ASIA-PACIFIC TRADE AND INVESTMENT REPORT 2018Recent Trends and Developments







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United Nations publication
Sales No. E.19.II.F.3
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ISBN: 978-92-1-120783-5
e-ISBN: 978-92-1-047596-9

ISSN: 2221-500X ST/ESCAP/2846

Reference to dollars (\$) are to United States dollars unless otherwise stated.

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FOREWORD

International trade and Investment are recognized in the 2030 Agenda for Sustainable Development as the key means of implementation of sustainable development. Trade and investment have been essential engines of growth for the Asia-Pacific region and the world, lifting millions out of poverty during the past 40 years and establishing the region as an economic powerhouse. The world's second- and third-largest economies are now Asian countries, both of which are also among the world's leading merchandise traders and foreign direct investors.

The relatively rapid shift in the world economic centre of gravity towards Asia and the Pacific and other developing world regions during the past two decades - as well as the lack of adequate social policies to support those affected by the reallocation of resources inherent to the opening up of trade and investment has resulted in a backlash against multilateralism in some developed economies. Strong disagreements have emerged on how and even whether to "promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the WTO", as specified in target 17.10 of Sustainable Development Goal 17.

Meanwhile, as discussed in this report, trade tensions have increased, particularly between the United States and China, with significant potential spillovers to other economies in and outside the Asia-Pacific region. These trade tensions have led to many countries implementing a significant number of new protectionist measures. Consequently, this report foresees a sharp slowdown in trade growth in 2019 for Asia and the Pacific as well as a continuing decline in foreign direct investment.

I would like to highlight two take-aways from the analysis of trade tensions presented in the report. The first is that neither China nor the United States can win a trade war; both countries will see significant economic losses from continuing conflict. Second, regional integration can play a very powerful and effective stabilizing role. Implementation of mega-regional trade agreements such as the Regional Comprehensive Economic Partnership, which would bring 16 regional economies together, has the potential to offset economic losses for the region caused by a further rise in trade tensions with countries outside the region.

Looking ahead, I would like to encourage all ESCAP member States to refrain from taking unilateral protectionist measures not consistent with multilateral trade rules. Instead, all member States should focus their efforts on reforming the multilateral trading system through negotiation and consensus. The ESCAP secretariat stands ready to support such efforts as well as help Asia-Pacific countries strengthen regional cooperation and integration towards sustainable development.

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Director

Trade, Investment and Innovation Division

December 2018

ACKNOWLEDGEMENTS

The Asia-Pacific Trade and Investment Report (APTIR) 2018 was prepared under the overall guidance of Mia Mikic, Director, Trade, Investment and Innovation Division (TIID) of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). Under the joint substantive direction of Yann Duval and Mia Mikic, the core team of authors included the following TIID staff: Witada Anukoonwattaka (chapters 1, 2 and 4); Alexey Kravchenko (chapter 4); and Soo Hyun Kim and Marc Proksch (chapter 3). Heather Lynne Taylor-Strauss and Yuhua Zhang contributed significant inputs to chapters 1 and 4, respectively. Badri Narayan, an ESCAP consultant, also contributed to the impact analysis presented in chapter 4.

Several ESCAP interns, provided research assistance for the Report under the guidance of ESCAP staff, including preparation of data, contribution in the drafting process, finalization of the report and preparation of dissemination materials. The list of ESCAP interns contributed to APTIR 2018 in alphabetical order includes: Corentin Mahmoud Daniel Billard, Jiayi He, Varan Kitayaporn, Richard Sean Lobo, Quynh Huong Nguyen, Jhanvi Trivedi, Weijie Yu, Warittha Srisermwongse and Sonam Wangdi. ESCAP support staff also contributed to data preparation. They include Pakkaporn Visetsilpanon of TIID providing data assistance, and Krisana Boonpriroje of the ESCAP Statistics Division preparing the trade performance indicator tables used in APTIR and available on the ESCAP online statistical database.

Several collaborators and researchers from ARTNeT institutional members as well as interns assisted in translating the country briefs into various languages for more effective dissemination. Ekaterina Silanteva, an ESCAP consultant, also provided assistance. We are grateful to all those in the ARTNeT community and beyond who contributed to these endeavours.

Special acknowledgement and appreciation is extended to Mahinthan Mariasingham and colleagues from the Statistics and Data Innovation Unit at ADB for providing Asian Development Bank Multi-Regional Input-Output Tables and peer reviews. Other peer reviewers from ESCAP and other institutions who provided useful comments and suggestions to ensure the quality and relevance of this year's APTIR includes: Prabir De, Evan Due, Simon Evenett, John Gilbert, Zhengian Huang, Alberto Isgut, José Durán Lima, Patrick Low, Biswajit Nag, Alessandro Nicita, Alberto Posso, Ben Shepherd and Susan Stone.

Robert Oliver edited this Report, while Charuwan Chongsathien of TIID assisted in final checks. The graphic concept, design and layout were carried out by Erawan Printing. The Strategic Communications and Advocacy Section, Chen-Wen Cheng and Yuhua Zhang also collaborated in disseminating and communicating the APTIR findings through media outlets, while Praiya Prayongsap helped with arrangements for timely online publication and ensuring that APTIR 2018 is accessible by readers worldwide.

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ABBREVIATIONS AND ACRONYMS

ADB Asian Development Bank

APEC Asia-Pacific Economic Cooperation

APTIAD Asia-Pacific Trade and Investment Agreement Database

Asia-Pacific Trade and Investment Report APTIR ASEAN Association of Southeast Asian Nations

BITs bilateral investment treaties BRI Belt and Road Initiative

CEPA Comprehensive Economic Partnership Agreement

CGE computable general equilibrium

CLMV Cambodia, Lao People's Democratic Republic, Myanmar and Viet Nam

Comtrade United Nations Commodity Trade Statistics Database

CPTPP Comprehensive and Progressive Agreement for Trans-Pacific Partnership

EAFU Eurasian Economic Union **EEC** Eastern Economic Corridor European Free Trade Association **EFTA** EIU Economist Intelligence Unit

United Nations Economic and Social Commission for Asia and the Pacific **ESCAP**

FDI foreign direct investment

FIPB Foreign Investment Promotion Board

FTA free trade agreement foreign value-added **FVA**

GDP gross domestic product GTA Global Trade Alert

GTAP Global Trade Analysis Project

GVC global value chain

ICT information and communications technology

ICTSD International Centre for Trade and Sustainable Development

international investment agreements IIAs

IMF International Monetary Fund **ISDS** investor-State dispute settlements

ΙT information technology

KORUS Korea-United States Trade Agreement

LDCs least developed countries

landlocked developing countries LLDCs

MFN most-favoured-nation MNEs multinational enterprises MRIO Multi-Region Input-Output NAFTA North American Free Trade Agreement

NDRC National Development and Reform Commission

NTMs non-tariff measures

OECD Organisation for Economic Co-operation and Development

PACER Pacific Agreement on Closer Economic Relations

R&D research and development

RCEP Regional Comprehensive Economic Partnership

RTA regional trade agreement

SAARC South Asian Association for Regional Cooperation

SDGs Sustainable Development Goals

SEZ special economic zone

SIDS small island developing States
SOEs state-owned enterprises
SPS sanitary and phytosanitary

STRI Services Trade Restrictiveness Index

TBT technical barriers to trade
TFA Trade Facilitation Agreement
TIPs treaties with investment provisions

TPP Trans-Pacific Partnership

UNCTAD United Nations Conference on Trade and Development

UNWTO United Nations World Tourism Organization USMCA United States-Mexico-Canada Agreement

USTR Office of the United States Trade Representative

WITS World Integrated Trade Solution WTO World Trade Organization

WTTC World Travel and Tourism Council

EXECUTIVE SUMMARY

The year 2018 has been an eventful period for international trade and investment. The trade protectionist rhetoric of 2017 has morphed into concrete policy actions that have triggered bilateral and sectoral trade wars. The continued blockage of the appointment of new judges to the World Trade Organization (WTO) Appellate Body has also made the binding dispute settlement mechanism almost completely ineffective in addressing the growing trade tensions or in clearing the backlog of old disputes. A number of WTO members have started to put forward reform proposals for addressing the growing concerns about the multilateral trading system and the future of WTO. Despite a show of willingness among WTO members to deal with these issues, achieving consensus will take time during which trade tensions are unlikely to weaken and may further escalate.

In that context, this year's Asia-Pacific Trade and Investment Report tracks trade and investment trends in Asia and the Pacific since 2017, i.e. trade in goods, trade in services and foreign direct investment. The report places a special focus on related policy developments and provides a forward-looking analysis of the potential impact of existing and potentially increasing trade tensions on Asia and the Pacific. Highlights from the report are summarized below.

The Asia-Pacific region increased its share of global merchandise trade further to 38.5%, thanks to double-digit growth in the value of both exports and imports during 2017

The region accounted for 39.8% of global merchandise exports and 36.5% of global merchandise imports, and remained the largest trading partner globally for trade in goods. This was achieved because the region again surpassed global trade growth and registered double-digit growth rates of 11.5% and 15% for exports and imports, respectively, in 2017. Such dynamic trade growth, leading to a further increase in the Asia-Pacific region's share of global trade, meant a break in the unprecedented five-year period of trade contraction prior to 2017. However, there is no great optimism that such dynamic growth can be sustained beyond 2018.

Higher prices helped to keep trade value growth above 10% in 2018, despite a trade volume growth slowdown

In the second half of 2018, trade growth decelerated significantly, which could be attributed to higher production costs and risks associated with rising fuel prices and increasing trade tensions between large economies, especially the United States and China. The increase in trade tensions has damaged trade and investment climates, thus raising uncertainties and volatilities in the global markets. Therefore, merchandise trade value in 2018 is expected to record slower growth than in 2017, although still at a double-digit rate. The growth was driven more by increased prices of goods than growth in trade volume. The value of regional exports is expected to grow by 10% in 2018, while imports may increase in value by 12%. However, in terms of volume, export and import growth rates for the year are expected to stand at only about 3.8% and 5.5%, respectively.

A further trade slowdown to 2%-3% growth in real terms is expected in 2019, unless trade tensions ease

The region's trade performance in 2019 is expected to worsen if trade tensions between the United States and China, and possibly other economies, remain or deepen. ESCAP anticipates that the export volume of the Asia-Pacific region may slow to 2.3% in 2019, while import growth may drop to 3.5%. China may see

its real exports stagnate in 2019. Other countries integrated with China through international manufacturing supply chains may also expect their export growth to soften further in 2019. Rising economic uncertainty may also delay foreign direct investment (FDI) and other capital investments that have been important drivers of global demand recovery thus far.

Trade in commercial services has experienced strong recovery since 2017

Commercial services trade recovered in 2017, with the value of exports and imports growing by 7.9% and 6.3%, respectively. Exports by all service sectors in 2017 grew above their long-term trends. Construction services and services linked to intellectual property rights protection recorded the most dynamic export performance in 2017. A major factor in the outstanding performance of construction services trade was the implementation of infrastructure projects in developing countries, including projects associated with the Belt and Road Initiative. The rapid expansion of intellectual property rights protection services is an indication of the expansion of digital and innovative economy.

Services export growth is driven by a handful of economies, especially China and India

The Asia-Pacific region has outperformed the rest of the world with higher growth of commercial services exports and imports. The share of world exports in commercial services captured by the Asia-Pacific region increased from 22% in 2005 to 28% in 2017, while its share of world imports grew from 28% to 32%. The positive services trade performance was driven mainly by the rapidly growing roles of China and India. These two economies, together with Japan and Singapore, accounted for more than half of the services trade in the region. More than 80% of services trade in the region was concentrated in only 10 economies.

Services export growth is likely to ease to 4%-5% in 2019, while import growth is expected to rebound slightly from 2018 to exceed 6% in 2019

As global demand both for goods and services decelerated during the second half of 2018, ESCAP estimates that the growth in value of commercial services exports will stand at 5%-6% in 2018. Growth in services imports may also ease to about 4% in 2018. In 2019, export growth is expected to soften further to 4%-5%. In contrast, services import growth may rebound slightly to above 6% in 2019, mainly because of intraregional demand for services for supporting digital economy expansion.

FDI inflows to Asia and the Pacific are expected to drop by 4% in 2018, a downward trend that is likely to continue into 2019

Since 2017, FDI inflows have fallen, both globally and in the Asia-Pacific region. While global FDI inflows dropped by 23% in 2017, the drop was only 2% in the region. However, greenfield FDI inflows, suffered a sharp drop by 40% in the region, compared to 13% worldwide. FDI inflows to the region are expected to witness a further decline by 4% in 2018, a trend that is likely to continue into 2019.

Globally, the Asia-Pacific region remained the most important destination and source of FDI, led by China and ASEAN

The region attracted 39% of global FDI inflows in 2017. China and Hong Kong, China accounted for 43% of total FDI inflows to the region. For greenfield FDI, ASEAN and China together attracted more than 50% of the total inflow. The Asia-Pacific region is also a major source of FDI, making up 36% of global FDI outflows. Intraregional greenfield investment accounted for nearly half of the greenfield FDI inflows to the region in 2017. Japan, China and Hong Kong, China were the three largest investors in the region. Compared with East and North-East Asia, and South-East Asia, FDI inflows to other subregions have been limited due to disadvantages related to geography, substandard business environment and limited participation in global value chains (GVCs).

Policy and structural factors both contributed to weakening investment

Policy changes are a major factor in explaining the drop in FDI. The repatriation of foreign earnings in response to tax reforms in the United States is one of the factors responsible for the weakening of FDI. China, the major investor country in the Asia-Pacific region, also implemented more restrictive policies concerning outward FDI in order to maintain the levels of foreign exchange reserves and value of its currency. Policy uncertainties associated with the ongoing trade tensions have also increased risks for investors. As for structural factors, a key trend has been a shift of FDI to intraregional sources. The slowdown of intraregional investment flows, particularly from China, was one of the factors contributing to the drop in FDI inflows in 2017. Some of the fastest-growing sectors are also digital economy-related sectors, which require fewer physical assets such as e-commerce business.

Further escalation of the United States-China trade war is possible in 2019

This year has been marked by rising trade tensions between the United States and other economies. particularly China. In the first half of 2018, the world's largest economy initiated a number of trade remedy procedures, unilaterally raising United States tariffs on targeted products, especially steel (25%) and aluminium (10%) products. More recently, on grounds of unfair trade practices, the United States also imposed higher 10% tariffs on a large number of Chinese imports. China and other affected economies, including Canada, India, the European Union, Mexico and Turkey filed WTO disputes against the United States and some retaliated by imposing higher tariffs on selected imports from the United States. The threat to include all imports from China on the increased tariff lists has made the escalation of the bilateral conflict between the world's two largest economies a real possibility in 2019. However, the 90-day truce agreed between President Trump and President Xi Jinping on the side of the G20 summit in December provides some hope of a compromise.

The protectionism trend is broad and not limited to bilateral or sectoral trade conflicts

The trend towards increasing trade and investment protectionism across the board is evident. Policy changes from 2017 to 2018 point to an accelerated imposition of restrictions on trade in goods, increasing restrictiveness of trade in services and more reservations on FDI. At the global level, the number of new discriminatory measures reached a record figure (88 per month) and largely exceeded the number of new liberalizing measures (32 per month) implemented in the same period. Similarly, in Asia and the Pacific, the number of new discriminatory measures introduced by economies of the region (33 per month) was more than double the number of liberalizing measures. Several Asia-Pacific economies raised the restrictiveness of trade in services, which could make their engagement in Industry 4.0 more difficult.

Asia-Pacific economies are not only a target, but are also active users of discriminatory trade measures

Asia and the Pacific are an important target as well as contributor of discriminatory trade measures, in part because the region is a major exporter of some of the products and sectors subject to trade conflicts. More than 30% of the newly implemented discriminatory measures affected the Asia-Pacific region. Notably, about a third of these measures were introduced by countries in the region. India, China, Indonesia and Australia contributed more than 70% of them. While the share of intraregional discriminatory measures decreased in 2018, it was only because of the more rapid growth in protectionism outside the region.

Tariffs are just a small part of a whole array of protectionist actions

Contrary to the global worries about the increase of bilateral tariffs, other forms of trade distortion measures have been much more often used than tariffs. Alleged subsidies provided to producers and exporters collectively represented more than 40% of trade distortion measures introduced in 2018. In contrast, import tariffs accounted for only 17% of newly implemented measures, while contingent trade-protective measures represented about 15%. Non-tariff measures (NTMs) have also grown rapidly. In particular, about 2,400 new technical barriers to trade (TBT) and sanitary and phytosanitary (SPS) measures have been implemented every year since 2013. While SPS and TBT measures often have legitimate non-trade (public) policy objectives, evidence exists that they are sometimes used as protectionist tools. The trend in the Asia-Pacific region has been similar to the global trend.

Asia and the Pacific accelerated their economic integration intra- and interregionally

Asian and the Pacific economies have signed 18 new free trade agreements (FTAs) since 2017, including the Comprehensive and Progressive Trans-Pacific Partnership (CPTPP), a mega-regional agreement involving 11 economies, seven of which are in the Asia-Pacific region. In addition, negotiations of another mega-regional agreement between 16 regional economies, the Regional Comprehensive Economic Partnership (RCEP), have also gathered pace with signature expected in 2019. Negotiations between such a large group of different economies has been difficult, but trade tensions as well as uncertainties about the future of the multilateral trading system have given new impetus to this and other regional integration initiatives. China and other Asian economies appear to be keen to speed up the negotiation and implementation of trade deals with each other. At the same time, they are also seeking new partners outside the region as a means of diversifying and strengthening economic resilience within a regional trade architecture dominated by the United States and China. A highlight in 2018 in this regard was the signing of the European Union-Japan Economic Partnership Agreement. The agreement has become one of the largest and most comprehensive FTAs, covering approximately 30% of the world GDP and 40% of world trade.

Escalating tariff wars may reduce global GDP by more than \$200 billion

ESCAP estimates, based on computable general equilibrium (CGE) simulations, reveal that the current trade war will have detrimental impacts globally and regionally. Global and regional trade flows are set to slow, particularly in the short term, as ongoing United States-China tensions disrupt existing supply chains and dampen investor confidence. While China and the United States experience economic losses under all scenarios, Asia-Pacific economies are affected by a significant loss of demand for intermediate products and commodities from China. ESCAP estimates that global GDP could fall by nearly \$215 billion if the tariffs threatened in 2018 materialize in 2019. In the Asia-Pacific region, the adverse impacts on China could drive the regional GDP down by about \$60 billion. In the case of a prolonged trade war in which investor confidence declines significantly, the cost of adverse impacts increases to about \$400 billion at the global level.

As trade frictions reshape GVCs, winners and losers are likely to emerge, with South-East Asia well positioned to benefit in the medium term

In the medium term, trade frictions could significantly affect the configuration of GVCs, particularly if those frictions remain essentially bilateral. As importers in the United States and China look for alternative suppliers, new opportunities will open up for economies that can leverage their competitiveness to attract the redirected trade and investment. Although the relocation of production will not be completed overnight, and will cause short-term pains in all economies involved in GVCs, ESCAP estimates that ASEAN members are some of the largest potential beneficiaries, especially Viet Nam. The retaliatory tariffs imposed by China and other economies on the United States' exports of agricultural and industrial commodities could also increase export opportunities for some commodity-based economies. However, GVC redirection and trade flows induced by trade tensions are not optimal – nor stable. Policy distortions affecting decisions of multinational enterprises to relocate may create inefficiency-related losses as production moves to second-best locations. Trade tensions may also lead investors to postpone investments until policy uncertainties decrease.

The Asia-Pacific region may weather worsening trade tensions and global policy uncertainties through continued regional integration

Deepening market integration in the region is an effective strategy for minimizing the adverse consequences of rising global trade tensions. ESCAP simulations suggest that, for the region as a whole, regional integration could more than offset the impacts of the ongoing trade war. Implementation of mega-regional deals (RCEP, CPTPP and the European Union-Japan) could boost regional exports by 1.3% to 2.9%, depending on the severity of global trade tensions. With regional integration, even with the "doomsday" trade war scenario, regional employment could actually increase by more than 3.5 million jobs, while still falling globally. Asia-Pacific economies that are not involved in regional trade integration efforts are found to be losers when global trade tensions increase. These results show that regional cooperation has become a vital means for Asia and the Pacific to increase economic resilience and mitigate adverse impacts from external trade policy shocks.

As trade tensions and regional integration lead to resource reallocation, both within and across borders, complementary policies will, more than ever, become necessary

The computable general equilibrium simulations of alternative trade war scenarios highlight the fact that discriminatory trade policies may have potentially serious impacts on resource allocation, efficiency and the environment in the region. The trade conflict will push production to more expensive locations, reducing resource efficiency globally. Some of the production activities may, for example, shift from China to economies with lower environmental standards, leading to higher global emissions. Importantly, as many of the main export industries in the region are relatively labour-intensive, a contraction of exports could spell at least temporary hardship for many workers as GVCs are redrawn. ESCAP estimates that, at a minimum, Asia and the Pacific will see a net loss of 2.7 million jobs if the trade tensions are not resolved. Employment losses will be 66% higher for unskilled workers, compared with those for skilled workers. As production shifts take place and resources are reallocated across sectors and borders, tens of millions of workers will see their jobs displaced and be forced to seek new employment. Those with lower skill sets or who are less mobile - often women - will face higher risk of unemployment. Regional integration, accompanied by efforts to simplify and digitalize trade as well as improve the business environment, will be an important factor in creating new economic opportunities. However, other complementary policies, such as social protection, labour and education policies to support people negatively affected by trade frictions and integration efforts, must also be placed high on the policymakers' agenda if the region is to continue its progress towards the Sustainable Development Goals.



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.

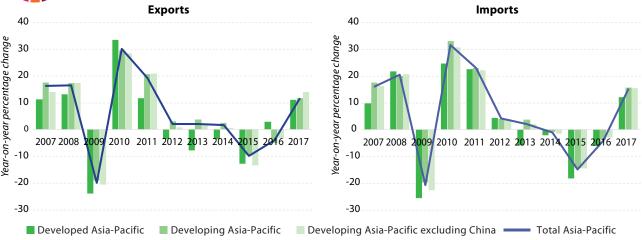
A. OVERVIEW

"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."

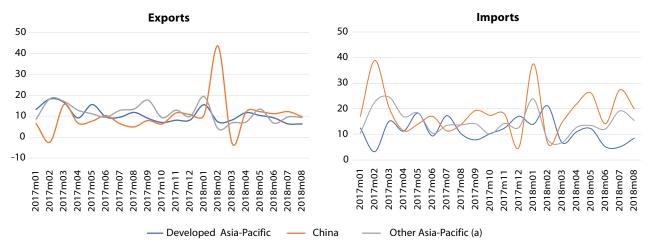
Asia and the Pacific entered 2018 with a steady growth in trade value. The value of exports and imports generally showed a double-digit growth rate during the first eight months of 2018 (figure 1.2). Imports, in particular, grew faster than exports in most of the region's developing countries. However, 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.



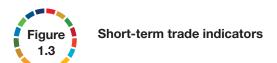
Year-on-year monthly trade growth in Asia and the Pacific, 2017-2018

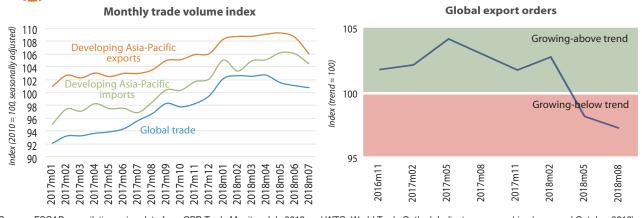
(Percentage)



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

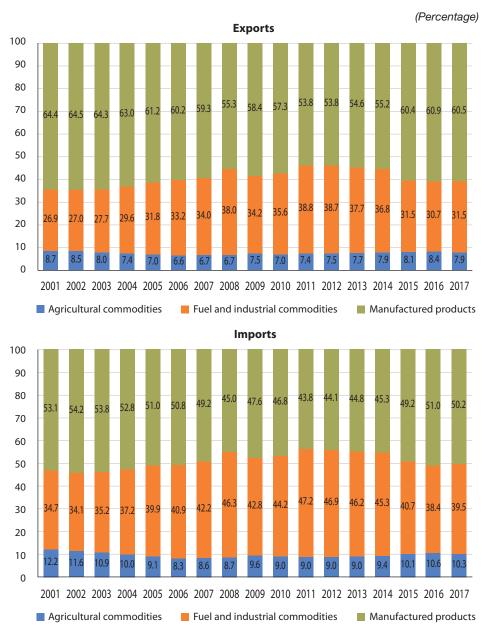
"Manufactured products retain dominance in Asia-Pacific trade."

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."

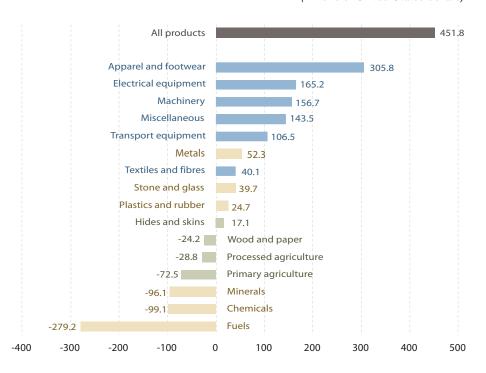
Electrical equipment remained an important trade sector for Asia and the Pacific, accounting for 23% and 22% of the region's exports and imports, respectively, in 2017. The region's trade in electrical equipment had a strong presence in the global market, registering 59% of the world's exports and

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.

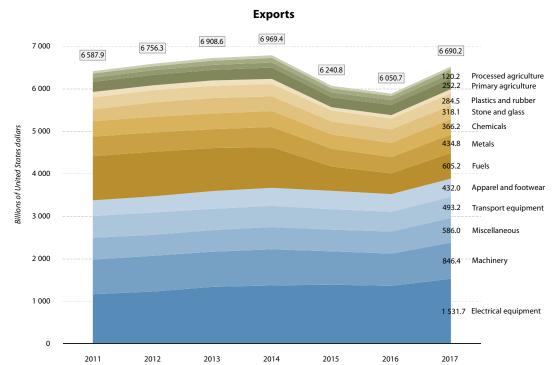
"Trade in most products experienced a good rebound in 2017, but many still lagged behind the historical peak in 2011-2014."

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.

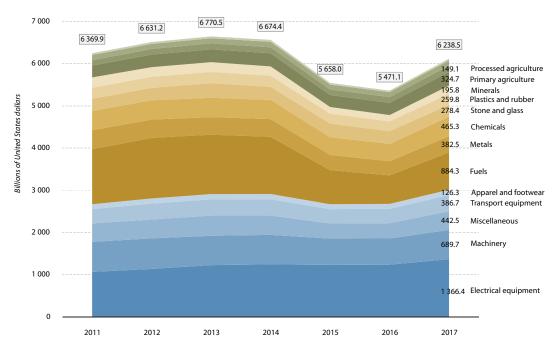
On the other hand, trade in GVC-related sectors was relatively resilient. Electrical equipment in particular suffered a minor decline in trade in 2015-2016. From 2013 to 2017, the trade in electrical equipment grew at a compound annual growth rate (CAGR) of 3.6% for exports and 3.1% for imports. Other 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."

