Book

Aid for trade in Asia and the Pacific : promoting connectivity for inclusive development

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AID FOR TRADE IN ASIA AND THE PACIFIC

PROMOTING CONNECTIVITY FOR INCLUSIVE DEVELOPMENT

WTO OMC

Australian Government
Department of Foreign Affairs and Trade

50 YEARS

ADB

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Foreword

The Hon Julie Bishop MP
Minister for Foreign Affairs
Government of Australia

The Hon Steven Ciobo MP
Minister for Trade, Tourism
and Investment
Government of Australia

Australia is pleased to support the Asian Development Bank's *Aid for Trade Report for Asia and the Pacific*. This will be an important contribution to the sixth Global Aid for Trade Review, focused on the theme of connectivity.

Aid for trade is central to Australia's aid program. By 2017-18, total aid-for-trade investment is expected to reach 19.7 per cent of our total aid budget (or $771 million). As an island trading nation, we understand well that high and lasting growth can only be achieved by participating in international trade.

Trade participation by developing countries is crucial to reduce poverty, improve living standards and help deliver the 2030 Agenda for Sustainable Development. Trade is central to Australia's ongoing engagement in the Pacific region, highlighted by the recent signing of the Pacific Agreement on Closer Economic Relations Plus (PACER Plus). Aid for Trade initiatives will help assist countries across the region to capture the benefits of a more open trading environment.

The Report highlights the unique challenges facing Pacific island countries in overcoming the vast distances and higher transport costs in the Pacific. Australia is proud of our track record in promoting greater connectivity in the Pacific, including establishing internet connectivity in Tonga and Fiji, telecommunications in Vanuatu and mobile coverage in Kiribati and the Solomon Islands. The report recognises such reforms as the foundations for digital trade and e-commerce, which promote connectivity, reduce barriers to market access, lower trade costs, and enhance competitiveness and productivity.

The Report adds that improving trade facilitation and promoting connectivity can help traditionally disadvantaged and underrepresented groups engage in the trading system, such as women, small businesses, and rural entrepreneurs.

Digital trade can also help unlock trade in the emerging services sectors of developing countries. The report outlines the steps to help this happen, from supportive services regulations to convergence between domestic regulations and regional standards. This reform can encourage sustainable service sector growth and reinforce productivity and competitiveness in other sectors of a developing economy.

We commend the ADB for highlighting the difference that aid for trade is making to people's lives in developing countries.

Bambang Susantono
Vice President of Knowledge Management and Sustainable Development
Asian Development Bank

International trade is a key driving force behind economic growth that since 1990 has lifted more than a billion people out of poverty in Asia and the Pacific. The Aid for Trade program can play an important role in ensuring this trend continues by maximizing opportunities for further trade growth and broadening the economic gains that result.

Today, however, developing Asia faces a more challenging global environment. Trade growth has been sluggish after dropping sharply in 2012. There are risks around the prospects for a quick recovery as some advanced economies adopt inward-looking trade policies. This is the backdrop to the latest Aid for Trade review of Asia and the Pacific.

Continued progress on lowering trade costs is imperative. This is key to integrating developing (especially least developed) economies into the global economy. Lowering trade costs can also boost participation of small and medium-sized enterprises and marginalized communities in global and regional trade and value chains. To do this, we need to promote trade facilitation, build trade infrastructure to expand trade capacity, and improve the business climate to attract more investment. Regulatory reform and stronger legal institutions can also enhance cross-border trade by reducing its complexity and costs.

Progress on these fronts is important for Asia and the Pacific, as trade creates the jobs needed to meet employment targets under the Sustainable Development Goals. Aid directed at services—which are increasingly tradable as digital technology transforms business and logistics—is particularly important. The report includes analysis of how Aid for Trade can increase the services sector's tradability through regulatory reforms and modern trade facilitation solutions such as e-commerce. Lessons highlighted in the report can help policy makers target sectors with the greatest potential to create jobs and reduce poverty, and to identify key areas of policy actions under the World Trade Organization-led Aid for Trade Initiative.

The rapid digitalization of trade and growth of e-commerce offers opportunities for geographically challenged economies to increase trade and promote inclusive growth. Backbone services can have major development impact in landlocked economies, as can services-based industries like tourism in island nations. By applying Aid for Trade in services, information and communication technology infrastructure can be improved and an enabling regulatory environment fostered to help such countries share in the benefits of the digital economy. Expanded internet access can be transformative in providing opportunities for small, often women-owned, firms to tap previously inaccessible markets.

Aid for Trade accounts for about 40% of official development assistance in Asia and the Pacific, so its contribution to the region's economic development is significant. This report will contribute to an important discussion on the many policy challenges the region faces—such as lowering trade barriers, facilitating trade, and deepening linkages between economies. I believe that it will contribute to generating bold ideas about how Aid for Trade can help countries to meet these challenges. ADB will continue to support Aid for Trade to this end.

Acknowledgments

The Aid for Trade (AfT) in Asia and the Pacific: Promoting Connectivity for Inclusive Development was prepared by the Regional Cooperation and Integration Division (ERCI) of ADB's Economic Research and Regional Cooperation Department (ERCD), under the supervision of ERCI Director Cyn-Young Park.

ERCI Director Cyn-Young Park led the preparation of the report along with Fahad Khan and Cindy Jane Justo. Other contributors from ERCI also included Jong Woo Kang, Kijin Kim, Aiko Kikkawa Takenaka, and Paulo Rodelio Halili. Anirudh Shingal and Hyun-Hoon Lee provided background research papers on AfT and services trade, and AfT and foreign direct investment, respectively. Excellent inputs and research support were provided by Benjamin Endriga, Regina Villasor, and Cristina Alfonso. Mara Claire Tayag, Paul Mariano, Suzette Dagli, and Grendell Magoncia provided regional integration data; Concepcion Latoja and Erickson Mercado provided support for the Pacific Exporters Survey. Arturo Martinez and Iva Sebastian from ERCD's Development Economics and Indicators Division (ERDI) provided data on poverty indicators.

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Abbreviations

ADB	Asian Development Bank
ADBI	Asian Development Bank Institute
ADB SDBS	Asian Development Bank Statistical Database System
AfT	Aid for Trade
APSA	ASEAN Petroleum Security Agreement
ASEAN	Association of Southeast Asian Nations (Brunei Darussalam, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam)
B2B	business-to-business
B2C	business-to-consumer
B2G	business-to-government
BIMP–EAGA	Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area
BOP	balance of payments
BPC	building productive capacity
CAREC	Central Asia Regional Economic Cooperation
C2C	consumer-to-consumer
CRS	Creditor Reporting System
ECLAC	Economic Commission for Latin America and the Caribbean
e-commerce	electronic commerce
e-mail	electronic mail
EU28	European Union 28 (Austria, Belgium, Bulgaria, Croatia, Republic of Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom)
FATS	foreign affiliate statistics
FDI	foreign direct investment
FMCG	fast-moving consumer good
FSM	Federated States of Micronesia
GDP	gross domestic product
GMS	Greater Mekong Subregion
GVC	global value chain
HIV	human immunodeficiency virus
ICT	information and communication technology
INF	economic infrastructure/trade-related infrastructure
Lao PDR	Lao People's Democratic Republic
LFPR	labor force participation rate

Abbreviations

LPI	Logistics Performance Index
M&A	merger and acquisition
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
PIFS	Pacific Islands Forum Secretariat
PNG	Papua New Guinea
PPP	purchasing power parity
PRC	People's Republic of China
SASEC	South Asia Subregional Economic Cooperation
SDG	Sustainable Development Goal
SMEs	small and medium-sized enterprises
STRI	Services Trade Restrictiveness Index
TiS	trade in services
TPR	trade policies and regulations and trade-related adjustment
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UN-IANWGE	United Nations Inter-Agency Network on Women and Gender Equality
UNWTO	United Nations World Tourism Organization
WEF	World Economic Forum
WTO	World Trade Organization
y-o-y	year-on-year

Highlights

Aid for Trade (AfT) is an integral part of official development assistance to developing countries, which aims to help recipients maximize the benefits of trade liberalization by improving their trade and productive capacities, infrastructure, and institutions.

AfT flows to Asia and the Pacific have been growing steadily. From 2002 to 2015, AfT disbursements to the region grew faster than overall official development assistance (ODA). From a low base of $4.1 billion in 2002, AfT disbursements reached nearly $14 billion in 2015—38.2% of $36.3 billion in total official aid to the region in 2015, significantly higher than the global average of 29.1% of the $112.8 billion received. AfT flows to the region have mainly targeted the transport and storage, energy, and agriculture sectors.

Trade costs have been falling in general, but further progress can be made, particularly in the trade facilitation vital to promoting trade and inclusive development.

Developing Asia's logistics performance moderately improved from 2007 to 2016, driven largely by new and upgraded infrastructure. However, since 2012, there has been a slight reversal, with subregional variations.

Several measures can reduce trade costs further. These include (i) promoting trade facilitation, (ii) building the trade infrastructure essential for expanding trade capacity, (iii) improving the business climate to enhance competition, (iv) lowering or streamlining nontariff barriers, (v) instituting regulatory reforms and harmonization, (vi) opening up services trade, and (vii) maximizing the complementarity between trade and investment.

International trade and foreign direct investment (FDI) generate economic opportunities for socially vulnerable groups including women, with aid for trade properly targeted at employment policies to help these groups benefit from participation in trade and related economic activities.

International trade and FDI have been major drivers of growth in Asia and the Pacific. Between 2000 and 2015, trade in the region trebled, from $1.8 trillion in 2000 to $6.8 trillion in 2015, and per capita gross domestic product (GDP) grew from $4,102 to $11,411. The proportion of the population living in extreme poverty (based on the international poverty line of $1.90 or less a day at 2011 purchasing power parity) declined from 31.8% to 9.0% between 2002 and 2013. Despite this progress, around 330 million people in the region still live in extreme poverty, with large subregional disparities. Moreover, inequality is growing within many countries, with fewer benefits accruing the poor and women in particular.

Evidence is compelling that participation in global value chains (GVCs) generate more jobs for women when labor-intensive work in manufacturing and business processing are part of international production networks. Empirical findings also show that AfT benefits women—a 10% increase in AfT disbursement is associated with a 1.77% increase in the labor force participation rate for women.

AfT can support targeted policies that increase opportunities for women—including policies that foster labor market efficiency and flexibility, and penalize discriminatory employment practices.

Aid targeted at tradable services sectors can be an important catalyst in promoting inclusive economic growth and structural transformation.

The services sector employs 60% of the global workforce (and 70% of the female workforce). Asia and the Pacific is one of the major recipients of AfT in services, accounting for 45.6% of global AfT in services from 2002 to 2015. The largest beneficiaries have been Southeast, South, and Central Asian economies, while transport and energy were the largest recipients by sector.

Regardless of the level of development of the recipient economy, aid that enhances economic infrastructure and boosts productive capacity is positively correlated with services trade across Asia and the Pacific. Empirical analysis shows a statistically and economically significant impact of AfT on services trade across all subregions, most pronounced for South Asia and Southeast Asia. Apart from the overall economic benefits AfT brings to the recipient economies, a 10% rise in AfT for services would directly increase services trade by 0.4%.

However, many barriers remain to trade and investment in services, more so than in merchandise trade. Integrated and coherent policies—together with more trade liberalization and regulatory reform—are critical for services trade. Not only do they promote productivity and competitiveness, but they also help form productive linkages between services sectors and the general economy. Instances of regulatory reform in telecommunications, energy, transport, and financial services have boosted services trade in many Asia and Pacific economies.

Technology can be leveraged to improve inclusiveness of trade-driven growth; fast growing e-commerce presents abundant growth opportunities for the region.

Retail e-commerce sales in Asia and the Pacific are estimated to have grown 31.5% in 2016—double the pace in North America, currently the second largest e-commerce regional market. The region is forecast to remain the world's largest market for e-commerce, with the estimated $1.0 trillion in 2016 sales expected to reach $2.7 trillion by 2020.

Growth of e-commerce has been driven by an expanding middle class, growing mobile and internet penetration, and improving logistics and infrastructure. However, the growth has not been uniform across Asia and the Pacific and e-commerce in many countries is still at a nascent stage and largely domestic.

There are several essential preconditions for e-commerce to grow in Asia and the Pacific: (i) access to reliable and affordable information and communication technology (ICT); (ii) availability of secure electronic payment systems; (iii) quality logistics and efficient customs procedures; and (iv) adequate, coherent and consistently applied legal and regulatory frameworks. The region must also reduce barriers to cross-border transactions, including high shipping costs, customs/duties/fees/taxes, and slow delivery times.

Women entrepreneurs use internet and digital technology more than their male counterparts and can benefit from widening access to digital technologies and services. Mainstreaming gender into ICT initiatives can promote women's entrepreneurial activities by allowing them to capitalize on online networking and outsourcing opportunities.

Promoting connectivity is a priority to expand trade in services and achieve inclusive growth in geographically challenged economies of Asia and the Pacific.

Geographically challenged (landlocked and sealocked) economies of Asia and Pacific have made visible progress in ease of doing business and reducing trade costs. Landlocked economies in particular have made greater strides than sealocked economies in lowering border and documentary compliance times to trade; as seen in the reduction of time to export in terms of border compliance from 63 hours to 54 hours for landlocked economies between 2014 and 2016. However, logistic costs for exporting and importing goods remain higher for both than the developing Asia average. For example, the cost to export associated with border compliance was $392 in 2016 for them, compared to $379 for developing Asia.

A positive relationship between aid for trade and trade in services is observed for both landlocked and sealocked economies. This relationship holds true for business, financial, and transport services. AfT has the most pronounced impact on tourism services for sealocked economies and on business services for landlocked economies. Backbone services (including transport, financial and telecommunications services) also offer a development potential for landlocked economies.

AfT should target (i) further improving infrastructure, (ii) building an enabling policy and regulatory environment to advance growth in trade in services, and (iii) promote the integration of geographically challenged economies into regional and global markets.

The CAREC Trade Policy Strategic Action Plan recognizes the expansion of trade in services as a core policy goal to help reduce barriers faced by landlocked Central Asian economies. Some crucial actions for promoting services exports include developing human capital for skilled services, enhancing cultural endowments that attract tourists, improving infrastructure (especially telecommunications networks that facilitate service delivery), and raising institutional quality.

Sealocked economies can benefit from developing their tourism industries. Some of the crucial actions for this include establishing tourism linkages with the local economy, enhancing tourism management capacity through institutional and human capacity development, tapping private sector resources, and pursuing regional integration strategies.

1 Regional Trends in Aid for Trade and Trade Costs

Introduction

Aid for Trade (AfT) is an integral part of official development assistance to developing countries, and aims to help maximize the benefits of trade liberalization by improving their trade and productive capacities, infrastructure, and institutions. In Asia and the Pacific,[1] AfT disbursements have grown consistently, and amounted to 38.2% of the region's total $36.3 billion in official development assistance in 2015, significantly higher than the global average. Regional AfT flows have mainly targeted the transport and energy sectors.

Trade growth in Asia and the Pacific, as elsewhere in the world, has slowed since 2012. Regional trade growth by volume, including the developed economies of Australia, Japan, and New Zealand, was 1.7% in 2016, recovering somewhat from 2015, but below the 2.8% growth in 2014. Forecasts for 2017 are mixed, and in its assessment, the World Trade Organization (WTO) warns that good prospects for recovery could be weighed down by increasingly inward-oriented trade policies.[2]

With an uncertain global economic environment and the slowdown of recent years drawn large on the trade backdrop, the role of AfT acquires even more prominence. Continued progress in lowering trade costs is imperative, especially since regional logistics performance has worsened across all but a few economies in East Asia and Southeast Asia. Indeed, research indicates that global trade would grow 14.5% by volume if all countries raised their trade infrastructure to meet global best practice (World Economic Forum 2013). In outlining regional trends in AfT and trade costs, this chapter sets the context for the rest of the report.

Over the past 50 years, rapid development has transformed Asia and the Pacific. From being the poorest region in the world, developing Asia has surged ahead over a wide range of economic and social indicators. Even so, long-term challenges remain for the region to achieve inclusive and sustainable growth. In this context, AfT's support of the Sustainable Development Goals, particularly for poverty eradication and gender empowerment by increasing women's labor force participation and entrepreneurship opportunities, is a focus of the report. Moreover, given that the services sector (which employs 60% of the global workforce) is set to make a bigger contribution to global economic growth—and the slowdown has not hit trade in services as hard as merchandise trade—the report features how AfT can be leveraged to support trade in services. Attention is paid in the final chapter to the landlocked and sealocked economies of the region, which face developmental constraints and high trade costs typical of nations with geographical challenges.

The report also includes analysis of how AfT can increase tradability in the services sector through regulatory reforms and modern trade facilitation solutions such as e-commerce and digital trade. Ultimately, the report aims to highlight lessons that can inform policy prescriptions for Asia and the Pacific and identify key interventions for AfT under the World Trade Organization-led Aid for Trade Initiative (Box 1.1).

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1 Unless otherwise specified, *Asia and the Pacific* refers to the developing economies of Asia according to ADB's classification and excluding Australia, Japan, and New Zealand.

2 World Trade Organization, "Trade recovery expected in 2017 and 2018, amid policy uncertainty," press release, April 12, 2017, https://www.wto.org/english/news_e/pres17_e/pr791_e.htm.

Box 1.1: Aid for Trade

The Aid-for-Trade (AfT) Initiative, launched in 2005 and led by the World Trade Organization, supports opening access to markets by helping developing countries "articulate, communicate and mainstream their trade-related objectives and for donors to align with these," according to the Organisation for Economic Co-operation and Development (OECD).

The OECD manages the Creditor Reporting System (CRS) for monitoring official development assistance. The recorded flows cover a range of economic sectors and AfT that supports development of trade policy, facilitation, and regional and multilateral trade negotiations. The OECD identifies AfT as comprising the following:[1]

1. *Economic Infrastructure (INF):* Aid under this category is primarily directed to projects aimed at developing hard and soft infrastructure networks to enable domestic markets connect to the global economy. Sectors include Transport and Storage (210), Communications (220), and Energy Generation and Supply (230).
2. *Building Productive Capacity (BPC):* Aid under this category is targeted to trade-related development projects geared toward supporting the private sector exploit their comparative advantages and diversify their exports. Sectors include Banking and Financial Services (240), Business and Other Services (250), Agriculture (311), Forestry (312), Fishing (313), Industry (321), Mineral Resources and Mining (322), and Tourism (332).
3. *Trade Policy and Regulations and Trade-related Adjustment (TPR) (331):* Aid under this category is primarily directed to helping countries develop their trade strategies, negotiate trade agreements, and implement their outcomes, as well as to deal with costs associated with trade liberalization such as tariff reductions, preference erosion, or declining terms of trade. Sectors include Trade Policy and Administrative Management (33110), Trade Facilitation (33120), Regional Trade Agreements (33130), Multilateral Trade Negotiations (33140), Trade-related Adjustment (33150), and Trade Education/Training (33181).

CRS data does not exactly match all of the above AfT categories. Only parts of official development assistance data are reported as aid for building economic infrastructure and for the creation of "productive capacity." These data are proxies at best and are the closest approximations for aid in trade-related infrastructure and productive capacity building.

[1] Numbers in parentheses are sectoral classification numbers according to OECD's Creditor Reporting System.

