | | | |
|--------------------------------------|---------|-----------|--------|-------|-----------|--------|---------|-----------|--------|-------|-----------|--------|--|
| | 201 | 8 (estima | tion) | 201 | 9 (projec | tion) | 201 | 8 (estima | tion) | 201 | 9 (projec | tion) | |
| | Value | Price | Volume | Value | Price | Volume | Value | Price | Volume | Value | Price | Volume | |
| Australia | 16.2 | 13.1 | 2.8 | 3.7 | -1.0 | 4.7 | 20.7 | 8.4 | 11.4 | 4.6 | 1.5 | 3.1 | |
| Bangladesh | 6.0 | 1.2 | 4.7 | 5.5 | 1.8 | 3.6 | 12.0 | -1.7 | 13.9 | 2.5 | -1.1 | 3.6 | |
| China | 9.7 | 4.3 | 5.1 | 2.5 | 1.8 | 0.7 | 13.9 | 5.7 | 7.7 | 3.6 | 2.9 | 0.7 | |
| Hong Kong, China | 7.2 | 2.2 | 4.9 | 4.7 | 2.3 | 2.3 | 7.2 | 2.3 | 4.8 | 5.4 | 2.6 | 2.7 | |
| India | 12.6 | -3.2 | 16.3 | 9.4 | 0.2 | 9.2 | 16.6 | 8.6 | 7.3 | 5.8 | -0.1 | 5.9 | |
| Indonesia | 13.3 | 6.5 | 6.4 | 12.0 | 3.0 | 8.8 | 25.0 | 7.7 | 16.1 | 14.4 | 2.7 | 11.3 | |
| Iran (Islamic Rep. of) | 8.6 | 25.5 | -13.5 | -28.1 | -15.5 | -15.0 | -4.0 | -15.4 | 13.5 | -15.0 | -31.3 | 23.7 | |
| Japan | 7.9 | 6.8 | 1.0 | 6.1 | 5.4 | 0.7 | 9.5 | 10.6 | -1.0 | 9.4 | 5.3 | 3.8 | |
| Kazakhstan | 28.9 | 21.0 | 6.5 | 2.7 | -0.8 | 3.5 | 14.7 | 8.4 | 5.8 | 4.7 | 1.5 | 3.2 | |
| Malaysia | 13.2 | 6.6 | 6.2 | 9.3 | 3.6 | 5.5 | 13.7 | 5.7 | 7.6 | 11.0 | 4.1 | 6.6 | |
| New Zealand | 4.7 | 4.1 | 0.5 | 3.5 | -0.2 | 3.7 | 7.8 | 4.9 | 2.8 | 3.9 | 1.2 | 2.7 | |
| Pakistan | 18.6 | 8.6 | 9.2 | 13.0 | -2.5 | 15.9 | 15.6 | 9.0 | 6.1 | -4.1 | -6.6 | 2.7 | |
| Philippines | 12.3 | 4.4 | 7.6 | 7.2 | 1.7 | 5.4 | 12.3 | 3.8 | 8.2 | 8.3 | 2.1 | 6.1 | |
| Republic of Korea | 25.3 | 19.9 | 4.5 | 4.7 | 0.3 | 4.4 | 16.1 | 8.0 | 7.5 | 8.9 | 0.4 | 8.5 | |
| Russian Federation | 7.4 | 11.1 | -3.3 | 5.0 | 3.3 | 1.6 | 10.5 | 10.5 | 0.0 | 3.4 | -0.1 | 3.5 | |
| Singapore | 8.8 | 7.5 | 1.2 | 7.5 | 6.3 | 1.2 | 11.5 | 7.9 | 3.4 | 7.1 | 2.1 | 4.9 | |
| Sri Lanka | 4.8 | 5.9 | -1.0 | 6.3 | 1.3 | 4.9 | 10.1 | 8.5 | 1.5 | 6.6 | 1.3 | 5.3 | |
| Thailand | 11.6 | 4.4 | 6.9 | 3.0 | 0.7 | 2.2 | 14.0 | 7.8 | 5.7 | 3.3 | -1.3 | 4.6 | |
| Turkey | 10.3 | 8.8 | 1.3 | 5.1 | 2.2 | 2.9 | 1.6 | 0.4 | 1.2 | 0.9 | 2.4 | -1.5 | |
| Viet Nam | 12.1 | 1.7 | 10.3 | 4.9 | -3.1 | 8.3 | 13.6 | 5.1 | 8.1 | 5.9 | -2.5 | 8.6 | |
| Asia-Pacific ^a | 10.6 | 6.8 | 3.8 | 4.4 | 2.1 | 2.3 | 12.4 | 6.9 | 5.5 | 5.3 | 1.7 | 3.5 | |
| Developed Asia-Pacific ^a | 9.8 | 8.4 | 1.4 | 5.4 | 3.6 | 1.8 | 12.1 | 10.1 | 2.0 | 7.9 | 4.3 | 3.6 | |
| Developing Asia-Pacific ^a | 10.8 | 6.5 | 4.2 | 4.2 | 1.8 | 2.4 | 12.4 | 6.3 | 6.2 | 4.8 | 1.3 | 3.5 | |

Source: ESCAP calculations based on data from the Economist Intelligence Unit database (accessed October 2018).

Notes: The estimated growth rates are calculated based on constant prices (in 2010 terms).

^a Trade growth is the trade-weighted, time-varying average growth rate.

Endnotes

- ¹ The GDP data are taken from the International Monetary Fund, World Economic Outlook, April 2018 (accessed October
- According to the World Bank's 2016 Logistic Performance Index, Hong Kong, China; Japan, Republic of Korea and China ranked second, third, fifth and sixth, respectively among the Asia-Pacific economies in terms of overall logistic performance (Singapore ranked first and Australia ranked fourth).
- See table 1.1 for details of major exported products by subregion.
- See APTIR's country and subregional briefs for more details.
- Further details about the definition of GVCs and their relation to economic development can be found in APTIR 2015.
- In this section, the products of interest are classified based on the work of Sturgeon and Memedovic (2011), which relies on the Standard International Trade Classification (SITC) Revision 3 and the Broad Economic Categories (BEC) nomenclatures. Hence, there may be some minor discrepancies between the figures presented here and those presented in the preceding sections, which are based on the 2-digit Harmonized System (HS) nomenclature.
- During the period for which the data are available (2011-2016), there appears to have been no significant change in the
- The only exception is final automotive products exports, where the share is still minimal.

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