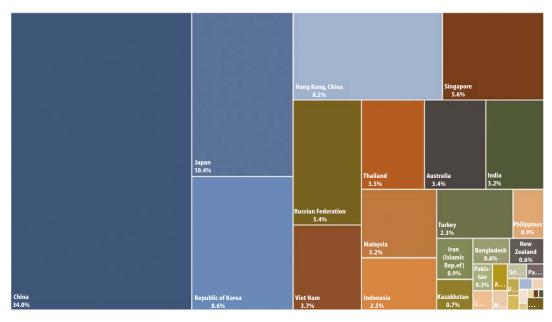
Asia-Pacific's merchandise trade is heavily concentrated within four East and North-East Asian economies, namely, China, Japan, the Republic of Korea and Hong Kong, China, which collectively accounted for more than half of the region's trade value in 2017 (figure 1.7). The dominant position of

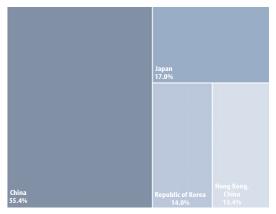
these four economies was associated with (a) their significant share (about 63%) of the region's gross domestic product (GDP) in 2017,1 (b) being producers of high-value and high-tech products in regional value chains, and (c) having a relatively superior logistical capacity to handle large volumes of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

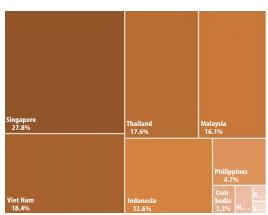
Similarly, at the subregional level, trade tends to be concentrated in the dominant economy of each subregion. The Russian Federation and Australia accounted for more than 80% of trade in their subregions. China represented more than half of East and North-East Asia's merchandise exports. India



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

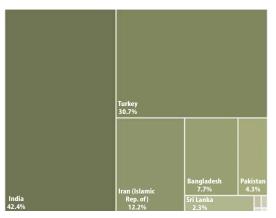


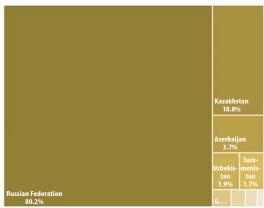


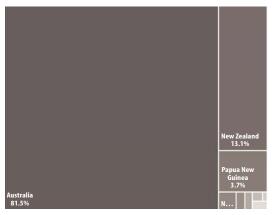




(continued)







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

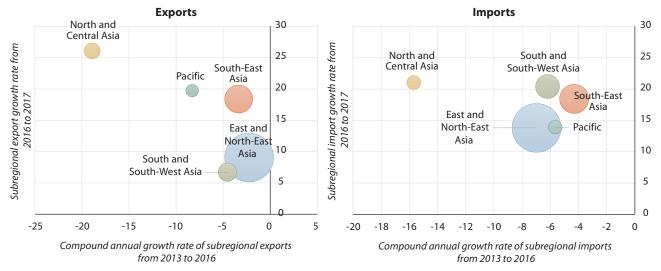
commodity prices, especially for fuel, pushed trade growth of North and Central Asian economies in 2017 to reach 26% and 21% for exports and imports, respectively (figure 1.8). Consequently, trade in North and Central Asia fluctuated more than in the other regions due to a high reliance on exports of 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	Pacific Minerals Fuels Frimary agri.		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

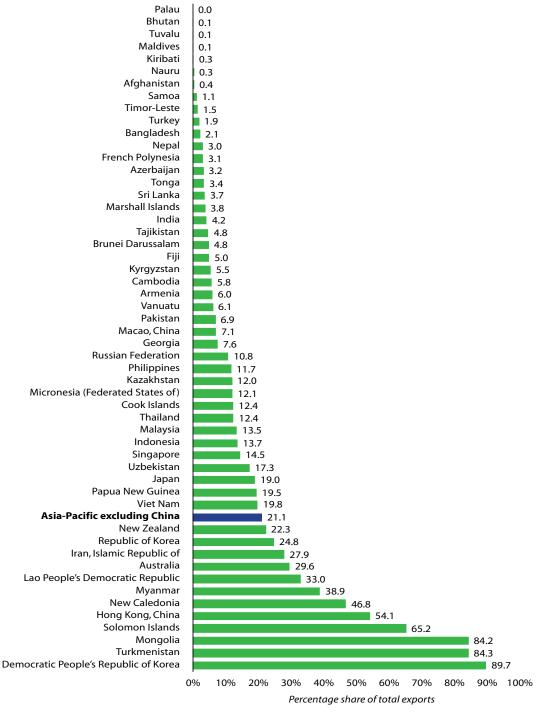
Source: ESCAP calculations using data from the International Trade Centre (accessed July 2018).

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



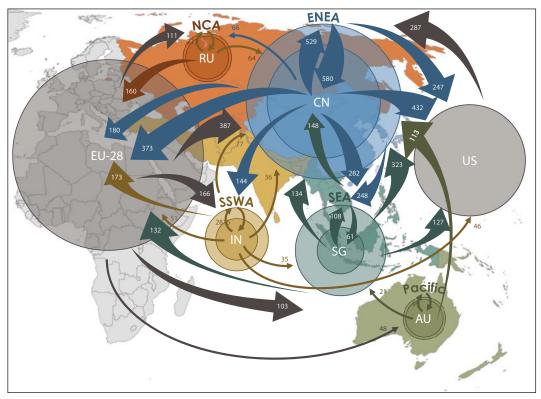
Source: ESCAP calculations using data from the International Trade Centre (accessed July 2018).

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"

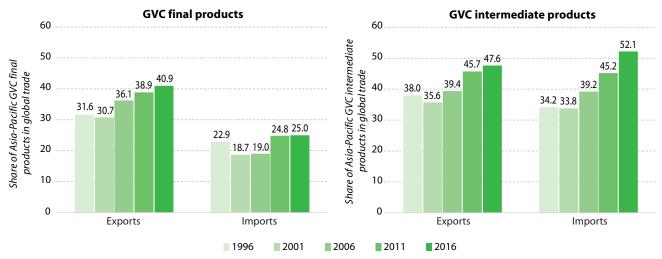
The cross-border movements of intermediate and final products of five industries, namely, apparel and footwear, automotive, electronics, primary agriculture and processed agriculture, are the major elements of trade related to GVCs in the Asia-Pacific region. The exports of GVC-related products by these 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.

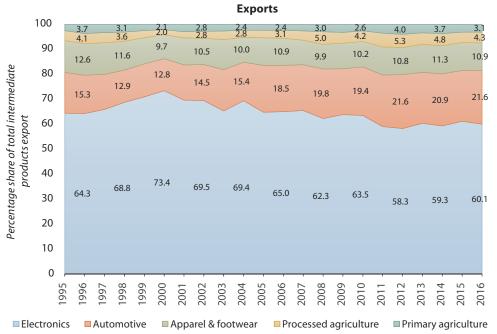
"The importance of intraregional markets as a source of final demand has gradually increased."

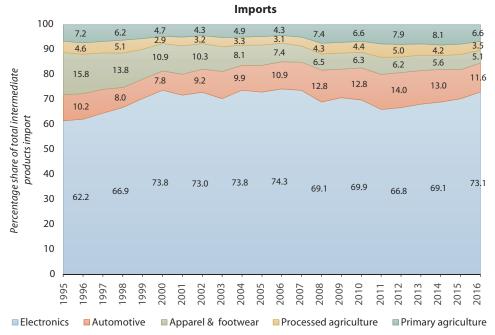
Intraregional demand for GVC-related final products has increased its importance. Intraregional exports accounted for about 40% of the total exports of final goods in 2016, which was a significant increase from 31% in 2001 (figure 1.13). The pattern was shared across industries. Intraregional-trade intensity 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

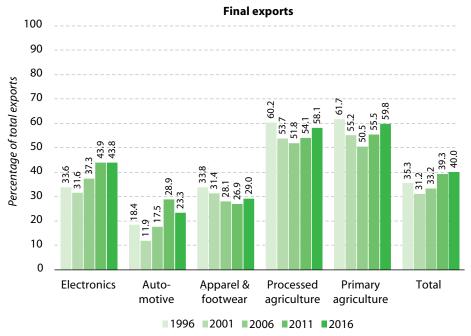


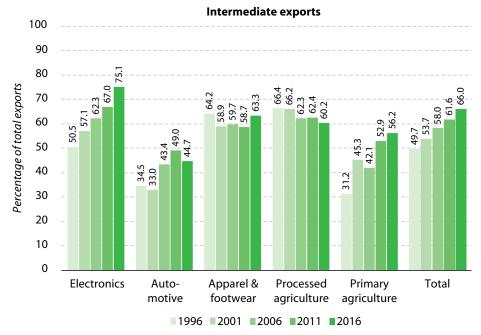


Source: ESCAP calculations using data from the United Nations Comtrade database (accessed through the World Bank WITS database in June 2018).



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).

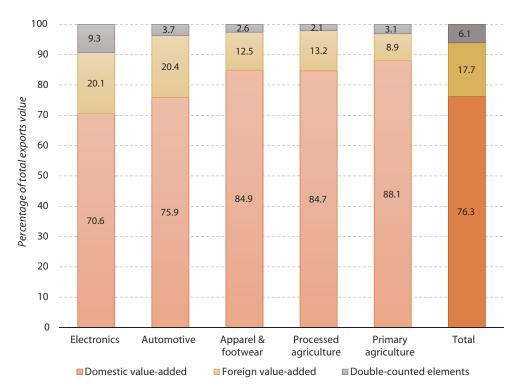
"Imported components accounted for about 20% of the GVC-related exports of the Asia-Pacific region."

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.



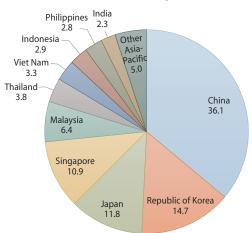
Major exporters of GVC-related products in the Asia-Pacific region, 2016

(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 postcrisis 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)

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	Partially implemented	Fully implemented	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						<u> </u>	
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	B (estima	tion)	201	9 (projec	tion)	2018 (estimation)			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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CHAPTER

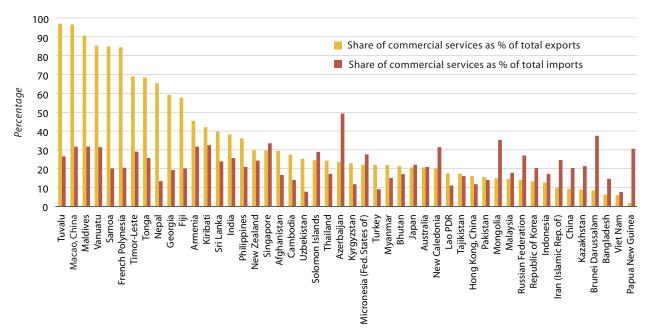


Commercial services trade recovery at risk

This chapter provides an update on trends and developments in commercial services trade in Asia and the Pacific. Commercial services have been an increasingly important trade sector globally and in Asia and the Pacific. Services trade now account for a significant share of total trade in many economies in the region¹ (figure 2.1). Small island economies often depend heavily on exports of commercial services (e.g. travel), while some landlocked developing countries' imports comprise 40% to 50% of services imports (e.g. transport services).



Exports and imports of commercial services as percentages of total exports and imports, by Asia-Pacific economy, 2017



Source: ESCAP calculations based on the WTO International Trade Statistics Database (accessed June 2018).

A. REGIONAL PERFORMANCE

Commercial services trade has picked up strongly since 2017, but growth moderation took place in the second half of 2018. After two years of sluggish performance in 2015 and 2016, commercial services trade, both in the Asia-Pacific region and globally, has returned to its post-crisis growth level. Driven mainly by the recovery of global demand, exports and imports of commercial services in Asia and the Pacific grew by 7.9% and 6.3%, respectively in 2017.2 However, services trade growth was still below the average growth rate before the 2009 crisis (figure 2.2).

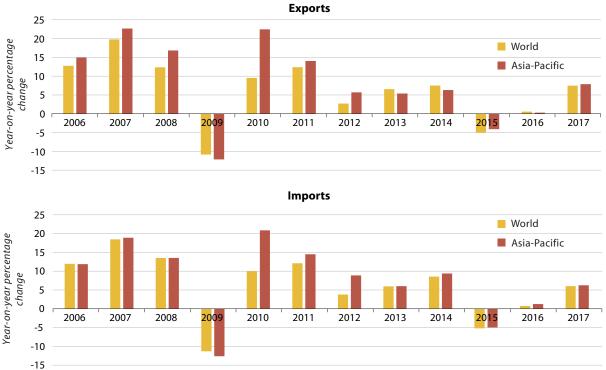
The half-year performance of commercial services trade in 2018 pointed to an upward adjustment, but growth softened when entered the second part of the year. During the first six months of 2018, exports by important exporting economies grew at a higher rate than the previous year's average, especially China and India (figure 2.3). Imports followed the same trend as exports. When entering the second half of 2018, services trade in Japan and Australia tended to stagnate, while trade in China, India and several developing Asia-Pacific economies grew moderately. Most factors contributing to the slowdown of merchandise trade also affect trade in services. Higher costs of fuel passed on to consumers can reduce demand for transport and travel services. In addition, economic slowdown caused by concerns over a trade war may reduce demand for goods and services (chapter 4 discusses the issues in detail).

"The Asia-Pacific region accounted for 28% of world exports and a third of world imports in commercial services in 2017."

The Asia-Pacific region is playing an increasingly important role in global services trade. In 2017, the region represented 28% of global exports and a third of global imports. It was the only region that significantly increased its share in global services trade from 2005 to 2017, and it remained the secondlargest exporting region after the European Union. However, the region remains a net importer of services. The services trade deficit of the region in 2017 (7%) was almost the same level as that in 2005 (9%).



Growth in commercial services trade in Asia-Pacific economies and globally

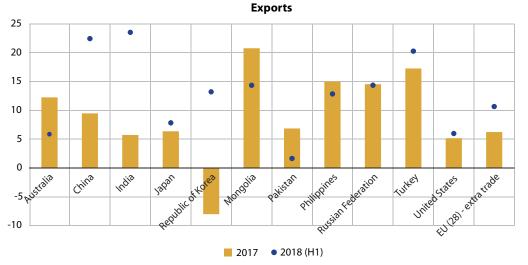


Source: ESCAP calculations based on the WTO International Trade Statistics Database (accessed June 2018).

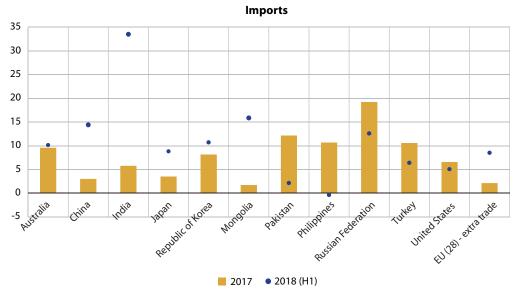


Year-on-year growth of commercial services trade in selected economies, 2017-2018

(Percentage)







Source: ESCAP calculations based on the WTO Short-term Trade Statistics Database (accessed July 2018). Note: Data are available only for selected countries in Asia and the Pacific. H1 refers to the first half of 2018.

B. SECTORAL PERFORMANCE

According to the Balance of Payments and International Investment Position Manual, sixth edition (BPM6) of the International Monetary Fund (2009), commercial services are divided into four broad sectors: (a) transport; (b) travel; (c) goods-related services; and (d) other commercial services. Other commercial services can be further disaggregated into seven subcategories: (a) telecommunications, computer and information services; (b) financial services; (c) charges for intellectual property; (d) construction; (e) insurance and pension services; (f) personal, cultural and recreational services; and (g) other business services. The "other business services" subcategory is usually the largest subcategory, representing almost half of the trade in this group.

"Travel and transport services represented half of the Asia-Pacific region trade in commercial services."

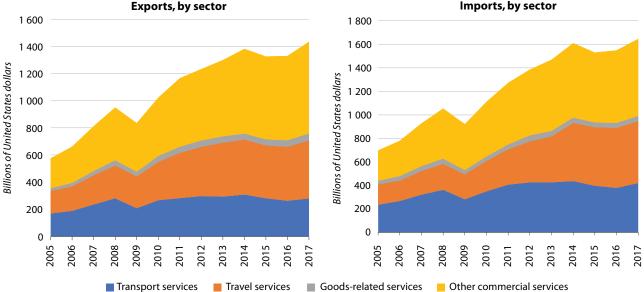
In Asia and the Pacific, other commercial services have formed the largest component, accounting for about half of total exports and 40% of imports in 2017 (figure 2.4). Apart from some traditional services, such as construction, other commercial services also cover a variety of modern services for which trade can take place through the use of information and communications technology. Examples of modern services include business, computers and information, finance and charges for intellectual property. Travel services represented about a third of total trade while transport services accounted around 20%-25%. In contrast, goodsrelated services only accounted for a marginal share of about 3%-4% (figure 2.4).4

Among the four categories, other commercial and travel services recorded a robust export performance during 2005-2017, growing at about 8%-10% per year (figure 2.5). In 2017 alone, other commercial services sector recorded the highest growth rate of 9%, followed by travel services at about 8%. Exports of transport services gained momentum in 2017 and recorded a growth rate of 6.5%, faster than its average growth rate of 4.5% during 2005-2017.

For imports, on the other hand, the two largest services categories grew modestly in 2017 compared



Commercial services trade in Asia and the Pacific, by sector, 2005-2017



Source: ESCAP calculations based on the WTO International Trade Statistics Database (accessed June 2018).

with their long-term average growth rate. In particular, imports of travel services grew by only 3% in 2017. In the Asia-Pacific region, China has been the most important importer, accounting for around half of the total travel imports. The demand slowdown in China in 2017 is a significant factor explaining the slowdown in travel imports. Similarly, imports of other commercial services grew by 6%, less than the long-term average of 8%. This was also due to the demand slowdown of large economies in the region, such as Japan, the Republic of Korea and Singapore. In contrast, transport services was the most dynamic import sector in 2017 with a growth rate of 10%, mainly the result of rising demand for shipping and transportation following the expansion of trade in goods.

Trade recovery in 2017 was uneven across services subsectors."

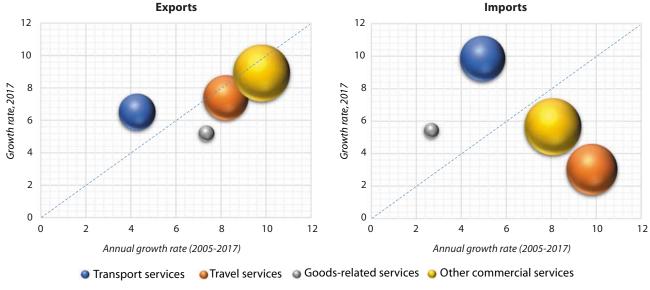
From 2005 to 2017, other commercial services recorded robust trade performance on average. Before the slowdown in the past two years, trade thrived across all subsectors of other commercial services. The most dynamic subsector during 2005 to 2017 was telecommunication services, which recorded an export growth rate of 12% per year. Imports showed the same trend, with telecommunication services as the fastest growing subsector during the 2005-2017 period. In contrast, trade in other business services, the biggest subsector of the group, stagnated. This indicates that the demand recovery in 2017 was concentrated in a few sectors, and that it has not yet trickled down to the recovery of business activities.

Consequently, the recovery in 2017 was uneven across the subsectors of other commercial services. Construction services and services-related to charges for intellectual property saw a strong recovery with double-digit growth rates in 2017, while other subsectors grew modestly (figure 2.6). A major factor in the outstanding performance of construction services was the implementation of infrastructure projects in many countries of the Asia-Pacific region, including projects related to China's Belt and Road Initiative. The rapid expansion of charges for the use of intellectual property is tending to follow the global trend of technology-driven trade and economic growth. In Asia and the Pacific, developing countries - and particularly China, have been investing in technology and innovation with a long-term development objective of shifting from manufacturingled to innovation-led export growth.



Growth of trade in commercial services, by sector

(Percentage per annum)

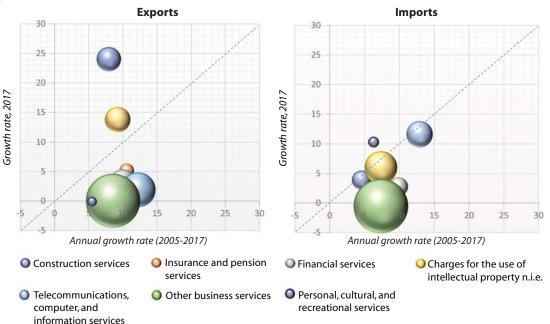


Source: ESCAP calculations based on available data from the WTO International Trade Statistics Database (accessed June 2018). Note: The bubble size represents the share of each category in the Asia-Pacific region's total exports/imports in 2017.



Growth of trade in other commercial services, by subsector

(Percentage per annum)



Source: ESCAP calculations based on available data from the WTO International Trade Statistics Database (accessed June 2018). *Note:* The bubble size represents the share of each subcategory in the Asia-Pacific region's total exports/imports in 2017.

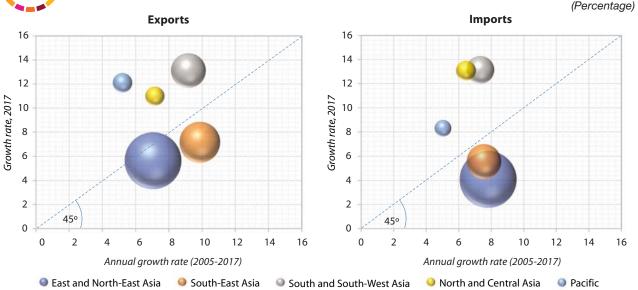
C. SUBREGIONAL AND ECONOMY-LEVEL **PERFORMANCE**

"Trade in services was concentrated within East and North-East Asia, which represented half of the region's services trade."

Similar to merchandise trade, the East and North-East Asia subregion dominates the Asia-Pacific region's services trade. In 2017, the subregion accounted for 47% and 55% of total exports and imports, respectively. The South-East Asia, and South and South-West Asia subregions followed in the second and the third place, respectively, in terms of their share in commercial services trade in Asia and the Pacific (figure 2.7). Together, they represented about 40% of the Asia-Pacific region's total trade in services. Meanwhile. North and Central Asia, and the Pacific shared the remainder of trade.



Growth of commercial services trade, by subregion, 2005-2017



Source: ESCAP calculations based on available data from the WTO International Trade Statistics Database (accessed June 2018). Note: The bubble size represents the share of each subregion in the Asia-Pacific region's total exports/imports in 2017.

"Trade in South and South-West Asia and North and Central Asia was the most dynamic but was highly concentrated in the largest economy of each subregion."

Trade in each subregion was concentrated in several specific countries. In particular, commercial services trade in North and Central Asia, South and South-West Asia, and the Pacific subregions was dominated by the largest economy of each subregion, i.e. Australia (75%),5 the Russian Federation (78%), and India (71%). Concurrently, the high concentration of trade in services was less pronounced in East and North-East Asia as well as in South-East Asia, where there were several important trading economies in each subregion. However, there were also dominant economies: China and Singapore. In 2017, China accounted for 33% and 51% of exports and imports, respectively, in East and North-East Asia. Meanwhile, Singapore represented about 47% of the commercial services trade in South-East Asia.

In 2017, the trade recovery of smaller trading subregions outperformed the large ones. North and Central Asia, the Pacific, and South and South-West Asia experienced the most dynamic expansion in trade in services, with double-digit growth rates. The strong growth of the Pacific subregion was especially evident in its exports; it is positioned above the 45-degree line, indicating that there was a bigger improvement in 2017 compared with the past decade.

"South-East Asia benefited from China's increasing demand."

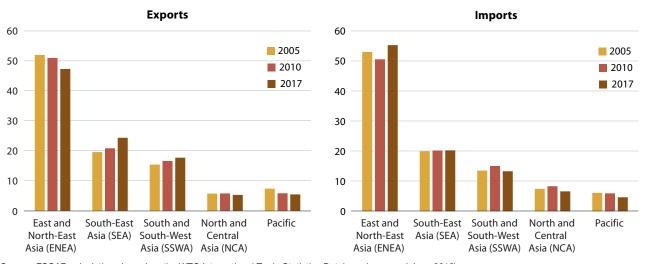
Figure 2.7 also shows that although all Asia-Pacific subregions exhibited a robust performance in trade in services from 2005 to 2017, trade in South-East Asia was exceptionally good as it exceeded the other subregions with a growth rate of 10% per year. On the import side, most subregional trade grew at about 7% per year during the same period, except for Pacific trade which grew slightly slower at 6% per year.

Since the 2008-2009 global economic crisis, there have been notable changes in the distribution of commercial services trade in the region. A substantial increase was recorded in the export share of South-East Asia, from 20% in 2005 to 24% in 2017 (figure 2.8). The increased share of South-East Asia was mainly driven by rising import demand from East and North-East Asia, particularly China which generated considerable intraregional export opportunities for South-East Asian economies such as Singapore and Thailand. Another subregion whose export share has increased over the past decade was South and South-West Asia. Led by computer and information technology services exports from India, the subregion gradually increased its representation in the region's total exports, which expanded from 15% in 2005 to 17% in 2017.



Share of commercial services trade, by subregion, 2005-2017

(Percentage)



Source: ESCAP calculations based on the WTO International Trade Statistics Database (accessed June 2018).

"Economy-level services-trade performance generally improved in 2017, resulting in a robust recovery in the region."

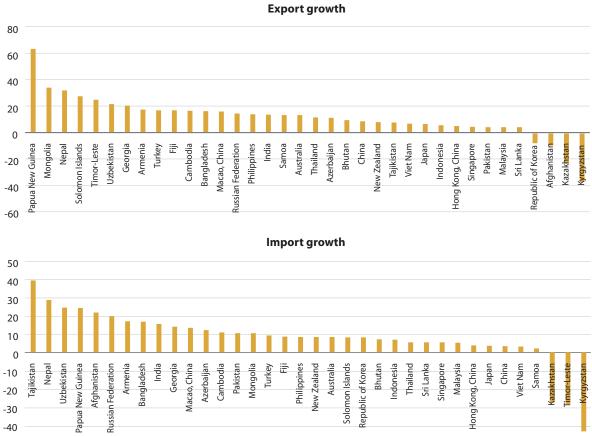
In 2017, most Asia-Pacific economies recorded a service-trade expansion, thanks to the improvement in global and intraregional demand. Twenty economies in the region achieved double-digit export growth rates in 2017; many were smaller economies such as Papua New Guinea, Mongolia, Nepal, Solomon Islands, Timor-Leste and Uzbekistan, whose exports grew by more than 20% from the previous year (figure 2.9). A few economies experienced a decline in trade in services, including Kazakhstan and Kyrgyzstan. Afghanistan and the Republic of Korea also underwent export contraction in the same year, but their imports grew strongly. Overall, the skewness of trade performance toward positive development led to robust regional growth of commercial services trade in 2017.



-50

Growth of services exports and imports, by Asia-Pacific economy, 2017

(Percentage)



Source: ESCAP calculations based on the WTO International Trade Statistics Database (accessed June 2018). Note: Data in 2017 are not available for Brunei Darussalam, Islamic Republic of Iran, Kiribati, Lao People's Democratic Republic, Maldives, Micronesia, Myanmar, New Caledonia, French Polynesia, Tonga, Tuvalu and Vanuatu.

"More than 80% of commercial services trade in the region was concentrated in just 10 economies in 2017."

In 2017, commercial services trade in the region was concentrated in relatively larger economies. The top 10 trading economies represented about 85% of imports and more than 80% of exports in 2017. In particular, China, Japan, India and Singapore collectively represented more than half of the region's total exports of commercial services (figure 2.10). In terms of imports, China alone accounted for about

30% of the region's total imports.

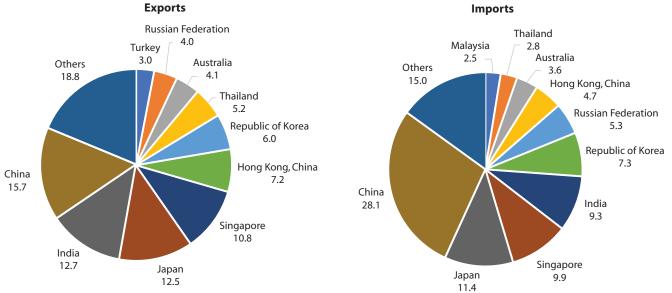
"A remarkable trend in Asia-Pacific services trade during the past decade has been the rising roles of China and India."

China is the largest services exporter in Asia and the Pacific, accounting for 15.7% of the region's services exports in 2017. However, the most dynamic exporter in the region from 2005 to 2017 was India. Although remaining the second-largest exporter after China, India recorded a stronger export growth performance with its share in the region's trade rising by 4 percentage points during that period. On the import side, China has become the largest service



Shares of Asia-Pacific economies in the region's commercial services trade, 2017

(Percentage)



Source: ESCAP calculations based on the WTO International Trade Statistics Database (accessed June 2018). Note: "Others" comprises an aggregate of the remaining Asia-Pacific economies that are not in the top 10 largest exporters/importers in the Asia-Pacific region.

importer in the region and the second-largest importer in the world. The rapid increase in demand by China raised its share of the region's imports by more than 16 percentage points during 2005 to 2017 (figure 2.11). The rising shares of China and India tend to diminish the importance of more advanced economies. The economy that experienced the largest decline was Japan, whose shares in services trade from the region decreased by 5-8 percentage points during 2005-2017.

However, the relatively advanced economies still play a superior role in the region's exports of high-skill and high-tech services, including charges for the use of intellectual property and financial services. Being a world leader in technology and innovation explains why Japan was a dominant exporter of charges for the use of intellectual property (table 2.1). Similarly, the leading role of Singapore and Hong Kong, China in financial services reflects the strong position of the two economies as the hub of global and regional financial services.

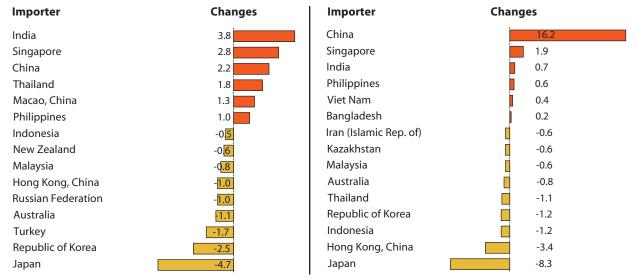
China, as a global assembly hub for multinational manufacturing companies, enjoys a strong advantage in goods-related services, which include manufacturing services, and maintenance and repair services. The country accounted for about half of the region's exports of goods-related services. China also took a leading role in the region's exports of construction, insurance, other business services and travel services. At the same time, India played a particularly prominent role in exporting telecommunications, computer and information services by contributing nearly half of the region's exports.