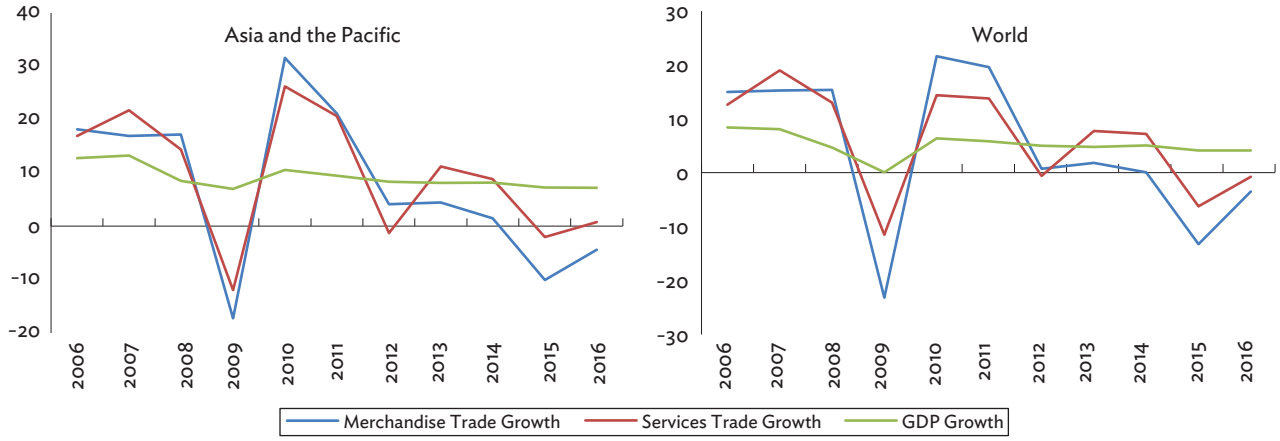
1.1 Recent Trends in Asia's Trade

Data show that trade by both volume and value in Asia and the Pacific (including developed economies) lost momentum since 2012. A slower-than-expected global economic recovery was the main culprit for falling regional trade growth, but structural and policy factors played a role too—including a slowdown in expansion of the global value chain and, in the People's Republic of China (PRC), a shift from low-cost manufacturing (ADB 2016a). The downturn in commodity prices was seen as the reason for a sharp contraction in the value of merchandise trade in 2015.

The pace of decline in the value of merchandise trade in Asia and the Pacific slowed to 4.4% in 2016 from -10.1% in 2015 (Figure 1.1), as imports shrank at a slower 4.1% clip in 2016, after shrinking 13.1% in 2015. Services trade was less affected, and grew 0.8% in 2016 from a 2% contraction in 2015, helped by a recovery in imports, which grew 2.2% after contracting 1.8% in 2015. However, merchandise and services trade both fall short of their respective 1.5% and 8.8% growth rates in 2014, and still remain below nominal GDP growth.

Growth of trade in services has exceeded that of merchandise since 2013, and its comparative lack of volatility moreover demonstrates the increasing importance of the services sector to the region's economies. Services trade has grown more rapidly than merchandise trade both as a share of the region's output, and in Asia and the Pacific's share of global trade.

Figure 1.1: Merchandise and Services Trade Growth and GDP Growth—Asia and the Pacific and World (%, y-o-y)



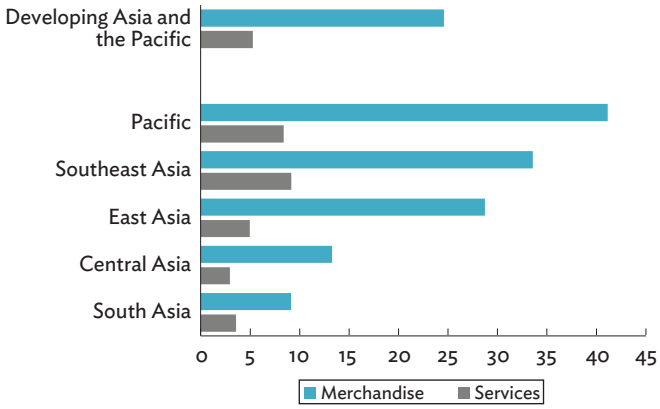
Source: ADB calculations using data from World Trade Organization. https://www.wto.org/. International Trade Centre Trade Map. http://www.trademap.org (accessed June 2017). International Monetary Fund. World Economic Outlook April 2017 Database. https://www.imf.org. (accessed April 2017).

Over 2014–2016, the share of merchandise trade to GDP in the region averaged 24.6% (Figure 1.2).[3] Across subregions, the Pacific had the highest trade openness and was most dependent on merchandise trade, at 41.1% of GDP. South Asian economies were least dependent, with merchandise trade averaging 9.1% of GDP.[4]

On the other hand, services trade accounted for 5.3% of GDP during 2014–2016.[5] Southeast Asian economies were most open to trade in services: services exports and imports comprised 9.2% of the subregion's economy, while Central Asian economies were least reliant, with services trade averaging 2.9% of GDP.[6]

By value, developing Asia and the Pacific economies made up 29.1% of global merchandise imports and exports during 2014–2016, up from 19% in 2000. East Asian economies, particularly the PRC and Hong Kong, China drove much of the growth (Figure 1.3a). East Asia's share of global trade rose to 17.1% of imports and 21.3% of exports in 2016, from 11% of imports and 12% of exports in 2000.

Figure 1.2: Merchandise and Services Trade-to-GDP (%)



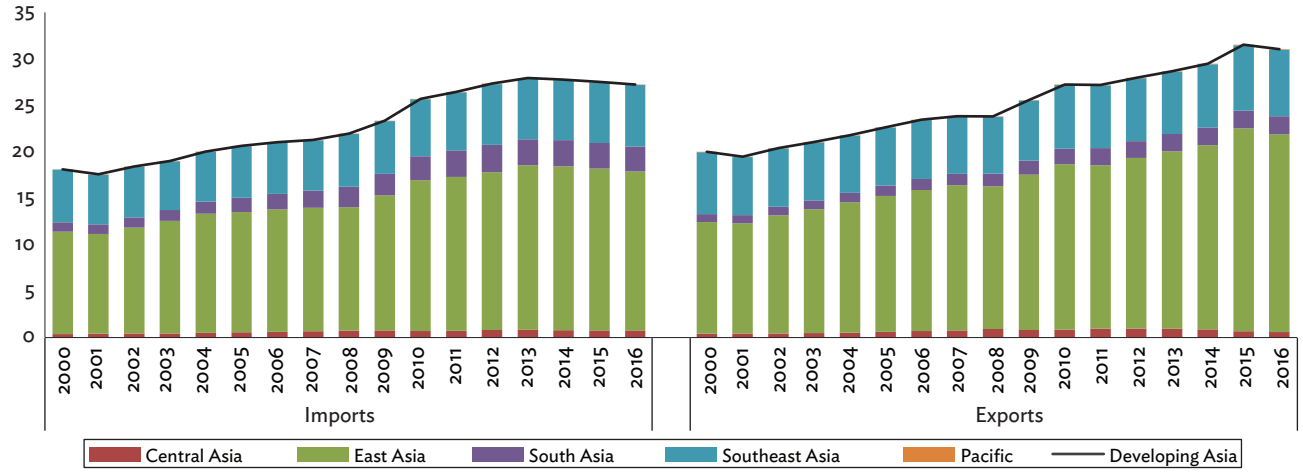
Note: Trade-to-GDP ratios refer to the average of 2014–2016.
Source: ADB calculations using data from World Trade Organization, International Trade Centre Trade Map, International Monetary Fund (accessed June 2017).

Meanwhile, the region's share of global trade in services increased to 22.2% during 2014-2016, from 16.7% in 2005, with East Asia as the major contributor, with 9.1% and 14.7% shares in global exports and imports, respectively, in 2016 (Figure 1.3b). Services trade also gained importance in Southeast Asia.

Between 2015 and 2016, Asia and the Pacific's intraregional trade as a share of total trade with the world rose from 56.8% to 57.2%. Intraregional trade

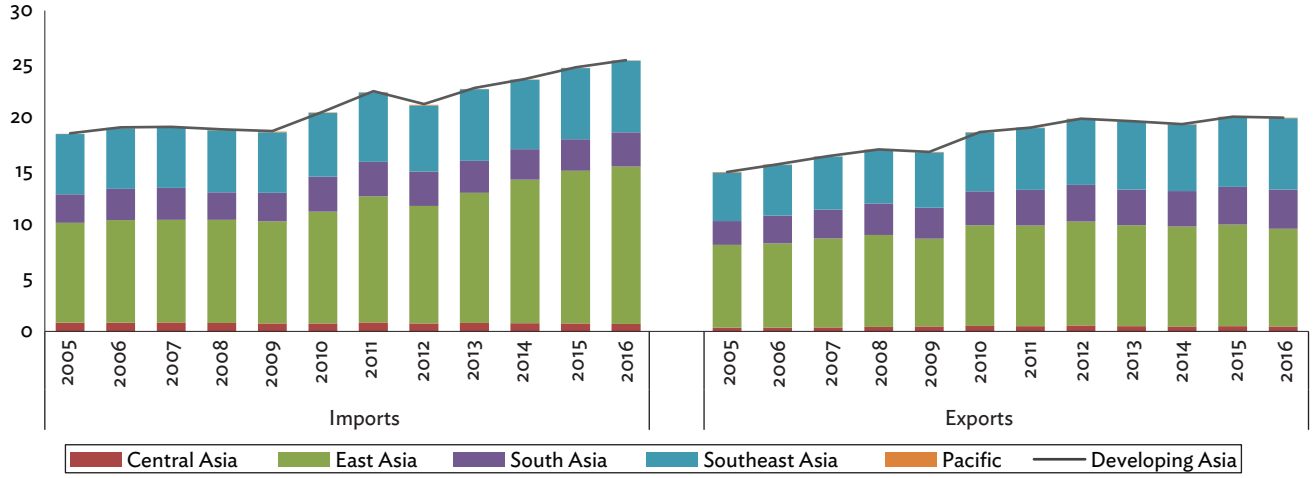
[3] The regional average including the developed economies of Australia, Japan and New Zealand in 2014–2016 is equivalent to 25.1%.
[4] In Southeast Asia, merchandise trade in 2014–2016 was 33.6% of regional GDP, in East Asia 28.7%, and in Central Asia 13.3%.
[5] Including the developed economies of Australia, Japan and New Zealand, the average share of services trade as a percent of regional GDP is equivalent to 5.6%.
[6] In the Pacific, services trade makes up 8.4% of subregional GDP, in East Asia 5.0%, and in South Asia 3.6%.

Figure 1.3a: Share of Asia and the Pacific in Global Merchandise Imports and Exports, 2000–2016 (%)



Source: ADB calculations using data from World Trade Organization (accessed June 2017).

Figure 1.3b: Share of Asia and the Pacific in Global Services Imports and Exports, 2005–2016 (%)



Source: ADB calculations using data from International Trade Centre Trade Map (accessed June 2017).

has remained above 50% in the last 2 decades, due largely to the rise of regional value chains, as Asian multinationals from emerging economies increasingly relocate parts of the production process to where wages are lower. Greater participation in global value chains, alongside export diversification, has resulted from open trade and investment regimes, the formation of regional trade agreements, and the export-oriented development strategies followed by many economies in the region. However, amid an uncertain global economic environment, increasingly inward-oriented trade policies in some advanced economies, and the continuing trade slowdown, developing Asian economies must reinvigorate trade growth through measures that reduce costs, improve domestic conditions for business, and strengthen regional connectivity. AfT can continue to play a vital role in each.

1.2 Directions in Aid for Trade

Much remains to be done to realize potential trade outcomes. Trade costs are still generally significant, international commitments are limited, and restrictive policies and poor regulatory environments hinder trade connectivity and the development of competitive goods and services (Roy 2016). While economic growth reduces these issues, aid for trade has a vital role in helping least developed and geographically challenged economies improve their trade and productive capacities, their infrastructure, and institutions to maximize the benefits of trade liberalization. This section describes the patterns and direction of aid for trade.

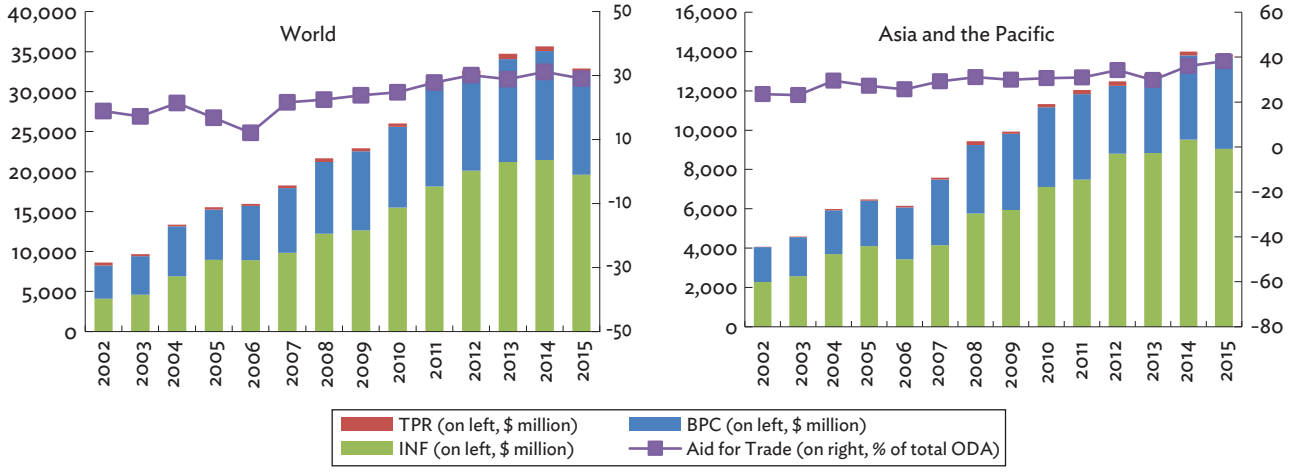
Globally, aid for trade disbursements in annual official development assistance grew from $8.6 billion in 2002 to $32.9 billion in 2015, at a faster rate than official development assistance (Figure 1.4). Excluding high-income countries,[7] $1,337.8 billion of official development assistance was disbursed during 2002–2015, and $319.3 billion, or 23.9%, of that was in AfT.

Asia and Pacific is amongst the largest recipients of aid for trade. From a low base of $4.1 billion in 2002, AfT disbursements to the region increased steadily between 2002 and 2015. AfT disbursements were 38.2% of $36.3 billion in total official aid to the region in 2015, significantly higher than the global average of 29.1% of the $112.8 billion received. Between 2002 and 2015, the region received $130.8 in total AfT disbursements accounting for 30.8% of the total official development assistance.

Further, for AfT's three main components—economic infrastructure, building productive capacity, and trade policy and regulations and trade-related adjustment—the figures show that AfT aimed at building infrastructure takes the lion's share, both globally and regionally. Between 2002 and 2015, 63% of total AfT to Asia and Pacific was targeted at building infrastructure, compared to 58% for the global sample.

Figure 1.5 shows annual disbursements in Asia and the Pacific compared with commitments.[8] The

Figure 1.4: Official Development Assistance and Aid for Trade, 2002–2015 ($ million, %)

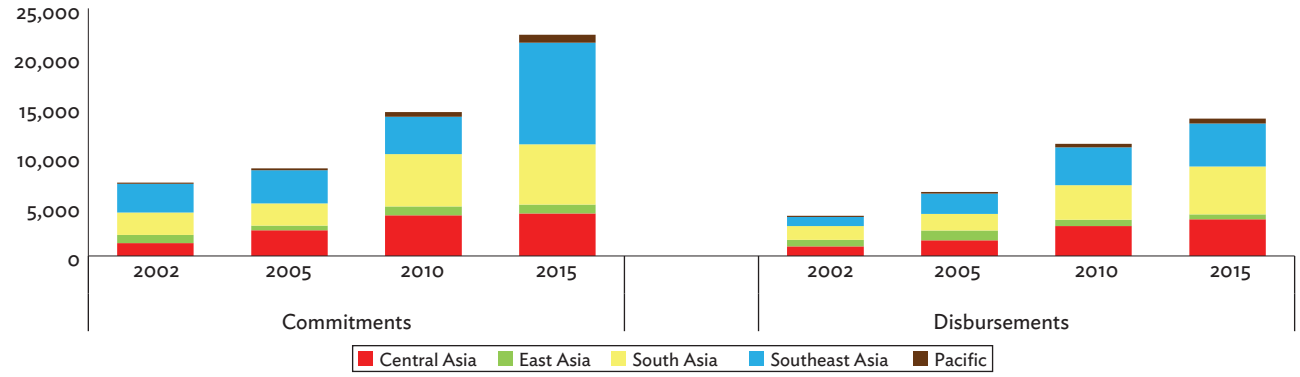


ODA = Official Development Assistance.
Note: Total aid for trade (AfT) is the sum of INF (aid for infrastructure), BPC (aid for building productive capacity) and TPR (trade policy and regulations and trade-related adjustment).
Source: ADB calculations using data from OECD. Creditor Reporting System. http://www.oecd.org/ (accessed April 2017).

[7] Income classifications are based on World Bank (July 2016). Excluding high-income economies, the global sample includes 138 recipients.

[8] Unless explicitly specified, all discussion in this section is based on actual disbursements rather than commitments.

Figure 1.5: Aid for Trade Commitments and Disbursements in Asia and the Pacific by Subregion ($ million)



Source: ADB calculations using data from OECD. Creditor Reporting System. http://www.oecd.org/ (accessed April 2017).

data show that annual disbursements are lower than commitments for all subregions except for East Asia. Fluctuations could have been due to the nature of commitments and disbursements data and prospective recipients' capacity to absorb foreign aid. Moreover, it could have been related to the nature of projects supported by AfT: for example, trade-related infrastructure—which generally gets most AfT in the region—tends to be characterized by a complex formulation phase, large disbursements, longer gestation periods, and sunk costs.

Regional commitments more than doubled in the past decade, reaching $22.3 billion in 2015 from $7.4 billion in 2002. Between 2002 and 2015, most commitments were destined to South Asia with $66.1 billion during 2002–2015, followed by Southeast Asia with $65.3 billion, and Central Asia with $46.6 billion. On the other hand, Southeast Asia was the main beneficiary with $44.5 billion of actual disbursements, followed by South Asia with $38.7 billion, and Central Asia with $33.2 billion. Less support went to East Asia ($10.4 billion) and the Pacific island economies ($4.1 billion). However, AfT disbursements in 2014–2015 increased by 10% in East Asia and 6.5% in the Pacific. Disbursements during the same period grew the most in South Asia, at 12.2%, and shrank in Southeast Asia (-9.2%) and Central Asia (-7.3%).

Top Recipients of AfT

Within the region, countries that received most AfT from 2002 to 2015 were India ($22.7 billion), Viet Nam ($21.4 billion), Afghanistan ($14.1 billion), Pakistan ($8.9 billion), and Indonesia ($8.8 billion). Table 1.1 shows those countries were the five biggest recipients of official development assistance on average from 2002 to 2015. Turkmenistan and the Pacific island countries received the least by value. That said, the island countries appeared reliant on foreign aid, with AfT as a percentage of GDP highest in Tuvalu (20.7%), Kiribati (10.9%), Tonga (4.3%), and the Federated States of Micronesia (4.1%). Meanwhile, as a percentage of total aid, AfT was highest in Viet Nam (50.4%), followed by Thailand (48.5%), Bhutan (46.0%), India (41.8%), and Mongolia (41.5%).

AfT Trends by Category and Sector

Since 2002, the bulk of AfT commitments and actual disbursements across subregions have gone to sectors that build economic infrastructure and productive capacity, while activities related to trade policies and regulations have received the least (Figure 1.4). In 2015, most regional AfT disbursements targeted transport and storage ($5.0 billion), energy ($4.0 billion), and agriculture ($1.8 billion)—equivalent to 35.7%, 28.6%, and 12.8% of total AfT to the region.

Table 1.1: Asia and the Pacific Recipients of Gross Aid and Aid for Trade, annual averages 2002–2015

Gross Aid			Aid for Trade			
Recipient	Gross aid ($ million)	Share (% of GDP)	Recipient	AfT ($ million)	Share (% of GDP)	Share (% of total Aid)
Afghanistan	4,074.2	33.21	India	1,622.4	0.12	41.85
India	3,876.9	0.29	Viet Nam	1,530.7	1.45	50.43
Viet Nam	3,035.2	2.88	Afghanistan	1,005.2	8.19	24.67
Pakistan	2,837.9	1.67	Pakistan	638.8	0.38	22.51
Indonesia	2,471.5	0.42	Indonesia	627.7	0.11	25.40
PRC	2,363.3	0.04	PRC	622.0	0.01	26.32
Bangladesh	2,145.3	1.91	Bangladesh	563.5	0.50	26.27
Philippines	1,131.4	0.63	Philippines	320.0	0.18	28.28
Myanmar	991.6	2.71	Sri Lanka	318.2	0.65	36.05
Sri Lanka	882.9	1.81	Thailand	279.5	0.10	48.53
Nepal	742.0	5.56	Nepal	207.4	1.55	27.95
Cambodia	630.0	6.08	Georgia	184.6	1.73	34.29
Thailand	575.9	0.20	Cambodia	167.4	1.61	26.57
Georgia	538.4	5.06	Lao PDR	122.7	1.98	34.42
Papua New Guinea	457.7	3.52	Mongolia	118.8	1.69	41.53
Lao PDR	356.5	5.74	Armenia	118.1	1.47	37.09
Kyrgyz Republic	319.2	7.01	Papua New Guinea	115.2	0.89	25.17
Armenia	318.4	3.95	Tajikistan	99.8	2.02	34.43
Tajikistan	289.8	5.87	Azerbaijan	91.0	0.23	39.27
Mongolia	286.1	4.06	Kyrgyz Republic	85.0	1.87	26.62
Malaysia	247.5	0.11	Uzbekistan	84.1	0.25	35.45
Uzbekistan	237.4	0.71	Myanmar	81.1	0.22	8.18
Azerbaijan	231.9	0.57	Kazakhstan	58.5	0.05	32.68
Timor-Leste	229.1	6.79	Malaysia	48.4	0.02	19.54
Solomon Islands	213.5	31.13	Bhutan	46.5	3.70	46.00
Kazakhstan	179.0	0.14	Timor-Leste	39.0	1.15	17.01
FSM	109.1	38.99	Solomon Islands	24.6	3.59	11.54
Bhutan	101.0	8.04	Vanuatu	20.2	3.47	25.01
Vanuatu	80.8	13.87	Samoa	19.6	3.27	26.22
Samoa	74.7	12.46	Kiribati	15.2	10.95	39.08
Fiji	68.5	2.04	Tonga	15.0	4.34	30.19
Marshall Islands	60.7	38.67	FSM	11.4	4.08	10.46
Tonga	49.6	14.38	Fiji	10.4	0.31	15.23
Maldives	41.7	2.09	Palau	6.7	3.30	24.79
Kiribati	38.9	28.00	Maldives	6.5	0.33	15.54
Palau	26.9	13.30	Tuvalu	6.0	20.70	30.34
Turkmenistan	23.2	0.09	Cook Islands	4.6	1.97	28.54
Tuvalu	19.8	68.21	Marshall Islands	4.3	2.76	7.14
Cook Islands	16.0	6.92	Turkmenistan	3.0	0.01	13.11
Total (39 Recipients)	30,373.8		Total (39Recipients)	9,343.2		

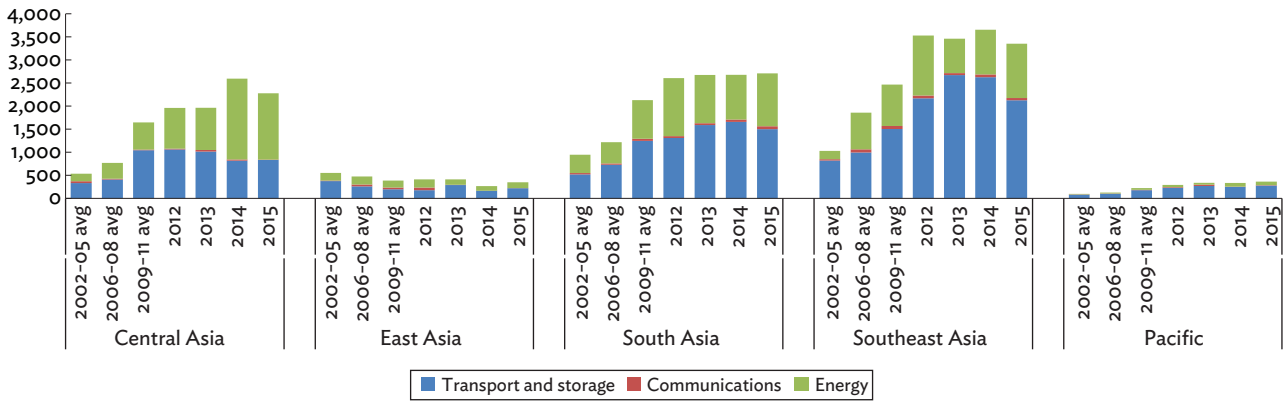
FSM = Federated States of Micronesia, Lao PDR = Lao People's Democratic Republic, and PRC = People's Republic of China.
Source: ADB calculations using data from OECD Creditor Reporting System and IMF World Economic Outlook Database (accessed April 2017); and for Cook Islands' GDP data: ADB SDBS (accessed May 2017).

Economic infrastructure comprises transport and storage, communications, and energy. Aid in this category increased to $9 billion (65.2% of total AfT) by 2015, from $2.3 billion (56.0% of total AfT) in 2002. The transport and storage and energy sectors accounted for 54.7% and 43.8% of such regional disbursements in 2015, in contrast to only 1.4% for communications. Among subregions, Southeast Asia, South Asia, and Central Asia received the most aid for economic infrastructure. Except in Central Asia, where energy got the lion's share, most AfT disbursements in 2015 went to transport and storage (Figure 1.6).

Similarly, aid for building productive capacity continues to rise—albeit at a slow rate compared to economic infrastructure—except in East Asia and Southeast Asia (Figure 1.7). Total aid in this category reached $4.7 billion (33.6% of total AfT) in 2015 from $1.8 billion (43.6% of total AfT) in 2002, with South Asia and Central Asia having received the most to date. Notably, agriculture, and banking and financial services comprised the largest shares, respectively accounting for 38.0% and 31.6% of such regional disbursements in 2015. Within the subregions, the largest shares went to agriculture in Central Asia, Southeast Asia, and the Pacific; banking and financial services in South Asia; and forestry in East Asia.

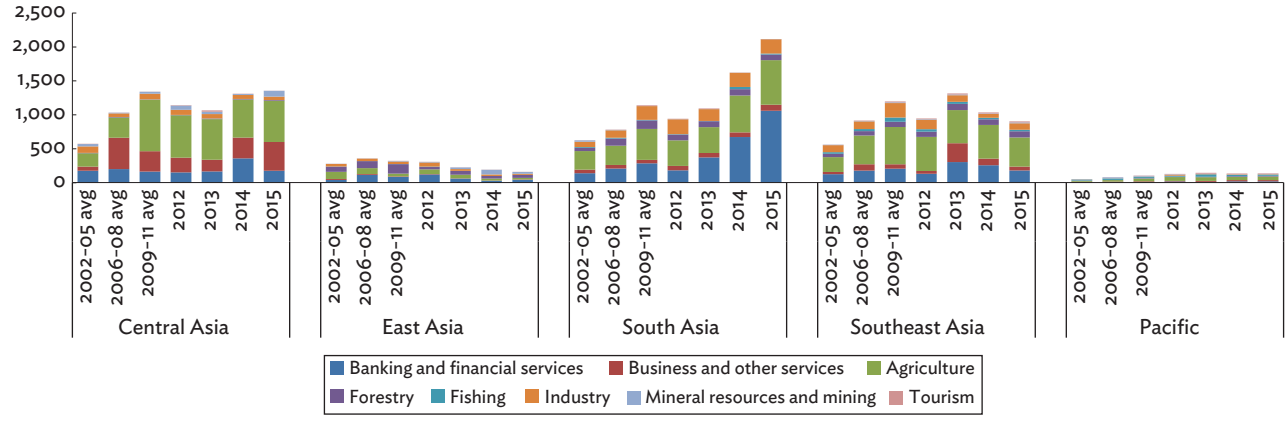
In contrast, the focus on aid for trade policies and regulations has faded in recent years after peaking in 2012, across all subregions. Aid in this category declined to $168 million in 2015 after impressive growth in disbursements, from $14 million in 2002 to $233 million in 2012. Central Asia and Southeast

Figure 1.6: Aid for Economic Infrastructure ($ million)



Source: ADB calculations using data from OECD. Creditor Reporting System. http://www.oecd.org/ (accessed April 2017).

Figure 1.7: Aid for Building Productive Capacity ($ million)



Source: ADB calculations using data from OECD. Creditor Reporting System. http://www.oecd.org/ (accessed April 2017).

Asia were the main recipients. Trade policy and administrative management accounted for the majority of aid disbursed in this category with $103 million in 2015; trade facilitation totaled $60 million in the same year.

1.3 Trade Cost Cuts are Key to Economic Integration

Reducing trade costs is among keys to the integration of developing (especially least developed) economies into the global economy, and to boosting the participation of small and medium-sized enterprises and disadvantaged people in global and regional trade and value chains. While regional economies have made progress, significant gaps remain. Alongside cross-border trade challenges, particularly for landlocked and remote island countries, increasingly inward-oriented trade policies and geopolitical tensions appear to pose greater risks to international trade.

Figures 1.8a and 1.8b show Asia and the Pacific's Logistics Performance Index (LPI) score from 2007 to 2016. The region has moderately improved, with East Asia performing better than other subregions. Most notably, Singapore and Hong Kong, China ranked 5th and 9th, respectively, among 160 countries rated in 2016. Developing Asia's improved performance is driven largely by improvements in infrastructure. However, since 2012, developing Asia's logistics performance has worsened slightly, with subregional variations.

The time and costs associated with the logistics of exporting and importing goods (i.e., trading across borders indicators) have improved moderately during 2014-2016 (Figure 1.9). However, exporting is less complex than importing goods across all subregions (Figure 1.10).

As illustrated in Figure 1.9, in 2016, Asia and the Pacific was about 30% of the way to the global "best practice frontier"[9] and matched the performance of Latin

Figure 1.8a: Logistics Performance Index, 2007, 2012 and 2016, by Region

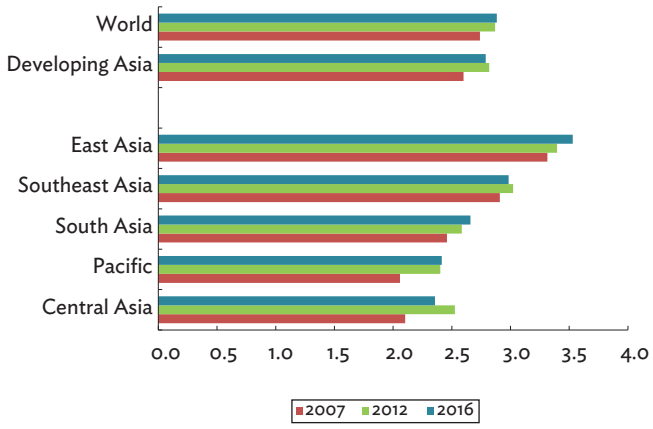
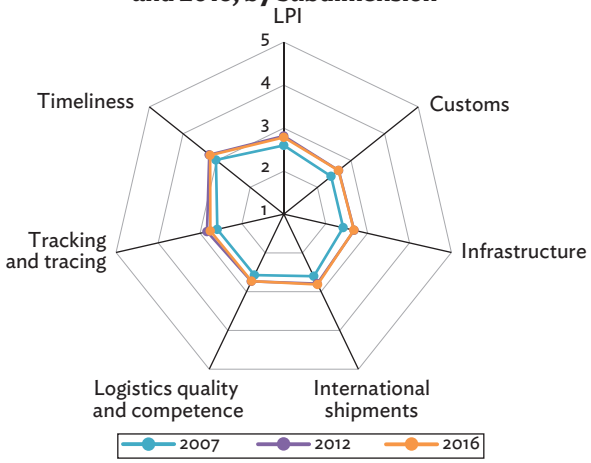


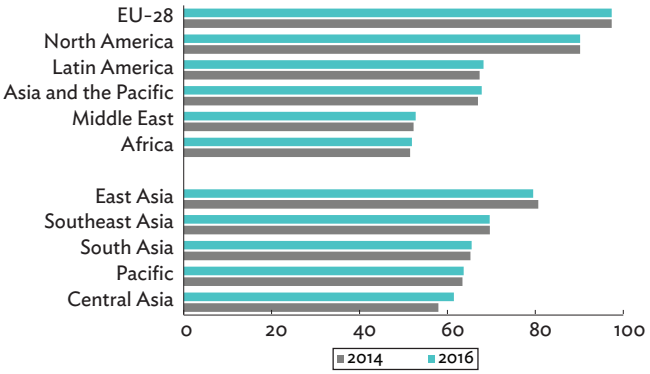
Figure 1.8b: Logistics Performance Index, 2007, 2012 and 2016, by Subdimension



Note: LPI scores are measured from 1 to 5, where 1 is rated as "poorest performance" and 5 as "best performance." Countries are analyzed in the following dimensions: efficiency of customs and border management clearance, quality of trade and transport infrastructure, ease of arranging competitively priced shipments, competence and quality of logistics services, ability to track and trace consignments, and frequency with which shipments reach consignees within scheduled or expected delivery times.
Source: World Bank. Logistics Performance Index Database. http://lpi.worldbank.org/ (accessed May 2017).

[9] The distance to frontier score is normalized to range from 0 to 100, with 100 representing the frontier. For example, a score of 75 in 2014 means that an economy is 25 percentage points away from the frontier

Figure 1.9: Distance to 'Best Performer Frontier' in Trading Across Borders by Region and Asia's Subregions, 2014 and 2016



EU28 = European Union member countries.
Notes: Includes ADB developing members only (excludes Australia, Japan, and New Zealand).
100 represents the 'best practice' frontier. For example, a score of 75 means an economy is 25 percentage points away from the frontier constructed from the global best performance. The figure may change from year to year (World Bank, Doing Business).
Source: ADB calculations using data from World Bank. *Doing Business Database.* http://doingbusiness.org (accessed March 2017).

America. [The distance to frontier score measures how far on average an economy is at a point in time from the best performance (the "frontier") and assesses the absolute change in the economy's regulatory environment over time (World Bank, *Doing Business*)]. Globally, the European Union and North America have set the best performance "frontier" in trading across borders, while Africa still lags.

East Asia and Southeast Asia are the best regional performers, while Central Asia has made most progress since 2014, but has much still to do. Armenia; Bhutan; Hong Kong, China; the Republic of Korea; and Singapore were among the top logistics performers on trading across borders, with Bhutan and the Republic of Korea setting the frontier. These economies have improved their performance in easing cross-border trade by enhancing regulatory trade environments by, among others, reducing the overall cost and complexity of compliance with border and documentary requirements. Meanwhile, Armenia, Georgia, and Tajikistan showed the most notable improvements from fiscal years 2014 to 2016. Malaysia; the Marshall Islands; the Federated States of Micronesia; Nepal; Taipei,China; and Thailand also did well.

Times to trade in Asia and the Pacific decreased for both border and documentary compliance,[10] but were still more than 20 times longer than in North America. Between fiscal 2014 and 2016, average border compliance time in the region was reduced from 60 to 57 hours for exports, and from 76 to 75 hours for imports. Among subregions, border compliance time to trade was lowest in East Asia, at 27 hours to export and 42 hours to import (Figure 1.10). Even as the average of border compliance time in Central Asia was about 60 days for exports and imports in 2016, the subregion improved the most, with an average of 10 hours cut during 2014–2016. During the same reporting period, average documentary compliance time in the region was reduced from 75 to 70 hours for exports, and from 75 to 73 hours for imports.

The cost to trade in the region has also improved for both border and documentary compliance. The average cost for border compliance to export fell from $385 in 2014 to $379 in 2016. Pacific economies had the highest average cost in 2016 ($509), followed by South Asia ($355), Central Asia ($354), Southeast Asia ($312), and East Asia ($303). The highest export cost was in Samoa, with $1,400. The region's average cost associated with border compliance to import fell from $449 in 2014 to $446 in 2016. It was highest in South Asia ($575). While it fell in Central Asia (from $432 to $404), it rose in Southeast Asia (from $328 to $337) and in South Asia (from $569 to $575).

For the costs associated with documentary compliance, the regional average improved from $159

constructed from the global best performance. A score of 80 in 2016 would indicate that an economy is improving (World Bank, Doing Business).

[10] Border compliance captures the time and cost associated with compliance with the economy's customs regulations and with regulations relating to other inspections that are mandatory in order for the shipment to cross the economy's border, as well as the time and cost for handling that takes place at its port or border. The time and cost for this segment includes time and cost for customs clearance and inspection procedures conducted by other government agencies. On the other hand, documentary compliance captures the time and cost associated with compliance with the documentary requirements of all government agencies of the origin economy, the destination economy and any transit economies. (World Bank, Doing Business)

Figure 1.10a: Time to Export and Import—Border Compliance, 2016 (hours)

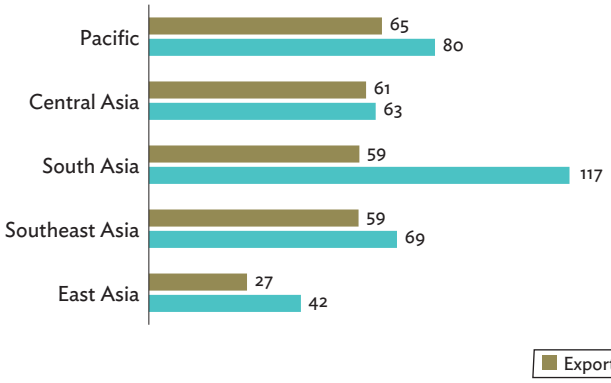
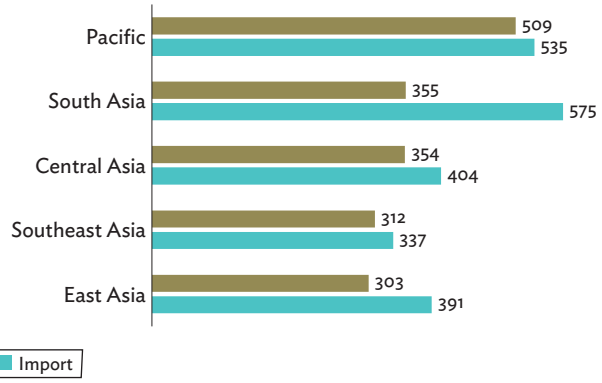


Figure 1.10b: Cost to Export and Import—Border Compliance, 2016 ($)



Note: Includes developing members only (excluding Japan, Australia, and New Zealand).
Source: ADB calculations using data from World Bank. *Doing Business Database.* http://doingbusiness.org (accessed March 2017).

in 2014 to $155 in 2016 for exports but increased from $175 to $177 for imports. Costs in Asia and the Pacific are about 9 times more for exports than in the European Union, and 38 times more for imports. Further, subregional average costs for compliance in 2016 range from $247 for Central Asian exports to $60 for East Asian exports.

Regulatory reform and the development of stronger legal institutions are key to reducing trade complexities and costs to facilitate cross-border trade. Some of these measures relate to innovations in electronic submission and processing of documentation. In Georgia for example, processing time for export documents fell from 48 hours to 2 hours after electronic submission and processing was introduced. Moreover, a customs union or trade agreement between major trading partners can cut the time and cost to trade. For instance, the Kyrgyz Republic reduced exporting time by 10 hours and the cost by $85 after joining the Eurasian Economic Union. Cutting the documentary burden also reduces trade complexities. As a case in point, export documentary compliance time in Kazakhstan declined as two documentary requirements for customs clearance were removed.

On the whole, trade costs have been falling, but the region is still not close to the global best practice frontier. Several measures can reduce trade costs further. They include promoting trade facilitation, building the trade infrastructure vital for expanding trade capacity, improving the business climate to enhance competition, lowering or streamlining nontariff barriers, regulatory reforms and harmonization, opening-up services trade, and maximizing the complementarity between trade and investment. Promoting trade facilitation and regulatory harmonization can also enhance trade integration. In this regard, AfT will continue to play a prominent role.