Notably, export opportunities in travel services, reflecting international tourism demand, were distributed more evenly than in other services. The region's five largest exporters of travel services presented about 48% of total travel service exports in the region, while that of other business services went beyond 60%. Studying the effect of trade on travel services usually shows a mixed picture. On the one hand, travel services potentially create significant amounts of foreign exchange income and jobs. On the other hand, trade in this sector could have adverse environmental impacts if not appropriately managed. Therefore, sustainable tourism has received attention in the 2030 Agenda for Sustainable Development (see box).



Changes in the distribution of commercial services trade in Asia and the Pacific from 2005 to 2017

(Changes in share in percentage points)



Source: ESCAP calculations based on the WTO International Trade Statistics Database (accessed June 2018).



Top five exporters in the Asia-Pacific region, by services subsector, 2017

(Percentage of total Asia-Pacific exports)

Services			Top five exporters		
Goods-related services	China	Singapore	Taiwan Province of China	Russian Federation	Malaysia
Share	46.7	15.0	7.6	6.5	5.6
Transport services	Singapore	China	Japan	Hong Kong, China	Republic of Korea
Share	18.1	13.1	12.0	10.7	8.7
Travel services	Thailand	China	Australia	Macao, China	Japan
Share	13.5	9.1	8.8	8.4	8.0
Charges for the use of intellectual property	Japan	Republic of Korea	Singapore	China	Taiwan Province of China
Share	64.8	11.1	9.3	7.4	2.6
Construction services	China	Japan	Republic of Korea	Russian Federation	India
Share	41.0	17.9	16.1	8.2	3.9
Financial services	Hong Kong, China	Singapore	Japan	India	China
Share	27.6	27.5	14.4	6.2	5.1
Insurance services	Singapore	China	India	Japan	Hong Kong, China
Share	32.5	19.0	11.6	9.1	7.0
Other business services	China	India	Japan	Singapore	Republic of Korea
Share	21.0	20.1	13.8	13.0	7.2
Personal, cultural, and recreational services	Turkey	India	Japan	Republic of Korea	China
Share	16.7	16.3	11.5	10.2	8.5
Telecommunications, computer and information	India	China	Singapore	Philippines	Russian Federation
Share	44.7	22.6	5.1	4.7	3.9

Source: ESCAP calculations based on the WTO International Trade Statistics Database (accessed June 2018).



International tourism: Trends and implications for sustainable development

Tourism is an important economic sector in the Asia-Pacific region. International tourism contributes about 30% of total commercial services exports in the region. Tourism exports has been one of the most resilient and fastest growing components of trade in the region despite the effects of the global economic crisis in 2009.^a After the crisis, intraregional demand from developing economies in the region was robust, particularly in the case of China.^b According to the World Travel and Tourism Council (WTTC), travel and tourism accounted directly and indirectly for about 9.8% of GDP and 9.3% of employment in the Asia-Pacific region in 2017.° The region attracted more than 320 million international tourist arrivals, generating nearly \$390 billion in tourism exports in 2017 (table). By 2028, tourist arrivals are expected to have nearly doubled to 562 million tourist arrivals per year (WTTC, 2018).

Table. Global tourism exports by region, 2015-2017

	Arrivals (billions of people)		Market share (%)		Receipts (billions of United States dollars)			Market share (%)		
	2015	2016	2017	2016	2017	2015	2016	2017	2016	2017
Europe	0.6	0.6	0.7	50.0	50.7	449.6	461.7	511.6	37.3	38.4
Asia and the Pacific	0.3	0.3	0.3	24.7	24.4	349.4	370.8	389.5	29.9	29.2
Americas	0.2	0.2	0.2	16.2	15.7	305.8	313.7	325.7	25.3	24.5
Middle East	0.1	0.1	0.1	4.5	4.4	58.2	59.0	67.8	4.8	5.1
Africa	0.1	0.1	0.1	4.7	4.8	32.8	33.4	37.8	2.7	2.8
World	1.2	1.2	1.3	100	100	1 196	1 239	1 332	100	100

Source: ESCAP calculations using United Nations World Tourism Organization data (accessed July 2018).

The Asia-Pacific region, which is an important exporter of international tourism, captured 25% of global tourist arrivals in 2017. Although the region's export share was still less than the share of Europe, the gap was narrowing due to the dynamic performance of the Asia-Pacific tourism industry following the 2009 global economic crisis. However, most of the exports are concentrated in large economies. In 2017, only seven economies in the region had a share greater than 5% of the entire region's exports in tourism. In contrast, the export performance of 30 economies, which accounted for 0.5% of the entire region's exports, were overshadowed by the export profiles of those seven large economies. This gap can be attributed to the lack of travel and tourism-related infrastructure between advanced and less developed economies in the Asia-Pacific region (World Economic Forum, 2017).

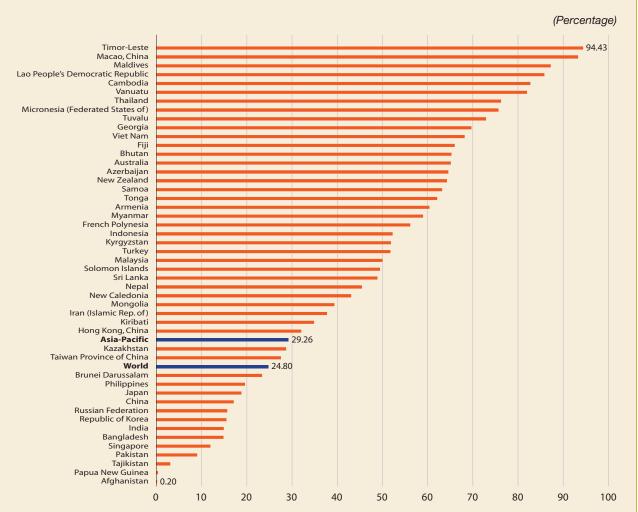
Although their market share is negligible, small developing economies are highly reliant on tourism as a primary source of income. Tourism accounted for more than 50% of commercial services exports in 26 economies of the Asia-Pacific region (figure A). Exports of tourism services accounted for more than 80% of total commercial exports in Cambodia, Lao People's Democratic Republic, Maldives, Timor-Leste and Macao, China.

The abundance of cultural and natural attractions as well as relatively lower costs gives the Asia-Pacific region high tourism export potential. Therefore, in order to maintain this potential, the region should assess the economic, environmental and social impacts of its tourism sector and should further develop the sector in a sustainable manner to ensure a steady inflow of tourists in the future.



(continued)

Figure A. Share of tourism in total exports of commercial services in the Asia-Pacific region, 2017



Source: ESCAP calculations using trade in commercial services data from the WTO Statistics Database (accessed July 2018).

While rapid growth in the number of incoming tourists stimulates an economy via the provision of jobs and the inflow of revenue, the failure to adopt sustainable tourism practices could potentially have long-term adverse impacts on the path towards sustainable development of an economy. For example, the tourism sector accounted for 8% of greenhouse gas emissions during 2009-2013. The rapid expansion of international tourism has led to increasing investment in large hotel lodgings in Asia-Pacific economies. While such investment increases export competitiveness in luxury tourism in the region, ESCAP research has shown that energy and water usage is generally higher in 5-star hotels than in less luxurious hotels in Asia-Pacific economies, regardless of the level of economic development (figure B). These trends indicate that to ensure sustainable and responsible tourism a new model of monitoring and managing tourism services is needed in Asia and the Pacific.



(continued)

Figure B. Energy and water usage per occupied room in Asia-Pacific hotels, 2016



Source: ESCAP calculations using the Greenview Cornell Hotel Sustainability Benchmarking Index, 2018 (accessed September 2018)

D. INTRAREGIONAL TRADE IN SERVICES

From the value-added perspective, less than one third of the region's imports of commercial services have intraregional value added. Therefore, strengthening the competitiveness of services providers in the region as well as regional cooperation to remove services trade barriers, are keys to unlock the region's potential to export services and realize the intraregional trade opportunities.

Estimated using the trade in value-added data, about one fifth of the Asia-Pacific region's services valueadded exports were to countries in the same region, while about a third of the value-added imports were sourced from countries within the region. The low intraregional-trade intensity implies that the global demand for services remains outside the region. It also reflects the fact that regional value chains of services are less developed than those of goods (ESCAP, 2017).

In some subregions, however, export markets within Asia and the Pacific are important. The Pacific and South-East Asia subregions are highly dependent on exports to intraregional markets, especially those in

^a On average, global tourism exports grew by 4% per year from 2009 to 2016. During the economic crisis year, global tourism exports decreased by 5% in real terms, which was a moderate decline compared to the 11% fall in total exports.

^b China's international tourism imports grew almost 8%, making the country the largest tourism importer, accounting for about 21% of global tourism imports. Driven by the rapidly growing demand for outbound tourism from China, the Asia-Pacific region has become the world's largest importer of international tourism. The region's share in global imports of travel and tourism services was nearly 41% during the same period. Tourism imports by China alone accounted more than 50% of the region's total tourism imports.

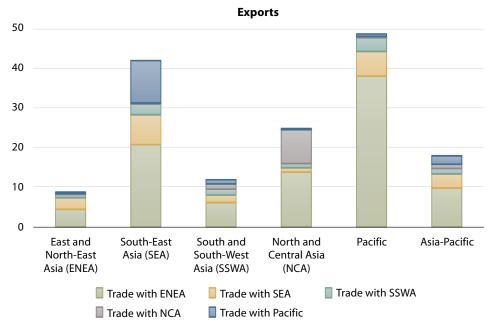
c The numbers include indirect contributions by the tourism sector. Direct contribution includes the impacts from spending on tourism-related sectors such as payments by residents and non-residents for hotels, air travel, travel agents and recreational services that deal directly with tourism. The tourism sector contributes indirectly to an economy through spending in tourism-related sectors, purchases of inputs such as food and beverages, and government spending on the promotion of tourism-related sectors, tourism marketing, tourism security and investment in the tourism sector such as new aircraft, and construction of new hotels etc. (WTTC, 2018).

^d Carbon Brief (2018).



Share of intraregional exports of commercial services, by subregion, 2016

(Percentage of total exports)



Source: ESCAP calculations using trade in value-added data from the Asian Development Bank (accessed June 2018). Note: The shares are estimated based on the set of countries for which data are available.

East and North-East Asia. Almost 50% of services exports by the Pacific subregion were destined for Asia-Pacific economies - about 78% of which went to East and North-East Asia. Similarly, about a half of the exports from South-East Asia went to the East and North-East Asia subregions (figure 2.12). The relatively high intraregional dependence of the Pacific subregion can be explained by travel demand from China. Exports to China alone accounted for a quarter of total services exports by the Pacific, more than 60% of which were travel services. South-East Asia's exports to China accounted for about 9% of the subregion's total exports, while exports to other economies in East and North-East Asia accounted for a further 12%. Travel demand from China and interconnectedness with economies in East and North-East Asia are significant factors in the relatively high intraregional-trade intensity of these two subregions.

Growing demand from East and North-East Asia has made that subregion a primary intraregional market. South-East Asia was a major beneficiary of this demand. About one third of the imports by East and North-East Asia was met by exports from South-East Asia - comprising mainly travel, transport and business services. The second-largest intraregional exporter was East and North-East Asia. These patterns confirmed the strong position of East Asian economies as the hub of regional trade both in goods and in services. In addition, intra-subregional trade was quite substantial within South-East Asia, indicating the interconnectedness of business activities among the ASEAN members. In contrast, the North and Central Asia subregion was the least integrated with other subregions. Most of the subregional demand was met by imports sourced within the subregion, mainly the Russian Federation (figure 2.13).



Share of intraregional imports of commercial services, by subregion, 2016

(Percentage of total imports)



Source: ESCAP calculations using trade in value added date from the Asian Development Bank (accessed June 2018). Note: The numbers are estimated based on available data only. The Asian Development Bank dataset contains detailed data for only 60 economies - the rest are simply labelled as "Rest of the World" - of which, 25 are Asia-Pacific economies. 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.

E. NEAR-TERM PROSPECTS

"Export growth in 2018 will be 5%-6% in terms of value, while import growth will show an increase of about 4%. In 2019, export growth may slow to 4.5% while imports may increase bv 6.5%."

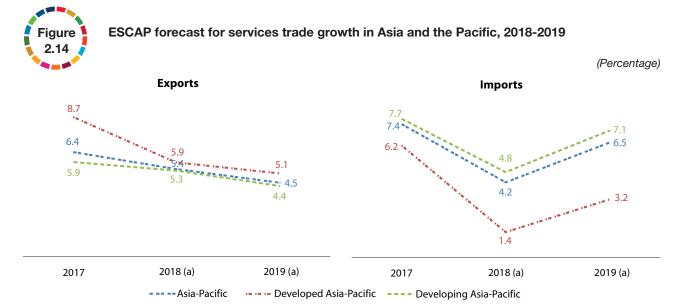
Trade in commercial services has recovered from its two-year sluggish performance during 2015-2016, but the services trade in large economies of the Asia-Pacific region has moderated in the second half of 2018. Several factors will come into play in determining the prospects of trade in services in the Asia-Pacific region in 2019. Among others, the income growth of China and major services importing countries will provide opportunities to services exporters in the Asia-Pacific region. The costs of travel, information and communications will determine the opportunities for travel services and business services. In addition, removing services trade restrictions - such as foreign equity restrictions and capital controls - would help to improve services trade prospects, while imposing restrictions will have a negative impact.

Similar to trade in goods, trade in commercial services is experiencing downside risks arising from trade tensions. Concern over the adverse impacts of trade war has disrupted the momentum of global demand recovery. In addition, as discussed in detail in chapter 4, the chance of trade wars spreading from goods to services cannot be ruled out. For example, conflicts related to the protection of intellectual property could affect trade in services related to research and development, design, information and computer technology between two trade partners.

Against the backdrop of restrained global demand due to trade tensions, ESCAP forecasts that services export growth in the Asia-Pacific region will slow down in the remaining months of 2018 and lessen further in 2019. Export value may grow by about 5%-6% in 2018 and 4%-5% in 2019 (figure 2.14).

Import growth will also ease in 2018, but the robust demand within the region and the growing importance of new business models relying on

digitalization and connectivity could lead to upward adjustment in services imports by the region in 2019.



Source: ESCAP calculations based on data from the Economist Intelligence Unit database (accessed October 2018). Notes: The trade growth is trade-weighted, time-varying estimated growth of commercial services trade in the region. (a) Projections based on available data as of October 2018.

Endnotes

- ¹ The figure is based on official trade statistics, which capture only the gross value of trade. Hence, the size of trade in commercial services tends to be underestimated. (See ESCAP, 2017, for details about the measurements of services trade).
- When countries have no reported data on trade in commercial services, the latest available data from the previous year are used. The countries that are missing aggregated data in 2017 include, i.e. Brunei Darussalam, Federated States of Micronesia, French Polynesia, Islamic Republic of Iran, Kiribati, Lao People's Democratic Republic, Maldives, Myanmar, New Caledonia, Tonga, Tuvalu and Vanuatu.
- ³ Goods-related services include manufacturing services using physical inputs owned by others, and maintenance and repair services. Manufacturing services using physical inputs owned by others are defined as the processing, assembly, labelling, packing, and other. Such processes are undertaken by enterprises that do not own the physical inputs involved. By definition, manufacturing services tend to capture processing exports that are part of the trade in global value chains.
- ⁴ According to WTO (2016), a number of economies are currently in the process of implementing international recommendations in the compilation of goods-related services, and statistics shown under this category are therefore preliminary estimates and should be considered with caution.
- ⁵ New Zealand represented another 20% of trade in the Pacific subregion.

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Foreign direct investment

- A. GLOBAL AND REGIONAL TRENDS IN FOREIGN DIRECT INVESTMENT
- 1. Global and regional Asia-Pacific FDI inflows continue to weaken

According to the United Nations Conference on Trade and Development (UNCTAD), global foreign direct investment (FDI) inflows continued their decline in 2018, following a 23% decrease in 2017 from the previous year, to \$1.43 trillion, with a 41% estimated decrease in the first half of 2018 (UNCTAD, 2018b). The decline was largely concentrated in developed countries and was mainly due to large repatriations of foreign earnings from affiliates of foreign investors from the United States of America following tax reforms implemented by the Government of the United States (UNCTAD, 2018a). Structural changes also contributed to the downward spiral, including an increasing number of asset-light businesses such as e-commerce companies with less physical assets engaging in FDI, and a significant and continued decline in rates of return on FDI, thus lowering investors' appetites for new investments abroad. Other factors accounting for the decline were mega one-off deals and corporate restructuring. (UNCTAD, 2018a)

"The Asia-Pacific region stood firm as the largest recipient of FDI, despite a decline in the level of FDI inflows."

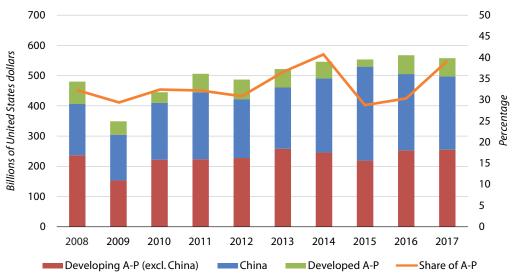
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According to the latest available annual data, FDI inflows to the Asia-Pacific region also stagnated, and contracted by 2% to \$558 billion in 2017 compared with the previous year (figure 3.1). However, Asia and the Pacific remained the main destination for FDI; the region accounted for 39% of global FDI inflows in 2017, a rise by 9 percentage points compared to 2016. Developing Asia-Pacific economies were collectively the largest recipient region for FDI inflows

worldwide in 2017. However, FDI was not evenly distributed across all those economies. China and Hong Kong, China remained the biggest FDI destinations, together receiving 43% of total FDI inflows to the region. Other economies, such as Indonesia, the Islamic Republic of Iran, the Philippines, Thailand, Turkey and Viet Nam, also attracted more FDI inflows.



FDI inflows to the Asia-Pacific region and their global share, 2008-2017



Source: ESCAP calculations based on UNCTAD (2018a).

Note: China in this graph includes China, Hong Kong, China and Macao, China. A-P stands for Asia-Pacific.

2. Asia-Pacific region expands its outward FDI

"FDI outflows from the Asia-Pacific region increased, despite a significant decline in FDI outflows from China."

The Asia-Pacific region also remained a major source of FDI worldwide. FDI outflows from the region increased by 2% in 2017 to \$515 billion, accounting for 36% of global FDI outflows (figure 3.2). Japan was the largest investor, followed by China and Hong Kong, China. China's FDI outflows declined significantly in 2017 for the first time since 2003 to \$125 billion, a 36% decrease compared with the

previous year. Many other economies increased their FDI outflows.

3. Uncertainties hampering greenfield FDI

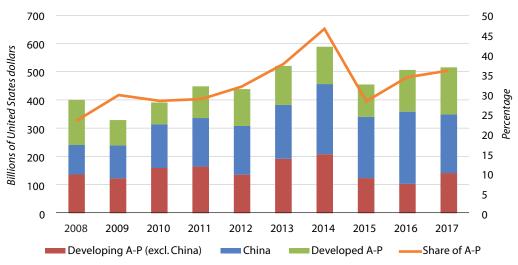
"A steeper decline in the announced FDI greenfield could point to stagnancy in future FDI inflows to the region."

In 2017, the value of announced global FDI greenfield projects declined by 13% to \$806 billion, driven to a large extent by the political uncertainty over global trade which could have deterred and delayed investment decisions (*Financial Times*, 2018). In the

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FDI outflows from the Asia-Pacific region and their global share, 2008-2017



Source: ESCAP calculations based on UNCTAD (2018a).

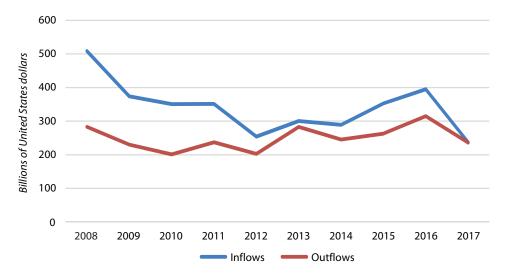
Note: China in this graph includes China, Hong Kong, China and Macao, China. A-P stands for Asia-Pacific.

Asia-Pacific region, where trade and investment are closely interlinked through a vast net of value chains, greenfield FDI inflows declined at an even steeper rate of 40% to \$237 billion (figure 3.3). As the value

of announced FDI greenfield projects is an indicator of future FDI trends, this decline could point to stagnation of future FDI inflows to the region (see subsection 4 below).



Announced greenfield FDI flows in the Asia-Pacific region, 2008-2017

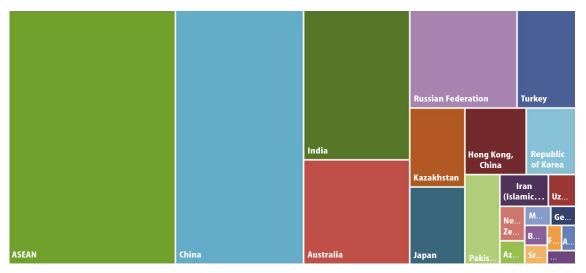


Source: ESCAP calculations based on fDi Intelligence data (accessed September 2018).

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Announced greenfield FDI projects by Asia-Pacific destinations, 2017



Source: ESCAP calculations based on fDi Intelligence data (accessed September 2018).

ASEAN and China received the most significant shares of greenfield FDI inflows to the region in 2017, at 30% and 23%, respectively (figure 3.4). While ASEAN and China attracted investment from around the world, they also attracted many investors from within the region (see section C below for more details).

Expected FDI trends in 2018

As noted above, global FDI fell by 41% in the first half of 2018 compared with the same period in 2017 (UNCTAD, 2018b). Earlier estimates by UNCTAD had projected marginal increases in global FDI flows of by about 5% in 2018, to reach \$1.5 trillion (UNCTAD, 2018a). However, FDI inflows to developing Asia in the first half of 2018 declined by 4% compared with the same period in 2017 (UNCTAD, 2018b).1 China continued to be both a major source of, and destination for FDI, and it became the largest FDI recipient in the world as a result of continued economic growth and FDI liberalization policies. Countries in North and Central Asia can expect increases in FDI supported by recovering oil prices and growing macro-stability of the Russian Federation economy (UNCTAD, 2018a).

"FDI inflows to the Asia-Pacific region in 2018-2019 will remain uneven with overall growth expected from 2020 onwards."

According to the Economic Intelligence Unit Data Tool,² the Asia-Pacific region will experience an estimated 4% decline in FDI inflows in 2018, but is expected to recover and witness rising FDI inflows from 2020 onwards. FDI outflows from the region are also expected to shrink by 2% in 2018, but recover in 2019.3 However, recent developments in global policymaking (e.g. Brexit and trade protectionist measures adopted by the United States) have raised concerns and uncertainty for future FDI flows, which are discussed further in chapter 4.

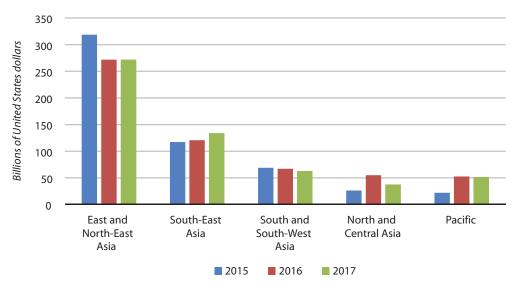
B. SUBREGIONAL FOREIGN DIRECT **INVESTMENT TRENDS**

Despite the general contraction of regional FDI inflows, South-East Asia was the only subregion that recorded an increase of FDI inflows in 2017 (figure 3.5), while East and North-East Asia remained the leading destination for FDI inflows, still attracting more than double the amount going to South-East Asia.

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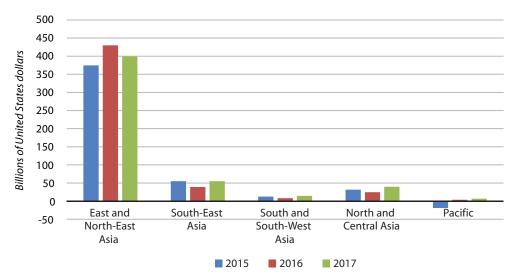
FDI inflows to Asia-Pacific subregions, 2015-2017



Source: ESCAP calculations based on UNCTAD (2018a).



FDI outflows from Asia-Pacific subregions, 2015-2017



Source: ESCAP calculations based on UNCTAD (2018a).

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East and North-East Asia also dominated FDI outflows from the region in 2017, but with a smaller share than in the previous year (figure 3.6).

1. East and North-East Asia: China still a leading destination and source for FDI

"China and Hong Kong, China account for most inward FDI to East and North-East Asia."

China continued to be the leading destination for FDI in East and North-East Asia, and for the entire region in 2017. While the subregion accounted for 49% of FDI inflows to the Asia-Pacific region, China and Hong Kong, China alone accounted for almost 90% of that share. China is expected to continue to attract significant FDI inflows as its economy is transitioning from labour-intensive, low value-added industries to higher value-added industries. This transformation has been supported by government initiatives such as "Made in China 2025", as discussed in last year's Asia-Pacific Trade and investment Report (ESCAP, 2017, chapter 3).

It should be noted that FDI inflows to the high-tech sector (e.g. manufacturing of electronics, medical devices, communications equipment, computers and pharmaceutical products) in China rose significantly and accounted for 29% of total FDI inflows to China in 2017 (UNCTAD, 2018a). However, there are worries resulting from the country's multi-year trend of declining GDP growth as well as from the increasingly unstable global political and economic environment (Hu, 2017). Trade tensions between China and the United States, which deepened in 2018, not only have implications for FDI between these two countries, but also for FDI in the rest of the world.⁴

East and North-East Asia also continued to be the leading subregion for FDI outflows, both within the Asia-Pacific region and beyond. However, outward FDI from China, the biggest source, declined by 36% to \$125 billion in 2017 as a result of restrictive policies and regulations on outward FDI intended to stem capital flight, shore up reserves and prop up the value of the renminbi currency (Kotoski and Ng, 2017). However, it is expected that FDI outflows from China will continue to grow, especially in view of the continued growing investment and trade links between China and the Belt and Road Initiative (BRI)

participating countries (Huang and Xia, 2018). It has been estimated that \$900 billion in future investment in roads, ports, pipelines and other infrastructure as part of the BRI can be expected (Chatterjee and Kumar 2017).

2. South-East Asia: Strong FDI rebound in leading economies

FDI inflows to South-East Asia, i.e. the members of the Association of Southeast Asian Nations (ASEAN) plus Timor-Leste, increased further in 2017 by 11% year-on-year to \$134 billion. Most countries recorded an increase of FDI inflows; Indonesia and Thailand, in particular, witnessed a strong rebound, although FDI contracted in Indonesia in the second and third quarter of 2018 from one year earlier, according to official national data.

"South-East Asia continued to receive increasing levels of FDI inflows, with CLMV countries expected to record the fastest growth."

Significant growth in cross-border mergers and acquisitions, led by expansion of Chinese investment in the subregion, played a vital role (UNCTAD, 2018a). For example, planned Chinese projects in Cambodia grew almost threefold in the year up to September 2017 (Economist Intelligence Unit, 2018a). With growing subregional investment opportunities, these economies are attracting increasing FDI inflows from both the world and from within the Asia-Pacific region. It is noteworthy that economies which joined ASEAN last, namely Cambodia, Lao People's Democratic Republic, Myanmar, and Viet Nam (commonly known as CLMV countries) are expected to be the fastest-growing in the subregion, reflecting advantageous geographical locations, relatively low labour costs, and comparatively stable Governments (Economist Intelligence Unit, 2018a).

Thanks to the financial strength and desire for internationalization of ASEAN-based multinational enterprises, investment from South-East Asia is also on the rise (ASEAN Secretariat and UNCTAD, 2017). Thailand, for example, has witnessed a more than 10-fold rise in its stock of outward FDI in the past decade (Economist Intelligence Unit, 2017a). The importance of ASEAN in intraregional investment is discussed further in section C below.

3. South and South-West Asia: Stronger presence of Chinese investors

FDI inflows to South and South-West Asia decreased by 6% to \$63 billion in 2017. This relatively modest performance was due to a drop in FDI inflows in South-West Asia, including India and Turkey. While India remains the largest investment destination in the subregion, largely due to its large and growing market and attracted \$22 billion FDI in the first half of 2018, the country slipped three notches to eleventh ranking in 2018, from eighth ranking in 2017 according to the AT Kearney FDI Confidence Index 2018. This is the first time it has fallen out of the top 10 since 2015. UNCTAD recorded a 9% drop in FDI in India in 2017 (UNCTAD, 2018a), The Islamic Republic of Iran, Nepal, Pakistan and Sri Lanka, witnessed sharp rises of 49%, 87%, 13% and 53%, respectively. However, with the United States announcing the re-imposition of sanctions on the Islamic Republic of Iran in May 2018 with implementation starting in August 2018, the country's attractiveness to foreign investors is falling (Salehi-Isfahani, 2018).