2 Trade, Inclusive Growth, and Employment for Women

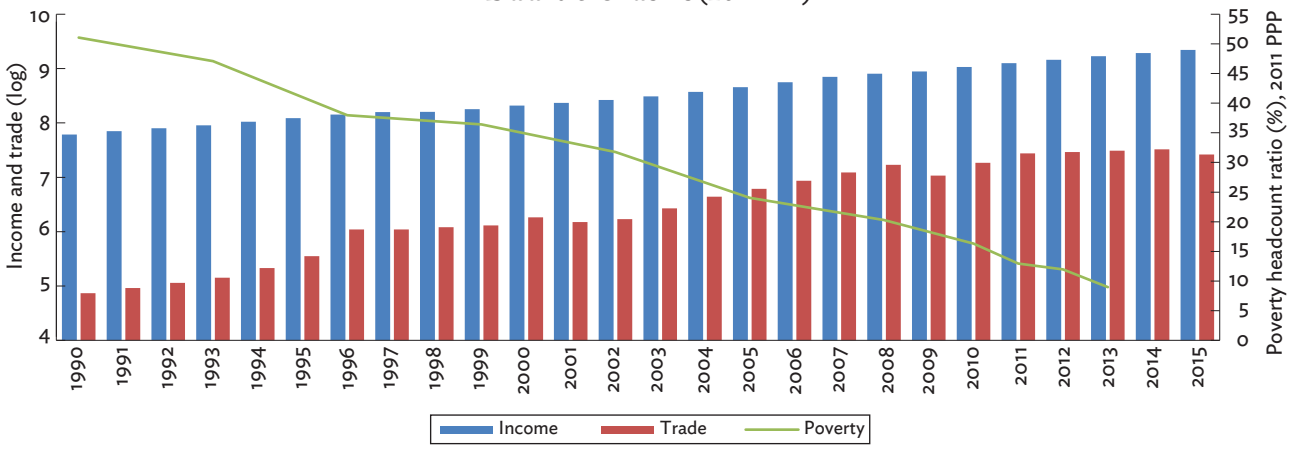
Introduction

International trade and foreign direct investment have been prominent among the drivers of economic growth that has lifted more than a billion people out of poverty in Asia and the Pacific since 1990. The Aid for Trade (AfT) initiative can make an important contribution to allocating opportunities and distributing trade gains to achieve inclusive growth. Export-oriented sectors in particular have attracted investment and raised production capacities. Between 2000 and 2015, trade in the region trebled, from $1.8 trillion in 2000 to $6.8 trillion in 2015, and per capita GDP grew from $4,102 to $11,411. The proportion of the population living in extreme poverty (based on the international poverty line of $1.90 or less a day at 2011 purchasing power parity) declined from 31.8% to 9% between 2002 and 2013. During that period, it dropped from 25.3% to 10.7% globally (Figure 2.1).

Despite this progress, around 330 million people in the region still live in absolute poverty on $1.90 a day or less (at 2011 purchasing power parity), and large subregional disparities remain (Figure 2.2). For instance, the proportion of population below the international poverty line in the Pacific islands in 2013 was estimated at 26.6%, while only about 1.8% in East Asia.

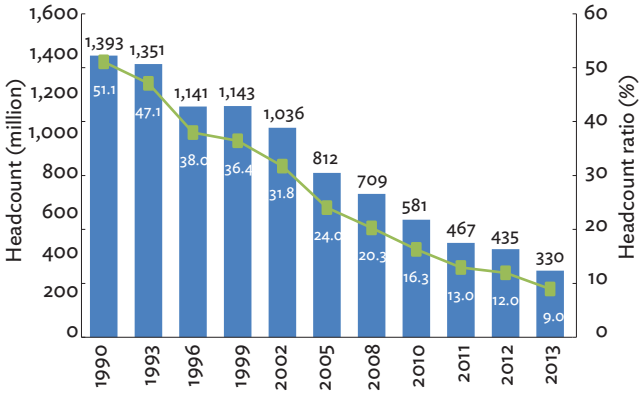
Gains presented by trade are not often distributed equally within nations. Vulnerable groups such as the extreme poor and women are often left out because they lack the means to exploit entrepreneurial and employment opportunities. However, with necessary policy help, women and others can also gain from globalizing markets. This chapter explores pathways through which AfT promotes inclusiveness and creates conditions for women to participate in productive activities.

Figure 2.1: Log of Income and Trade (Population Weighted) **and Poverty Headcount Ratio at $1.90, Asia and the Pacific** (2011 PPP)



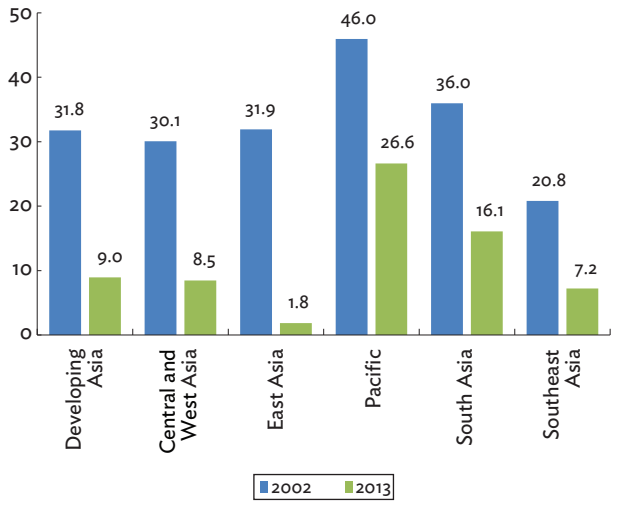
PPP = purchasing power parity.
Notes: Income refers to the log of GDP per capita based on PPP. Trade refers to the log of exports of goods and services comprising all transactions between residents of a country and the rest of the world involving a change of ownership from residents to nonresidents of general merchandise, net exports of goods under merchanting, nonmonetary gold, and services. Poverty headcount ratio at $1.90 a day is the percentage of the population living on less than $1.90 a day at 2011 international prices.
Source: World Bank. World Development Indicators (accessed 1 June 2017). ADB estimates using World Bank. PovcalNet Database. http://iresearch.worldbank.org/PovcalNet/home.aspx (accessed 4 October 2016).

Figure 2.2a: Population below the $1.90 a Day Poverty Line, Asia and the Pacific (2011 PPP)



Source: ADB estimates using World Bank. PovcalNet Database. http://iresearch.worldbank.org/PovcalNet/home.aspx (accessed 4 October 2016).

Figure 2.2b: Population below the $1.90 a Day Poverty Line, by Subregion (2011 PPP, %)



Source: ADB (2016b).

2.1 Trade Can Deliver Inclusive Growth and Quality Jobs

Asia and the Pacific economies have achieved remarkable growth and development through open trade and investment over the past few decades. Between 1990 and 2013, more than 1 billion people in the region were lifted out of extreme poverty and the Millennium Development Goals target to cut rates of extreme poverty by half was met (United Nations 2015). However, progress has been uneven. Some Asian countries for example report poor progress or deteriorating indicators on goals such as eradicating extreme poverty and hunger, and combating HIV/AIDS, malaria, and other diseases.

One of the biggest challenges in fighting poverty is a lack of quality jobs. The global employment-to-population ratio—the proportion of the working-age population in work—declined from 62% in 1991 to 60% in 2015. From 28% in 2000, 10% of the world's workers were living on less than $1.90 per day (United Nations 2016). The problem is more serious for young people; only 40% of women and men aged 15–24 were employed in 2015, compared with 50% in 1991. Among working-age men, about three quarters were employed, while less than half of women were employed.

Taking the challenges of the Millennium Development Goals forward, the Sustainable Development Goals (SDG), which were launched in 2015 to set the development agenda until 2030, follow the principle of leaving no one behind: emphasizing inclusivity through a pro-growth, pro-poor and nondiscriminatory approach. The SDGs notably see job creation as the primary channel to realize inclusive growth.[11] SDG 8 "promote[s] sustained, inclusive and sustainable growth, full and productive employment, and decent work for all" by raising "economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labor-intensive sectors." Goal 8 also emphasizes that policy measures must support productive capacities, employment generation, and innovation if growth is to be inclusive.

Internet access is an important support for development outcomes in the SDGs, particularly Goal 9, on building resilient infrastructure, promoting sustainable industrialization, and fostering innovation. Access to information and communication technology (ICT) is also an enabling factor in achieving other goals, including

[11] Inclusive growth can be broadly defined as growth with social equity and comprising: (i) high, sustainable growth to create and expand economic opportunities; (ii) broader access to these opportunities to ensure that members of society can participate and benefit from growth; and (iii) social safety nets to prevent extreme deprivation. https://www.adb.org/themes/social-development/poverty-reduction/inclusive-growth

gender equality and empowerment of women and girls (Goal 5).

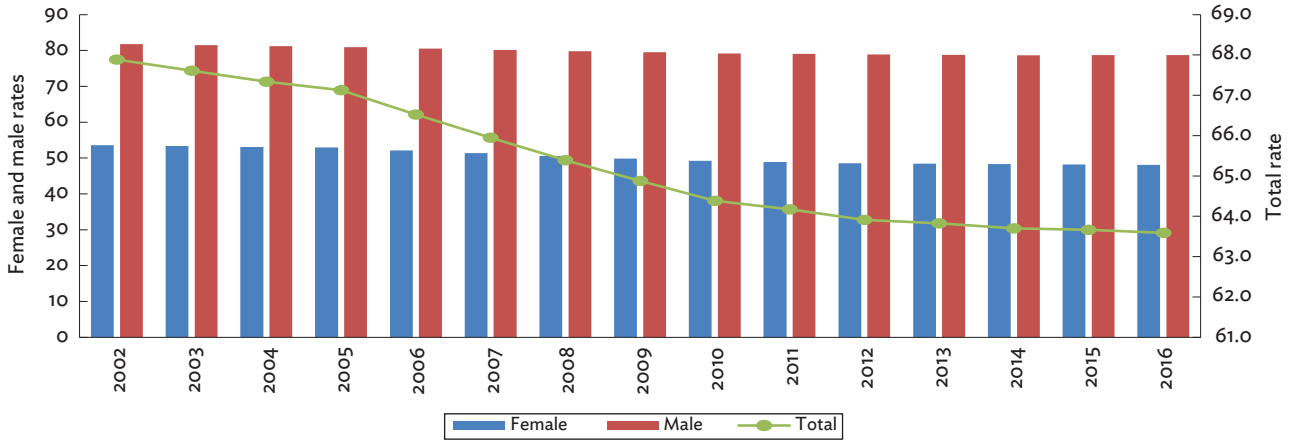
Trade can help achieve the SDG employment targets. In aggregate, trade has a positive impact on welfare, which can lead to job creation (Vandenberg 2017). However, trade and trade processes have different effects on labor supply, the movement of workers between economic sectors, and the quality of jobs.

Gains from trade happen when economies produce goods and services for which they have a comparative advantage. Specialization can advance welfare across a whole economy and, in turn, increase economic growth and demand for labor. Countries with liberal trade regimes have lower unemployment than others.[12] For example, in the PRC employment in the manufacturing sector related to exports increased by 2.3 million in only 4 years (from 15 million in 2004 to 17.3 million in 2008) after accession to the World Trade Organization (Cai and Du 2014).

Trade may raise employment quality, when trade competition encourages companies to formalize employment, an SDG aim, which incentivizes workers and can increase productivity. International buyers are increasingly keen to purchase from ethical producers who compensate workers adequately. However, trade can also pressure companies to cut costs by shifting to lower-paid casual employment, especially when human resources are abundant.

Empirical studies tend to prove the positive side of the trade effect on employment, and have shown that trade openness helps reduce egregious forms of employment, such as child and forced labor. That said, trade openness causes some sectors and companies to expand and others to shrink, in a process that creates demand for labor in some sectors while making jobs redundant in others. For instance, Hong Kong, China has seen employment move from manufacturing to services as comparative advantage shifted, with changes more pronounced in wages than employment numbers (Vere 2014). Indonesia similarly illustrates adjustments caused by trade, but jobs there have been lost in more labor-intensive export sectors with weak export performance but strong barriers to investment (Aswicahyono et al 2014). Another example is the PRC, where competition in manufacturing has caused job losses in the north of the country (Vandenberg 2017). As shown in Figure 2.3, labor force participation has gradually decreased.

Figure 2.3: Labor Force Participation Rate, Asia and the Pacific (% of total population ages 15+)



Note: Modeled in an International Labour Organization estimate.
Source: World Bank. World Development Indicators (accessed 1 June 2017).

[12] See for example Moore and Ranjan (2005); Dutt, Mitra, and Ranjan (2009); and Felbermayr, Prat, and Schmerer (2009).

Aid for trade-related adjustment helps developing countries tackle costs associated with trade liberalization and to compensate for the negative effects on employment, especially as they impact vulnerable groups (Hynes and Lammersen 2017).

2.2 Trade and Gender Equality: Capitalizing on Women's Participation

To the extent that AfT promotes trade and trade-related foreign direct investment, it can raise women's participation in production. Globally, the average labor force participation rate (LFPR) declined from 65.4% in 2000 to 62.8% in 2016. The same trend occurred by gender, with LFPR over those years declining from 78.8% to 76.2% for males, and from 52% and 49.5% for females (International Labour Organization, ILOSTAT database).

Changes in LFPR vary across Asia and the Pacific. Between 2000 and 2015, LFPRs rose in about 70% of the economies of Central and South Asia and 50% of Southeast Asia's, while rates declined in about 60% of East Asian economies and 70% of Pacific economies (ADB 2016b).

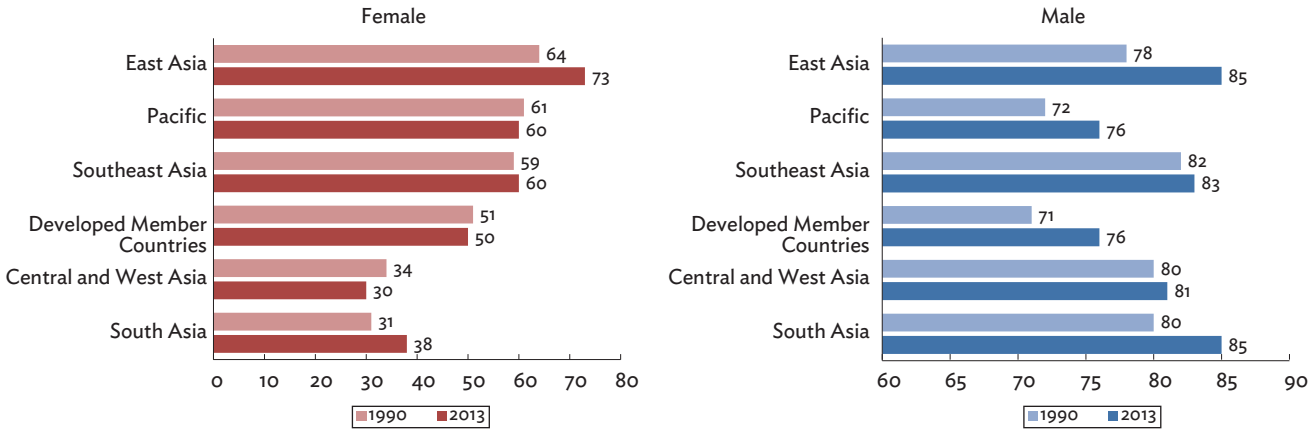
Asia and the Pacific economies mostly conform to a global LFPR convergence trend between women and men, with some exceptions. Between 1990 and 2015, female LFPRs fell in Vanuatu (by 18.8%), Thailand (11.6%), and the PRC (8.7%), and to some extent South Asia, while the gap between the rates of women and men in these countries also widened. Within subregions, South Asia has the lowest LFPR for women and East Asia the highest (Figure 2.4). Narrowing gaps in LFPR between men and women in some subregions is attributed to progress in education and female employment in the tradable sector.

Despite that narrowing, women in Asia are on average 70% less likely to be in work than men, with the country-to-country percentage varying anywhere from 3% to 80%, and wages that are one-half to two-thirds of men in the same jobs (ADB 2015b). This gap persists despite economic growth, decreasing fertility rates, and increasing education, in a disparity largely influenced by how women allocate their time between market and nonmarket activities.

Global Value Chains Widen Women's Options

In an increasingly integrated environment, many traded goods and services from developing Asian countries are linked to global value chains. Nearly 60% of gross exports (value-added components) were processed under cross-border production networks in 2015 (ADB 2016a). Furthermore, global value chains have reinforced the

Figure 2.4: Female and Male Labor Force Participation Rates, 1990 and 2013 (%)



Note: Developed Member Countries refers to ADB members Australia, Japan, and New Zealand.
Source: ADB (2015b).

specialization, compartmentalization, and agglomeration of economic activities—all of which can influence women's work in a variety of ways.

Women stand to gain from international trade, especially through better wages and working conditions when export-oriented multinationals invest in labor-intensive sectors (Silvander 2013). Evidence is compelling that participation in global value chains can generate more jobs for women when labor-intensive manufacturing sectors join international production networks. Electronics and garment sectors are good examples. More than 75% of Bangladesh's 4 million garment industry workers are women in the labor market for the first time and mostly from poor families (Government of Bangladesh 2016). The creation of export-oriented market jobs can generate incentives for training and educational opportunities, raising a country's human capital (Heath and Mobarak 2015).

Value chains include services which create new types of employment. For example, software and business process outsourcing sectors hire educated women. In India, more than 1.3 million of the 3.7 million people employed in the information technology and business process management industries are women, and they outnumber men as entry-level hires (PriceWaterhouseCoopers and NASSCOM 2016). In the Philippines, the business process outsourcing industry counts mostly women among its 1.3 million employees (Errighi, Bodwell, and Khatiwada 2016).

While global value chains generate opportunities for women in developing countries, they can reinforce common forms of workplace gender discrimination. Demand for low-cost and flexible labor in the export industry has led to low wages and poor conditions in traditionally "women's jobs." This is particularly true in the agriculture sector, where women often work informally (as household members) and receive little or no compensation. Where employed, women are concentrated in picking or packing harvested vegetables and fruits, with limited bargaining power, erratic hours, and seasonal work.

Women tend to be more exposed to negative effects of trade liberalization. "Gender biases in education and training, inequalities in the distribution of income and command over resources, and unequal access to productive inputs such as credit, land, and technology ... translate into significant gender differences in occupational distribution," according to UN-IANWGE (2011). Nonetheless, working conditions in international trade-oriented sectors may be better than in alternative employment or jobs previously available to women.

AfT can introduce measures to increase women's opportunities through targeted policies, which are often needed to ensure the benefits of trade reach women employed downstream in value chains (Box 2.1). For example, evaluations described in OECD (2010) identified the potential of the Fairtrade program to draw more female participation. In West Africa, this program promoted increased incomes, autonomy, and gender equality in cotton farming. In Guatemala and Mexico, the scheme promoted transparency, participation, and access to income for women in coffee production. However, case studies show that in Peru, Costa Rica, and Ghana, the Fairtrade program may have exacerbated inequalities: i.e., women lost decision-making influence and income.

Another program to develop women's brands promoted entrepreneurship and gendered labor policies such as maternal leave and measures to increase women's self-esteem and leadership skills. The program was active in communities in Peru, Brazil, Bolivia, Dominican Republic, Guatemala, Nicaragua, Mexico, and Columbia. In empowering women, it produced an attitude shift among men who encouraged women's entry into the workplace. International trade offers potential in strategies to include women in value chains by promoting gender empowerment, employment training, income gains, and market access. However, the full picture is mixed at best (OECD 2010).

Female Participation Boosts Economic Growth

Increased female labor force participation can reduce the misallocation of talent and is considered a predictor of autonomy, subjective well-being, and other positive outcomes for women and girls. More employment for women also benefits household dynamics and produces strong intrinsic value in reducing discrimination and enabling protection of women's rights. Evidence suggests that these changes can boost efficiency and productivity (ADB 2016b, ADB 2015c).

Box 2.1: Analysis Shows AfT Helps Women Get Work

To quantify the contribution of AfT to employment, we examined the association between AfT disbursement and employment conditions using descriptive fixed effects regressions. Our model utilizes rates for labor force participation and unemployment in recipient countries, broken down for men and women as well as the totals, and explained by the volume of per capita AfT inflow (log and lag) along with per capita GDP, fertility, and year dummies. GDP per capita includes the squared term to capture the nonlinear nature (U-shape) of female labor force participation, while fixed effects control for country-specific effects.