Intraregional foreign investors were prevalent in the subregion in 2017, especially from China. For example, China dominated FDI inflows in the power and construction sectors in Pakistan, led by investments in the China-Pakistan Economic Corridor (CPEC) (*Gulf Times*, 2018; UNCTAD, 2018a). In Sri Lanka, China accounted for 35% of total FDI inflows to the country (up to September 2017) (Economynext, 2018). While India's FDI outflows more than doubled in 2017 to \$11 billion in 2017, most was directed out of the subregion.

4. North and Central Asia: Poor business environment continues to hamper FDI

FDI inflows to North and Central Asia continued to be concentrated on oil and gas and other natural resources. Due to continued policy uncertainty, linked in part to geopolitical concerns, FDI inflows to the countries of the subregion decreased by 32% in 2017 compared with the previous year, to reach \$38 billion (UNCTAD, 2018a). Several countries in the subregion, such as Azerbaijan, Kazakhstan and the Russian Federation, receive FDI inflows mainly in commodities, and are hence exposed to cyclical FDI flows. In the Russian Federation, which accounts for most of the FDI inflows to the subregion, the sale of Rosneft did not prevent a contraction of FDI inflows

by \$25 billion in 2017, a decrease of 32% over the previous year (Sudakov, 2017). In addition to the declining oil price, rising tensions between the Russian Federation and the United States leading to new sanctions by the former country, as of August 2018, are expected to negatively affect FDI to the latter country (Economist Intelligence Unit, 2018b).

The North and Central Asia subregion has great FDI potential, based on the availability of relatively cheap and reasonably skilled workforces and modest average corporate tax rates. However, the poor business environment in the countries of the subregion, exemplified by a relatively high corruption index, low ease of doing business ranking and high political risk, continue to undermine the interest of foreign investors. However, it is expected that the business environment in most countries of the subregion will improve in the future. In particular, major economic reforms are underway in Uzbekistan, including a renewed interest in attracting FDI. Inflows of FDI in the energy sector will also be boosted by the completion of the Trans-Anatolian Pipeline in 2019. In addition, various countries, particularly Kazakhstan, have been identified as major investment targets under the Belt and Road Initiative. (Economist Intelligence Unit, 2018c).

5. Pacific: FDI remains limited and volatile

Australia, which accounts for almost 90% of total FDI inflows to the Pacific, maintained a prominent level of FDI inflows in 2017, but with a slight decline that contributed to a 2% overall decline of FDI inflows to the subregion to \$52 billion. This was the result of changes in FDI policies in Australia; Foreign Investment Review Board (2017) approvals fell in 2016/2017 because of the introduction of application fees in December 2015 as well as the implementation of a higher foreign investment screening threshold for Chinese investors under the China-Australia Free Trade Agreement (Economist Intelligence Unit, 2018d).

For other countries, mainly small island developing countries, FDI remains very limited due to the small size of their economies and remote geographic locations. They also suffer from exposure to volatile flows, depending on one-off transactions of multinational enterprises (MNEs). For example, Papua

New Guinea experienced an accelerated divestment of \$201 million in 2017, which was a further decrease from \$40 million in 2016. Despite ongoing efforts towards improving an enabling business environment, including the adoption of the revised Companies Act and the Business Names Act, and a new online business registration system, that country suffers from policy uncertainties related mainly to the implementation of large-scale mining and natural gas projects, and an overall weak investment environment, including but not limited to efficient infrastructure, financial market and government policies (Oxford Business Group, 2017; Santander, 2018). However, in Fiji, the investment climate has improved following the democratic elections in 2014, and FDI inflows reached \$299 million in 2017.

C. CONTINUED SIGNIFICANCE OF INTRAREGIONAL FOREIGN DIRECT INVESTMENT FLOWS

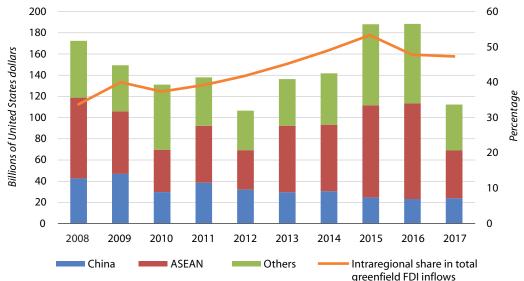
"Intraregional greenfield FDI flows accounts for nearly half of the total greenfield FDI flows to the Asia-Pacific region."

Intraregional greenfield FDI flows accounted for nearly half of the total greenfield FDI flows to the Asia-Pacific region in 2017 (figure 3.7). Countries within Asia and the Pacific, especially the East and North-East Asia subregion, continued to be significant investors in the region. Their increasing share has been noticeable during the past few years, indicating a shift from FDI by traditional sources, mainly countries in the West. China's total greenfield investment in the region in 2017 accounted for 10% of total greenfield FDI inflows to the region – more than doubling in a decade, even though it was a decrease almost by 50% over the previous year - amounting to \$24 billion. China continued to invest in Pakistan's China-Pakistan Economic Corridor, which is part of the Belt and Road Initiative. According to Pakistan's Board of Investment figures, inward FDI for the financial year 2017-2018 (July-June) is expected to reach about \$3.7 billion, with Chinese companies providing up to 70% of the new investment (Jorgic, 2018).

Japan continued its position as a long-standing investor in Thailand (Creehan, 2017); it accounted for 47% of the total FDI in Thailand in 2017, according to the Bank of Thailand. Japan and the Republic of Korea were the biggest investors in Viet Nam, accounting for 60% of total FDI inflows to that country in 2017 (VietNamNet, 2018). Singapore was the largest investor in Indonesia in 2017, at \$8.4 billion, followed by China, Japan as well as Hong Kong, China and the Republic of Korea, all countries from the Asia-Pacific region. India is not a major investor in the region except for Singapore.



Destinations of intraregional greenfield FDI inflows and share of intraregional in total greenfield FDI inflows to the Asia-Pacific region, 2008-2017



Source: ESCAP calculations based on fDi Intelligence data (accessed September 2018).

"South-East Asia is the leading destination for intraregional FDI reflecting sustained market integration efforts within the framework of ASEAN."

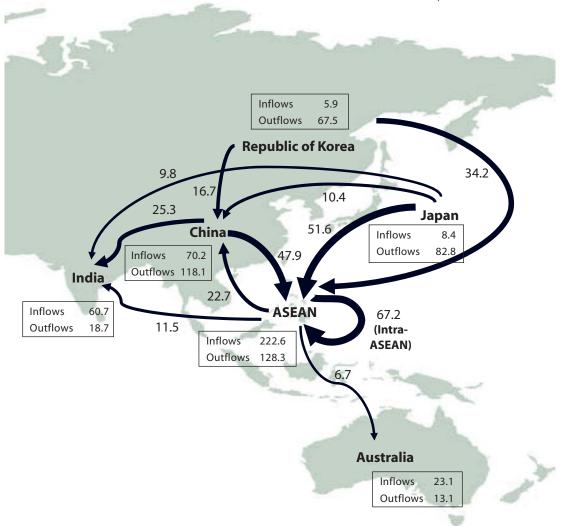
ASEAN firmly positioned themselves as the leading destination in intraregional FDI flows from the Asia-Pacific region (figure 3.8). In 2017, ASEAN received \$45 billion of greenfield FDI inflows from the region, which accounted for 40% of total intraregional FDI inflows. Moreover, intra-ASEAN investments are on the increase (ASEAN Secretariat and UNCTAD, 2017).

Intra-ASEAN FDI has typically represented around one-fifth of total ASEAN FDI inflows but it increased to one fourth in 2016 (OECD, 2018), supported by the ASEAN Economic Community. Sustained market integration would contribute to making ASEAN an even more attractive investment destination. ASEAN's firm position would also contribute to sustained FDI flows into the Asia-Pacific region as a whole, partly compensating for slowed growth of FDI inflows to China, as explained in last year's Asia-Pacific Trade and Investment Report (ESCAP, 2017).



Major intraregional greenfield FDI flows between selected Asia-Pacific economies, and total intraregional greenfield FDI inflows and outflows, 2015-2018

(Billions of United States dollars)



Source: ESCAP calculations based on fDi Intelligence data (accessed September 2018).

Note: In order to even out volatile annual FDI flows, total FDI flows during 2015-2018 are used instead of annual flows.

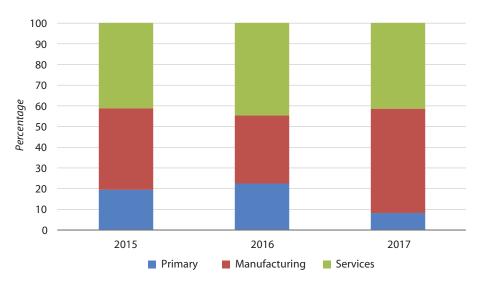
Reviewing data only for greenfield FDI flows from 2015 to 2018 shows that Malaysia, Singapore and Thailand were the major intra-ASEAN investors, while Indonesia and Viet Nam received the biggest share of intra-ASEAN investment. The ASEAN subgroup CLMV (Cambodia, Lao People's Democratic Republic, Myanmar and Viet Nam) benefited from lower wage costs compared to the more developed ASEAN countries with relatively advantageous geographical locations and stable Governments. In addition, in Myanmar, intraregional FDI contributed to a significant increase of 45% in FDI inflow to the country, for example investment in a new tin can manufacturing plant by Malaysia-based Kian Joo Group's in the Thilawa Special Economic Zone (UNCTAD, 2018a).

D. SHIFT IN SECTORAL FOREIGN DIRECT INVESTMENT FLOWS⁵

Sectoral FDI inflows to the Asia-Pacific region have evolved over time, with the services sector gaining a bigger share and the primary sector receiving declining FDI inflows (figure 3.9). The decline of the primary sector is felt universally. A review of the composition of the global top 100 MNEs reveals that over time extractive industries and trade corporations have been replaced by digital-economy related MNEs (UNCTAD, 2018a). In 2017, FDI inflows to coal, oil and natural gas resources in the region declined significantly to \$19 billion, an 80% decrease from the previous year. However, the primary sector remains relevant, especially for North and Central Asia.



Announced greenfield FDI inflows to the Asia-Pacific region, composition by sector, 2008-2017



Source: ESCAP calculations based on fDi Intelligence data (accessed September 2018).

"The Asia-Pacific region continues to receive significant and continuing FDI inflows to the manufacturing sector."

The Asia-Pacific region has received, and is expected to continue receiving significant and continued FDI inflows to the manufacturing sector. Target subsectors vary by country and are evolving as several countries pursue structural reforms. China, as discussed in the previous editions of the Asia-Pacific Trade and Investment Report, is pursuing a transition to high value-added industries. Thailand, despite concerns about its domestic capacity and technological readiness, is making efforts to move towards technology-based manufacturing and services under its Thailand 4.0 policy and the Eastern Economic Corridor. New legislation came into force in February 2017 incentivising foreign companies in target industries in the corridor (see section E for more details) (Economist Intelligence Unit, 2017b).

Developing countries in the region continue to attract investment in labour-intensive sectors, particularly the garment industry. Traditional big players, such as Bangladesh, Cambodia and Viet Nam have continued to receive significant FDI inflows to this sector, with most FDI coming from neighbouring economies such as China and Hong Kong, China as well as Singapore, Malaysia and the Republic of Korea, while domestic companies dominate in Bangladesh. Nevertheless, Bangladesh received \$422 million in FDI for the textile and apparel sector in 2017, 1% higher compared with the previous year, according to Bangladesh Bank data (Textile Today, 2018). This upward trend was recorded despite lingering concerns about the sustainability of the country's ready-made garment sector. The ongoing trade war between China and the United States is expected to open worldwide investment opportunities. In this regard, major players in the garment industry in the Asia-Pacific region, such as Bangladesh and Viet Nam, are expected to benefit by acquiring a larger share in exports to the United States, and thus attracting more investment. Smaller but still

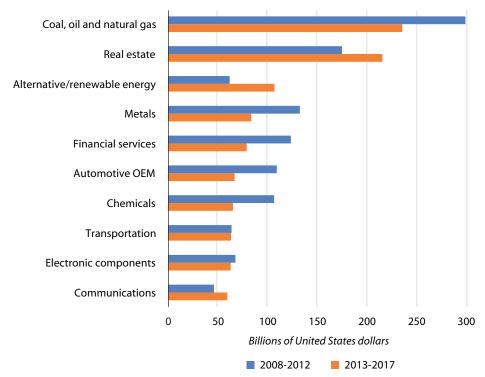
significant gains can also be expected for other countries such as Cambodia, Myanmar and Sri Lanka (Economist Intelligence Unit, 2018e).

"The services sector accounts for a bigger share of FDI inflows, with ASEAN and China in particular witnessing significant increases."

In the Asia-Pacific region, FDI inflows to the services sector accounted for a bigger share during 2013-2017 than in 2009-2012. In 2017, despite the steep declines in greenfield FDI inflows globally and regionally, FDI inflows to the services sector in the Asia-Pacific region still accounted for 42% of total greenfield FDI inflows to the region (figure 3.9). At the regional level, alternative/renewable energy, communications and real estate experienced significant growth, at 73%, 29% and 23%, respectively, during 2013-2017, compared with 2009-2012 (figure 3.10). ASEAN was a major investment destination for FDI in services. In the early 2000s, FDI inflows to services represented around 50% of total FDI inflows received by ASEAN; however, this figure

Figure 3.10

Top 10 sectors by announced greenfield FDI inflows to the Asia-Pacific region, 2008-2017



Source: ESCAP calculations based on fDi Intelligence data (accessed September 2018).

rose to more than two thirds a decade later (2012-2016) (OECD, 2018). For China, a similar trend can be seen with FDI in the services industry as a share of total FDI rising from 41% in 2008 to 67% in 2016 (KPMG, 2018a).

An evaluation of industries also supports the shifting trend. Whereas extraction of natural resources such as coal, oil, natural gas and metals have attracted less greenfield FDI inflows, sectors such as real estate, alternative/renewable energy and transportation have attracted increasing greenfield FDI inflows (figure 3.10).

In 2017, most sectors received less greenfield FDI inflows. However, some major services subsectors, such as financial services, transportation, and communications suffered less (table 3.1).



Announced greenfield FDI inflows to the Asia-Pacific region, by industry, 2016-2017

(Millions of United States dollars)

	(Willions of Officer States C						
Sector/industry	2016	2017					
Total	395 196	236 866					
Primary	87 972	18 871					
Coal, oil and natural gas	87 825	18 779					
Manufacturing	130 106	119 596					
Electronic components	24 607	11 278					
Metals	14 871	9 089					
Food and tobacco	11 884	10 936					
Chemicals	11 321	14 762					
Automotive OEM	9 643	10 827					
Textiles	9 170	7 543					
Semiconductors	3 041	11 602					
Services	177 117	98 399					
Real estate	76 361	25 247					
Alternative/renewable energy	32 955	19 124					
Financial services	13 757	10 947					
Communications	13 712	10 686					
Software and IT services	10 085	8 277					
Transportation	8 803	10 615					
O FOOAR							

Source: ESCAP calculations based on fDi Intelligence data (accessed September 2018).

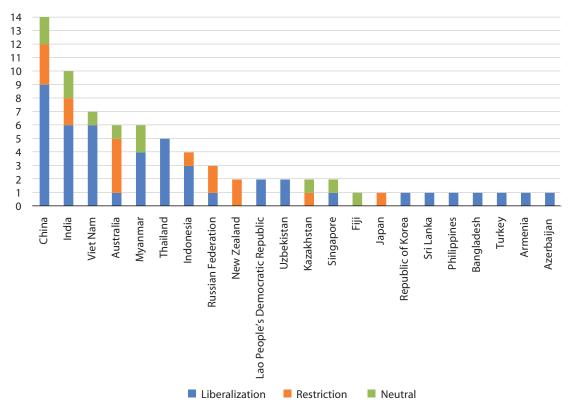
E. NATIONAL POLICIES ON FOREIGN DIRECT INVESTMENT: LIBERALIZATION CONTINUES BUT RESTRICTIONS ALSO INCREASE

Countries in Asia and the Pacific continued to pursue policies to improve the environment for FDI. During the observed period, from January 2017 to June 2018, 163 policy changes were adopted globally while 22 countries in the Asia-Pacific region adopted

74 policy measures related to FDI, according to the UNCTAD Investment Policy Monitor Database.⁷ Forty-seven of these measures liberalized, promoted or facilitated investment while 16 new policy measures introduced restrictions or regulations on investment, and 11 policies were neutral (figure 3.11). Compared with 124 policy measures introduced during 2016, the number of policy measures in the region from January 2017 to June 2018 showed significant declines.



Number and types of investment policy changes in Asia-Pacific economies, January 2017-June 2018



Source: ESCAP calculations based on the UNCTAD Investment Policy Monitor database (accessed September 2018).

"Countries of the Asia-Pacific region introduced fewer FDI policy measures in 2017 with most aimed at easing FDI regulations as part of overall investment facilitation. However, restrictive or regulatory policy measures also increased mainly due to national security concerns."

During this period, changes in FDI policy measures mainly concerned easing the regulations for FDI and facilitating investment. At the same time, restrictive or regulatory FDI policy measures significantly increased due to national security concerns. China led with nine policy changes aimed at easing the environment for foreign investors, but also implemented several restrictions on both inward and outward FDI to balance liberalization with national priorities. The following presents an overview of the main areas where policy measures were introduced.

1. FDI Liberalization

In efforts to attract more foreign investors, many countries in the Asia-Pacific region have further liberalized foreign ownership. In China, one notable update is the Special Administrative Measures (Negative List) for Foreign Investment Access (so called "Negative List 2018"), jointly issued by the National Development and Reform Commission (NDRC) and the Ministry of Commerce (MOC) in June 2018.8 It is a continuation of the gradual reform of China's move towards a more liberalized, negative list approach for pre-establishment. The length of the negative list 2018 was further shortened from 63 items to 48 items while market access in 22 industry sectors was liberalized (Glueck, 2018). In addition, other changes have been made such as a separate negative list for free trade zones, temporary tax exemption for foreign companies and easier rules for FDI in securities firms (Glueck, 2018; Xinhua, 2018).

Another country that has implemented significant FDI liberalization policies is Uzbekistan. Uzbekistan's Development Strategy for 2017-2021 indicates FDI liberalization as a policy priority together with economic development. A major step was taken with the issuing of a Presidential Decree in September 2017 on the liberalization of monetary policy, moving away from strict control of the outflows of national currency. Another Decree issued in August 2018 relaxed legal requirements for enterprises with foreign shareholders, expanded the authority of regional authorities to provide land for foreign investor, and the relaxation of visa requirements (Uzbekistan, State Committee for Investments, 2018). These significant reforms are aimed at removing barriers to business and proving that the country is moving away from economic isolationism (Economist Intelligence Unit, 2017c).

Myanmar is another country that is actively pursuing FDI liberalization. The Myanmar Companies Act signed in December 2017, and which came into effect in August 2018, followed the enactment of the Myanmar Investment Law. Myanmar continues to encourage investment activity. The Ministry of Commerce opened the country to wholly foreignowned firms operating in the wholesale and retail sectors (Singh, A., 2018). In addition, foreign investors are allowed to hold up to 35% of shares in a domestic company without the company losing its categorization as a local company (Aung, 2017). Moreover, foreigners were allowed to make full capital investments in private schools (Thiha and Kang, 2018). However, the country faces significant challenges in addressing international image problems arising from its perceived treatment of ethnic minorities, which undermine investment inflows from Western countries in particular.

Other countries in the region also continued to liberalize policies to attract FDI. For example, the Lao People's Democratic Republic removed the minimum registered capital requirements for certain foreign investors (*Laotian Times*, 2017), while Viet Nam issued a new decree which allows foreign investors to hold up to 49% ownership (Bizhub, 2018). India also liberalized FDI in selected sectors; 100% FDI under the automatic route is now allowed for Single Brand Retail Trading, and foreign airlines are allowed to hold up to 49% of ownership in Indian airlines, including Air India (Srivats, 2018).

2. Easing of investment facilitation processes

Various Asian and Pacific countries, especially South-East Asian countries, continued their efforts to facilitate FDI by simplifying processes and using information communications technology to reduce red tape. For example, the Indonesian Investment Coordination Board simplified the process for obtaining investment licences and made the procedures to obtain tax privileges easier (Sundaryani and Singgih, 2017; KPMG, 2018b). Under a Presidential regulation, central and regional Governments are pushed to cooperate in a system called "online single submission" that allows investors to complete registration more easily. The system was implemented in July 2018. The Government of the Philippines launched a business data bank that allows businesses to renew permits in a shorter time (Caraballo 2017). Singapore introduced an enhanced "EntrePass" to attract global start-up talents to build innovative businesses (Singapore, Ministry of Manpower, 2017). Thailand issued a regulation exempting certain business activities from the requirement for obtaining a foreign business licence (Baker McKenzie, 2017). Myanmar's Directorate of Investment and Company Administration (2018) implemented an electronic registry, easing the registration of businesses.

Countries from other subregions also improved their investment facilitation processes. In India, the Foreign Investment Promotion Board (FIPB) was abolished, and individual departments of the Government have been empowered to clear FDI proposals in consultation with the Department of Industrial Policy and Promotion. This decision was made in order to simplify the existing procedure for seeking clearance of FDI proposals. Ensuring the alignment in the approach of different ministries will be the key for maintaining consistency and continuity for investors (Mishra, 2017). In Central Asia, Azerbaijan established a single online portal for the issuance of business licences and permits that is operated by the Ministry of Economy (UNCTAD, 2018b). Uzbekistan also launched a new platform for business registration as part of its liberalization efforts (Economist Intelligence Unit, 2018a). In the Pacific, Australia announced changes to the foreign investment framework, which took effect from July 2017, including streamlining and simplifying of several regulations. Australia introduced

new exemption certificates to streamline the processing of multiple transactions as well as a streamlined and simplified commercial fee framework⁹ (Australia, Foreign Investment Review Board, 2017).

3. Expansion and refocusing of special economic zones

"Asia-Pacific countries continue to establish special economic zones as a mechanism to attract FDI with mixed success rate."

During the observed period, many special economic zones (SEZs) were established and developed in various Asia-Pacific region countries. The empirical evidence of the economic, social and environmental impacts of SEZs is mixed and needs to be considered with regard to factors such as: physical, strategic and financial links with the local economy; strategical location of SEZs; flexibility of SEZs regimes and systems; and other factors (ESCAP, 2017). One clear benefit of SEZs, which has been successfully utilized by China, is that they can be used as testing grounds for new policies and economic reforms, especially liberalization of FDI. For this reason, and in order to attract more investment and establish linkages with regional and global value chains, many countries in the region have established more SEZs or expanded the privileges for companies operating in SEZs. For example, the Government of Bangladesh approved four new SEZs (Economist, 2017). India issued a notification exempting all goods imported by a unit or a developer in an SEZ for authorised operations from the integrated goods and services tax (PTI, 2018). Myanmar has renewed efforts to develop SEZs. The Thilawa SEZ, a Japan-Myanmar joint venture, is almost complete whereas progress in the development of the Dawei SEZ, in the making for almost a decade, is slow despite recent discussions between Thailand and Myanmar, and support from China and Japan. (Jagan, 2017). Sri Lanka is currently developing four investment zones (Sri Lanka, Board of Investment, 2018). In Uzbekistan, the President ordered legislation for creating new economic zones, together with other economic reforms, and 16 new SEZs were created by Presidential Decree (Uzbekistan, State Committee for Investments, 2018).

Another noticeable trend is the change in the focus of SEZs. Many are moving away from general

purposes towards specific types of SEZs that reflect economic or competitive strengths of the locations or the zones. Some examples are: tourism-linked SEZs in Indonesia and the Lao People's Democratic Republic; information technology and business process outsourcing in the Philippines; aerospace parks in Singapore; and the Rubber City Industrial Estate in Thailand (ASEAN Secretariat and UNCTAD, 2017). Quite often, focused SEZs offer special treatment for target industries. For example, Viet Nam has issued a decree providing preferential treatment of companies operating in the Danang Hi-tech Park, including corporate income tax, import duty and land usage (Tilleke and Gibbins, 2018).

One noteworthy development is Thailand's development of the Eastern Economic Corridor (EEC), and associated legal reforms aimed at boosting investment in EEC. EEC builds on strong connectivity to neighbouring trade partners and established shipping routes, and links with China's Belt and Road Initiative. EEC stands as a good example of pursuing strategic sectors within a focused area that facilitate foreign investment, based on competitive strengths of the location and capacity. Thailand sees EEC playing an important part in implementing the Thailand 4.0 initiative, which aims to transform the country's manufacturing base from labour-intensive industries towards innovative and digitalized production (Oxford Business Group, 2018).

4. Increased restrictions on foreign investment

Due to rising concerns that foreign acquisitions of strategic domestic companies may give investors access to critical infrastructure, technology or sensitive data, various countries have expanded restrictions on FDI, often based on national security. However, blocking and screening FDI based on national security is quite often subjective and not transparent. In addition, it is sometimes a disguised form of trade protectionism. In this context, other measures could be considered for addressing security concern that are less trade and investment distorting, such as strengthened provisions in bilateral investment treaties that deter broad intellectual-property theft. While many of the policy changes in the region have been aimed towards liberalization of FDI, 16 policy measures introduced restrictions or tightened regulations on investments in the Asia-Pacific region between January 2017 and

June 2018. Such restrictions are often related to the protection of strategic industries in host countries, or to controlling transactions with/from countries and entities that experience political tensions with the host country. Some highlights of such policy changes are detailed below.

China has applied a new rule prohibiting outbound FDI to countries or regions that have no diplomatic ties with China, are at war or face civil disturbance, or are subject to investment restrictions by international treaties or agreements of which China is a party (Reedsmith, 2018). In addition, the Chinese State Council Measures for the Overseas Transfers of Intellectual Property Rights sets out review procedures for the transfer of intellectual property from China, in consideration of the country's national security and innovation and development capabilities (CMS, 2018). India prohibits direct outward investment in countries identified as "non-cooperative countries and territories" (Reserve Bank of India, 2017). Japan has promulgated a rule that extends the review mechanism of acquisitions of non-listed companies, based on a consideration of threats to national security, change to business environment and the spread of critical technologies (Japan, Ministry of Economy, Trade and Industry, 2017). The Russian Federation has amended foreign investment laws for offshore companies and prohibits them from establishing control over Russian entities considered "strategic" under the Strategic Investments Law (Ostapets, Dmitrieva and Tyunik, 2017).

Various other countries have voiced concerns over investment, especially by state-owned enterprises (SOEs), particularly from China. In response, various countries have created or strengthened the regulatory review processes of incoming mergers and acquisitions, especially in critical infrastructure industries (Sauvant, 2018). For example, Australia, as the world's second-largest recipient of Chinese investment since 2007, has tightened rules on foreign investment in electricity infrastructure and agricultural land, amid concerns about growing Chinese influence (Smyth, 2018). Japan has also expanded its scrutiny based on a reconsideration of threats to national security, changes to the business environment and the spread of critical technologies, including dual-use technologies (OECD and UNCTAD, 2017). The Government of New Zealand issued a ministerial directive letter on tightening the screening procedures for sensitive land acquisitions by foreign investors (Thomson and Edirisuriya, 2017).

With the rise of nationalism and protectionism globally, leading to retaliatory actions by affected countries, it is anticipated that more Governments – particularly those of developed countries – may introduce new FDI restrictions in the immediate future. Examples are the recently approved bill expanding the scope of the Committee on Foreign Investment in the United States, an inter-agency body able to block deals that may threaten national security. Germany intends new measures to block FDI, while the European Union is developing an overarching screening framework for its members (*Economist*, 2018).

F. INTERNATIONAL INVESTMENT AGREEMENTS

1. Slowdown of investment treaty making

A slowdown in investment treaty-making in 2017 and 2018 has been evident, with a record low in the number of new international investment agreements (IIAs) since 1983. According to the UNCTAD International Investment Agreements Navigator database, 10 from January 2017 to June 2018, 37 bilateral investment treaties (BITs) and 13 treaties with investment provisions (TIPs) were either signed and/or entered into force globally, bringing the total number of IIAs to 3,332. A total of 34 IIAs were terminated during the same period. The number of effective treaty terminations outpaced the number of newly concluded IIAs for the first time, partly due to the heightened need for review of the current IIA regime in terms of rebalancing investor and host country rights and obligations (UNCTAD, 2018c).

"Despite a global trend towards the signing of fewer investment treaties, countries in the Asia-Pacific region remain active in investment treaty making."

Despite the slowdown, countries in the Asia-Pacific region have continued to be active in investment treaty-making, accounting for a significant proportion of new IIAs, with 25 BITs either signed and/or entered into force. Turkey was the most active country,

followed by Japan and the Islamic Republic of Iran. One notable trend in the region, reflecting the global trend, is the high number of terminated IIAs. During the observed period, 19 BITs were terminated 11 by one or more countries in the region. India was particularly active, having terminated 17 BITs. (figure 3.12.) The intention of the Government of India behind the terminations is to replace all its existing BITs with a new set of treaties, based on its new Model BIT 2015, which is designed to strike a balance between investors' rights and regulatory space of the host Government. This was prompted by recent arbitration claims from investors (Singh and

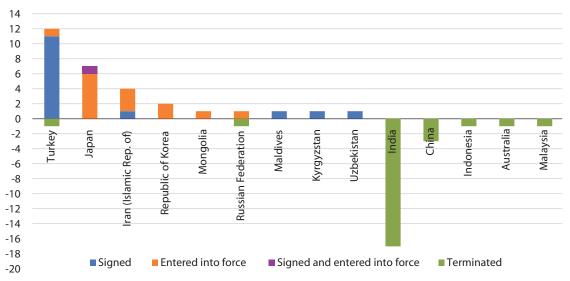
Ilge, 2016). The UNCTAD Investment Policy Framework for Sustainable Development (UNCTAD, 2015) has provided policy options to implement sustainable development objectives in IIAs.

For TIPs, 11 new TIPs were either signed and/or entered into force (table 3.2).

The Asia-Pacific region is already home to a few very advanced regional IIAs, such as the ASEAN Comprehensive Investment Agreement (ACIA) and the ASEAN-China Agreement on Investment. A new mega-regional agreement in the region, the



New and terminated bilateral investment treaties by countries in the Asia-Pacific region, January 2017-June 2018



Source: UNCTAD International Investment Agreements Navigator database (accessed on August 2018).

Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), will come into effect on 30 December 2018, with 7 out of 11 signatories from Asia-Pacific – Australia, Brunei Darussalam, Japan, Malaysia, New Zealand, Singapore and Viet Nam. Notwithstanding the withdrawal of the United States from TPP in early 2017, CPTPP represents a continued endeavour towards forming closer trade and investment linkages in the Asia-Pacific region, with the anticipation of increased FDI flows and opportunities to better integrated into global value chains.

Another noteworthy development is the "Free Trade Agreement between Hong Kong, China and the Association of Southeast Asian Nations", which was signed on 12 November 2017. With the removal of barriers on foreign capital participation and the number of foreign workers allowed to be employed, the Agreement aims to reduce the restrictions on doing business and expand business opportunities between ASEAN countries and Hong Kong, China (Hong Kong, Government of Hong Kong Special Administrative Region, 2017). Considering the fact that many Chinese investors use Hong Kong, China



New TIPs by countries from the Asia-Pacific region, January 2017-June 2018 based on UNCTAD classification

Treaties with investment provisions (short title)	Signatories from Asia and the Pacific	Signatories from non-Asia and the Pacific	Date of signature	Date of entry into force	
Mainland and Hong Kong Closer Economic Partnership Arrangement (2017)	China, Hong Kong, China		28 June 2017	28 June 2017	
China-Georgia Free Trade Agreement (FTA)	China, Georgia		13 May 2017		
ASEAN – Hong Kong, China SAR Investment Agreement (2017)	ASEAN, Hong Kong, China		12 November 2017		
Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)	Australia, Brunei Darussalam, Japan, Malaysia, New Zealand, Singapore, Viet Nam	Canada, Chile, Mexico, Peru	8 March 2018	30 December 2018 ^a	
Republic of Korea – Republics of Central America FTA	Republic of Korea	Costa Rica, El Salvador, Honduras, Nicaragua, Panama	21 February 2018		
Chile-Indonesia Comprehensive Economic Partnership Agreement (CEPA)	Indonesia	Chile	15 December 2017		
Singapore – Turkey FTA (2015)	Singapore, Turkey		14 November 2015	1 October 2017	
EU-Armenia CEPA	Armenia	European Union	24 November 2017		
EFTA-Georgia FTA (2016)	Georgia	EFTA (European Free Trade Association)	27 June 2016	1 September 2017	
Pacific Agreement on Closer Economic Relations (PACER) Plus	Australia, Cook Islands, Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, New Zealand, Niue, Palau, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu		14 June 2017		
Australia-Peru FTA	Australia	Peru	12 February 2018		

Source: UNCTAD International Investment Agreements Navigator database (accessed on August 2018).

^a Australia became the sixth and final nation to complete the ratification in October 2018, and CPTPP will come into effect on 30 December 2018.

as a strategic location to invest abroad, and that many investors from all over the region use Hong Kong, China as a financial hub for their investment and operations, this FTA could potentially encourage further investment within the region and in ASEAN specifically. In addition, the "Mainland and Hong Kong Closer Economic Partnership Arrangement: Investment Agreement" was implemented on 1 January 2018, broadening its scope to become a comprehensive FTA. In the meantime, the Asia-Pacific Trade Agreement (APTA) members started negotiations in 2018 to promote and facilitate FDI among their countries, based on the implementation of the Framework Agreement on Promotion, Protection and Liberalization of Investment.

2. Investment facilitation: Towards a harmonized global investment regime

Despite many failed attempts towards realizing multilateral investment frameworks, the rapid growth of MNEs from emerging markets is creating renewed interest in reviewing multilateral approaches to investment. With regard to recent negotiations under mega-regionals, such as the Regional Comprehensive Economic Partnership (RCEP) and CPTPP, these efforts could lead to enhanced harmonization of the substantive and procedural aspects of international investment law (Sauvant, 2018). Discussions have continued through the G20, especially during the Chinese presidency in 2016, with the "Guiding Principles for Global Investment Policymaking" and the Trade and Investment Working Group.

"Global discourse on harmonizing the global investment regime, with specific focus on investment facilitation, is attracting renewed interest."

One discussion thread that warrants attention is the global discourse on harmonizing the global investment regime, specifically with regard to investment facilitation. The definition of investment facilitation varies but can be scoped to refer to activities that improve the overall investment climate and reduce the costs of doing business. It does not cover investment protection, investment liberalization or investment promotion (Hamdani, 2018). Investment facilitation is considered to enhance the

investment environment by "improving transparency and predictability of investment policies, streamlining administrative procedures and adopting tools to handle inquiries or complaints by investors" (Singh, K., 2018). Therefore, it is considered to be relatively non-controversial and in the interests of every country.

Several initiatives have been put forward in this regard. An international support programme for sustainable investment facilitation was put forward by the E15 Task Force on Investment Policy. During the Chinese presidency of the G20 in 2016, the groundwork was laid together with support from international organizations, almed at agreement on a non-binding investment facilitation package that included the fostering of open and transparent business climates and actions to promote inclusive economic growth. However, the negotiations collapsed and the final G20 Hamburg Summit declaration final included only a vague reference (Berger, 2018).

A multilateral investment agreement, even one that focuses on investment facilitation, is unlikely to be realized in the immediate future; however, with renewed interest and pursuit from international organizations and selected countries, improvements and harmonization may materialize in the foreseeable future. The issue has now been taken up by the World Trade Organization (WTO), and emerging economies, including China and Brazil, are the main drivers (Berger, 2018). However, there are concerns that the current discussions may lead to actual negotiations and that WTO may not be the best forum for such negotiations, particularly as the negotiation processes within the WTO framework have not always been inclusive. While there are no current intentions to start formal negotiations, the principal objective of any multilateral agreement on investment is that it should contribute to the achievement of the Sustainable Development Goals. In the meantime, India introduced the idea of an "Agreement on Trade Facilitation in Services" in WTO. As FDI is a mode of the delivery of a service, such an agreement could become, in the longer term, a stepping-stone for multilateral efforts towards investment facilitation (Sauvant, 2018).

Recent protectionist measures adopted by several countries, including the United States, that impose trade restrictions are prompting reciprocal measures

from its trading partners have raised investors' concerns. Notwithstanding the current trade war, efforts are continuing towards multilateralization of investment commitments, including those by emerging economies.

G. CONCLUSIONS

Despite the decline in the level of FDI inflows, the Asia-Pacific region continued to stand firm in 2017 as a major FDI destination, accounting for 39% of global inflows amid significant decreases in FDI inflows worldwide. The region also remained a major source of FDI outflows worldwide, accounting for 36% of global outflows.

Within the region, China continued to be both the main investment destination and the main source of FDI within and outside the region. Despite the recent slowdown in FDI inflows due to its structural change from labour-intensive industries to high value-added industries, the country is expected to retain its leading position as outward investor, especially expanding its outward investment related to the Belt and Road Initiative partners. The shift to high value-added industries in China and American trade policies could help less developed countries attract FDI in manufacturing industries, provided they improve their domestic business and investment environment.

One notable trend is the continuing and growing importance of intraregional investment, which accounts for nearly half of total FDI inflow to the region. Intraregional investment has already been on the rise for the past few years, but large economies such as China, Japan and the Republic of Korea invested heavily in the region in 2017, and ASEAN was the leading destination for intraregional investment. Intraregional investment could further strengthen economic linkages within the region and encourage the development of robust regional value chains.

Another trend has been the rise of FDI in the services sector. Against the backdrop of steep declines in global and regional greenfield FDI inflows, FDI in the services sector in the region has remained relatively intact and has on fact risen in a number of countries. ASEAN and China in particular have received increasing FDI inflows in the services sector. The region also received increased FDI inflows in the

alternative/renewable energy, communications and real estate subsectors in more recent years.

Countries in Asia and the Pacific continued to implement policies to improve the environment for FDI. Changes in FDI policy measures from observed period of January 2017 to June 2018 were mainly on easing the regulations for FDI and strengthening investment facilitation. There was a significant push in this direction by a number of countries, including: China with its gradual reform towards a more liberalized, negative list approach; Uzbekistan with a number of policy changes on relaxing regulations and requirements for foreign investors; and Myanmar with the enactment of relevant laws supporting FDI liberalization.

Countries have continued to adopt policies to either attract FDI that is strategically important to host countries or enhance the screening process for certain types of investment. One modality widely utilized in the region was SEZs, often used as testing grounds for new policies and economic reforms, especially towards liberalization of FDI. Countries have been increasingly moving away from general purpose towards specific types of SEZs that reflect economic or competitive strengths of the locations or zones. Another modality is restrictive or regulatory investment policy measures, which significantly increased. National security was often used as the screening criteria, despite being criticized for its subjectivity. With the global rise of nationalism and protectionism, it is anticipated that these restrictive or regulatory investment policy measures will expand further.

During the observed period, a slowdown of international investment treaty-signing was evident. The number of effective treaty terminations outpaced the number of newly concluded IIAs for the first time, due to increasing concerns over the current IIA regime in terms of rebalancing investor and host country rights and obligations. To overcome persistent concerns, interest in the global discourse on harmonizing the global investment regime was renewed, specifically with regard to investment facilitation. Several initiatives have been put forward, such as (a) an international support programme for sustainable investment facilitation by the E15 Task Force on Investment Policy, and (b) discussions on a non-binding investment facilitation package that were initiated at the G20 with the support from international organizations. Notwithstanding the

current trade war, efforts are continuing towards multilateralization of investment commitments, including by emerging economies.

As global prospects for FDI remain unclear in the current environment that is clouded by uncertainty

and volatility, including protectionist measures adopted by a number of countries, FDI to and from the region is also expected to stagnate. However, with its strong fundamentals and structural change, it is anticipated that the Asia-Pacific region will retain its importance in the global investment environment.

Endnotes

¹ Developing Asia is the approximate equivalent of East and North Asia, South-East Asia, and South-West Asia, and is taken as the best-estimate for the Asia-Pacific region as a whole (among available data).

- ² Accessed on 12 September 2018.
- The estimate was based on the 21 economies of the Asia-Pacific region, which accounted for 97% of FDI inward stock of the region as of 2017. The 21 economies are: Australia; Azerbaijan; Bangladesh; China; Hong Kong, China; India; Indonesia; Islamic Republic of Iran; Japan; Kazakhstan; Malaysia; New Zealand; Pakistan; Philippines; Republic of Korea; Russian Federation; Singapore; Sri Lanka; Thailand; Turkey; and Viet Nam.
- ⁴ Trade wars do not involve direct actions against FDI, but raise barriers to trade and, indirectly, to trade-related investment linked to global and regional value chains. Their impact on FDI is discussed further in chapter 4.
- Data on sectoral flows are from fDi Intelligence data, and which provide a two-dimensional classification system recording the sector and activity. Efforts were made to best align this with official industry classifications, such as the International Standard Industrial Classification, which is a hierarchical system. However, this proved to be problematic. In this report, aggregate sectors as defined in fDi Intelligence data were used to construct primary, manufacturing and services sectors.
- ⁶ Alternative/renewable energy is classified under Services on the basis that distribution is the major activity.
- VINCTAD Investment Policy Monitor Database available from http://investmentpolicyhub.unctad.org/IPM (accessed August 2018).
- Under a negative list approach, all foreign investments are to be liberalized unless otherwise specified in annexes containing reservations or non-conforming measures. The Negative List in China is a list of industries in which foreign investment is either prohibited or restricted. The Free Trade Zone Negative List follows the same logic but is less restrictive than the national list, and only applies to China's free trade zones. For industries not included in the Negative List, foreign investors are given equal treatment to domestic Chinese investments, except for record-filing requirements. Restricted industries are usually only accessible to foreign investors through joint venture structures with Chinese companies or are restricted through shareholding limits. In other cases, foreign investors might need prior approval from the Ministry of Commerce to invest in a restricted industry.
- ⁹ Foreign persons are required to pay a fee for each application made, or notice given, under the Foreign Acquisitions and Takeovers Fees Imposition Act 2015 (Fees Act) and Foreign Acquisitions and Takeovers Fees Imposition Regulation 2015 (Fees Regulation).
- ¹⁰ UNCTAD International Investment Agreements Navigator database, available at http://investmentpolicyhub.unctad.org/IIA (accessed on August 2018).
- 11 Termination of IIAs refers to various types, including expired, replaced by a new treaty, terminated by consent or unilaterally denounced.
- ¹² Australia became the sixth and final nation to complete the ratification in October 2018, and CPTPP will come into effect from 30 December 2018.
- The International Centre for Trade and Sustainable Development and the World Economic Forum established the E15 Initiative for examining the challenges faced by the international trade and investment regime. The Task Force on Investment Policy released a policy option paper in January 2016, available at https://www.ictsd.org/sites/default/files/research/WEF_Investment_Law_Policy_regime_report_2015_1401.pdf.
- ¹⁴ UNCTAD published a discussion note on "Investment facilitation and promotion: A global action menu" and OECD also contributed to the discussion, and a working paper, "Towards an international framework for investment facilitation", available at http://investmentpolicyhub.unctad.org/Publications/Details/148 and https://www.oecd.org/investment/Towards-an-international-framework-for-investment-facilitation.pdf.
- ¹⁵ G20 Leaders' Declaration: Shaping an Interconnected World, Hamburg, 7-8 July 2017. Available at https://www.g20germany.de/Content/EN/_Anlagen/G20/G20-leaders-declaration.pdf?__blob=publicationFile&v=11.

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CHAPTER



Policy developments and potential impacts of trade tensions in Asia and the Pacific

INTRODUCTION

The relatively dynamic global trade recovery that began in late 2016 is now threatened by trade tensions between the United States and other economies, particularly China. Increasing protectionism does not sit well with the universally accepted 2030 Agenda for Sustainable Development, in which trade is an important means of implementation and one of the 17 goals is to promote global partnership. The possible escalation of trade conflicts, as economies retaliate over each other's protectionist measures, has become an important impediment to foreign trade and investment as engines of sustainable development, both in Asia and the Pacific and globally.

The impacts of trade wars depend largely on their scale and scope as well as the policy uncertainties they generate. While the direct impacts of trade wars are largely limited to those economies involved, there is the possibility of spillover effects for third parties. Some spillover effects could be positive for some economies. For example, some economies may see market opportunities because of the redirection of trade and investment. Some economies may see terms of trade improvements if the loss of demand due to trade wars decreases the global price level of their imports more than their exports. However, economies are most likely to see negative spillover effects on their trade because of the loss of global demand. The adverse impacts will be even more disastrous if trade wars extend their scope - for example, from bilateral tit-for-tat actions to global protectionism, from goods to goods and services, etc. In addition to direct trade effects, trade wars have additional detrimental effects on aggregate demand as they increase uncertainties. In particular, consumers may delay spending and businesses may defer their investments while they are waiting for a more predictable policy environment.

Against this backdrop, this chapter reviews the current tensions and their implication for the Asia-Pacific region. The chapter consists of the following sections. Section A describes the current state of trade tensions. Section B reviews recent changes in trade and investment policies in the region in the context of these tensions. Section C, taking into account the interdependence of Asia-Pacific economies participating in global value chains (GVCs), identifies highly vulnerable economies and potential beneficiaries from the growing tensions between the United States and China. Section D then presents a computable general equilibrium (CGE) analysis of the potential economic, social and environmental impacts of different trade war and regional integration scenarios, followed by conclusions in section E.

A. TRADE TENSIONS BETWEEN THE UNITED STATES AND CHINA: WHAT HAS HAPPENED SO FAR?

Growing scepticism of globalization is increasingly reflected in the policy agendas of developed economies. The trend started with "Brexit" in the United Kingdom, political campaigns of other major European economies such as Germany and France,

and – more importantly – the trade policy and actions of the new administration of the United States. An important indication is the United States Trade Representative (USTR) trade policy agenda for 2017 that sets out the principles that will drive policy actions by the United States administration. The agenda explicitly focuses on reducing trade deficits, renegotiating existing agreements and tackling perceived unfair practices (USTR, 2017).

The United States, which is attempting to reduce merchandise trade deficits with targeted economies, has a services-trade surplus, but a large deficit of trade in goods (figure 4.1). In addition to China, in 2017 the other major trading partners of the United States with large merchandise-trade surpluses were Germany, Mexico, the Republic of Korea and Japan. Some of these economies have been alleged to have used unfair trade practices in certain sectors, and the United States has consequently imposed traderemedy measures, arguably as a negotiating tactic (*Economist*, 2018a; Kravchenko and Mikic, 2018).

"Tariff increases by the United States in 2018 have focused mainly but not solely on China."

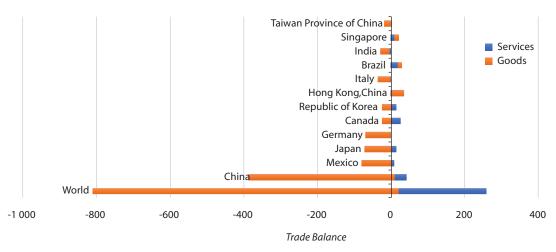
In 2018, the United States invoked a series of unilateral tariffs on a targeted list of imported goods as trade remedy procedures. The first official action began in early 2018 with the global safeguard measures (Section 201 of the Trade Act of 1974) on solar panels and washing machines which imposed 20% and 30% tariffs, respectively, in the first year with the tariffs scheduled to be reduced by a half within four years. Although these safeguard measures affect essentially all economies exporting to the United States, China is among the largest exporters to the United States. In March 2018, tariffs on steel at 25% and aluminium at 10% - which affect all economies - came into force following an investigation into the national security concerns of such imports (Section 232 of the Trade Expansion Act of 1962).

The steel and aluminium measures as well as measures on solar panels and washing machines have affected other economies in addition to China. Although the steel and aluminium measures were seen as targeting China's excess capacity, only 6% of the imports by the United States came from China in 2017 following the previous imposition by the United States of anti-dumping and countervailing



Merchandise and services trade balances of the United States with major trading partners, 2017

(Billions of United States dollars)

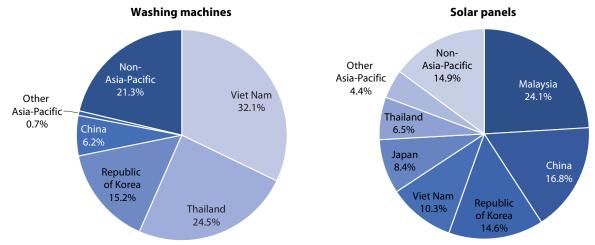


Sources: ESCAP compilation based on data from the United States Department of Commerce; and Bureau of Economic Analysis "U.S. International Trade in Goods and services", August 2018. Available at https://www.bea.gov/news/2018/us-international-trade-goods-and-services-august-2018.

duties on imports from China. The measures then affected other major exporters of steel and aluminium to the United States, including Canada, the European Union and Mexico. Those economies accounted for about 50% of the imports by the United States in 2017. In the case of solar panels and washing machines, the largest exporters to the United States are from Asia and include Japan, the Republic of Korea, Malaysia, Thailand, and Viet Nam (figure 4.2).



Major exporters of washing machines and solar panels to the United States, 2017



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

Note: The washing machines in this chart refer to products under the subheading 845020. The solar panels in this chart refer to products under the subheading 854140.

Similarly to the action on steel and aluminium, the United States announced its national security investigation of the automotive sector in May 2018. The investigation is ongoing, and is expected to reach completion by early 2019. Tariffs on imported automobiles and auto parts will be increased to 25% if the investigation concludes that automotive sector imports impair national security. The potential tariffs on automobiles would cover imports of car and trucks valued at more than \$200 billion, not including auto parts. Any auto tariffs would affect the major exporters of automobiles to the United States such as Canada, the European Union, Japan, Mexico and the Republic of Korea. Despite the fact that the plan to impose tariffs has temporarily been put on hold, the looming tariffs on car imports have given the United States some leverage to negotiate bilateral trade agreements with those car exporting economies (see, for example, King, 2018, and Stearns, 2018).

"Tensions escalated with retaliations from China and other economies affected by the tariff increase."

During the second half of 2018, trade tensions between the United States and China escalated. The United States imposed 25% tariffs on imports of goods from China specifically under the unfair trade practices related to technology transfer, intellectual property and innovation (Section 301 of the Trade Act of 1974). Major products affected by the tariff implementation thus far include: computers, telephones and machinery, computer parts, electrical machinery, furniture, and car parts. The current implementation of 25% tariffs on imports from China covers about half of the Chinese exports entering the United States.¹

In response to the tariff increases by the United States, many of economies affected have begun implementing retaliatory actions, while also turning to WTO for dispute resolutions. For example, China and the Republic of Korea have filed a WTO Dispute case against solar panel tariffs imposed by the United States. The aluminium and steel tariffs have prompted retaliation from several economies including Canada, China, the European Union, India, Mexico and Turkey. In the case of retaliation by China, as of November 2018, China has implemented a "tit-for-tat" strategy by imposing tariffs ranging from 5% to 25% on \$100 billion out of \$130 billion worth of merchandise imports from the United States. According to China's trade statistics, its retaliatory

lists covered about two thirds of its imports from the United States in 2017. The goods mainly affected by retaliatory actions of trade partners were initially agricultural products, especially soybeans, pork, fruits and nuts. Intermediate and capital equipment were included in the list of tariff retaliation after trade tensions have escalated in the second half of 2018. Retaliatory tariffs by Canada, the European Union and Mexico mainly target steel and aluminium, as well as symbolic American products such as whisky, motorcycles and pork. Tariffs by India focus on almonds, chemicals, aluminium and steel, and apples, while Turkey directs its higher tariffs at coal, nuts, paper, and plastics (*Economist*, 2018a). Notably not all notified retaliatory tariffs have been implemented thus far.2

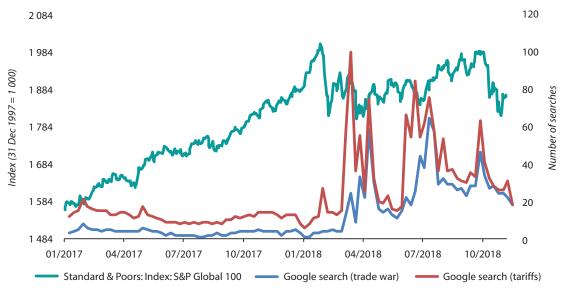
"Although the trade war is currently bilateral, the real danger is the policy uncertainty that will eventually result in the loss of demand from the economies subject to the restrictions as well as globally."

The "tit-for-tat" protectionist actions have created concerns worldwide. Uncertainty arising from policy changes can have a sizeable negative impact on global investment and economic activity. Firms may defer their investments because of the growing uncertainty over prospective trade and investment policies in their investment destinations and global markets. Similarly, households may increase precautionary savings and postpone consumption. An indication of the decreasing confidence was the flurry in Google searches for terms "trade war" and "tariff" in 2018. After April 2018, the search for the term "trade war" increased five-fold (figure 4.3).

Another indication is the higher volatility in the global stock markets seen during 2018. Part of the reason for the volatile stock market was the concern that further escalation of the trade conflicts between the United States and China could derail the momentum of global economic recovery. The volatility in stock markets, in response to the growing concern over the protectionist actions as well as deterioration of the global trade and investment environment, could amplify the negative effects on consumption and investment. The agreement by the United States and China on the sidelines of the G20 summit on 1 December 2018 to temporarily delay any further bilateral tariff increases to negotiate a solution to their trade dispute is welcome news in that context.



Growing concern over trade wars



Source: ESCAP compilation based on data from Google trends (https://trends.google.com/trends/?geo=US) and CEIC.

B. REGIONAL POLICY DEVELOPMENTS IN THE WAKE OF TRADE WARS

"Tariff increases are just a small part of a whole array of protectionist actions."

Although the trade policy environment has been increasingly characterized by a steady rise in the frequency of targeted protectionist measures, the scope of the measures remains narrow thus far. In general, on average the applied tariff levels in the Asia-Pacific economies have remained stable in recent years (figure 4.4).³ However, tariffs are not the only forms of protectionist actions. The general rise in trade protectionism can be driven by successive waves of technical barriers to trade, special safeguards, and a whole array of other non-tariff measures (NTM). Therefore, tracking all implemented trade measures provides better information on policy stands.

1. Trade policy measures affecting goods: A rapid increase of trade restrictiveness

The drastic increase in newly implemented trade measures in 2018 is a cause for concern. These

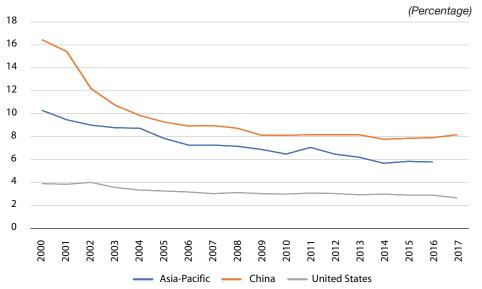
measures include subsidies, government procurement regulations, NTMs, etc. Worldwide average number of new trade-discriminatory measures introduced from 1 January to 1 November 2018 was 88 per month, the highest level since the 2009 economic crisis (figure 4.5).4 The number of these new discriminatory measures significantly surpassed the 32 new liberalizing measures per month in the same period^{5, 6} Asia and the Pacific followed a similar trend, with the introduction of 33 discriminatory measures and 15 liberalizing measures per month, on average, in the first 10 months of 2018. Although many of these measures could be WTO compatible, their increasing use by an economy could lead to a protectionism spiral as other economies also find them acceptable to use.

"Alleged subsidies are the most important form of trade distortions."

Among the different categories of discriminatory measures, subsidies were the most frequent, both globally and in Asia and the Pacific. In 2018, about 30% of the discriminatory measures were subsidies provided to producers, and another 12% were subsidies to exporters. Import tariffs accounted for only 17%, while contingent trade-protective measures



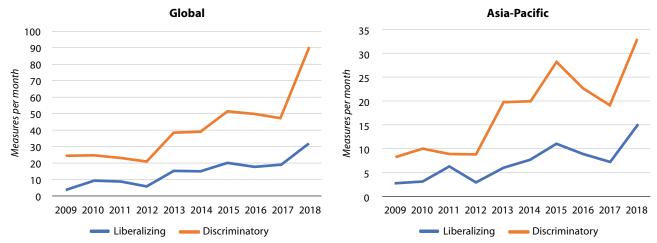
Simple-average effectively applied tariffs in the Asia-Pacific region, China, and the United States, 2000-2017



Source: ESCAP calculations based on data from the World Bank, World Integrated Trade Solutions (WITS) (accessed September 2018).



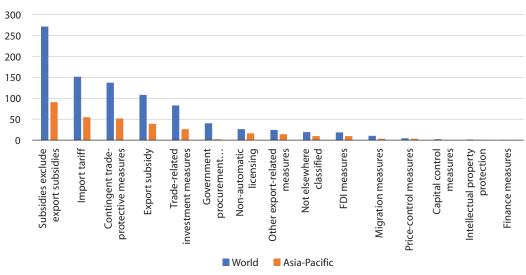
The average monthly number of new trade measures introduced globally, 2009-2018



Source: ESCAP calculations based on data from the Global Trade Alert database (accessed 1 November 2018). Note: The data are based on the policy changes implemented and documented before 1 November in each year.