Fixed effects regression analysis finds that AfT is positively associated with job creation and employment. Holding all else constant and weighed for population, a 10% increase in AfT disbursement is associated with a 1.62% increase in LFPR. That represents a substantial proportion of the working-age population. Particularly for AfT's primary categories,[1] results show that a 10% increase in AfT disbursements for building productive capacity promotes 1.57% more labor force participation. In a similar manner, AfT disbursements for regulations lifted the LPR by 0.67%. AfT is also associated with a reduction in the unemployment rate.

Gender-segregated results from the regression examining the association between the AfT and labor force participation indicates that AfT generates benefits for women. Holding all else constant and weighed for population, a 10% increase in AfT disbursement is associated with a 1.77% increase in the LFPR for women, above a 1.22% increase for men. The effect is greater among young people: female and male youth unemployment rates drop by 2.62% and 2.39%. The results also indicate that the larger the size of trade, the greater the contribution of AfT to the LFPR for men, although no such impact is found for women.

Other findings include that the higher the fertility rate, the lower the labor force participation for both men and women, and that there is a nonlinear relationship between per capita GDP and employment rates. Lastly, Asian country samples do not deviate from global trends in the relationship between AfT and LFPR, except that AfT adds more to the male LFPR when the services and manufacturing sectors are large.

[1] Please see Box 1.1.

Source: ADB staff.

Studies have shown that increasing women's participation can benefit organizations. Edwards (2017) cites evidence from the International Finance Corporation on the benefits of opening up opportunities for women in low- and middle-income countries. In nine case studies, gender-empowering initiatives, such as promoting women to senior management, bolstered revenue, efficiency, and productivity.

Higher labor force participation and increased representation of women can contribute to economic growth. Calculations in ADB 2016c show that in a typical Asian economy, closing gender gaps in education and work can increase economic growth by 30.6% over a generation. Similarly, Woetzl et al (2015) explain that advancing gender equality could add $12 to $28 trillion to the value of global economy every year by 2025.

Diversity and prosperity increases when equal access to the labor markets is promoted, but completely closing the gender gap will take 170 years to realize (World Economic Forum 2016). Women's entrepreneurship may hold the key to accelerating the process, since it presents the potential for innovation, job creation, and development in emerging economies. Assistance from the private and public sectors could help overcome lack of access to finance, training, and markets, especially since while more women are pursuing sole-proprietor enterprises their rate of failure is increasing (Niethammer 2013).

Debt financing through capacity-building and market access through regulation are often cited as enabling factors for more women to succeed in business (Niethammer 2013). After all, women comprise 80% of consumer spending (Pellegrino, D'Amato and Weisberg 2011) and there is a unique opportunity for women entrepreneurs to cater to their underserved consumer preferences.

2.3 Policy Implications and Key Intervention Areas for AfT

Trade and related investments can promote the broad development agenda for inclusive growth by creating quality jobs in labor-intensive sectors such as manufacturing and business processing services which can bring substantial benefits for women. These sectors hire relatively qualified individuals and necessitate AfT interventions for education and technical–vocational training.

While more jobs for women and other vulnerable groups may become available through trade, AfT must address lingering practices that reinforce gender bias in access to employment and working conditions. Areas include support to implement labor market policies that foster efficiency and flexibility in labor markets and penalize discriminatory employment practices. Notably, free trade and international investment agreements increasingly tend to negotiate for the inclusion of labor standards, which serves to prevent degradation of working conditions for local workers.

Meanwhile, trade competition creates short-term shocks which are particularly serious for marginalized groups and must be mitigated. Again, labor laws and programs can help workers transition from one workplace to another. Job referral services, vocational training to upgrade skills or acquire new ones, and other compensatory adjustment programs can help reduce the pain.

Lastly, access to the business opportunities that trade produces can be extended to women entrepreneurs (Box 2.2). For women to benefit from being part of global value chains, policymakers need to ensure women can access finance and business advisory support, such as knowledge-sharing among women-owned enterprises, and these efforts must be coupled with legislation that upholds gender equality. Some targeted trade facilitation programs have been found effective. AfT can promote them.

Box 2.2: Access to ICT and Digital Trade Empowers Women

Digital trade can be an important driver for connectivity, helping women-owned enterprises participate in international value chains and to integrate more easily in global markets, which improves competitiveness and inclusive growth.

ADB (2015a) notes two primary channels through which women exporters can benefit from digital trade: information and communication technology (ICT) tools that boost women's entrepreneurship, and e-commerce that allows them to do more with limited resources and to access opportunities. In particular, ICT can enable entrepreneurial activities by: enhancing access to finance (such as through mobile banking and crowdfunding); improving business communication strategies; providing a degree of anonymity that minimizes gender biases; facilitating access to networks and knowledge sharing; allowing women to balance their domestic and entrepreneurial activities and avoid commuting; and enabling time and cost efficiencies in business management (Hussain 2016; The Sasakawa Peace Foundation and Dalberg Global Development Advisors 2017).

UNCTAD and ADB (2015a) note that there remains a "gender digital divide" where women entrepreneurs struggle to maximize opportunities offered by ICT due to limited physical mobility and lack of time, poor literacy, skills, networks, and access to resources, especially finance (among other reasons). To an extent, this gender imbalance reflects embedded sociocultural norms and gender roles that create gaps between men and women's chances to access resources and maximize opportunities. Primarily in entrepreneurship and business relations, women's disadvantages in asset ownership impede participation. For instance, women's lack of rights to assets means they have fewer assets than men to pledge as collateral for formal sources of financing such as bank loans (ADB 2015a).

How then can technology be leveraged to improve the inclusion and connectivity of women entrepreneurs? Capitalizing on networking and online networks is one way. Picard and Bollinger (2015) note that networking and online networks can bridge the gender gap in mobile and internet use, improve access to markets, and connect women in the entrepreneurial ecosystem.

Such networks include mentoring programs that involve ICT and business skills training, partnering with ICT companies to increasing women entrepreneurs' knowledge of ICT solutions, supporting online startup communities for networking and information sharing, and connecting to global networks that help women-owned businesses design and implement business solutions.

The Mentoring Women in Business Programme by the Cherie Blair Foundation for Women and its partners in Malaysia is an example of ICT and business skills training; a partnership between the Indonesian Business Women Association and Microsoft Corporation increases ICT skills; Indonesia's #StartupLokal offers support for new businesses; and WEConnect International allows women to network globally.

Moreover, capitalizing on online outsourcing opportunities (e.g., Upwork), and increasing aid and investment in digital infrastructure—coupled with more equitable aid distribution—are other ways to enhance women's participation in e-commerce and even increase their job prospects in the digital economy by offering flexible opportunities such as telecommuting.

From a governance perspective, widening access to digital technologies and services is crucial. In particular, mainstreaming gender into ICT initiatives for education, employment, delivery of public services, and regulatory reforms could play significant roles in harnessing ICT for women's empowerment and gender equality (Kuga Thas, Garcia Ramilo, and Cinco 2007; Chang and Powell 2016).

Participatory governance and collective action between public and private sectors and nongovernment organizations is essential. As the Sasakawa Peace Foundation and Dalberg Global Development Advisors (2017) notes, "coordination amongst policymakers, philanthropies, and private sector businesses is crucial to ensure ICT fosters the transition of female entrepreneurs from owning informal, small businesses to formalized, larger businesses."

(Note: The Pacific Exporter's Survey in Chapter 5 explores the use of ICT by women-owned enterprises in the Pacific and highlights the potential for e-commerce to increase incomes.)

Sources: ADB (2015a), Chang and Powell (2016), Hussain (2016), Kuga Thas et al (2007), Picard and Bollinger (2015), The Sasakawa Peace Foundation and Dalberg Global Development Advisors (2017), UNCTAD.

3

The Digital Economy and Trade Connectivity

Introduction

Online sales of goods and services through computers and mobile phones in Asia and the Pacific have been growing at double the pace of North America. As the world's biggest market for e-commerce,[13] the region's e-commerce is benefitting from rapid technological advancement, expansion of the internet, and the information and communication technology (ICT) revolution that, as Roy (2016) notes, is shaping connectivity among economies worldwide and transforming the tradability of goods and services.

The potential benefits of e-commerce include enhanced participation in international value chains, greater market access and reach, improved internal and market efficiency, and lower transaction costs (UNCTAD 2015). It increases market size through integration, reduced communication costs, increased efficiency, shrinking entry barriers, and leveraging knowledge of consumer preferences (World Economic Forum 2016). It also facilitates greater collaboration and coordination among companies through better information and communication exchanges, hence boosting supply chain efficiencies. Further, better ICT can help companies operate in locations that enjoy comparative advantage (Terziaa 2015).

E-commerce facilitates tradability of services, by allowing cross-border trade for activities previously deemed as nontradable, such as research and development, computing, inventory management, quality control, accounting, personnel management, marketing and distribution (ECLAC 2002). In recent years, trade in services has expanded rapidly in parallel with the rise of digital markets. The value of trade in commercial services nearly doubled between 2005 and 2015 (World Trade Organization 2016).

The digitalization of trade and growth of e-commerce is increasingly important for raising trade volumes and promoting more inclusive development, especially for landlocked and sealocked countries. This chapter discusses the distributional effects of e-commerce in Asia and the Pacific and their policy implications for trade facilitation and efficiency.

3.1 Trends and Patterns in E-Commerce

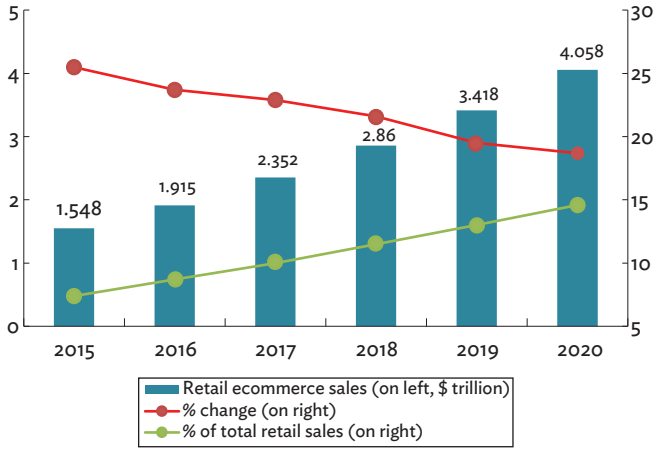
Global Trends

E-commerce is claiming an increasing share of retail sales worldwide. In 2016, e-commerce sales amounted to $1.915 trillion or 8.7% of total retail spending.[14] Retail e-commerce sales grew 25.5% in 2015 and 23.7% in 2016, according to eMarketer (2016a), with the forecast to reach $4.058 trillion in 2020 (Figure 3.1).

[13] Broadly defined, e-commerce refers to the purchase and sales of goods and services using the web and electronic data interchange with the use of computers and mobile phones. This includes physical goods as well as products and services that can be delivered digitally. There are four types of e-commerce: B2B (business-to-business), B2C (business-to-consumer), C2C (consumer-to-consumer), and B2G (business-to-government). B2B involves transactions between businesses and accounts for the bulk of e-commerce; B2C includes sales to consumers by "pure-play" e-commerce enterprises and by traditional bricks-and-mortar retailers or manufacturers that add online sales channels; C2C transactions cover online auction platforms and sales with online communities, and provide opportunities for informal enterprises to do business; and B2G covers transactions between businesses and government entities, such as in public e-procurement (UNCTAD 2015).

[14] Refers to sales across all retail channels, including sales from e-commerce retailers and transactions that occur over consumer-to-consumer (C2C) platforms such as eBay and other auction sites; and sales by motor vehicle and parts dealers and gas stations. Travel, event ticket, and restaurant sales are excluded from the forecast (eMarketer 2016a).

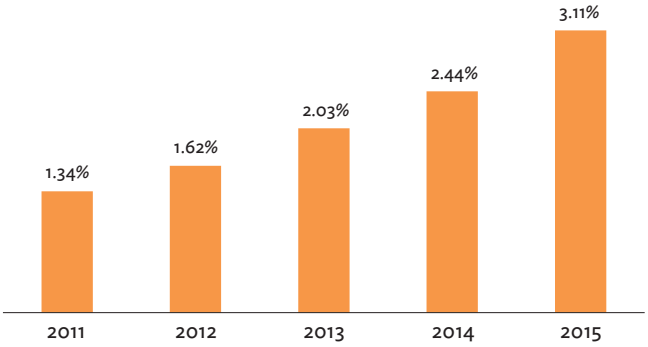
Figure 3.1: Retail E-commerce Sales Worldwide, 2015–2020
($ trillion, %)



Note: Includes products or services ordered using the internet via any device, regardless of the method of payment or fulfillment; excludes travel and event tickets.
Source: eMarketer August 2016.

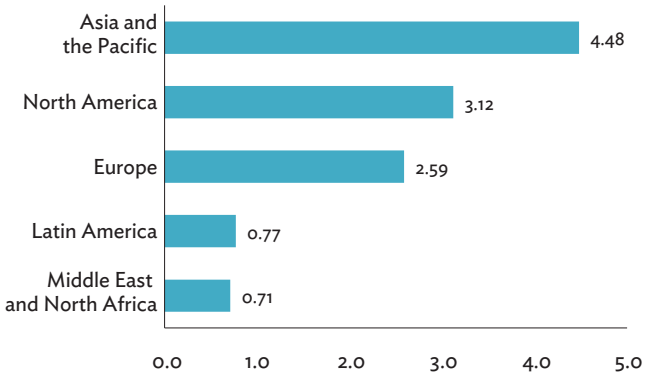
In particular, global B2C (business-to-consumer) e-commerce is gaining increasing prominence. From $1,196 billion in 2012, online sales of goods and services from businesses to consumers reached $2,272.7 billion in 2015 (62% from transactions for goods and 38% for services). However, growth is projected to slow from 19.9% in 2015 to 17.5% in 2016, reaching $2,671 billion in 2016, as the e-commerce industry matures (Ecommerce Foundation 2016). Figure 3.2 shows Asia and the Pacific continues to be the strongest B2C e-commerce market of goods and services, accounting for 46.5% ($1,056.8 billion) of global e-commerce turnover.

Figure 3.3: Share of E-commerce in Global GDP, 2011-2015



Source: Ecommerce Foundation.

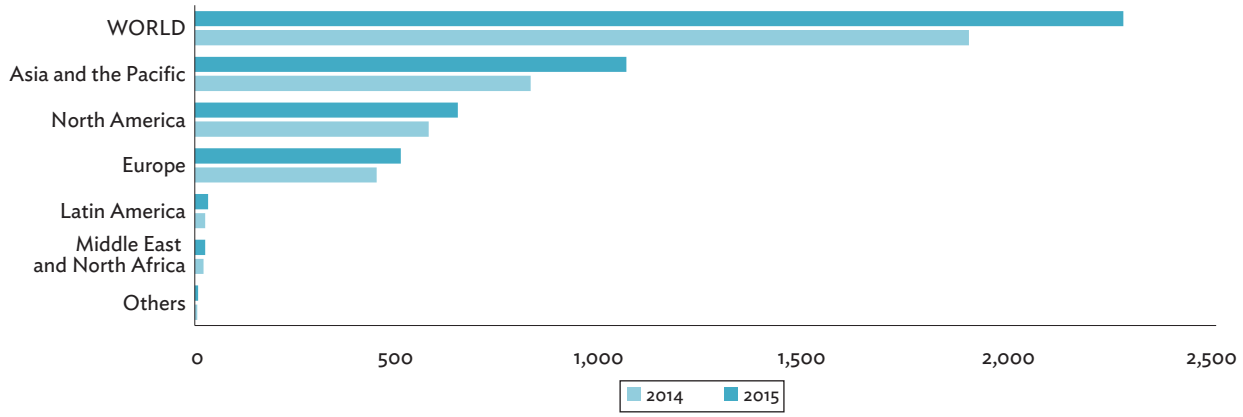
Figure 3.4: Share of E-commerce in GDP, 2015 (%)



Source: Ecommerce Foundation.

The share of e-commerce in global GDP has grown steadily from 1.3% in 2011 to 3.1% in 2015 and is likely to continue to rise (Figure 3.3). Similarly, Asia and the Pacific leads the way (Figure 3.4).

Figure 3.2: Global Business-to-Consumer E-Commerce Marketplace by Region, 2014–2015 ($ billion)



Source: Ecommerce Foundation.

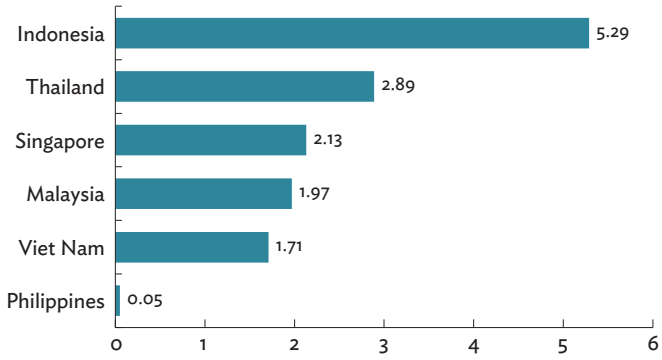
Regional Trends

Asia and the Pacific is forecast to remain the world's largest retail e-commerce market for 2016–2020, with an estimated $1 trillion in sales in 2016 expected to reach $2.7 trillion by 2020. Retail e-commerce sales are estimated to have grown 31.5% in 2016, driven by an expanding middle class, greater mobile and internet penetration, growing competition among sellers, and improving logistics and infrastructure. In contrast, sales in North America, the second-largest regional e-commerce market, grew at about half that rate, 15.6%, to $423.34 billion. The forecast for consistent double-digit growth in Asia through 2020 is fueled by "increased spending from existing digital buyers, expansion into new categories such as grocery, and growing [mobile] commerce sales" (eMarketer 2016a).

The bulk of Asia and the Pacific's e-commerce market in 2016 involved the PRC, where estimated sales of more than $899 billion comprised almost half (47%) of retail e-commerce sales worldwide. Several e-commerce platforms including PRC-based Alibaba played key roles in shoring up growth. The Alibaba Group provides basic technology infrastructure and marketing reach for businesses to engage with customers. Alibaba has operations in more than 200 countries and has overtaken Walmart as the world's largest retailer by market value (RT 2016a), generating more revenue than Amazon and eBay combined (RT 2016b).

Despite abundant growth opportunities, e-commerce remains at a nascent stage in some parts of the region. For instance, according to eMarketer, e-commerce in Southeast Asia comprises a fraction of retail sales due to underdeveloped digital payments infrastructure and a weak logistics framework. However, social commerce offers plenty of opportunities for Southeast Asia to complement the lack of consumer access to developed payment systems and robust shipping services. E-commerce through social media accounted for 30% of digital sales in Southeast Asia in 2016 (eMarketer 2016b). The biggest growth in 2016 on Southeast Asia's dominant e-commerce platform Lazada was in the fast-moving consumer goods (FMCG) product category, where sales expanded 181% over 2015. The company, majority-owned by Alibaba and established in 2012, sells 39 million products across Southeast Asia, including electronics, home products and fashion (Saiidi 2017).

Figure 3.5: Retail E-commerce Sales in Selected Countries in Southeast Asia, 2016 ($ billion)



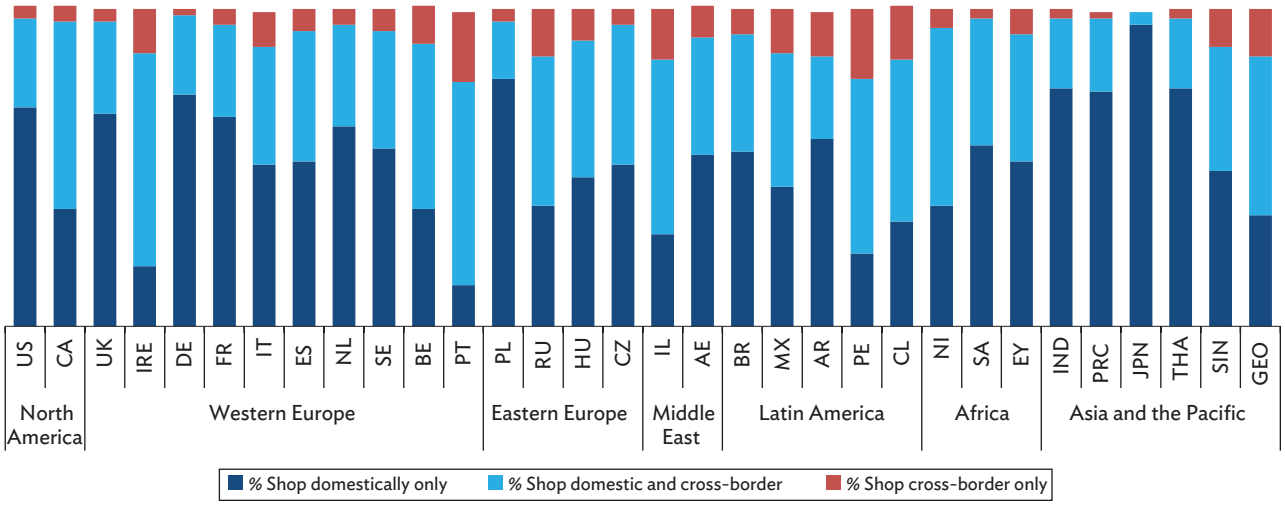
Note: Includes products or services ordered using the internet via any device, regardless of the method of payment or fulfillment; excludes travel and event tickets.
Source: eMarketer August 2016.