Discriminatory measures introduced globally and in the Asia-Pacific region, by type, 2018



Source: ESCAP calculations based on data from the Global Trade Alert database (accessed 1 October 2018).

represented about 15%. The pattern in the Asia-Pacific region was similar. Contrary to the global worries on import restrictions, the distribution of discriminatory measures suggests that economies are using trade distortions in the form of subsidies more often than import restrictions.⁷

"Asia-Pacific economies are targets but also active contributors of discriminatory trade measures."

Globally, the United States is the highest contributor of new discriminatory measures. The share of the United States increased drastically from 9% of new measures in 2016 to 22% in 2018. Some Asian and Pacific economies are also significant initiators of discriminatory measures. India, the second-largest initiator after the United States, contributed 8% of new discriminatory measures in 2018. In addition, China, Indonesia and Australia are among the top 10 largest contributors of discriminatory measures (table 4.1). Overall, about 23% of discriminatory measures introduced in 2018 were from Asia and the Pacific.

Asia and the Pacific are an important target of the discriminatory measures, because the region includes important exports of products under scrutiny. About one third of the newly implemented



Top 10 contributors of discriminatory trade measures in the world, 2016-2018

Rank	Economy	2016	2017	2018
1	United States	8.9	12.6	22.2
2	India	4.3	5.9	8.3
3	Canada	1.6	2.7	5.2
4	Brazil	3.1	3.7	3.7
5	China	3.0	3.3	3.6
6	Germany	4.9	3.6	3.6
7	Argentina	2.7	3.3	3.0
8	Indonesia	1.7	2.8	2.5
9	Australia	1.5	2.4	2.3
10	South Africa	2.2	2.0	2.1

 $\it Source: ESCAP$ calculations using the Global Trade Alert database (accessed 1 October 2018).

discriminatory trade measures affected Asia-Pacific economies. China, Japan, the Republic of Korea, India and Thailand were more affected by the discriminatory measures than other Asia-Pacific economies (table 4.2). These economies are major exporters of products under dispute, such as aluminum and steel, automotive products, solar panels and washing machines.



Top 10 targets of discriminatory trade measures globally, 2016-2018

Rank	Economy	2016	2017	2018
1	China	3.1	3.7	3.7
2	United States	2.2	2.5	2.4
3	Germany	2.5	2.8	2.4
4	Japan	1.9	2.5	2.3
5	Italy	2.4	2.5	2.3
6	Republic of Korea	1.9	2.4	2.3
7	France	2.3	2.5	2.2
8	India	1.9	2.1	2.1
9	Mexico	1.3	1.8	2.0
10	Thailand	1.6	1.8	2.0

Source: ESCAP calculations using the Global Trade Alert database (accessed 1 October 2018).

"A third of discriminatory measures affecting Asia-Pacific economies in 2018 were introduced by other economies in the region."

However, about one third of discriminatory measures affecting Asia-Pacific economies in 2018 were introduced by economies within the region. This is a relative decrease from previous years, as the share of intraregional discriminatory measures stood at more than 40% on average between 2015 and 2017.8 The increasing importance of extra-regional discriminatory measures tend to be consistent with the dynamic of current trade tensions, which potentially increase barriers to trade with developed economies outside the region.

Technical non-tariff measures (NTMs), such as product-labelling standards and sanitary and phytosanitary (SPS) measures, have also increased rapidly. Although they often have legitimate non-trade policy objectives, NTMs are more complex, less transparent and more difficult to monitor than tariffs. They therefore provide a convenient means for governments to discriminate against imported products while avoiding disputes with their partners over trade policy. This may harm trade significantly, especially in developing and least developed economies, where testing or certification facilities to ensure compliance are often lacking or inadequate. Developing economies consequently have to resort

to outsourcing services such as laboratory testing or certification in order to meet standards, which can erode any cost advantages they have. NTMs are now believed to pose a greater impediment to trade and to be the cause of higher trade costs than tariffs – the traditional barriers to trade. Most notably affected are the agricultural and food sectors. This is particularly disadvantageous for developing economies, which often have comparative advantages in those sectors.

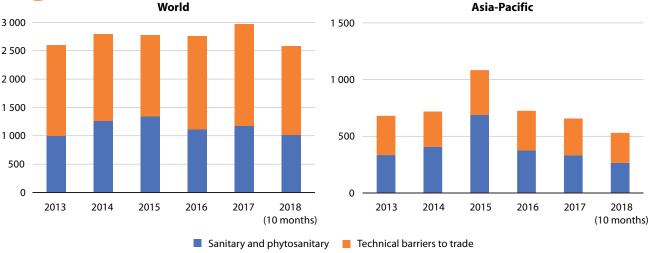
"Since 2013, about 3,000 new NTMs have been introduced every year. Most of them have been technical barriers to trade and sanitary and phytosanitary measures."

During the past five years, more than 3,000 newlyinitiated NTMs were notified annually and notified to WTO under the WTO transparency mechanism.9 Technical barriers to trade (TBT) account for about a half of NTMs initiated globally, while SPS captured about 30% of total NTMs reported to WTO.¹⁰ The number of SPS and TBT measures initiated globally increased in 2017. Based on the data about new measures during the first 10 months of 2018, the trend of new SPS and TBT measures in 2018 maintain the same pace (figure 4.7). Asia and the Pacific represented about 28% of SPS and 22% of TBT initiated globally in 2017. The region's contribution to those measures decreased to 26% and 20.5%, respectively, during the first 10 months of 2018. Efforts to reduce technical barriers and enhance market access through standards and conformance are ongoing in the region. For example, the APEC Sub-Committee on Standards and Conformance instituted working groups to look at establishing a compendium of export certificate requirements for APEC economies. ASEAN has developed an NTM database and incorporated it into the ASEAN Trade Repository (ATR) and National Trade Repositories (NTR).

Overall, available data implies that the use of traderestrictive measures rapidly increased in 2017-2018. Such measures add frictions to the flows of trade in goods. The rising trade restrictions came in terms of tariffs and NTMs. Some non-tariff measures are discriminatory, such as subsidies and trade remedy actions. Non-discriminatory NTMs such as SPS and TBT can restrict trade, although many of them have legitimate non-trade objectives. Part of the trade distortions originated within the region; however, the



The number of SPS and TBT initiated globally and in the Asia-Pacific region, 2013-2018



Source: ESCAP calculations based on data from the WTO Integrated Trade Intelligence Portal (I-TIP) database (accessed October 2018).

recent trend shows that the rapid increase of distortion measures originated from economies outside the region. The drastic increase in trade restrictiveness measures adds more concern to the potential spread of discriminatory impacts from protectionisms and trade tensions.

2. Trade policies affecting commercial services: Services are not subject to new trade tensions but remain persistently restricted

Trade in commercial services has not been a direct target of the current trade tensions between developed and developing economies. One possible reason is that advanced economies tend to have service trade surpluses. Another reason is that, when compared to trade in goods, trade restrictions in services are much more difficult to detect and have remained high. Trade in services is predominantly affected by "beyond the border" measures not necessarily related to trade policies. For example, these measures can range from restrictions on foreign ownership to the degree of competition or the movement of people that affects different modes of service delivery to varying degrees.

"Several Asia-Pacific economies raised the restrictiveness of trade in services from the already high level."

The chance of spreading trade wars from goods to services cannot be ruled out. Given the fact that developing economies currently affected by the tariff frictions have services trade deficits with the United States, they might make use of trade-restrictiveness regulations in services as a tool for retaliation. To explore the possible tendency towards increasing services-trade restrictiveness, this report uses the OECD Services Trade Restrictiveness Index (STRI) to monitor changes in policies affecting trade in services.¹¹ There was an indication of rising trade restrictiveness in a small group of economies, including major economies in Asia and the Pacific. In 2017, the share of trade-restrictive measures increased to 32%, up from 24% of all measures in 2016. This was due to the introduction, by a few economies, of more stringent conditions across the economy, particularly those limiting the temporary movement of natural persons providing services.

In 2017, of 44 economies in the OECD STRI database, 15 economies showed an increase in trade restrictiveness among the 22 sectors analysed. Among those 15 economies, six are in Asia and the Pacific. In the Asia-Pacific region, most economies captured in the database took trade-restrictive actions in at least one of the services sectors. Japan, India and the Russian Federation adopted trade-restrictive measures that resulted in an increase in STRI in a number of sectors, while China increased trade restrictiveness in the motion pictures sector



Trend in STRI of selected economies, 2016-2017

	Logistics cargo- handling	Logistics storage and warehouse	Logistics freight forwarding	Logistics customs brokerage	Accounting	Architecture	Engineering	Legal	Motion pictures	Broadcasting	Sound recording
Australia	0.23	0.18	0.19	0.19	0.22	0.17	0.14	0.14	0.15	0.20	0.14
Japan	0.22	0.18	0.19	0.16	0.20	0.16	0.12	0.58	0.10	0.27	0.11
Republic of Korea	0.16	0.09	0.12	0.11	1.00	0.18	0.14	0.44	0.15	0.28	0.11
New Zealand	0.30	0.23	0.23	0.23	0.17	0.20	0.19	0.22	0.17	0.17	0.15
China	0.44	0.33	0.32	0.31	0.39	0.24	0.23	0.47	0.59	0.68	0.26
India	0.39	0.38	0.29	0.30	0.88	0.65	0.29	0.91	0.33	0.43	0.27
Indonesia	0.42	0.35	0.33	0.26	0.44	0.30	0.27	0.88	0.29	0.39	0.20
Russian Federation	1.00	1.00	0.29	0.33	0.32	0.28	0.27	0.22	0.30	0.39	0.25
United Kingdom	0.18	0.17	0.16	0.16	0.32	0.25	0.20	0.18	0.21	0.20	0.16
United States	0.24	0.21	0.22	0.24	0.17	0.19	0.22	0.20	0.16	0.26	0.17

	Telecom	Air transport	Maritime transport	Road freight transport	Rail freight transport	Courier	Distribution	Banking	Insurance	Computer	Construction
Australia	0.19	0.30	0.19	0.14	0.14	0.37	0.12	0.18	0.18	0.17	0.17
Japan	0.20	0.40	0.21	0.15	0.19	0.26	0.12	0.21	0.18	0.17	0.13
Republic of Korea	0.30	0.42	0.25	0.11	1.00	0.36	0.09	0.15	0.11	0.10	0.13
New Zealand	0.21	0.36	0.21	0.16	0.21	0.24	0.14	0.18	0.13	0.18	0.17
China	0.44	0.47	0.41	0.24	0.29	0.88	0.26	0.41	0.45	0.31	0.30
India	0.48	0.56	0.40	0.28	1.00	0.56	0.44	0.52	0.56	0.36	0.35
Indonesia	0.51	0.46	0.50	0.40	0.32	0.43	0.62	0.48	0.48	0.29	0.40
Russian Federation	0.44	0.57	0.40	0.27	0.99	0.37	0.22	0.31	0.44	0.33	0.33
United Kingdom	0.17	0.41	0.21	0.21	0.19	0.19	0.13	0.18	0.16	0.20	0.17
United States	0.12	0.53	0.37	0.17	0.16	0.37	0.16	0.22	0.29	0.18	0.25

Source: ESCAP calculations based on data from the OECD STRI database, available at http://stats.oecd.org/ (accessed October, 2018). Notes: STRI is an index defined over 0 and 1, while 1 is most restrictive and 0 is least. The colour of each cell indicates the degree of change in STRI in 2017 compared with 2016. Green = liberalization; red = increase in restrictiveness; no colour = no increase in restrictiveness. The numbers in the table show values of STRI in 2017.

only (table 4.3). There is no evidence that the regulations resulting in increased trade restrictiveness in those economies discriminate against any particular economy. Outside the region, the United Kingdom took actions resulting in an increase of the average STRI in all the sectors analysed. In contrast, the United States did not introduce any measures resulting in an increased STRI in 2017. The increase of services trade restrictions in 2017 in Asia-Pacific economies has raised the already high levels of protection of services sectors in the region to a higher level.

3. Policies affecting investment: Increasing restrictions and reservations towards FDI

Despite ambiguous evidence, the perception that foreign direct investment (FDI) outsourced manufacturing jobs from developed to developing economies has created anti-globalization sentiment in the former group of economies. 12 As a reflection, the momentous tax reforms under the Tax Cuts and Job Act of the United States include features that offer incentives for companies to keep their intangible

property in the economy while penalizing multinational companies that have shifted intangible property and earnings out of the territory (Gravelle and Marples, 2018).

"Increased concerns over foreign acquisitions of stragetic companies and by state-owned enterprises has contributed to a rise in investment restrictions."

As mentioned in chapter 3 of this report, investment restrictions are showing a tendency to rise, both globally and in the Asia-Pacific region. These restrictions are often to protect industries deemed strategic in host economies, or to control transactions with economies and entities that have political issues with the host economy. A common concern is that foreign acquisitions of strategic domestic companies might give foreign investors access to critical infrastructure, technology or sensitive data. Many economies have expanded restrictions on FDI based on national security concerns. For example, the recent expansion of the scope of the Committee on Foreign Investment in the United States (CFIUS), an inter-agency body able to block deals that may threaten national security. Germany also intends to introduce new measures to restrict FDI, while the European Union is developing an overarching screening framework for its members (Economist, 2018a). In addition, various economies have voiced concerns over anti-competitive effects created by incoming investment from state-owned enterprises (SOEs) receiving direct and indirect government subsidies.

The remarkable decrease in the number of new bilateral investment treaties (BITs) as well as the increase in termination of existing ones is further evidence of increasing reservations towards foreign investors. By their nature, bilateral agreements mostly contain binding investor-State dispute settlements (ISDS) to increase levels of predictability and certainty by ensuring that the host economy (receiving the investment) abides by obligations specified in the BIT. Motivated partly by the high numbers of investor-State disputes being filed and the regularity with which some of these governments face claims, some developing economies have turned against ISDS. Some developed economies are also challenging the existing ISDS system, and are pushing for reform. However, reforming the arbitration system for global investment protection has progressed only slowly, due to a divergence of the views between the European Union and the United States in this area. The European Union put forward proposals for a permanent investment court, but the United States has so far resisted this notion. In the renegotiation of the North American Free Trade Agreement (NAFTA), the United States considered an "opt-in" system under which NAFTA member States would individually choose whether or not to allow investors of other States to bring about ISDS claims (Trehearne, 2017). These changes related to investment policy suggest that uncertainties in international investment governance are increasing.

4. Dynamics of RTA architecture in Asia and the Pacific

Although Asia-Pacific economies have contributed to the overall increase in the protectionism trend discussed earlier, they have remained very active in engaging in preferential trade agreements to cut tariffs and other trade barriers with selected partner economies. They are currently participating in a wide variety of trade agreements, both at the bilateral and the plurilateral levels. As of October 2018, there were 283 trade agreements in force, signed or under negotiations, which had at least one member from the Asia-Pacific region. Of those, 194 agreements are already in force or have been signed, but 47 of these have yet to be notified to WTO under the Transparency Mechanism for RTAs.¹³

"2018 marked progress on several mega-trade agreements including signature of the CPTPP and the EU-Japan FTA."

During 2017-2018, Asia and the Pacific signed 18 new free trade agreements (FTAs). This includes a large plurilateral agreement, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP),¹⁴ the successor to the Trans-Pacific Partnership after the United States withdrew in January 2017. CPTPP is a cross-regional trade agreement covering 11 economies (seven of which are in Asia and the Pacific) that represent around 16% of the world gross domestic product (GDP) and 7% of the world population. Expected to enter into force on 30 December 2018, the agreement is designed around high standards of human rights, labour practices, and environmental standards.

CPTPP deviates only partly from TPP essentially in terms of regulatory matters rather than market access. Examples of the difference include a suspension of the intellectual property provisions and the provisions on investor-State dispute settlement; CPTPP has narrowed the mechanisms' availability for foreign investors to sue a host member State, and shortened the terms of copyright protection in cases such as innovative medicine and written material. Another plurilateral agreement signed during the same period is the Pacific Agreement on Closer Economic Relations (PACER) Plus.¹⁵

In addition, several bilateral agreements have been signed with economic blocs and individual economies during 2017-2018. Japan and Singapore signed bilateral FTAs with their large trading partner, the European Union, in 2018. ASEAN signed a bilateral FTA with Hong Kong, China, while the Republic of Korea signed bilateral FTAs with all five members of Central American Free Trade Area (CAFTA). Eight bilateral agreements signed during the same period include Australia-Peru, China-Georgia, China-Maldives, China-EAEU, Islamic Republic of Iran-EAEU, Hong Kong, China-Macao, China, Indonesia-Chile and Singapore-Sri Lanka FTAs.

The Regional Comprehensive Economic Partnership (RCEP) has also gathered pace with its signature expected in 2019. RCEP involves 16 economies, including China, India, Japan and all the ASEAN members. The member States of RCEP represent 30% of the world GDP and 45% of the world population. The negotiations of this mega-plurilateral agreement have missed several deadlines, but the momentum has increased since 2016. This comprehensive agreement covers the liberalization of goods, services, investment, economic and technical cooperation, intellectual property rights, rules of origin, competition and dispute settlement (ESCAP, 2016).

"Asia-Pacific economies are currently more connected with China than the United States through a network of RTAs."

Trade tensions between the two powerful trade partners could affect the RTA architecture of the Asia-Pacific region. Based on the existing network of trade agreements in the region, Asia-Pacific economies are more connected with China than the United States through FTAs (figure 4.8).¹⁶ This is in part because

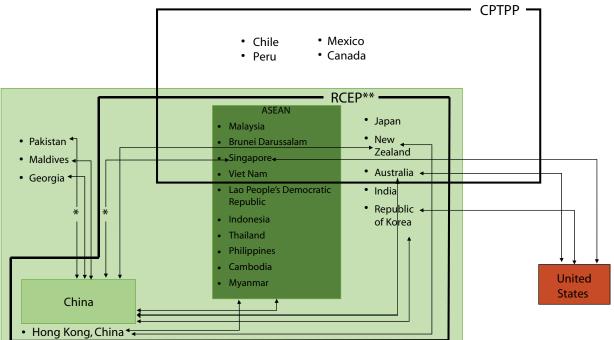
China is engaged in RCEP negotiations with 15 other economies of the region. China is also driving the mega cross-regional connectivity project, the Belt and Road Initiative (BRI). The project aims to increase international connectivity between 65 economies, across Asia, Europe, Africa and the Pacific, covering 60% of the world's population.

In contrast, the United States has trade agreements with a small number of Asia-Pacific economies, including bilateral FTAs with three Asia-Pacific economies, i.e. the Republic of Korea, Australia and Singapore. The United States completed renegotiation of the Korea-United States Trade Agreement (KORUS) with the Republic of Korea. An updated version of KORUS was signed in September 2018, leading to the removal of steel tariffs imposed on steel exports from the Republic of Korea in exchange for voluntary export restraints at 70% of its average export volume during the past three years, and increased benefits for the United States in sectors such as automobiles (Tankersley, 2018). In addition, the United States is pursuing a potential FTA with Japan.¹⁷ New Zealand is also aiming at having an FTA with the United States by 2030 (International Trade Administration, 2018). Other developing economies in Asia and the Pacific have not been included in new FTA initiatives by the United States.

Given the existence of the trade tensions with the United States, China appears to be speeding up the implementation of its regional trade agreement policy. There have been several developments in China's regional trade agreement policies since 2017. To begin with, China signed FTAs with Maldives and Georgia in 2017.¹⁸ China has also signed its FTA with the Eurasian Economic Union (EAEU), which will constitute an important regulatory achievement for BRI expansion in North and Central Asia. 19 China is also expediting its negotiations for a possible FTA with Israel as well as a trilateral FTA with Japan and the Republic of Korea.²⁰ In addition, China is upgrading some of its existing trade agreements, which include renegotiation of the China-Singapore Free Trade Agreement (CSFTA), which aims to increase trade facilitation and protection of Singaporean businesses, and the China-Pakistan FTA. China is also looking to strengthen trade relations beyond the Asia-Pacific region; it has upgraded its FTA with Chile and is currently negotiating FTAs with Panama and Moldova.²²



Network of signed FTAs between Asia-Pacific economies and China and the United States



Source: Based on FTA information from the ESCAP, Asia-Pacific Trade and Investment Agreement Database (APTIAD) (accessed November 2018). Notes: * Existing FTAs being renegotiated.

Moreover, the economy is forming potential FTAs with Africa, having already concluded negotiations for an FTA with Mauritius.²³ In addition, China has become more active in shaping the agendas of the Asia-Pacific Economic Cooperation (APEC) grouping and Group of 20 (G20) summits that it hosted in 2014 (Daojiong, 2017).

"As trade tensions accelerate bilateral and plurilateral negotiations, the future of the rule-based multilateral trading system becomes more uncertain than ever."

In contrast, the new United States administration has diverged from the path followed by previous administrations. An important change is its policy stance on multilateralism. The 2017 USTR trade policy agenda stated that the administration would not be bound by the WTO rulings that "undermine the ability of the United States and other WTO Members to respond effectively to these real-world unfair trade practices" (USTR, 2017, p. 4). Following

the agenda, the United States refused to approve new judges for the appellate body of the WTO dispute settlement system. The shifting role of the United States in WTO, including its threat to exit the organization, has created serious concern about the stability of global trade governance. As highlighted by WTO Director-General Roberto Azevedo, "the scenarios are not going to be good for anyone. The United States is responsible for about 11% of global trade. So, leaving the organization would be a blow to the organization".24 As part of the calling for WTO reform, on 25 September 2018, the United States, the European Union and Japan issued a trilateral statement aimed at negotiating new rules to address concerns regarding coercive technology transfers, industrial subsidies and SOEs, and other "nonmarket-oriented policies and practices of third economies" (Caporal, 2018).²⁵

Regarding the trade agreement policy of the United States, the major developments are reduced participation in multi-party FTAs and renegotiation of bilateral FTAs. The future of trade agreements

^{**} RCEP is expected to be signed by 2019.

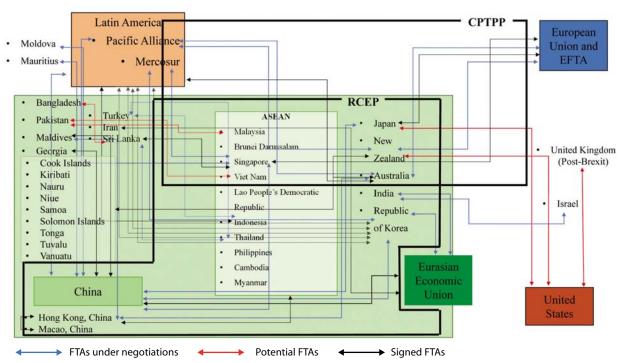
involving the United States has become unclear. The economy has withdrawn from TPP and has refrained from moving forward with the Transatlantic Trade and Investment Partnership (TTIP).26 Leveraging its dominant economic power, the United States has renegotiated existing trade agreements such as NAFTA. The United States-Mexico-Canada Agreement (USMCA), which is replacing NAFTA, entails increased protection of intellectual property rights in the pharmaceutical sector. It has increased the threshold for duty-free United States retail exports to Canada and has expanded United States export access to the Canadian dairy and poultry sectors, but remains to be ratified by each economy's legislature (Reuters, 2018a). Notably, USMCA included new provisions from NAFTA. Among others, a controversial provision allows a party to withdraw from the agreement if another party enters into an FTA with an economy it deems to be a non-market economy (e.g. China) (Congressional Research Service, 2018). In addition, it appears that labour provisions in USMCA will increase the average costs in Mexico's exporting sectors. These new provisions may be indicative of the type of trade agreements that will be pursued by the United States administrations in the coming years.

"Asia-Pacific economies tend to deepen their intraregional integration as well as interregional economic cooperations."

Tensions between China and the United States may provide a new incentive for Asia-Pacific economies to deepen trade relations intraregionally as well as with other economies outside the region.²⁷ This is evidenced by the number of new agreements initiated since 2017. Newly-initiated agreements include both potential intraregional agreements and potential agreements with trade partners outside the region, particularly with economies in Europe and Latin America (figure 4.9).



Potential FTAs initiated in the Asia-Pacific region since 2017



Source: Based on FTA information from the ESCAP APTIAD database, available at https://www.unescap.or/content/optiod/ (accessed November 2018).

For the potential intraregional agreements, eight new initiatives commenced during 2017-2018. These eight potential intraregional FTAs include: Thailand-Turkey; Indonesia-Turkey; Sri Lanka-Thailand; Australia-Hong Kong, China; India-EAEU; Republic of Korea-EAEU; China-Japan-Republic of Korea; and Hong Kong, China-Maldives. In addition, there are potential bilateral FTAs between Bangladesh and Sri Lanka, Pakistan and Malaysia, and Pakistan and Viet Nam.²⁸

At the same time, Asia-Pacific economies are discussing potential FTAs with trade partners outside the region. As the most important trading partner outside the Asia-Pacific region, the European Union and the European Free-Trade Association (EFTA) become natural partners for potential FTAs. Several economies have recently signed agreements with the European Union. In 2018, Japan and Singapore signed FTAs with the European Union, while the Philippines recently ratified its FTA with EFTA.²⁹ In addition, since 2017, several initiatives for potential FTAs with economies have been developed. For example, Australia and New Zealand began FTA negotiations with the European Union in 2017.30 ASEAN is putting back FTA with the European Union on the agenda after suspending its negotiations since 2009. Similarly, India, Malaysia, the Philippines, Thailand, Malaysia and Viet Nam are continuing their FTA negotiations with the European Union. At the same time, India, Indonesia and Malaysia are negotiating FTAs with EFTA.31

During 2017-2018, new FTAs were also developed between Asia-Pacific economies and economies in Latin America. Australia and Indonesia have signed bilateral FTAs with Peru and Chile, respectively,³² while the Republic of Korea has signed bilateral FTAs with five Central American economies.³³ In addition, Australia and New Zealand are working towards FTAs with the Pacific Alliance,³⁴ while the Republic of Korea has initiated discussions for an FTA with Mercosur³⁵ and Singapore is pursuing potential FTAs with both of these Latin American trading blocs.³⁶

Trade tensions are expected to continue shaping the dynamics of the RTA architecture of the region. Ensuring that new RTAs are consistent with established rules under WTO and that they serve as building blocks towards a new and stronger multilateral trading system will be important.

C. VULNERABILITY AND OPPORTUNITIES OF ASIA-PACIFIC ECONOMIES FROM THE CHINA-UNITED STATES TRADE CONFLICT

This section considers consequential impacts from trade tensions between the United States and China on the rest of the Asia-Pacific region. Taking into account economic linkages through regional production networks, the analysis highlights direct and indirect exposures of Asian and Pacific economies to the impacts from the imposition of tariffs by the United States on a wide variety of imports from China. The direct exposure to protectionist actions is captured by exports affected by tariffs when entering the United States. Indirect exposure is reflected in the exports of raw materials, intermediate goods and semi-finished products to China and other economies that may be subject to higher tariffs, which are used in the exports by these economies of manufactured products to the United States.

It should be noted that the economies not subject to higher unilateral United States tariffs could leverage their indirect exposure, i.e. their existing involvement in a GVC, to attract redirected trade and investment if trade conflicts persist in the medium to long term. Indeed, to avoid tariffs imposed by a major source of final demand, such as the United States, multinational corporations might adjust the structure of their GVCs. Some of the GVC activities currently performed in China might move to the United States to serve the domestic demand there. Some may also be relocated from China to other economies not targeted by tariff increases. This section therefore also evaluates opportunities from GVC restructuring for Asia-Pacific economies.

1. Direct exposure

"The direct exposure of the Asia-Pacific region other than China to the current tariff war is limited, but the indirect exposure is much more significant."

Given the current scope of tariff imposition by the United States, the direct exposure of Asia-Pacific economies, beyond China, is limited. Tariffs apply on a wide variety of imports from China, but for other economies only tariffs on steel and aluminium, solar

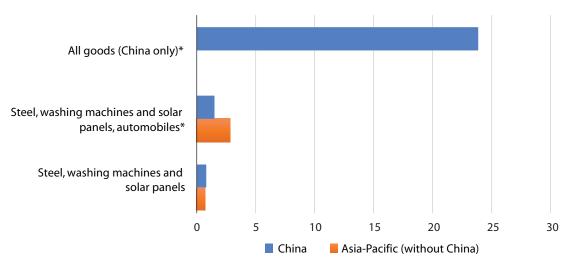
panels and washing machines are currently relevant. There has been a threat to impose tariffs on imports of automobiles and auto parts under national security concerns (Section 232 of the Trade Expansion Act of 1962), but the investigation is still ongoing.

For the Asia-Pacific region as a whole, exports of steel and aluminium, solar panels and washing machines count marginally in the region's total exports. Exports of steel and aluminium, solar panels and washing machines to the United States represented only 0.8% of total exports by the AsiaPacific region in 2017 (figure 4.10). If the automobiles and parts become subject to new tariffs, the share of tariff-affected exports by the Asia-Pacific region will rise to only 2.3%. However, some economies would be disproportionately affected. Japan and the Republic of Korea, as major automotive exporters to the United States, would have the highest exposure as their share of total exports hit by the increased tariffs stand at 8% and 5%, respectively. New Caledonia and Georgia are also vulnerable because steel and aluminium tariffs may affect 4% to 5% of their total exports.



Potential direct exposure to tariffs imposed by the United States

(Percentage of total exports)



Source: ESCAP calculations using data from the United Nations Comtrade database downloaded from WITS (accessed September 2018). Note: The calculations are based on trade value in 2017. Mirror data have been used.

China's direct exports to the United States accounted for about 24% of its total merchandise exports in 2017. While economies other than China are only minimally exposed to the tariff increases by the United States at this time, most are heavily engaged in indirect exports to the United States via China. More than 17% of total exports from the Asia-Pacific region went directly to the United States. Some small economies in the region, such as Fiji, French Polynesia, Sri Lanka and Tonga, depend heavily on the United States for their exports. Cambodia, India, Japan, Pakistan and Viet Nam are less dependent on trade with the United States, but still almost 20% of their exports currently going to the American market.

2. Indirect exposure through integrated value chains

The region has indirect exposure to the tariff imposition on goods exported from China because of the regional integration through GVCs. As highlighted in chapter 1 of this report, many economies in the Asia-Pacific region are integrated deeply with China through value chains that ultimately export to markets outside the region, especially the European Union and the United States. Exports of raw material, and intermediate and capital goods accounted for 69% of total exports by the Asia-Pacific region in 2017.37 Exports to China

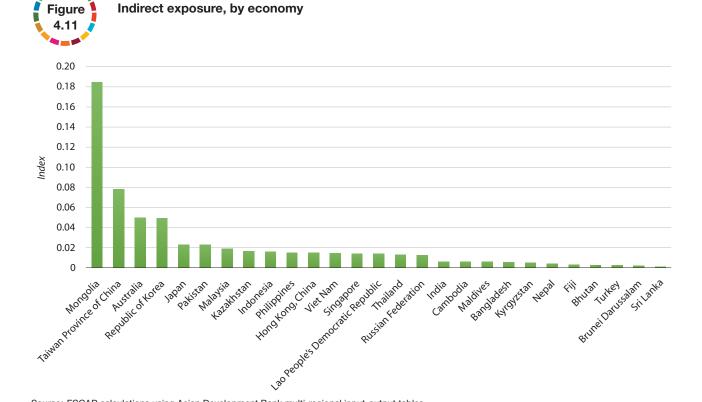
^{*} Potenetial targets

represented 27% of these exports by other Asia and the Pacific economies. Some of those exports were used by China as inputs in the production of exports to the United States and the rest of the world. The substantial shares of these GVC-related exports imply that trade conflicts between the United States and China could have ripple effects on the rest of the region. The indirect effects could be particularly strong for sectors and economies that are deeply integrated with China and the United States through GVCs.

To identify vulnerable economies, ESCAP has constructed an indirect-exposure indicator identifying economies in the Asia-Pacific region that are highly vulnerable to the consequential loss of intermediate demand from China due to the protectionism actions against China's exports. The analysis is based on an input-output analysis using data from the Asian Development Bank Multi-Region Input-Output (MRIO) Database.³⁸ Constructing the index of economy vulnerability is based on the following two assumptions: (a) an economy would have high indirect exposure if the share of indirect exports through China in their total exports is significant; and (b) an economy's exposure is high if its exports to China tend to be used as inputs in the production of China's exports more than in China's domestic consumption.³⁹ In other words, the index of economy vulnerability combines the risks arising from an economy's export concentration on vulnerable sectors and its heavy reliance on indirect exports through China.40

"Economies exporting raw materials and intermediate products used in China's exports are most vulnerable."

The economy-level analysis reveals that Mongolia is the most vulnerable economy in the region, followed by Taiwan Province of China,41 Australia and the Republic of Korea (figure 4.11). These economies have relatively high reliance on indirect exports through China. The high vulnerability of Mongolia is not surprising, given the fact that China is almost



Source: ESCAP calculations using Asian Development Bank multi-regional input-output tables.

a single gateway for Mongolia to export to the world market. Exports to China accounted for 76% of total value-added exports to the world by Mongolia in 2017, 91% of which were mining and quarrying exports. About 24% of Mongolia's mining exports would be at immediate risk from the tariffs hitting China's exports, while the remainder would suffer from slower domestic demand in China. Other economies exporting raw materials, such as Kazakhstan and Kyrgyzstan, face less risks than Mongolia because they are less dependent on exports to China.

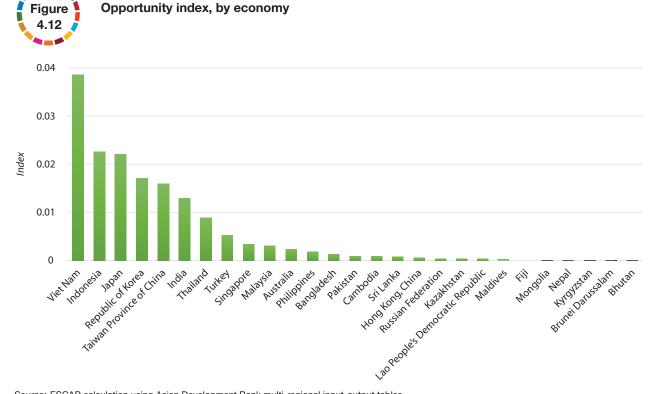
In contrast, Taiwan Province of China and the Republic of Korea are highly vulnerable because of their GVC-related exports of electrical and optical intermediate products to China. For Taiwan Province of China, 6% of its total domestic value-added exports end up in China's export production, and come from the electrical and optical sector. The Republic of Korea, faces vulnerability in the same sector with exposure of approximately 3%. Australia, on the other hand, has 3.5% of its total domestic value-added exports to the world directed towards China's export production, all of which is concentrated in the mining and quarrying sector.

A number of South-East Asian economies such as Singapore, Malaysia, Thailand and the Philippines face a moderate degree of vulnerability. Although these economies' exports of electrical and optical equipment are at risk, their relatively high diversification in intermediate export markets explain their moderate levels of vulnerability. South and South-West Asian as well as North and Central Asian economies face low risks for other reasons. First, these subregions are not significantly integrated into GVCs linked with China's exports. Second, these economies have a diverse portfolio of trade partners, thus limiting their exposure to volatilities faced by China. In addition, part of their exports to China, such as textiles and textile products, agriculture, hunting, forestry and fishing, end up in domestic consumption more than in China's export production. The results highlight potential ripple effects on economies exporting intermediate goods in GVCs. These results also underline the need for the diversification of exports and markets, and the need to improve the balance of regional integration strategies.

3. Potential opportunities arising from the redirection of trade and production in GVCs

To avoid the United States tariffs, multinational operations could reorganize their GVCs. Given that the United States remains the dominant market for the final products of GVCs, final production would move from China to other economies, including back to the United States (see box 4.1). Therefore, despite the immediate downside risks and vulnerabilities from indirect exposure, some Asia-Pacific economies might gain opportunities arising from the redirection of trade and investment away from China.

The opportunity index identifies economies potentially taking up market opportunities. Again, the analysis is based on the input-output analysis using data from the Asian Development Bank's MRIO Database. Index construction here is based on the assumption that the United States limits its tariffs to only goods from China. The opportunity index consists of three sub-components representing factors determining the potential of an economy to attract the redirected investment and become a new assembly centre instead of China.42 The first component captures the fact that an economy having greater access to final demand in the United States would have a higher advantage. The second component addresses the fact that an economy having a higher degree of integration into regional and global production networks would have a higher potential to become a new assembly centre. This is because it needs to have cost efficiency in importing goods and required services, assembling them or adding value and then re-exporting.43 The third component captures the fact that the opportunity of an economy also depends on the sectoral composition of its exports. The redirection of trade and investment would more likely happen in sectors where China has large market shares in the United States.



Source: ESCAP calculation using Asian Development Bank multi-regional input-output tables.

"Some economies could see positive spillovers because of trade and investment moving away from China."

The analysis indicates that Viet Nam has high potential for replacing China as a new assembly centre for GVCs. A major factor for Viet Nam's high potential is its strong links to final demand in the United States (figure 4.12). The fact that Viet Nam has already integrated into GVCs of some sectors makes its potential to become a new assembly centre highly probable. The economy has particularly high potential for attracting labour-intensive manufacturing sectors, such as the leather and leather footwear industry. These sectors are also facing new tariffs in the United States. Indonesia's relatively high opportunity index is driven by its manufacturing sectors and rawmaterial exports. Opportunities for Japan, the Republic of Korea and Taiwan Province of China are driven by their competitiveness in hi-tech electronics, concentrated in the electrical and optical equipment sector. These sectors are likely to be more exposed to United States tariffs.

The above analysis is a partial equilibrium analysis limited to tariff increases by the United States on China and does not take into account the effect of retaliation by China and other economies to the United States' protectionist actions. For example, China has increased tariffs on a wide variety of products from the United States, creating potential opportunities for other economies to export to China instead. The impacts on GVC-related trade from China's tariffs are not likely to be as significant as the impacts from the United States tariffs. The current share of China, as a source of final demand for products in GVCs, remains at only 5% of global imports of GVC-related final products; the share of the United States is more than 20%. Nevertheless, the retaliatory tariffs imposed by China on the United States' exports of agricultural and industrial commodities could increase market opportunities for commodity-based economies to expand exports to China. In addition, some of these commodity exporting economies could potentially become highopportunity economies if China decides to actively support the development of their capacity to engage in GVCs through foreign direct investment and knowledge transfers.



Supply chain adjustments in response to a growing trade war could boost FDI to South-East, and South and South-West Asia

As the trade war between the United States and China escalates, businesses operating in both economies are experiencing parallel pressure to rethink and adjust supply chains in order to remain competitive. High tariffs between the two economies stand to penalize producers and consumers in both economies by triggering a rise in the cost of industrial inputs and other goods. Moreover, the consequences of trade tensions are likely to spillover beyond exports and imports, and could spark investment diversions from China and the United States to South-East, and South and South-West Asia as businesses look to adjust their supply chains and shift production to mitigate tariffs on both sides of the Pacific. Such shifts in FDI can be leveraged in both subregions to further stimulate inclusive and sustainable growth.

Enterprises beyond the United States and China have already reported significant headwinds from the tariffs, noting that their price competitiveness and revenue streams are being directly threatened. Some auto firms, including BMW and Tesla, plan to transfer the costs of the tariffs to consumers by raising the prices of their vehicles being imported from the United States and sold in China. Other firms are exploring contingency plans that could have significant implications for FDI flows in the future. These options include: limiting the sourcing of inputs from China while simultaneously beginning to source from other economies; relocating some or all production lines; and relocating to the United States.

"Production shifts to maintain competitive advantage amid trade tensions are real. They are already happening."

Production shifts may become an increasingly compelling business strategy for maintaining a competitive advantage as uncertainty grows amid trade tensions. Anecdotal evidence^a confirms that manufacturing firms operating in the electronics, chemicals, furniture, toys and medical device sectors are seriously considering relocating or reshoring to trim their exposure. Media reports and official press releases collected between June and October 2018 reveal that at least 25 firms are currently considering or have already made concrete plans to shift parts or all of their production outside of China. Conversely, only three firms have indicated that they will or are likely to shift part of their production from the United States, while six firms, largely concentrated in the electronics sector, have confirmed they are exploring, or have already initiated, plans to reshore production to the United States. Firms that have already formally confirmed relocation include: Harley Davidson, which plans to move part of its production from the United States to Thailand; Kayamatics, a company which sells Internet of Things devices, will move production from China to Malaysia; and Luxshare, an electronics manufacturing firm, will move parts of its production to a new site in Viet Nam. Those firms that have officially announced plans to reshore include Foxconn, an electronics component manufacturer for Apple that will open its first international plant in the United States, and Premier Guard, a medical device manufacturer that plans to transfer 60% of its production from China to the United States.

Surveys of American and European businesses in China further illustrate the tariff war's potentially looming effects on future investments. Of 430 American firms surveyed, 61% reported that the tariffs would result in them readjusting their supply chains to source and/or assemble either outside China (30.2%) or the United States (30.9%). Another 27% disclosed that they were considering relocating outside China (18.3%) or the United States (9%), while 31% cited that they were putting future investments on hold. In comparison, of the 193 European firms surveyed, nearly 12% are considering moving all or part of their production out of China (6.7%) or the United States (5.2%), while 5% have already changed suppliers and no longer source from China, and 14% are putting investments on hold. While comparable surveys of the tariff war's impact on Chinese firms are not available, initial reports point to a geographical shift in Chinese outbound investments that favoured Europe over North America in the first two quarters of 2018. Chinese divestments in North America are the result of escalating trade tensions as well as the tightening of regulations in China on outward FDI.



(continued)

While most firms are hesitant to act prematurely, they have nonetheless initiated a number of official business scouting missions to Malaysia, Myanmar, Thailand and Viet Nam. In the survey of American firms, 18.5% were considering moving production to ASEAN, while 6.3% were considering South and South-West Asia. Both subregions have been cited as the preferred destination for potential moves because of their low production costs and ability to accommodate large-scale shifts of production from China. Within ASEAN, Malaysia and Viet Nam have a competitive advantage compared to other economies in the subregion as both are a party to the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). Recognizing the potential of their economies to capitalize on the trade war through the redirection of FDI flows, Viet Nam's Deputy Minister of Industry and Trade was quoted as emphasizing the attractiveness and openness of Viet Nam in a statement made to high-level officials and businesses in Brussels, just after the third round of tariffs was announced. Malaysia's Deputy Minister of International Trade and Industry also recently confirmed that interest in investing in Malaysia has risen directly as a result of the trade war and of CPTPP, which allows Malaysia to attract more FDI of this type.

"There are huge uncertainties in the relocation strategy, depending on how trade tensions will be evolving."

Relocation and reshoring are, however, not easy and require time to get the right staff and train them, the right permits, the right location, and get the right logistics and distribution networks in place. Moreover, China is not easily replaceable as it is able to boast having some of the best infrastructure, supply chain networks and engineering talent in Asia and the Pacific; as many firms rethink their calculations about making goods in China and exporting to the United States, they are taking this into consideration. For China, relocation and reshoring moves triggered by the tariff war come at a time when it has already been targeting a move into high-end manufacturing. Thus, tariffs of the United States on China could hasten the upgrading of Chinese companies into middle- and high-range products, while low-end manufacturing is shifted elsewhere and Chinese companies are pushed into upgrading to offset any negative effects.

A time lag between the relocation and reshoring moves of firms and their appearance in official FDI figures is to be expected. Moreover, the full effects on FDI from the trade war will also depend on whether the United States imposes any additional tariffs and how China responds. In addition to increased tariffs from either side, there is a possibility that the United States could extend tariffs to South-East, and South and South-West Asia. Tariff extension could subsequently deter supply chain adjustments and related investment redirection to these subregions.

The dynamics of investment flows in Asia and the Pacific are changing, and the trade war provides new opportunities for economies in South-East, and South and South-West Asia to attract FDI, particularly in the manufacturing sector. Such investment flows could generate more opportunities for small and medium-sized enterprises in those economies to integrate into GVCs. However, in capitalizing on these opportunities, it is essential that host economies ensure investments deliver sustainable benefits. Doing so critically depends on the ability of Governments in the region to assess and evaluate the sustainability characteristics of FDI, and to implement the appropriate investment policy and regulatory frameworks. To this end, ESCAP is developing economy-specific FDI sustainability indicators, and has already developed a Handbook on FDI Policies (ESCAP, 2017a) to support its member States in promoting and attracting sustainable FDI. It is hoped that policymakers in Asia and the Pacific will utilize these resources in harnessing investment flows that generate maximum sustainable development benefits for the region.

Source: Taylor-Strauss (2018).

a Anecdotal evidence is being used as basis given that the recent nature of the topic combined with the fact that it is still unfolding has meant that rigorous empirical evidence on it has yet to be developed on this phenomenon. ESCAP will continue to monitor these developments and provide additional empirical evidence in support of these claims as they are developed.

D. THE POTENTIAL IMPACTS OF TRADE TENSIONS AND REGIONAL INTEGRATION

In order to gain more comprehensive insights on the potential impacts of trade tensions on the Asia-Pacific region, a computable general equilibrium (CGE) model is used to evaluate the economic, social, and environmental impacts of: (1) tariffs and retaliatory tariffs already notified or implemented at the time of preparing this report; (2) implementation of further tariff threats; (3) a potential decline in investment rate of return and a reduction in global consumer confidence as the trade wars and associated policy uncertainties persist. In addition, the CGE model is used to evaluate the impacts of implementation of RCEP, CPTPP and the European Union-Japan FTA, and how their implementation could help mitigate the impacts from worsening trade conflicts.

The economic impacts of the policy changes are captured through: (a) changes in GDP and trade levels; (b) the social impact through changes in levels of inequality and employment; and (c) the environmental impact through changes in CO₂ emissions. The baseline year is 2017 and the results are generated using an extended comparative static GTAP model to capture the effect of real wages on labour supply and examine employment outcomes. The model estimates presented total economic impacts from a specific set of policy changes. The economic losses or benefits estimated may not happen instantaneously. It may take some time for them to materialize, with the ultimate outcome influenced in practice by other policies and mitigation measures that affected economies may put in place. Model details are available in Annex B.44

The policy changes are modelled as follows:

Scenario 1 – Current tariff hikes by the United States and retaliations that have either already occurred or been notified to WTO in 2018 ("implemented tariffs"). ⁴⁵ In this scenario, Canada, China, the European Union, India, Indonesia, Japan, Mexico, the Republic of Korea, Turkey and the United States raise their tariffs as per their official notifications to WTO. The additional tariff rates range from 10% to 140%.

Scenario 2 – All tariffs implemented up to date (from scenario 1) as well as all threatened tariffs ("threatened tariffs"). The threatened tariffs are those mentioned in the economies' official communiques,

news, etc. but not yet notified to WTO or implemented. These include potential tariffs on cars and car parts (as a consequence of the United States Section 232 Auto Investigation – discussed earlier), as well as further escalating retaliatory tariffs between China and the United States.

Scenario 3 – In addition to all implemented and threatened tariffs, a 5% negative shock to expected rate of return on investment in economies experiencing declines in GDP, and a further worldwide 0.5% demand shock ("doomsday scenario"). The 0.5% demand shock is in line with modelling conducted by the World Bank (2018). Furthermore, following Malcolm (1998), investment risk increased uniformly to the extent of a 5% lower expected rate of return on investment in China, the United States, Canada and Mexico – economies that see their GDP decline under scenarios 1 and 2.

Scenario 4 – Baseline RTAs: RCEP, CPTPP, European Union-Japan ("regional integration"). This scenario simulates the removal of all tariffs within upcoming/potential trade agreements in the region, i.e. RCEP, CPTPP and European Union-Japan FTA.

Scenario 5 – Doomsday scenario + RTAs ("doomsday with integration"). The "doomsday" scenario is combined with the "regional integration" scenario.

"The current trade war is having detrimental impacts globally. Global GDP could fall by nearly \$150 billion with tariffs already implemented. In the Asia-Pacific region, the adverse impacts on China could drive the regional GDP down by \$43 billion. The adverse impacts could more than double in the worst-case scenario."

As a result of the implemented tariffs so far (scenario 1, "implemented tariffs"), global GDP is estimated to fall by 0.16%, or nearly \$150 billion. This is just \$10 billion short of the total official development assistance (ODA) given by the developed economies in 2016. In Asia and the Pacific alone, the decline is 0.12% of GDP, or \$43 billion. Notably, in absolute and relative terms, the United States experiences the largest decline, with an estimated decline of 0.65% of GDP, at more than \$120 billion. The United States loses the most because it has engaged in trade conflicts not only with China, but also with other significant trade partners, most of whom retaliated. The largest

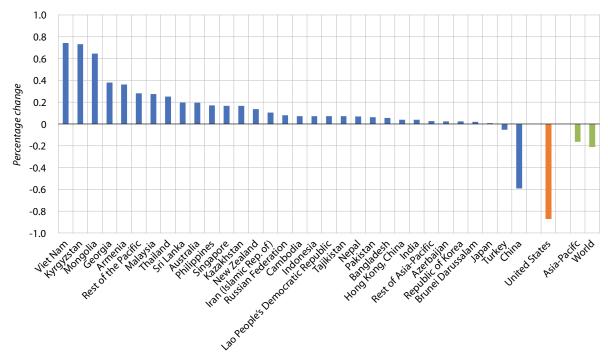
sectors to experience a decline in the United States in relative terms are oil seeds, plant fibres, construction, manufacturing, and mining of metal ores, uranium, gems and others. These sectors decline by an estimated 15%, 6.1%, 6.0%, 3.5% and 3.0%, respectively. In absolute terms, the declines in construction, other services, retail trade, motor vehicles and parts, and recreation services are expected to fall by \$84 billion, \$28 billion, \$26 billion, \$12 billion, and \$8 billion, respectively. In Asia and the Pacific, the biggest loser is China, with a 0.48% loss of GDP under scenario 1, at \$60 billion. Chinese sectors of electronic equipment, lumber, construction, fabricated metal products and other services are estimated to fall by 4.8%, 3.1%, 0.8%, 0.7% and 0.7%, respectively. In absolute terms, electronic equipment, construction, other services, lumber and non-metallic minerals fall by an estimated \$78 billion, \$24 billion, \$14 billion, \$12 billion and \$8 billion, respectively.

If all the tariff hikes threatened but not yet undertaken in 2018 are indeed implemented (scenario 2), global GDP losses reach \$214 billion. If we take into account the higher risks faced by investors and the loss of consumer confidence associated with an uncertain policy environment (scenario 3), global GDP losses rise to nearly \$400 billion. Asia-Pacific GDP losses rise from \$59 billion under scenario 2 to \$117 billion under scenario 3. Most of these losses are accounted for by economic losses in China and the United States, as in scenario 1 – see figure 4.13. Indeed, all other economies in the Asia-Pacific region see a rise in GDP, with the exception of Turkey, which records a slight decline. Viet Nam, Kyrgyzstan and Mongolia are all expected to benefit from the trade war to the tune of more than 0.5% of their respective GDPs. Importantly and somewhat paradoxically, these GDP gains come as net exports actually decrease in all economies except the United States, China, Mexico and Canada.

To demonstrate the effects of trade disruptions, for example, Viet Nam's exports to the European Union, Japan, China and the Republic of Korea experience the most significant declines. However, Viet Nam's exports to the United States grow, with lumber, electrical machinery and electronic equipment, and



Change to GDP if threatened tariffs are implemented (Scenario 2)



Source: ESCAP calculations.

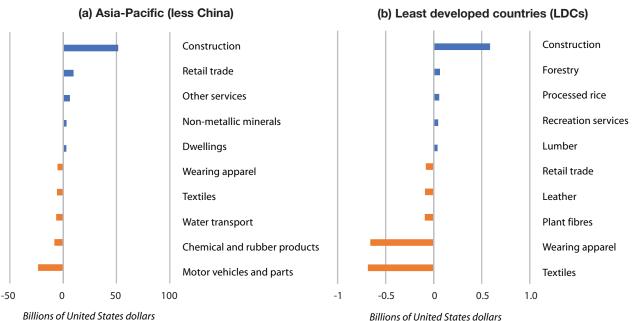
textiles all expected to show significant increases. Imports to Viet Nam increase overall, most notably from China and, to a lesser degree, the United States, particularly by the electrical machinery and equipment sectors (from China) and plant fibres and electrical machinery (from the United States).

The impact of trade tensions at the sectoral level vary widely at the regional level. Figure 4.14.a shows the top 5 growing and top 5 declining sectors in the region, excluding China, when both "implemented" and "threatened" tariffs are applied (scenario 2). Figure 4.14.b shows the same, but only for AsiaPacific least developed economies (LDCs). Construction is expected to be the big winner in LDCs and the Asia-Pacific region whereas potential motor-vehicle tariffs are expected to affect the automotive and parts sectors the most in the region as a whole. Since LDCs are not large automotive or parts producers, sectors experiencing the most declines there are textiles, wearing apparel and plant fibres. Although the sectoral declines observed in LDCs are small, it may be noted that the sectors concerned are labour-intensive sectors characterised by a particularly high proportion of female workers.



Sectors most affected by implemented and threatened tariffs (Scenario 2)

(Change in billions of United States dollars)



Source: ESCAP calculations.

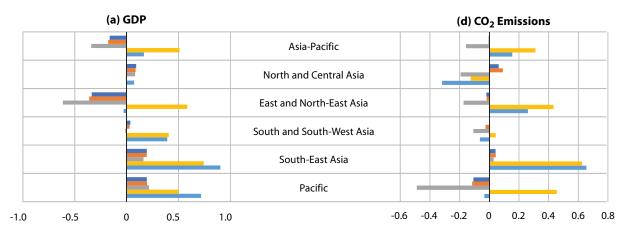
Figure 4.15.a summarizes the impact of all of the scenarios on GDP in subregions as well as Asia and the Pacific as a whole. While the overall effect on the Asia-Pacific region becomes progressively worse with severity of the trade frictions, the negative impact is primarily driven by East and North-East Asia which, in turn, is driven by the estimated results for China. All other subregions are actually better off in aggregate in scenarios 1 ("implemented tariffs") and 2 ("threatened tariffs"); only the South and SouthWest Asia subregion experiences a slight decline in GDP under the third scenario ("doomsday").

As already noted, the results themselves are not directly trade-driven - most economies experience declining real trade balances under scenarios 1, 2 and 3, meaning real net exports decrease. The increase in GDP and, subsequently, welfare is conveyed through three mechanisms, although they vary in significance among the individual economies.

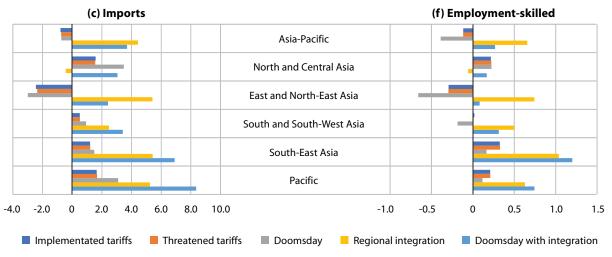


Simulated results of trade tensions, regional integration and combined scenario

(Percentage change from baseline)48







Source: ESCAP calculations.

First, there are "allocative gains" where governments collect more consumer, producer and import tax revenues. Next, there are "endowment gains" where higher economic activities lead to higher income, both for skilled and unskilled labour. Most significantly, this is all enhanced through improvements in terms of trade. As producers in the United States and China experience oversupply (due to blocked markets), this leads to declines in the prices of their exports to third markets. As such, prices for most imported products fall, benefitting both consumers and intermediate producers in third economies. In addition, exporters in economies not blocked by increasing tariffs experience increases in their export prices, as they fill in the gaps opened by the exclusion of China and the United States in respective markets.

"Asia and the Pacific can weather the escalating trade war, if negotiation and implementation of regional trade integration initiatives are accelerated."

Significantly, regional integration (scenario 4) promises a substantial boost to regional GDP and, even when combined with the "doomsday" trade war scenario, more than offsets regional GDP loses. This, however, is only true at the regional and subregional levels, with some economies in the region still experiencing negative GDP growth, most significantly China. As expected, regional integration boosts exports and imports in all scenarios to a great extent. Regional exports and imports increase by 2.9% (1.3% in combination with the doomsday trade war scenario), and 4.4% (3.8% in combination with the with doomsday trade war scenario), respectively. Significantly, in Asia and the Pacific as a whole as well as in most subregions, trade gains from implementation of the mega RTAs are enough to offset negative effects on trade from even the worst trade war scenario considered (scenario 5). Notably, under the regional integration scenario, the North and Central Asia subregion actually experiences a small decline, as its economies are not part of any regionalization efforts considered under the scenario. This highlights the need to accord priority to integration efforts in order to ensure that trade is not diverted by forthcoming mega trade agreements. Emerging RTAs between the Eurasian Economic Union (EAEU) and a number of economies in East and South-East Asia noted earlier in the chapter are welcome in this regard.

"Social and environmental impacts depend on the level and pattern of economic activity. Hence, complementary policies must be implemented at all times."

Turning to impacts on the environment, the effects of the first two scenarios (implemented and threatened tariffs) are CO₂ neutral in the region. Due to declining trade levels and a significant economic contraction in China, the effects of the doomsday scenario (3) are actually positive, meaning that CO2 levels decline. In contrast, regional integration is expected to boost emissions as regional trade increases, even if the trade conflicts with the United States worsen ("doomsday with integration" scenario). As such, higher economic activity with no emission mitigation policies will inevitably lead to higher emissions; thus, complementary environmental policies will remain essential in channelling trade into sustainable development.