Southeast Asia is expected to achieve a double-digit growth over the next four years, with retail e-commerce sales in primary markets—Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam—more than doubling by 2020 (Figure 3.5, eMarketer 2016b). Facebook and Instagram, for instance, can boost e-commerce transactions in Southeast Asia, especially for small- and medium-sized businesses. In Asia and the Pacific as a whole, the strong market position of Facebook among a young population and services it offers such as the "Shop" feature, have made C2C and B2C transactions easier. The widespread use of social media platforms is transforming the region's e-commerce landscape.

Cross-Border E-Commerce Trends

Cross-border transactions are important in e-commerce. Worldwide B2C cross-border commerce is forecast to reach $424 billion in 2021, making up 15% of all online commerce (Forrester Research as cited by eMarketer 2017). Cross-border online shopping is most common in Portugal, Peru, and Ireland (Figure 3.6), and is most popular in Latin America and the Middle East. While cross-border shopping is least common in Asia, the PRC remains the most popular online shopping destination for global online shoppers (21% of the

Figure 3.6: Incidence of Domestic and Cross-Border Online Shopping, 2016



US = United States; CA = Canada; UK = United Kingdom; IRE = Ireland, Rep of; DE = Germany; FR = France; IT = Italy; ES = Spain; NL = Netherlands; SE = Sweden; BE = Belgium; PT = Portugal; PL = Poland; RU = Russian Federation; HU = Hungary; CZ = Czech Republic; IL = Israel; AE = United Arab Emirates; BR = Brazil; MX = Mexico; AR = Argentina; PE = Peru; CL = Chile; NI = Nigeria; SA = South Africa; EY = Egypt; IND = India; PRC = People's Republic of China; JPN = Japan; THA = Thailand; SIN = Singapore; GEO = Georgia.
Source: PayPal 2016.

total), followed by the United States (17%), the United Kingdom (13%), Germany (7%), and Japan (4%)—together accounting for 62% of global online shoppers (PayPal 2016).

Potential drivers include free shipping, secure payment methods, the absence of or difficulty finding items locally, costs shown in local currency, and lower overall costs. Barriers include shipping costs, doubts about whether purchased products will be dispatched or match the sellers' descriptions, customs/duties/fees/taxes, and slow delivery times (PayPal 2016).

Evidently, much e-commerce in Asia is still based on domestic sales. For instance, in the six major economies of Southeast Asia—Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam—the absence of digital payment platforms and the prevalence of cash on delivery as a payment option (accounting for about 80% of online transactions) indicates mostly domestic e-commerce sales (Nexibeo 2015). Moreover, e-commerce as a share of retail sales is only marginal, about 0.2% in these six economies in 2013. Similarly, in the PRC, India, and Japan, cross-border e-commerce is mainly domestic. For instance, Japan has the second highest digital buyer penetration rate in the world in 2016 (i.e., 82.5% of internet users making an online purchase regularly), but online purchases are mostly geared toward local merchants (eMarketer 2017a). However, regional cross-border e-commerce sales are expected to pick up as regulatory and infrastructure bottlenecks are cleared. In fact, it is estimated that between 2014 and 2020, cross-border B2C e-commerce sales in Asia and the Pacific will surpass Western Europe and North America (Research and Markets 2017).

At the same time, mobile technology in cross-border e-commerce continues to strengthen and the growth of mobile commerce is said to be the "biggest game-changer" for cross-border e-commerce (eMarketer 2017b). Nearly half of purchases in some markets, particularly the PRC and Thailand, are made on devices such as smartphones. The region's shoppers are frontrunners in the adoption of mobile devices for cross-border purchases (PayPal 2016). Omnichannel retail—which gives shoppers using one device a variety of ways to purchase from different suppliers—is also becoming a must-have for digital business growth (Sopadjieva et al 2017; McDermott 2016). Where customers are more engaged than ever in social networks, growth in mobile commerce is likely to accelerate.

3.2 Readiness Factors Influence E-Commerce Adoption

The uptake of e-commerce is a function of degrees of accessibility. We use four indicators of e-commerce readiness to explore gaps in the region. These are ICT infrastructure, affordability and skills; payment systems; logistics and shipment; and the legal and regulatory environment. These indicators may represent key areas for AfT to support e-commerce and trade connectivity.

ICT Infrastructure, Affordability and Skills

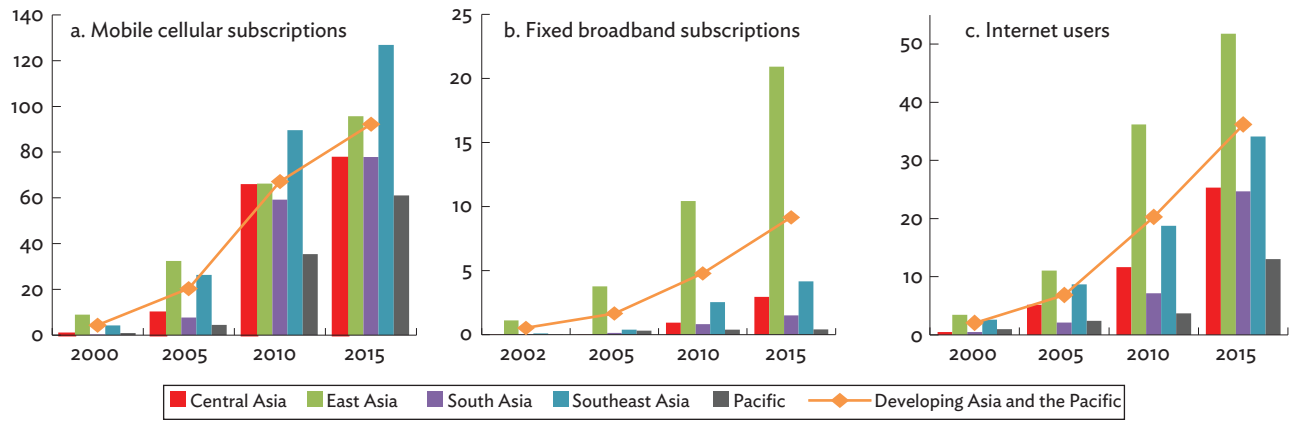
Access to reliable and affordable ICT services is vital for e-commerce to maximize opportunities for business development and trade. In Asia and the Pacific, mobile cellular subscription rates have expanded from an average of just 4 subscriptions per 100 people in 2000 to 92 subscriptions per 100 people in 2015 (Figure 3.7).[15] Subscription rates have risen steadily except in Central Asia, where rates fell 5.7% from 2014 to 2015. In the last five years, the Pacific has had the strongest growth in subscriber penetration (72%), followed by East Asia and Southeast Asia with over 40% growth. In 2015, Southeast Asia had highest mobile penetration rate with 127 subscriptions per 100 people, followed by East Asia (96), South Asia (78), Central Asia (77), and the Pacific (61).

In the information age, broadband access is also essential for businesses. East Asia's internet penetration leads the way. But fixed broadband penetration remains low at only 20 subscriptions per 100 people even in East Asia, and lower still elsewhere (Figure 3.7). Central Asia has had the strongest growth in the last five years, followed by East Asia. That said, the penetration rate is low because only about a third of people in the region have access.[16]

Low Online Profiles Impede Sales Growth

Export growth through e-commerce requires that sellers can research and locate foreign customers

Figure 3.7: Internet Users and Mobile Cellular and Fixed Broadband Subscriptions in Asia and the Pacific, 2000–2015 (per 100 people)

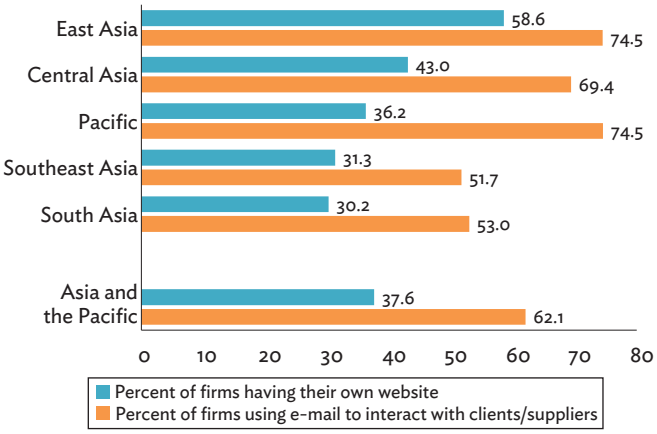


Note: For fixed broadband subscriptions, 2002 reported the required (earliest year) data for the largest number of constituent countries in each subregion.
Source: World Bank. World Development Indicators. http://www.data.worldbank.org (accessed April 2017).

[15] This includes developing economies only (excluding Australia, Japan, and New Zealand).

[16] The Pacific, South Asia, and Central Asia have seen the most significant regional growth in the last five years. The Republic of Korea recorded the highest percentage of internet users in 2015 with 89.6% of its population, followed by Hong Kong, China (84.9%); Singapore (82.1%); Azerbaijan (77%); Brunei Darussalam (71.2%); Malaysia (71.1%); and Kazakhstan (70.8%).

Figure 3.8: Share of Companies that Use their Own Website and E-mail with Clients/Suppliers (%)



Note: Regional and subregional averages are computed by taking a simple average of country point estimates. For each economy, only the latest available year of survey data are used in this computation. Only surveys, posted during the years 2010–2016, and adhering to the Enterprise Surveys Global Methodology are used to compute these regional and subregional averages.
Source: ADB calculations using data from World Bank. Enterprise Survey 2016. http://www.enterprisesurveys.org (accessed March 2017).

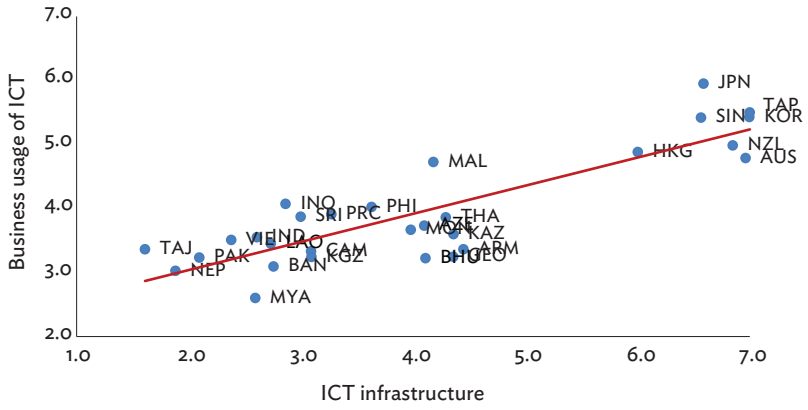
and markets over the internet, develop web-based marketing and social media strategies using foreign languages, and brand, label, and price products for foreign markets. Companies also need to build the awareness and capacity to incorporate e-commerce into operations (ADB 2015a).

Most companies in Asia and the Pacific still do not have websites and lack the capability and/or resources to facilitate online transactions. To date, only 37.6% have their own website, while 62.1% use e-mail to interact with clients/suppliers. Figure 3.8 shows East Asia has the highest percentage of companies with their own websites and (alongside the Pacific) of companies that use e-mail.

Advanced economies in Asia and the Pacific (Hong Kong, China; the Republic of Korea; Singapore; and Taipei,China) have excellent ICT infrastructure and high business usage (Figure 3.9). However, some economies, notably in Central Asia, while having good ICT infrastructure, have not been able to utilize it for business. The PRC, Indonesia, Malaysia, Philippines, and Sri Lanka have better business usage than other economies with similar ICT infrastructure.

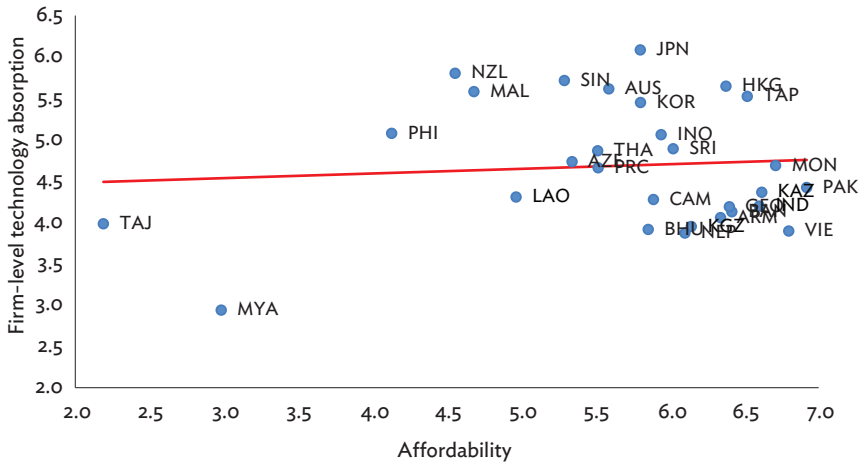
The cost of accessing ICT—either via smartphones or broadband internet—and the competition that determine it, is also a significant element in the adoption of ICT in business (Figure 3.10). For most economies in the region, affordability of ICT devices and services is a precondition in the adoption of technology for business.

Figure 3.9: Quality and Business Usage of ICT Infrastructure in Asia and the Pacific, 2015



ARM = Armenia; AUS = Australia; AZE = Azerbaijan; BAN = Bangladesh; BHU = Bhutan; CAM = Cambodia; GEO = Georgia; HKG = Hong Kong, China; IND = India; INO = Indonesia; JPN = Japan; KAZ = Kazakhstan; KOR = Republic of Korea; KGZ = Kyrgyz Republic; LAO = Lao People's Democratic Republic; MAL = Malaysia; MON = Mongolia; MYA = Myanmar; NEP = Nepal; NZL = New Zealand; PAK = Pakistan; PHI = Philippines; PRC = People's Republic of China; SIN = Singapore; SRI = Sri Lanka; TAP = Taipei,China; TAJ = Tajikistan; THA = Thailand; VIE = Viet Nam; ICT = information and communication technology.
Source: World Economic Forum. Networked Readiness Index (accessed May 2017).

Figure 3.10: Affordability and Firm-level Technology Absorption of Businesses in Asia and the Pacific, 2015



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Source: World Economic Forum. Networked Readiness Index (accessed May 2017).

Further and in general, skills or the ability to make effective use of ICTs is a prerequisite for its full adoption and utilization—either by individuals, businesses, or governments (Figure 3.11). [17]

E-Payment Options Are Just Emerging

The availability of secure electronic payment systems is another key factor in e-commerce growth. Where credit card penetration is low, alternative payment solutions such as mobile payments, cash on delivery and escrow arrangements are gaining importance (UNCTAD 2015). Particularly for small and medium-sized enterprises, the advent of e-payment and improved access to international payment services offer considerable opportunities to expand customer bases, launch products, and rationalize businesses by competing in global economies. Adoption of e-payments is likely to give greater geographic reach, reduce transaction costs, enhance efficiency, and increase revenues.

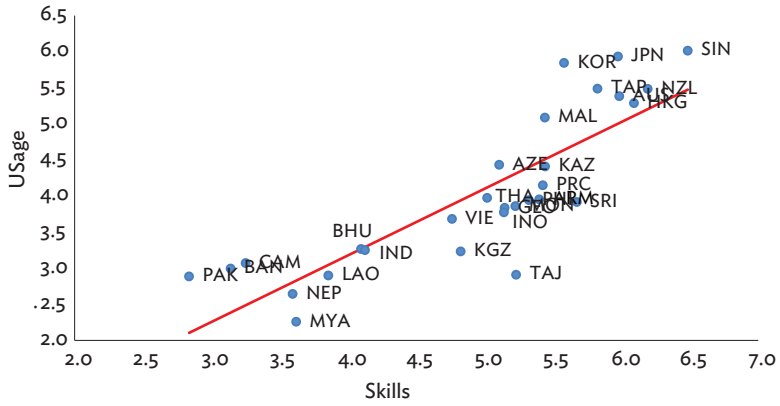
In general, the maturation of online purchase tools and consumer confidence has helped emerging Asian markets drive the ongoing global acceleration of e-commerce spending. E-commerce in Viet Nam nearly doubled to $1.3 billion in 2015, from $700 million in 2012. The Indian e-commerce market grew 35% in 2013 after expanding by 40% in 2012, while in 2013 the PRC market increased by 65% year-on-year. Further expansion of e-payment use is expected, with ITC (2016) noting that growth of the middle class, increased financial inclusion and rural economic mobility, and a rise in remittances from migrant workers are three important factors.

Logistics Remains a Constraint

Other factors constraining e-commerce in Asia and the Pacific relate to high costs of shipment and poor logistics. A survey by Reddy and Divekar (2014), found logistics and shipment services to be the greatest challenges for e-commerce companies in India, mainly due to poor infrastructure. A similar study by A.T.

[17] The skills pillar of the Networked Readiness Index is captured by the quality of the education system, the level of adult literacy, and the rate of secondary education enrollment. Meanwhile, the usage subindex assesses the individual efforts of individuals, businesses, and governments to increase their capacity to use ICTs, as well as their actual use (World Economic Forum 2016a).

Figure 3.11: Skills and Usage of ICTs in Asia and the Pacific, 2015



ARM = Armenia; AUS = Australia; AZE = Azerbaijan; BAN = Bangladesh; BHU = Bhutan; CAM = Cambodia; GEO = Georgia; HKG = Hong Kong, China; IND = India; INO = Indonesia; JPN = Japan; KAZ = Kazakhstan; KOR = Republic of Korea; KGZ = Kyrgyz Republic; LAO = Lao People's Democratic Republic; MAL = Malaysia; MON = Mongolia; MYA = Myanmar; NEP = Nepal; NZL = New Zealand; PAK = Pakistan; PHI = Philippines; PRC = People's Republic of China; SIN = Singapore; SRI = Sri Lanka; TAP = Taipei,China; TAJ = Tajikistan; THA = Thailand; VIE = Viet Nam; ICT = information and communication technology.
Source: World Economic Forum. Networked Readiness Index (accessed May 2017)

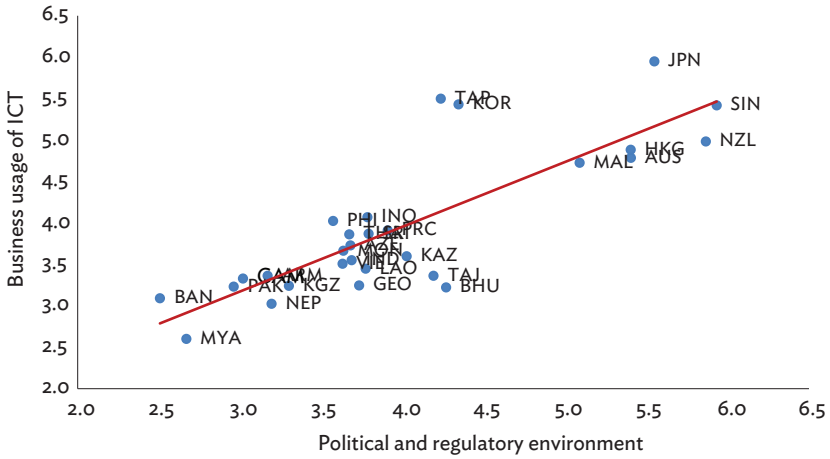
Kearney (2016) cited cost management as one of the biggest challenges to efficient e-commerce logistics in the Association of Southeast Asian Nations (ASEAN). The root causes of this challenge are poor transport infrastructure, lack of warehouse readiness, ineffective last mile delivery, and inconsistent and time-consuming customs and excise processes. Transport infrastructure remains underdeveloped in several ASEAN countries. Upgrading roads and reducing bottlenecks are seen as main priority areas to improve logistics (Jones Lang LaSalle 2013). Moreover, apart from Singapore and Thailand, warehouse capacity remains inadequate. Investment in automation is also lacking and online players/businesses are challenged with meeting the volume requirements of logistics providers. Further, capacity building on last mile delivery for logistics companies and refinements in their processes appear to be a necessity to develop the group's e-commerce.