In terms of social impacts, both skilled and unskilled employment changes largely follow the overall pattern of economic activity described by GDP at subregional levels. A net loss of at least 2.7 million jobs can be expected in the Asia-Pacific region if threatened tariffs are implemented (scenario 2). If the continued trade conflicts impact investor and consumer confidence significantly, as modelled in scenario 3, net job losses rise to 8.9 million in the region. Regional job losses are primarily driven by losses in China, but other economies also experience total job losses, including Turkey and Bangladesh. Thirteen economies experience net job losses under the worst case scenario. Sectors where unemployment rises in China include in particular the electrical equipment sector. Under scenarios 2 and 3, the sector, and consequently employment, in economies other than China that experiences the most precipitous decline is motor vehicles and parts, whereas construction (including building of houses, factories, offices and roads) experiences the most gains. The current tariff war (scenario 1) seems to affect disproportionately more unskilled workers, as the rate of job losses for unskilled workers is 66% higher than that for skilled workers under scenario 1. However, as the trade conflicts deepen under scenarios 2 and 3, the rate of job losses among skilled and unskilled workers narrows to 23%. It is notable that regional integration can add as many as 12.5 million jobs in the region, and when combined

with the worst trade war scenario considered, overall, region adds more than 3.5 million jobs.

"While escalating trade war can put almost 9 million people out of work in the region, regional integration can add 12.5 million new jobs."

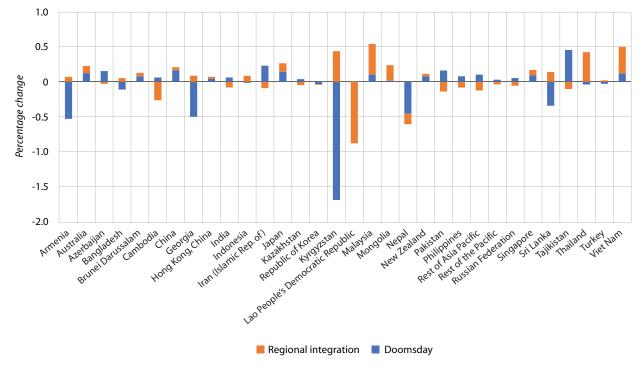
While net job losses are not very large, millions of workers can expect their jobs to be displaced as global value chains are reshaped and economies restructured under the impact of the trade conflicts; as well as of regional integration. On average for the region as a whole, the overall effect of the doomsday and regional integration scenarios on inequality are largely insignificant, bringing about only a 0.01% increase in both cases. ⁴⁹ The effect on inequality for most economies in the Asia-Pacific region is confined to a +/- 0.5% change band (figure 4.16). At the individual economy level, however, the effect is more pronounced in some economies that are more susceptible to production

redistribution in the sectors affected, both by trade frictions and the trade integration effect. For example, electrical machinery and equipment - a sector that employs comparatively more skilled labour experiences a significant decline in Kyrgyzstan under the doomsday scenario, while the retail trade sector (low-skill intensive) experiences gains, ultimately reducing inequality. At the same time, under the regional integration scenario the Lao People's Democratic Republic experiences a surge in the construction sector (low-skill intensive), and marginal declines in a number of sectors employing high-skill labour. As such, integration efforts – as noted in the APTIR 2017 (ESCAP, 2017b, chapter 6) – must also be accompanied by social policies to ensure inequality does not widen due to significant changes in affected sectors.

Overall, the results show that Asia and the Pacific can weather the escalating trade war if the negotiation and implementation of regional trade integration initiatives are accelerated. The United States, a key party to trade frictions, stands to lose the most from



Effect of trade tensions and regional integration on inequality



Source: ESCAP calculations.

these frictions – even if its trade deficit falls by an estimated 42%. At the same time, even with the implementation of RCEP and other RTAs considered, China will still stand to lose more than \$100 billion of its GDP and the region will see net export losses of over \$170 billion. As noted in the APTIR 2017 (ESCAP, 2017b), trade facilitation is one area that can bring significant gains. Annual figures suggest that for the Asia-Pacific region an additional 4.2% could potentially be added to the regional GDP by 2030 through trade facilitation and digitalization of trade procedures. Furthermore, the environmental impact analysis highlights the need for mitigation by complementary environmental policies.

E. CONCLUSION

Heightened trade tensions between the two largest economies in the world could have important implications for economies in the Asia-Pacific region. By reviewing policy developments globally and in the region, the trend of increasing restrictions is evident across the board from the rapid increase of restrictions on trade in goods, a persistently high restrictiveness on trade in services, and increasing reservations over investment. In addition, trade tensions also affect the dynamic of regional integration. On the one hand, the tensions are prompting Asia-Pacific economies to become closer as China and other economies appear to speed up their implementation of regional trade agreements. On the other hand, Asia-Pacific economies are enhancing trade integration with economies outside the region as a means of diversifying their trade partners, and balancing the dominance of the United States and China in the trade architecture of the region.

Although the United States-China trade war has an adverse impact on the world economy, the direct exposure of the Asia-Pacific region, except China, to the current tariff wars are generally limited. The indirect impacts from the tariff wars could, however, be much more significant. The conflict has already had ripple effects through backward and forward linkages in GVCs. For the immediate term, global trade flows are set to slow, as the United States-China tensions disrupt existing supply chains and dampen investor confidence. In the medium term, trade frictions between the world's two largest economies may significantly affect the configuration and expansion of GVCs, which have been the major

driver for the economic success of many economies in the region during the past three decades.

The CGE analysis presented in this chapter confirms that the overall economic impact of the trade tensions on the region is negative, although moderate in aggregate terms. Tariff increases already implemented only reduce regional GDP by 0.12%, or about \$40 billion. However, if the trade tensions worsen and investor confidence falls as envisaged in some of the scenarios, the adverse impacts could reach nearly \$400 billion at the global level, and exceed \$115 billion in Asia and the Pacific. In all cases, most of the regional GDP decline is driven by the adverse impacts on China, although net exports also fall in almost all other Asia-Pacific economies.

Winners and losers are expected to emerge if higher tariffs between the United States and China persist. As importers in the United States and China look for alternative suppliers, new opportunities will open up for exporters in third-party markets. A significant share of the gains from the trade war may fall to economies in Asia and the Pacific. But these gains are not expected to be equally distributed across the Asia-Pacific region. Some of the largest beneficiaries will be ASEAN members. Viet Nam, in particular, has a high potential for attracting assembly activities from China. Labour costs and existing integration into GVCs are both giving Viet Nam an advantage over other economies in the region.

At the aggregate level, there is still a potentially serious downside in GVC redirection induced by trade tensions. Given that the location optimization in GVCs was driven by cost efficiency, any distortion affecting relocation decisions of multinational enterprises could create inefficiency-related losses both at the regional and global levels. In addition, the relocation of production will not be completed overnight, and short-term pains may be expected at the firm level in many economies as GVC maps are redrawn. Even if net job losses in the Asia-Pacific region from increasing trade tensions are moderate, millions of workers may be forced to move to different sectors as the trade architecture is transformed. Finally, effects of trade tensions on the environment and CO, emissions could also be negative, e.g. if assembly activities were to move from China to economies with lower environmental standards. As such, emission mitigation strategies as well as income re-distribution strategies for people

negatively affected by trade frictions must be placed high on the policymakers' agenda.

Overall, it is important to recognize how difficult it is to accurately estimate the impact of current trade tensions on sustainable development. Besides limitations inherent to the data and models, the policy changes associated with the trade tensions have been relatively unpredictable and constantly evolving. This policy uncertainty is probably what is most damaging for the region as a whole.

In this context, a key finding of the analysis presented in this report is that deepening market integration in the region is an effective strategy for minimizing the adverse consequences of current and future trade tensions. Taking the Asia-Pacific region as a whole, positive trade impacts from regional integration could more than offset the negative effects from potentially worsening externally driven trade tensions. Asia-Pacific economies may therefore strive to complete negotiations of existing regional trade agreements as soon as possible. They may also consider proactive engagement in other potentially complementary trade-related regional cooperation and integration initiatives, such as the Framework Agreement on Facilitation of Cross-Border Paperless Trade in Asia and the Pacific⁵⁰ and the Belt and Road Initiative, among others. Finally, they may work together on the pending WTO reform towards a universal, rule-based, open, non-discriminatory and equitable multilateral trading system, as already envisaged in SDG target 17.10 of the 2030 Agenda for Sustainable Development.

Endnotes

- ¹ The first round of tariff imposition took effect in July 2018, covering \$50 billion of imports from China in 2017. The second round covering \$200 billion of imports from China became effective in September. The United States has also threatened to include all imports from China. The President of the United States announced in September 2018 that the remaining \$267 billion of merchandise imports from China may also be included in the next tariff round.
- As of December 2018, not all retaliatory measures notified to WTO have been implemented. For example, the retaliatory tariffs notified to WTO by India (see WTO notification G/L/1239, G/SG/N/12/IND/1), have not yet been implemented as per India Customs notification No. 77/2018 dated 1 November 2018, which postponed the implementation of retaliatory tariffs to 17 December 2018.
- The definition of tariffs includes only most-favoured-nation (MFN), non-MFN and preferential tariffs, and excludes anti-dumping and countervailing duties, which as classified as non-tariff measures (NTMs).
- ⁴ The term "discriminatory measures", also sometimes referred to as "harmful measures", is based on evaluations by the Global Trade Alert, and is defined as an intervention that is likely or almost certainly discriminates against foreign commercial interest (Evenett and Fritz, 2018). Improved recording of measures through the Global Trade Alerts (GTA) database in the recent years may also partially affect the trend.
- The numbers are based on data from GTA database. The data include all "state measures" that affect the commercial interests of a trading partner. The scope of measures captured here go beyond border measures to include measures such as domestic regulations, stimulus packages and subsidies that affect commercial interests of a trading partner. Some of these measures need not be subject to WTO discipline. The numbers presented in this report differ from the numbers in WTO reports because WTO reporting does not capture all potential trade-distorting measures, as members merely notify measures that fall within the WTO ruling coverage or disciplines set by WTO agreements.
- The data on WTO-notified measures in the WTO database show a worrying trend that, globally as well as regionally, there was an increase in the number of trade restrictive measures adopted per month from mid-October 2017 to mid-May 2018 compared with the overall reporting period.
- However, welfare effect of export subsidies are potentially theoretically ambiguous and can vary by industry and economy. In the presence of markets characterised by imperfect competition, subsidies could potentially shift oligopoly rents from one economy to another (Brander and Spencer, 1985).
- 8 Calculations are based on non-discriminatory red measures reported in the GTA database (accessed 8 November 2018).
- ⁹ The enforcement of those measures does not take immediate effect. In the case of NTMS originating in the Asia-Pacific region, the enforcement ratio went beyond 50% only after adjusting for a time-lag of five years.
- ¹⁰ The calculation is based on NTMs notified to WTO that are available from the WTO Integrated Trade Intelligence Portal (I-TIP) database (accessed October 2018).
- OECD STRI is an aggregate index categorized under five policy areas: (a) barriers to competition and public ownership; (b) regulatory transparency and administrative requirements; (c) restrictions on foreign ownership and other market entry conditions; (d) restrictions on the movement of people; and (e) other discriminatory measures and international standards. The 2017 database include 22 sectors: computer services; construction; professional services, comprising accounting, architecture, engineering and legal services; and telecommunications. The analysis in this section uses data for the nine Asia-Pacific economies currently available in the database, as described in table 4.4. This list includes the major performers in terms of total trade in the commercial service sector, i.e. China, Japan, India and the Republic of Korea.
- ¹² By using the data on parent and affiliate employment of United States multinationals from the United States Bureau of Economic Analysis, Slaughter (2004) shows that outsourced jobs and parent jobs are not substitutes, but complements.
- ¹³ For RTAs not notified to WTO, official information that is available online was used to register them in APTIAD.
- ¹⁴ Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Viet Nam.
- Australia, Cook Islands, Kiribati, Nauru, New Zealand, Niue, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu are the 11 signatories of PACER Plus. Fiji, Papua New Guinea, Marshall Islands, Micronesia and Palau were initially part of Pacer Plus talks but refrained from signing the agreement, although Fiji is now in negotiations with Australia, and Papua New Guinea is reconsidering its stance (RNZ, 2018).
- Twenty-seven economies in the region are currently participating or negotiating trade agreements with China, while there are only three economies in the region that have trade agreements or are negotiating agreements with the United States.
- ¹⁷ Bryan (2018).
- ¹⁸ Reuters (2017a) and based on FTA data obtained from APTIAD Database (accessed October 2018).
- 19 China Briefing (2018).
- ²⁰ Hayom (2018), and International Centre for Trade and Sustainable Development (2018a).
- ²¹ Lim (2018) and Khan (2018).
- ²² China FTA Network (2017a, 2017b, 2018a).

- ²³ Tabeta, Nagai and Tobita (2018) and China FTA Network (2018b).
- ²⁴ Donnan (2018).
- ²⁵ Caporal (2018).
- ²⁶ The United States has recently taken steps to initiate a new trade deal with the European Union. Entering into trade talks has led both sides to hold off on further tariffs and to work towards dropping existing ones. The trade deal aims to eliminate tariff and non-tariff barriers, and subsides on industrial goods, excluding autos (Landler and Swanson, 2018). There is also indication of a possible FTA with the United Kingdom post its exit from the European Union (Fox, 2018).
- ²⁷ For example, the Government of Indonesia is seeking the completion of 13 trade agreements with other economies and trade organizations in an attempt to boost its exports amid the trade war between China and the United States that has seen a trend towards global trade protectionism (*Jakarta Post*, 2018).
- ²⁸ Based on FTA data obtained from APTIAD database (accessed November 2018), Bangkok Post (2018) and Korea.net (2017).
- ²⁹ White (2018), Kit (2018) and Manila Bulletin (2018).
- 30 European Commission (2018a and 2018b).
- ³¹ Based on FTA data obtained from APTIAD Database (accessed October 2018).
- 32 Australia, Department of Foreign Affairs and Trade (2018) and Indonesia, Ministry of Foreign Affairs (2017).
- 33 Reuters (2018b).
- 34 Reuters (2017b).
- ³⁵ International Centre for Trade and Sustainable Development (2018b).
- ³⁶ Singapore, Ministry of Trade and Industry (2018a and 2018b).
- 37 Calculations are based on mirror data from United Nation Comtrade database, accessed through WITS (November 2018).
- ³⁸ The input-output analysis is partial in nature. It does not take account of general equilibrium trade reallocations following a change in bilateral tariffs.
- ³⁹ See the technical note in annex A for an explanation of the economy vulnerability index.
- ⁴⁰ For further details and analysis, see Anukoonwattaka and Lobo (forthcoming).
- ⁴¹ Taiwan Province of China is not a member of United Nations or ESCAP.
- ⁴² See the technical note in annex A for an explanation of the economy opportunity index.
- ⁴³ Athukorala (2017) describes China's rise to prominence in international trade through its immense integration in regional and global production networks.
- ⁴⁴ For further details, see also Kravchenko, Badri and Duval (forthcoming).
- ⁴⁵ For a technical note and a detailed list of tariff implementation simulated, see Kravchenko, Badri and Duval (forthcoming).
- ⁴⁶ World Bank (2018).
- 47 Malcolm (1998).
- ⁴⁸ Baseline figures are based on the GTAP 7 database, updated to 2017 based on IMF forecasts. See annex B for baseline figures.
- ⁴⁹ Unweighted, excluding Kyrgyzstan as an outlier.
- ⁵⁰ See Ha, Khan and Duval (2017) for an introduction to the framework agreement, or visit www.unescap.org/resources/framework-agreement-facilitation-cross-border-paperless-trade-asia-and-pacific.

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Annex A

Technical note on the construction and interpretation of vulnerability and opportunity indices

This note briefly summarizes the methodology and concepts of the vulnerability and opportunity indices shown in figures 4.11 and 4.12. The vulnerability and opportunity indices are economy-specific and are calculated sector-wise.

The subscripts i and j correspond to sector i in economy j. For brevity, the following detailed discussion of the indices will no longer refer to sector i, for the most part, and its presence is to be implicitly considered. Absence of subscript j in a term implies that the term is constant across countries, and only varies across sectors.

1. Components of the composite index for economy specific vulnerability

Vulnerability of country
$$j = \sum_{i=1}^{35} \left\{ \left(\frac{DVA_INTrexChina_{ij}}{DVAX_GWorld_j} \right) \right\} - (1)$$

Assumption: Countries that possess stronger links with China's exports are more exposed to the impacts of United States tariffs on China.

The vulnerability index for economy j is a ratio that measures indirect exports through China relative to its total exports. The numerator is defined as economy j's domestic value added in intermediate exports to China, used by China in production of its own exports. The denominator is economy j's total domestic value-added exports to the world. The index value shows intensity of economy j's intermediate exports to China's export production as a proportion of its total exports. It thus quantifies economy j's link with China's export production.

2. Components of the composite index for economy specific opportunity

Opportunity of country
$$j = \sum_{i=1}^{35} \left\{ \left(\frac{DVAFin1_{ij}}{DVAFin2_i} \right) \times \left(\frac{FVA_{ij}}{Gross\ Exports_{ij}} \right) \times \left(\frac{DVAFin3_i}{DVAFin2_i} \right) \right\} - (2)$$

The opportunity index of economy j is the weighted average sectoral-opportunity facing economy j, comprised of three components. Component 1 considers the extent of final demand linkage with the United States, component 2 considers the level of integration in global production networks and component 3 is the weight applied to economy j's demand and production sectoral-opportunity (components 1 and 2).

Component
$$1 - \left(\frac{DVAFin1_{ij}}{DVAFin2_i}\right)$$
:

Assumption: Countries that possess stronger links with United States final demand are better positioned to substitute China as a potential import partner for the United States.

Component 1 measures the market share of economy j in the United States final import-demand of sector i. The numerator, *DVAFin1_i*, measures the domestic value-added by economy j in final goods exports to the

United States. The denominator, *DVAFin2_{ii}*, on the other hand, measures the total domestic value-added by all countries in final goods exports to the United States. Therefore, the ratio of DVAFin1; to DVAFin2; shows economy j's domestic value-added in final goods exports to the United States as a proportion of domestic value-added by all countries in final goods exports of the United States. This indicator quantifies economy i's access to final demand in the United States, i.e., it is an indicator of which countries are better positioned to serve United States final demand relative to other countries. Based on the assumption that countries which possess stronger links with United States final demand are better positioned to substitute China as a potential import partner for the United States, a higher value for Indicator 1 corresponds to a higher value for the opportunity index.

Component 2
$$-\left(\frac{FVA_{ij}}{Gross\ Exports_{ij}}\right)$$
:

Assumption: Countries that have a greater degree of involvement in regional and global production networks are more capable of being new assembly centres

This ratio quantifies economy i's degree of integration in regional and global production networks. The numerator, i.e. FVAii, refers to the total foreign value-added in economy j's gross exports to the world. It provides the imported content in economy j's gross exports to the world. The denominator, i.e., Gross Exports_{ii}, is economy j's gross exports to the world. Therefore, the ratio of FVA_{ii} to Gross Exports_{ii} provides the import intensity in economy i's gross exports. This component highlights the fact that countries with a higher degree of integration in global production networks need to have efficient access to parts and components made in any part of the world and be able to put them together into final products. Hence, a higher value for Indicator 2 concomitantly increases the opportunity index value.

Component 3
$$-\left(\frac{DVAFin3_i}{DVAFin2_i}\right)$$
:

Assumption: The level of China's sectoral link with United States final demand is an indicator of which Chinese sectors are most at risk of protectionist actions by the United States.

This term is sectoral-specific indicator. The numerator (DVAFin3) is the domestic value-added in final goods exports from China to the United States. The denominator (DVAFin2), as already highlighted in the discussion of Indicator 1, is the total domestic value-added by all countries in final goods exports to the United States. Therefore, the ratio of these two terms reveals the market share of China in the final-import demand in the United States. A higher value of Indicator 3 in a particular sector provides higher potential for the sector to be included in the target list of the United States against China, and therefore the higher likelihood of redirection of trade to happen in these sectors. Countries that concentrate on exports from these sectors stand to substitute for China in meeting United States final demand.

Combining the three components, the opportunity index is a composite index that gives a proxy of economy opportunity arising from trade tensions, based on sector-specific links with United States final demand, sector specific integration in regional and global production networks, and corresponding focus in opportunity sectors.

Annex B

Methodology overview, baseline values and results tables

This chapter provides a computable general equilibrium (CGE) analysis using an augmented version of the standard Global Trade Analysis Project (GTAP) model and database (Hertel, 2017), which features sectoral and economy level details for Asia and the Pacific. The database is updated to 2017, using World Bank macroeconomic data and the GTAP Adjust tool (Horridge, 2011) – see annex table B1 for the 2017 baseline values. Furthermore, a number of changes in the model are made to capture the importance of some variables related to sustainable development, discussed below.

First, although a full-fledged energy-environment model like GTAP-E (McDougall and Golub, 2010) is not employed, the model used in this analysis draws inspiration from it to compute region-specific CO₂ emissions that are linked with various economic activities. Second, the differential between the growth rates of unskilled and skilled labour is used to account for inequality. Finally, the strong alternative assumptions of full employment or sticky real wages are relaxed by introducing a 45-degree labour supply elasticity curve that ensures both labour supply (employment) and real wages are endogenous in the model. This is exactly midway between the horizontal and vertical labour supply curves that are implicitly assumed in the standard GTAP model. This is consistent with the Monash model, and is supported by econometric literature on labour supply elasticities. This was also done in the APTIR 2017 analysis (ESCAP, 2017b).

The economic impacts of the policy changes are captured through: (a) changes in gross domestic product (GDP) and trade levels; (b) the social impact through changes in levels of inequality and employment; and (c) the environmental impact through changes in CO_2 emissions. Trade balance is assumed to be endogenous, as are all prices and quantities, except capital, land and natural resources, which are all fixed and exogenous. Exogenous technological change variables are not shocked. For scenario 3 ("doomsday scenario"), in addition to implemented and threatened tariffs implemented in scenario 2, the global consumer demand decline is modelled through shocking variable tp_R for each region (region-wide shock to tax on purchases by private household in region R); in addition, a lower expected rate of return on investment in China, the United States, Mexico, Canada and Turkey is implemented by shocking the slack variable cgdslack to impose exogeneity restrictions on the output level of new capital goods in those economies.

While more disaggregated groups are used to run the model, the results are presented using subregional and regional groupings (annex tables B2 and B3).

	GDP (Billion	Exports	Imports	CO ₂ Emissions (Thousands of	
	(Billio	ns of United States o	dollars)	metric tons)	
Asia-Pacific	35 046	35 046 10 438 9 679			
Pacific	2 189	481	462	425	
South-East Asia	2 945	1 737	1 668	1 140	
South and South-West Asia	5 188	1 405	1 670	2 763	
East and North-East Asia	21 357	5 719	5 108	9 135	
North and Central Asia	3 366	1 096	771	1 799	
United States	18 778	2 114	3 183	5 106	

92 514

26 441

26 441

28 623

Annex table B1. Absolute initial values, 2017

Global

Annex table B2. Asia-Pacific subregional groupings

Asia-Pacific subregions	Country groups (GTAP regions)
Pacific	Australia; New Zealand; rest of the Pacific
South-East Asia	Brunei Darussalam; Cambodia; Indonesia; Lao People's Democratic Republic; Malaysia; the Philippines; Singapore; Thailand; Viet Nam
South and South-West Asia	Bangladesh; India; Islamic Republic of Iran; Nepal; Pakistan; Sri Lanka; Turkey; rest of Asia-Pacific
East and North-East Asia	China; Hong Kong, China; Japan; Republic of Korea; Mongolia; Taiwan Province of China
North and Central Asia	Armenia; Azerbaijan; Georgia; Kazakhstan; Kyrgyzstan; Russian Federation; Tajikistan

Annex table B3. Subregional and regional results of simulations

(Percentage changes from the baseline)

(a) Gross domestic product

	Scenario 1 Implemented tariffs	Scenario 2 Threatened tariffs	Scenario 3 Doomsday	Scenario 4 Regional integration	Scenario 5 Doomsday with integration
Pacific	0.19	0.20	0.22	0.50	0.72
South-East Asia	0.19	0.19	0.16	0.74	0.90
South and South-West Asia	0.04	0.03	-0.02	0.40	0.39
East and North-East Asia	-0.34	-0.36	-0.61	0.58	-0.03
North and Central Asia	0.09	0.09	0.08	-0.01	0.07
Asia-Pacific	-0.16	-0.18	-0.34	0.51	0.17
United States	-0.87	-0.88	-1.32	-0.06	-1.39
World	-0.21	-0.22	-0.42	0.16	-0.26

(b) Exports

	Scenario 1 Implemented tariffs	Scenario 2 Threatened tariffs	Scenario 3 Doomsday	Scenario 4 Regional integration	Scenario 5 Doomsday with integration
Pacific	-1.08	-1.09	-2.80	0.79	-2.01
South-East Asia	-0.69	-0.69	-1.79	2.89	1.10
South and South-West Asia	-1.05	-1.00	-2.10	4.67	2.56
East and North-East Asia	-2.12	-2.09	-0.97	3.09	2.12
North and Central Asia	-0.80	-0.68	-2.05	0.28	-1.76
Asia-Pacific	-1.55	-1.52	-1.46	2.87	1.41
United States	-4.53	-4.02	1.49	0.24	1.73
World	-1.34	-1.28	-1.38	1.30	-0.08

(c) Imports

	Scenario 1 Implemented tariffs	Scenario 2 Threatened tariffs	Scenario 3 Doomsday	Scenario 4 Regional integration	Scenario 5 Doomsday with integration
Pacific	1.65	1.68	3.10	5.25	8.36
South-East Asia	1.21	1.21	1.49	5.43	6.91
South and South-West Asia	0.51	0.52	0.94	2.47	3.41
East and North-East Asia	-2.45	-2.36	-3.00	5.41	2.41
North and Central Asia	1.58	1.54	3.49	-0.44	3.05
Asia-Pacific	-0.79	-0.74	-0.74	4.43	3.70
United States	-11.02	-10.72	-13.38	-1.15	-14.53
World	-1.34	-1.28	-1.39	1.29	-0.10

(d) ${\rm CO_2}$ emissions

	Scenario 1 Implemented tariffs	Scenario 2 Threatened tariffs	Scenario 3 Doomsday	Scenario 4 Regional integration	Scenario 5 Doomsday with integration
Pacific	-0.11	-0.11	-0.49	0.46	-0.03
South-East Asia	0.04	0.04	0.03	0.63	0.66
South and South-West Asia	0.00	-0.02	-0.11	0.04	-0.06
East and North-East Asia	-0.02	-0.02	-0.17	0.43	0.26
North and Central Asia	0.06	0.09	-0.19	-0.13	-0.32
Asia-Pacific	-0.00	-0.00	-0.16	0.31	0.16
United States	-0.49	-1.14	-1.41	-0.10	-1.52
World	-0.11	-0.22	-0.43	0.15	-0.28

(e) Employment-unskilled

	Scenario 1 Implemented tariffs	Scenario 2 Threatened tariffs	Scenario 3 Doomsday	Scenario 4 Regional integration	Scenario 5 Doomsday with integration
Pacific	0.26	0.26	0.24	0.73	0.97
South-East Asia	0.31	0.31	0.19	1.14	1.32
South and South-West Asia	0.04	0.03	-0.17	0.42	0.25
East and North-East Asia	-0.33	-0.32	-0.72	0.58	-0.14
North and Central Asia	0.24	0.28	0.30	-0.11	0.19
Asia-Pacific	-0.18	-0.17	-0.48	0.58	0.09
United States	-0.85	-0.87	-1.59	-0.12	-1.71
World	-0.23	-0.23	-0.59	0.21	-0.38

(f) Employment-skilled

	Scenario 1 Implemented tariffs	Scenario 2 Threatened tariffs	Scenario 3 Doomsday	Scenario 4 Regional integration	Scenario 5 Doomsday with integration
Pacific	0.21	0.21	0.12	0.63	0.74
South-East Asia	0.33	0.33	0.16	1.04	1.20
South and South-West Asia	0.02	0.01	-0.18	0.50	0.31
East and North-East Asia	-0.29	-0.30	-0.66	0.74	0.08
North and Central Asia	0.22	0.22	0.23	-0.06	0.17
Asia-Pacific	-0.12	-0.12	-0.39	0.66	0.27
United States	-0.68	-0.70	-1.23	-0.07	-1.30
World	-0.23	-0.24	-0.58	0.15	-0.43

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The Asia-Pacific Trade and Investment Report (APTIR) is a recurrent publication prepared by the Trade, Investment and Innovation Division of the United Nations Economic and Social Commission for Asia and the Pacific. It provides information on and independent analyses of regional trends and policy developments in trade in goods and commercial services, as well as foreign direct investment. It also provides insights into the impacts of these recent and emerging developments on countries' abilities to meet the challenges of achieving sustainable development.

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ISBN: 978-92-1-120783-5