While functional and adequate road transport facilities, land ports, and postal services are essential for facilitating both domestic and cross-border e-commerce transactions, building efficient soft infrastructure is just as important. For instance, cross-border e-commerce faces innumerable national rules and regulations on taxes, customs, and duties. Large cross-country variations in customs policies mean for example that goods shipped duty free are valued at less than $300 in Singapore and less than $140 in Malaysia (A.T. Kearney 2016). In Indonesia, the Philippines, Thailand, and Viet Nam, a $100 dress bought from another ASEAN country would require payment of duties and taxes that add one third to its price. Moreover, if the item is returned, reclaiming import duties may not be possible or can be costly. Some imported products may also need import permits. Strengthening logistics and streamlining customs processes are critical for shoring up investments needed to seize the trade opportunities e-commerce can bring for Asia's economies.

Legal and Regulatory Restrictions

A high-quality regulatory and business environment is critical to fully leverage ICT and generate economic and social impacts. Advanced economies in Asia and the Pacific (Hong Kong, China; the Republic of Korea; Singapore; and Taipei,China) have excellent political and regulatory environment for information and communications industries and high business usage of ICT (Figure 3.12). However, most economies in the region have a lot of room to improve the legal and regulatory environment.

Figure 3.12: Political and Regulatory Environment and Business Usage of ICT in Asia and the Pacific, 2015



ARM = Armenia; AUS = Australia; AZE = Azerbaijan; BAN = Bangladesh; BHU = Bhutan; CAM = Cambodia; GEO = Georgia; HKG = Hong Kong, China; IND = India; INO = Indonesia; JPN = Japan; KAZ = Kazakhstan; KOR = Republic of Korea; KGZ = Kyrgyz Republic; LAO = Lao People's Democratic Republic; MAL = Malaysia; MON = Mongolia; MYA = Myanmar; NEP = Nepal; NZL = New Zealand; PAK = Pakistan; PHI = Philippines; PRC = People's Republic of China; SIN = Singapore; SRI = Sri Lanka; TAP = Taipei,China; TAJ = Tajikistan; THA = Thailand; VIE = Viet Nam; ICT = information and communication technology.
Source: World Economic Forum. Networked Readiness Index (accessed May 2017).

The legal and regulatory framework for e-commerce encompasses legislation on e-transactions, consumer protection, data protection/privacy, and cybercrime. In the global e-commerce landscape, 77% of countries have adopted laws on electronic transactions, 50% on consumer protection, 57% on privacy, and 72% on cybercrime. In Asia and the Pacific, 77% of countries have adopted legislation on e-transactions, 37% on consumer protection, 45% on privacy and data protection, and 70% on cybercrime (UNCTAD Global Cyberlaw Tracker).

E-transaction laws refer to the legal recognition between paper-based and electronic forms of exchange for online transactions. Among other forms, this includes electronic signatures (e-signatures), and requires a national certification authority to give legal validity to the transactions. However, financial and human constraints make these hard to set up in developing countries. In addition, e-transaction laws specify different standards for what defines an e-signature (UNCTAD 2015).

Cross-border trade can be hampered by the different ways countries adopt policies on consumer and business rights, terms and conditions, disclosure obligations, and international redress mechanisms. For instance, the European Union has 28 different sets of national rules governing cross-border trade. Exporters need to familiarize themselves with these and shoulder responsibility for compliance. These create extra costs, complexity, and legal uncertainties. A 2010 survey found that 44% hesitated to buying from another EU country due to uncertainty about consumer rights protections (The Gallup Organization 2011). To address this, the European Commission has proposed a Common European Sales Law for traders to do business with customers in other countries. Other challenges to implementation include questions over jurisdiction and how to organize cooperation between implementing agencies.

Growth in internet traffic has produced concerns about data security. Unauthorized sharing of personal information and data breaches are being more common, as is use of cloud services crossing jurisdictions. While international reference frameworks for privacy and data protection are in place (OECD guidelines, the European Union Data Protection Directive, and the Asia-Pacific Economic Cooperation Privacy Directive), there is no agreement on how their basic principles can be applied. Privacy and data protection regimes are similarly diffuse.

Cybercrime through mobile devices is particularly challenging for developing countries because mobile phones are commonly used for e-commerce and e-payments. Developing countries are also targeted by criminals because of lax enforcement of cybercrime laws. Developing countries also lack the capacity and infrastructure to respond properly to cyberattacks, and enforcing laws on this involves complicated cross-border cooperation.

An adequate legal and regulatory framework for e-commerce is very important for all stakeholders, particularly in reducing online transaction risks and encouraging transparency (UNCTAD 2015). Moreover, international convergence in e-transaction, consumer protection, data protection/privacy, and cybercrime laws is essential to develop and strengthen national and regional e-commerce laws.

3.3 Way Forward for Key Policy Interventions

Significant legal, regulatory and institutional constraints present barriers to e-commerce in many developing countries. Government capacity is often an issue in implementing legislations, while regional initiatives to harmonize regulations are also hampered by disparate legal frameworks and the "digital divide" within and between countries. The increasingly cross-border nature of e-commerce calls for coordinated regional and global efforts to promote ICT and e-commerce, such as the e-ASEAN initiative (Box 3.1). More information infrastructure, regulatory frameworks that foster competition, the equitable allocation of resources, greater consumer protection, and reliable and secure payment systems can help improve e-commerce, along with more investment in human capital (ECLAC 2002).

ADB (2015a) notes "[m]any trade facilitation projects ... aim to put data online and use data-driven electronic systems to improve border processing and government programs. Digital trade facilitation has been integrated in a number of ADB's subregional programs, including the Greater Mekong Subregion (GMS), Central Asia Regional Economic Cooperation (CAREC), and Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area (BIMP-EAGA).

In the GMS, the Transport and Trade Facilitation Action Program aims to tackle "software" challenges of improved connectivity through improvements in

Box 3.1: e-ASEAN Initiative

The member states of the Association of Southeast Asian Nations (ASEAN) initiated the e-ASEAN platform to strengthen information and communication technology (ICT) infrastructure as an engine of trade, economic growth, innovation and better governance, and to reduce the digital divide within the 10-country group.

An agreement in 2000 made ASEAN the first developing region to prepare a harmonized e-commerce legal framework consistent across jurisdictions (UNCTAD 2013). Other landmarks included the ASEAN ICT Masterplan 2015 for harmonized e-commerce laws in each member country to create ICT conducive to businesses and to secure transactions throughout the group.

UNCTAD (2013) notes that progress toward harmonization has been strongest in electronic transactions laws, with nine member countries having legislation in place and Cambodia now putting a draft law into effect, and progress on laws covering cybercrime, domain names and dispute resolution.

The ASEAN e-commerce market has been growing much faster than in other regions and the pace is expected to continue (Yuwono 2015). However, the market is still in its infancy and faces challenges beyond harmonization of rules and regulations, which include limited broadband access, low e-payment penetration and bankability, and inefficient logistics and infrastructure.

Sources: ASEAN Secretariat (2015), UNCTAD (2013), and Yuwono (2015).

transport and trade facilitation, as well as capacity building and institutional reform. The CAREC Transport and Trade Facilitation Strategy 2020 provides the blueprint for harmonizing customs procedures and standards, and has included piloting a regional transit regime utilizing a single electronic transit document.

Meanwhile, in BIMP-EAGA, the Implementation Blueprint 2012–2016 took improvements in ICT facilities and services, and trade facilitation as its priorities. The blueprint also recognized that ICT plays an important role in modernizing customs facilities, promoting e-commerce, facilitating information and communication exchange and tracking system, and building online systems.

Ultimately, a regulatory framework that encourages cross-border trade opportunities for e-commerce could increase competitiveness, maximize economic gains, and generate social impacts. However, access to accurate and adequate e-commerce data should be part of any e-commerce growth and development agenda. Closing data gaps and limitations is paramount given that e-commerce has already reached a critical mass in business transactions and increasingly impacts global trade. The necessity for official statistics in e-commerce/digital trade is discussed in Box 3.2.

Development of national and regional strategies can help Asian economies address challenges more systemically and unlock the potential of e-commerce. Coordination between different countries and development partners is essential and could work toward standardized e-commerce business processes and automated information exchange to simplify transactions (Rillo and dela Cruz 2016).

The following policy areas can be prioritized to accelerate growth in digital trade:

- Improve market access by removing barriers to digital trade
- Introduce legal, regulatory and institutional reforms to accommodate electronic business, facilitate access and connectivity, and enable e-payments
- Foster an enabling environment for digital businesses through investment, especially in local start-up networks/ecosystems
- Improve the availability and quality of connectivity infrastructure
- Enhance the use of digital technologies for trade finance solutions
- Promote public–private partnerships for e-commerce exports
- Strengthen regional efforts to modernize and harmonize cross-border e-commerce by improving digital regulations and interoperability of the internet across the region
- Advance capacity-building efforts specific to digital trade through cross-border knowledge sharing of best practices and policies

The new Framework Agreement on the Facilitation of Cross-Border Paperless Trade in Asia and the Pacific can serve as a valuable tool to facilitate cross-border digital trade and better equip economies to

Box 3.2: Official Statistics Needed in E-Commerce/Digital Trade

Limited data has made it difficult to discuss trends and developments in digital trade and e-commerce or to conduct quantitative analysis. Different working definitions of e-commerce among institutions that track its growth pose challenges to measurement, particularly the valuation of trade. Studies are primarily based on private data sources that offer glimpses of e-commerce trends and patterns, and without internationally consistent and comprehensive official statistics meaningful cross-country analysis is not possible. Issues of variations in working definitions and data collection methods are compounded by difficulties in distinguishing domestic and cross-border digital trade, and in pinpointing the increasing digitization of trade in services. Inconsistency of e-commerce data across countries presents challenges, especially when assessing the potential economic impact of e-commerce and offering evidence-based policies and practices for trade issues. Proper quantitative assessment of digital trade and e-commerce could contribute significantly to harmonization of trade facilitation and policy instruments in Asia and the Pacific, especially as the region makes progress in paperless trade.

Source: ADB analysis using UNCTAD (2015) and various sources.

implement the WTO Trade Facilitation Agreement. The agreement is expected to benefit the region by providing a multilateral intergovernmental platform, offering a strong capacity building program with emphasis on sharing knowledge, enabling pilot projects on cross-border data exchange, setting action plans based on countries' state of readiness, and fostering recognition among stakeholders to achieve the agreement's goals (UNESCAP 2016).

4 Aid for Trade and Services

Introduction: Services Can Drive Economic Development

Services make important contributions to economic growth and development by virtue of their contribution to GDP, potential to create jobs, and provision of inputs necessary for the rest of the economy to thrive. Services are key inputs in the production of goods: information and communication technology (ICT) services, for example, help boost productivity and increase competitiveness in an economy. Financial services are important in facilitating capital accumulation for productive investment and innovation, while transport and logistics services are vital for moving goods and people, and good health and education services help improve human capital.

The leading role of services in transforming growth and productivity is now widely recognized. Trade in services is growing especially rapidly, and has strong potential to promote economic performance and create new business and employment opportunities.

Developing countries can benefit from increased services exports by expanding their services industries, which produces higher growth, more jobs, and greater foreign exchange earnings. Imports of services or the entry of foreign service providers can also bring greater competition, international best practices, better skills and technologies, and investment capital. These benefits can be particularly important for landlocked and sealocked economies with poor transport infrastructure and connectivity, as will be explored in chapter 5.

Table 4.1 lists the shares of services in GDP, employment and total trade for countries included in the study on the relationship between AfT and growth in trade in services that follows in this chapter. The table shows services play especially significant roles in the economies of Europe, America and Pacific island countries, and in East Asia.[18]

Table 4.1: Importance of Services Across Regions

Variable (2010)	Asia	Europe	Africa	America	
Employment in services (% of total employment)	51.2	61.5	46.5	66.7	
Services value added (% of GDP)	51.4	65.1	48.9	64.9	
Services trade in total trade (%)	21.9	30.3	25.5	28.6	
Variable (2010)	**SA**	**CA**	**EA**	**SEA**	**Pacific**
Employment in services (% of total employment)	40.6	44.8	63.4	44.7	60.4
Services value added (% of GDP)	55.3	47.8	63.7	45.1	67.7
Services trade in total trade (%)	26.6	24.8	15.5	17.1	43.9

CA = Central Asia, EA = East Asia, GDP = gross domestic product, SA = South Asia, SEA = Southeast Asia.
Source: World Bank, World Development Indicators (accessed January 2017).

[18] Note that countries included in Europe, Africa and America are AfT recipients as reported in CRS data.

However, experience shows that services industries face far greater regulations and barriers to trade than manufacturing industries. In addition, network externalities, information asymmetries, and market failures can pose risks to realizing the development benefits of the services economy and trade. This makes AfT support for regulatory reforms and trade liberalization very beneficial to services trade. AfT can also build the ICT infrastructure necessary for e-commerce growth, and it can boost the tradability of services. This chapter discusses the link between AfT and trade in services, identifies constraints, and highlights examples of reforms in the region that can inform prescriptions for policy intervention.

4.1 Trends in Services AfT and Trade in Services

Aid targeted at tradable services sectors is an important catalyst in the development, economic growth, and structural transformation of recipient economies. The analysis of trading data in this chapter suggests a strong relationship between growth in trade in services (TiS) and AfT targeted at six sectors: services that boost economic infrastructure—transport, energy, and communications—and those that increase productive capacity in an economy, which broadly are financial, travel/tourism, and business services.

Given that there are limitations on AfT data (Box 4.1), the analysis makes use of data on official aid disbursements between 2002 and 2015 as proxies to examine the relationship between AfT flows to services

Box 4.1: Data Considerations

The OECD's Creditor Reporting System (CRS) data does not exactly match all AfT categories. Only parts of data on Official Development Assistance (ODA) are reported as aid going to building economic infrastructure (these include three services sectors: transport and storage, communication and information, and energy) and as aid for the creation of "productive capacity" (going to banking and financial services, business and other services, and tourism). At best, the data are proxies for aid in trade-related infrastructure and productive capacity building since not all ODA reported under these headings is trade-related. Given the data limitations, we use ODA flows disbursed in these services sectors as a proxy for AfT in services and examine the relationship between these flows and trade in services (TiS).

Interestingly, the OECD definition of "economic infrastructure" in aid data includes three services sectors—transport, energy and communications—while the creation of "productive capacity" includes aid disbursed to develop financial, travel/tourism and business services. It is also important to note that while disaggregation of the three CRS economic infrastructure "services" sectors (transport and storage, communications, and energy) does not yield information on the classification of these sectors as industry or services, they are classified as services in the UN's Central Product Classification (CPC), in the list of services sectors and subsectors covered under General Agreement of Trade in Services, and in empirical analyses of services trade. Consistent with this established practice, these three sectors are classified as services. Moreover, the CRS also clubs the three sectors under the "Economic infrastructure and services" grouping and not under "Industry, mining, construction." For the same reason, the construction sector is not classified as a service as construction is included in "Industry, mining, construction" in the CRS. Hence, services used in this study include six aggregate sectors: transport and storage; communications; energy; banking and finance; business and other services; and tourism.

Major challenges remain in TiS data despite improvements in international availability. We therefore use global TiS data to increase the number of reporting countries, sectors, and years. Further, the average of services imports and exports is used, for two reasons: the availability of services trade data is more robust for imports than for exports, and AfT in services is likely to affect the (services) importing and exporting capacity of a recipient.

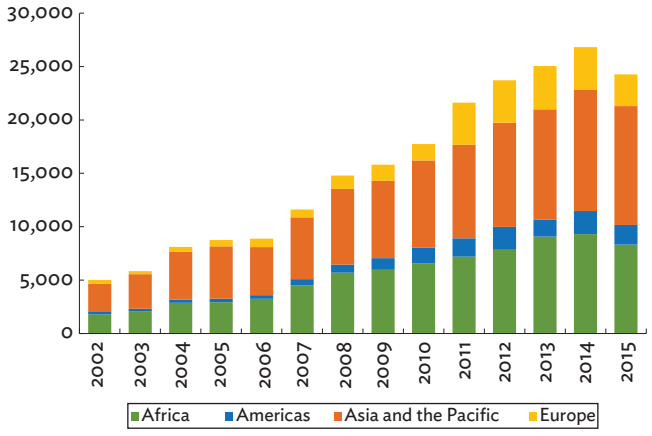
and growth in trade in services (TiS) across the six aggregated services sectors. First, the discussion turns to growth in AfT disbursements to the services sectors over the study period.

Asia Takes the Lion's Share of Services AfT

Figure 4.1 shows that global AfT in services rose steadily to $24.3 billion in 2015 from $5 billion in 2002, and that it peaked at $26.8 billion in 2014. Accordingly, services sectors took 58.9% of AfT disbursements in 2002 and 75.1% in 2015, reflecting in particular the growth in official aid to transport and storage and energy. By region, most AfT in services was received by Asia (45.6%) and Africa (35.5%) over 2002–2015.

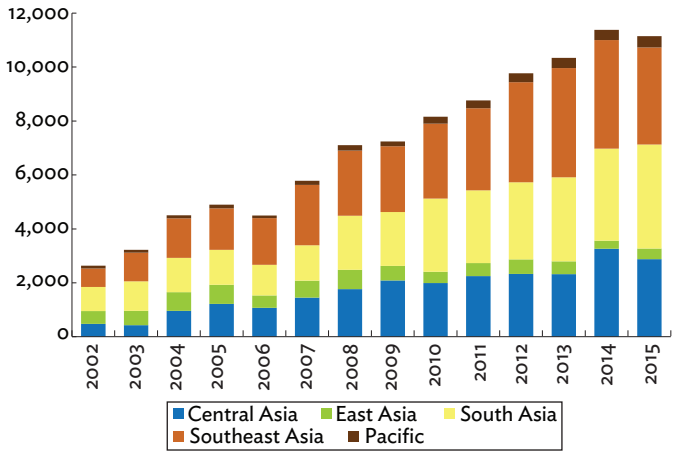
The largest beneficiaries in Asia have been Southeast, South, and Central Asian economies, accounting for 35%, 29.8%, and 24.6% of AfT disbursed in the region over 2002–2015 (Figure 4.2). Southeast Asian economies received $3.6 billion of aid in services in 2015, up from $678.7 million in 2002, while South Asian economies took $3.9 billion in 2015 ($892.5 million in 2002) and Central Asian economies $2.9 billion ($478.8 million in 2002).

Figure 4.1: Global Aid for Trade in Services by Region ($ million)



Note: Services include six aggregate sectors: transport and storage; communications; energy; banking and finance; business and other services; tourism.
Source: ADB calculations using data from OECD. Creditor Reporting System. http://www.oecd.org/ (accessed April 2017).

Figure 4.2: Distribution of Aid for Trade in Services in Asia and the Pacific ($ million)



Source: ADB calculations using data from OECD. Creditor Reporting System. http://www.oecd.org/ (accessed April 2017).

Within services, Table 4.2 shows that during 2002–2015, the transport and storage and energy sectors were the largest recipients of aid for Asia and the Pacific. The transport sector received more AfT than the energy sector in all subregions. This reflects the greater importance of both sectors in building economic infrastructure, though the predominance of transport and storage also reflects the higher cost of infrastructure projects than of AfT disbursements for other purposes (ADB 2015a).

Asia's Trade in Services Nearly Increased Fivefold

Services trade with the world for all countries in the AfT sample increased to $1.3 trillion in 2015 from $345.1 billion in 2002, according to UNCTAD data (Figure 4.3).[19] Asian and American countries in the sample were the major services traders, accounting for 67.2% and 14.9% of global services trade for the sample countries over 2002–2015. Asia and the Pacific's services trade nearly increased fivefold from $218.9 billion in 2002 to $988.2 billion in 2015. Asian recipients of AfT are not just larger and richer but

[19] The measure of services trade used in this section is the average of services imports and exports. The availability of services trade data is generally more reliable for imports than for exports.

Table 4.2: Sectoral Distribution of AfT in Services within Asia ($ million)

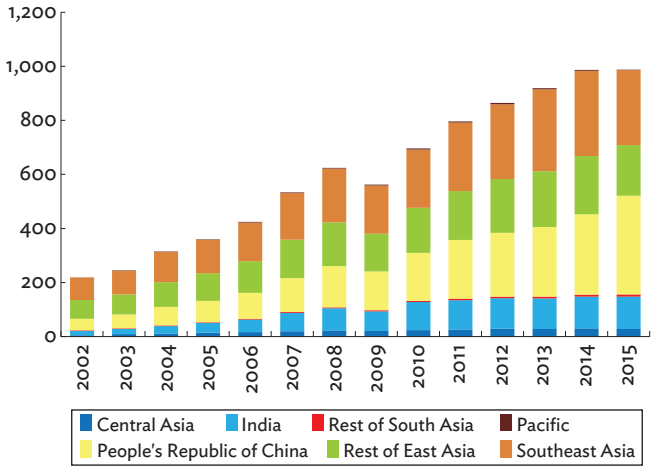
AfT in services (average 2002–2015, $ million)	Central Asia	South Asia	East Asia	Southeast Asia	Pacific	Asia and the Pacific
Transport & Storage	671.6	1,004.3	265.2	1,453.7	154.6	3,549.5
Communications	24.4	37.8	24.4	52.6	9.1	148.3
Energy	601.8	706.5	155.0	713.4	36.5	2,213.2
Banking & Financial Services	187.5	306.9	71.0	178.5	6.4	750.3
Business & Other Services	260.1	57.8	9.7	76.7	12.6	417.0
Tourism	4.1	4.9	1.0	9.6	4.3	23.8
Total	**1,749.5**	**2,118.3**	**526.3**	**2,484.6**	**223.5**	**7,102.1**

Source: ADB calculations using data from OECD. Creditor Reporting System. http://www.oecd.org/ (accessed April 2017).

also more deeply embedded in regional and global value chains and well-functioning Preferential Trade Agreements compared to sample countries in other regions. This explains the dominance of Asia as a services trader.

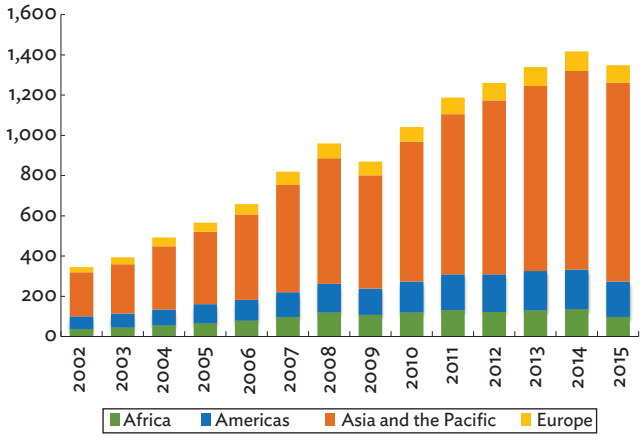
In Asia, by far the largest services traders have been the East Asian economies, accounting for 51.2% of Asia's mean services trade with the world between 2002 and 2015 (Figure 4.4) and the PRC alone contributing 27.1%. Again, this reflects the size of East Asian economies and their wealth and integration into global value chains. East Asia's average services trade with the world quadrupled to $552.8 billion in 2015 from $112.7 billion in 2002.

Figure 4.4: Distribution of Services Trade across Asia and the Pacific ($ billion)



Source: ADB calculations using data from UNComtrade. https://comtrade.un.org/ (accessed June 2017).

Figure 4.3: Services Trade by Region ($ billion)



Source: ADB calculations using data from UNComtrade. https://comtrade.un.org/ (accessed June 2017).

The sectoral distribution of services trade within Asia over 2002–2015 shows the predominance of transportation, travel, and other business services (OBS) for all subregions except Central Asia and South Asia (excluding India), where trade in OBS is lower (Table 4.3).[20] From Table 4.3, it is interesting to note that computer and related services are more important in services trade in the PRC and India, than they are in the rest of the region. Especially in India, computer and related services is the biggest contributor to the services trade, followed by OBS. Trade in financial

[20] This also reflects the modal coverage of TiS data that excludes Mode 3 where financial, insurance and communications services may be the more important contributors.

Table 4.3: Services Trade for Asian Subregions by Sector ($ billion)

Sector	Central Asia		India		Rest of South Asia		PRC		Rest of East Asia		Southeast Asia		Pacific	
	2002	2015	2002	2015	2002	2015	2002	2015	2002	2015	2002	2015	2002	2015
Transport	1.11	8.64	2.80	14.84	0.81	2.34	9.67	57.10	12.33	54.60	26.15	81.95	0.32	0.40
Travel	0.99	7.72	3.05	17.93	0.59	4.17	17.89	203.15	8.32	50.07	23.42	77.80	0.24	0.64
Communications	0.12	0.49	0.89	1.50	0.04	0.08	0.51	1.728[a]	0.53	1.33	0.62	0.47	0.03	0.03
Insurance	0.07	0.52	0.31	1.56	0.08	0.17	1.73	7.15	0.30	2.19	2.17	8.31	0.04	0.03
Financial	0.03	0.29	1.02	4.23	0.00001	0.32	0.07	2.49	0.38	13.79	1.69	13.15	0.001	0.004
CRS	0.01	0.55	4.90	38.62	0.03	0.51	0.89	71.43	0.07	2.40	0.24	0.38	0.002	0.022
OBS	0.58	2.16	4.09	30.60	0.28	0.34	9.19	48.97	7.81	41.74	15.02	61.97	0.39	0.08

CRS = Computer and related services, OBS = Other business services, PRC = People's Republic of China.
[a] Data refers to 2012, the latest available data for the PRC.
Source: ADB calculations using data from UNComtrade. https://comtrade.un.org/ (accessed June 2017).

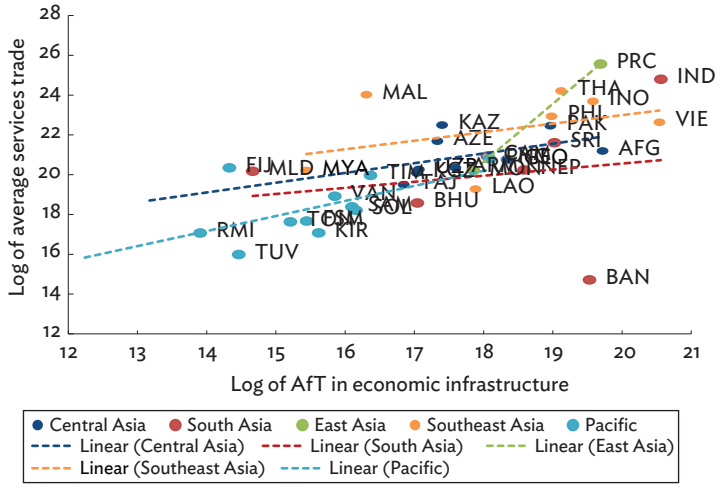
services is growing rapidly from a low base in the PRC, the rest of East Asia, and Southeast Asia.

4.2 Targeted AfT Can Boost Trade in Services

The AfT-TiS relationship is expected to be positive. Literature on the economic determinants of development assistance suggests that donor countries are more likely to disburse aid to countries that are potentially important markets for their exports (see for instance Neumayer 2003). Moreover, aid targeted at services sectors has a direct positive impact on economic infrastructure and productive capacity, which in turn contributes to economic growth and fuels the trading potential of recipients.

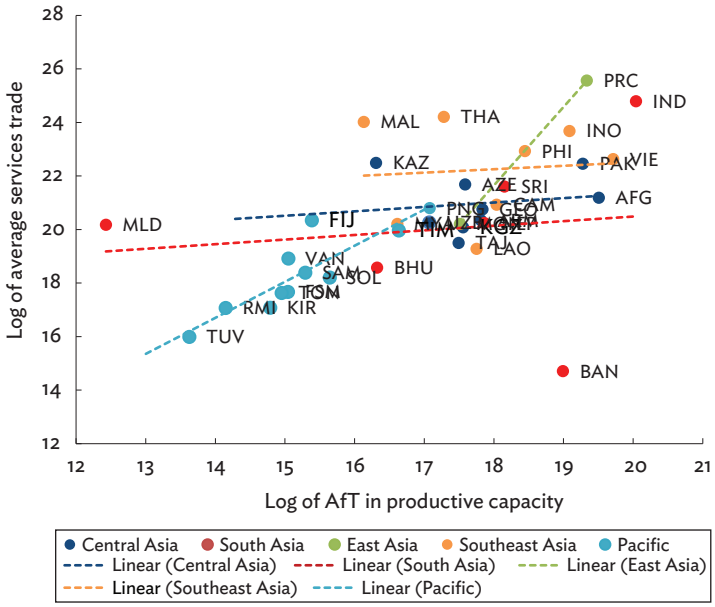
Figure 4.5 shows a positive relationship between services trade and AfT in building economic infrastructure (aid disbursed in the transport,

Figure 4.5: Services Trade and AfT in Economic Infrastructure: Asia and Pacific (average 2002–2015)



AFG = Afghanistan, ARM = Armenia, AZE = Azerbaijan, BAN = Bangladesh, BHU = Bhutan, CAM = Cambodia, COO = Cook Islands, FIJ = Fiji, FSM = Federated States of Micronesia, GEO = Georgia, IND = India, INO = Indonesia, KAZ = Kazakhstan, KIR = Kiribati, KGZ = Kyrgyz Republic, LAO = Lao People's Democratic Republic, MAL = Malaysia, MLD = Maldives, MON = Mongolia, MYA= Myanmar, NAU = Nauru, NEP = Nepal, PAK = Pakistan, PAL = Palau, PHI = Philippines, PNG = Papua New Guinea, PRC = People's Republic of China, RMI = Marshall Islands, SAM = Samoa, SOL = Solomon Islands, TAJ = Tajikistan, THA = Thailand, TIM = Timor-Leste, TKM = Turkmenistan, TON = Tonga, TUV = Tuvalu, UZB = Uzbekistan, VAN = Vanuatu, VIE = Viet Nam.
Source: ADB calculations using data from OECD. Creditor Reporting System. http://www.oecd.org/ (accessed April 2017). UNComtrade. https://comtrade.un.org/ (accessed June 2017).

Figure 4.6: Services Trade and AfT in Productive Capacity: Asia and the Pacific (average 2002–2015)



AFG = Afghanistan, ARM = Armenia, AZE = Azerbaijan, BAN = Bangladesh, BHU = Bhutan, CAM = Cambodia, COO = Cook Islands, FIJ = Fiji, FSM = Federated States of Micronesia, GEO = Georgia, IND = India, INO = Indonesia, KAZ = Kazakhstan, KIR = Kiribati, KGZ = Kyrgyz Republic, LAO = Lao People's Democratic Republic, MAL = Malaysia, MLD = Maldives, MON = Mongolia, MYA= Myanmar, NAU = Nauru, NEP = Nepal, PAK = Pakistan, PAL = Palau, PHI = Philippines, PNG = Papua New Guinea, PRC = People's Republic of China, RMI = Marshall Islands, SAM = Samoa, SOL = Solomon Islands, TAJ = Tajikistan, THA = Thailand, TIM = Timor-Leste, TKM = Turkmenistan, TON = Tonga, TUV = Tuvalu, UZB = Uzbekistan, VAN = Vanuatu, VIE = Viet Nam.
Source: ADB calculations using data from OECD. Creditor Reporting System. http://www.oecd.org/ (accessed April 2017). UNComtrade. https://comtrade.un.org/ (accessed June 2017).

communications, and energy sectors) for Asian and the Pacific countries during 2002–2015.

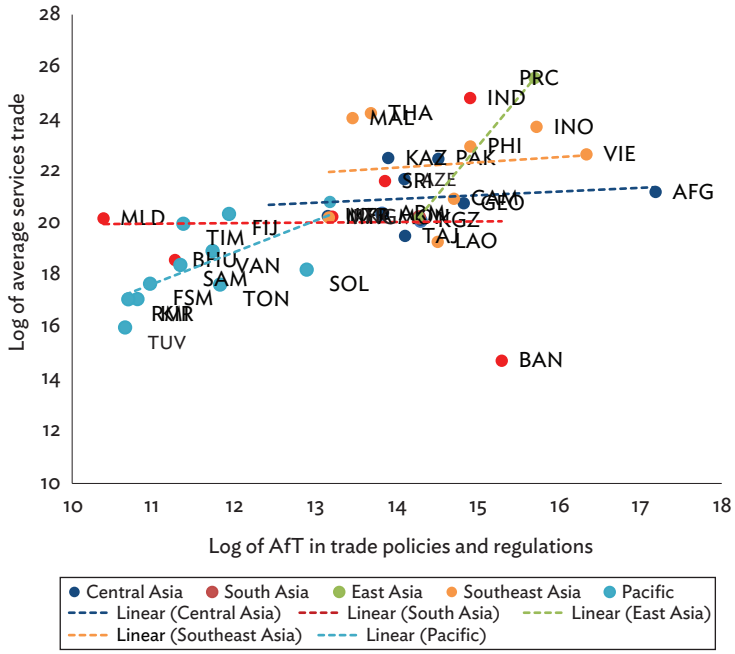
The relationship between AfT in productive capacity building (sectors other than economic infrastructure) and aggregate TiS for the same period is also positive, especially for Pacific economies (Figure 4.6).

Finally, looking at AfT in trade policies and regulations and aggregate TiS, the relationship between these variables for the region is positive (Figure 4.7). However, by subregion some results are less positive than others, such as for South Asia.

Correlation analysis was also performed to gauge the relationship between TiS and AfT for the same sample and time period, but disaggregated among the different services sectors. The scatterplots show a positive relationship between mean services trade and sectoral AfT. By subregions, a strong positive relationship between mean services trade and AfT holds for the Pacific, Central Asia, and East Asia, and less so for South and Southeast Asia. These correlations reflect the institutional barriers to services trade shown in the World Bank's Services Trade Restrictiveness Index (STRI) data (Borchert, Gootiiz, and Mattoo 2014). Central and East Asia have much fewer restrictions than other subregions, which may explain marked differences observed in AfT-services trade relationships. Therefore, these findings point to the important need for regulatory reform to channel the benefits from development assistance for trade.

Econometric analysis reveals a positive and statistically significant relationship for all services and for business services. A 10% rise in AfT in all services may be associated with a 0.4% increase in services trade. Moreover, a 10% rise in annual AfT in business services

Figure 4.7: Services Trade and AfT in Trade Policies and Regulations: Asia and the Pacific (average 2002–2015)



AFG = Afghanistan, ARM = Armenia, AZE = Azerbaijan, BAN = Bangladesh, BHU = Bhutan, CAM = Cambodia, COO = Cook Islands, FIJ = Fiji, FSM = Federated States of Micronesia, GEO = Georgia, IND = India, INO = Indonesia, KAZ = Kazakhstan, KIR = Kiribati, KGZ = Kyrgyz Republic, LAO = Lao People's Democratic Republic, MAL = Malaysia, MLD = Maldives, MON = Mongolia, MYA= Myanmar, NAU = Nauru, NEP = Nepal, PAK = Pakistan, PAL = Palau, PHI = Philippines, PNG = Papua New Guinea, PRC = People's Republic of China, RMI = Marshall Islands, SAM = Samoa, SOL = Solomon Islands, TAJ = Tajikistan, THA = Thailand, TIM = Timor-Leste, TKM = Turkmenistan, TON = Tonga, TUV = Tuvalu, UZB = Uzbekistan, VAN = Vanuatu, VIE = Viet Nam.
Source: ADB calculations using data from OECD. Creditor Reporting System. http://www.oecd.org/ (accessed April 2017). UNComtrade. https://comtrade.un.org/ (accessed June 2017).

may be associated with a 1.02% increase in services trade in OBS. However, the results for remaining sectors are not statistically significant.

Empirical results also suggest statistically significant elasticities for South Asia and Southeast Asia during 2002-2015. Doubling AfT in services may be associated with a 10% increase in services trade in both subregions.

Overall, the results suggest that, irrespective of geographic challenges and economic development stages, aid disbursed in building economic infrastructure and productive capacity is positively correlated with services trade across the Asia and the Pacific region. Besides services trade, AfT may have implications for foreign direct investment (Box 4.2).

4.3 Dismantling Barriers to Services Trade

Services have a key function in improving the investment climate and economic performance. It is important to promote universal access and efficient and equitable delivery of the whole spectrum of essential services, since this provides a wide impact on overall investment and business conditions.

However, barriers to trade and investment in services are prevalent. A recent World Bank research project finds that services barriers in high–income and developing countries are higher than those for trade in goods, and that barriers in emerging markets are generally much higher than those in OECD countries (Borchert et al 2014). For developing economies to counteract pervasive market failures and structural

Box 4.2: FDI and Mode 3 Trade in Services

There are four modes of trade in services: (i) Mode 1 (cross-border, such as for online medical transcriptions), (ii) Mode 2 (consumption abroad, such as tourism services), (iii) Mode 3 (commercial presence, such as foreign banks in domestic economy), and (iv) Mode 4 (movement of natural persons, such as Indian IT professionals in the United States). Among these four modes, WTO estimates Mode 3 accounts for nearly two-thirds of total services trade, but it is not captured in balance of payments transactions and is therefore excluded from TiS data.

Mode 3 services trade can be measured by sales or production value available from foreign affiliate statistics (FATS). In the absence of FATS for most economies in Asia and the Pacific, we use foreign direct investment (FDI) data—both greenfield type and mergers and acquisitions (M&A)—as a proxy for FATS and estimate the effect of AfT on FDI. WTO (2010) notes the existence of important links between FATS and FDI. Both reflect different facets of the multinationals' roles in the world economy. FDI statistics measure the monetary value of capital movement between investors and affiliates as a component of the capital account of a country's balance of payments. On the other hand, FATS cover data linked to the operations of foreign affiliates, such as sales, production, and employment.

FDI transactions and positions are not, strictly speaking, substitutes for FATS variables. Not all FDI will likely result in establishment of a commercial presence as defined by Mode 3. But FDI statistics in countries that have yet to compile FATS may indicate multinationals' interest to establish services supply in their countries. FDI statistics can also be used in conjunction with FATS to indicate the extent to which affiliates were funded by direct investors, and to show where income generated by affiliates accrues to direct investors.

The following chart suggests a strong positive correlation between FDI stock data taken from UNCTAD and FATS for a 2010–2012 sample of 41 countries, including 6 in Asia (the PRC; Hong Kong, China; India; Japan; Thailand; and Viet Nam).

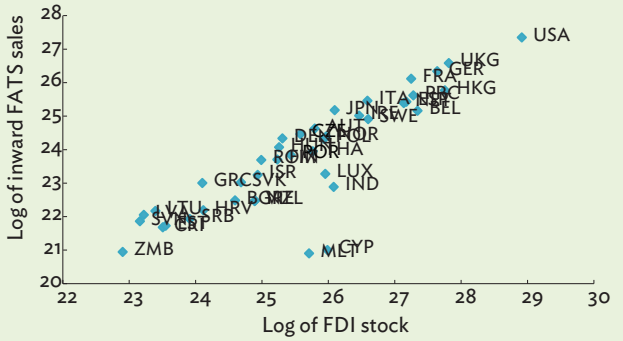
The World Bank (2011) argues that AfT can make countries more attractive for FDI and potentially Mode 3 trade in services. More generally, OECD (2004) argues that development assistance that boosts the investment climate can attract FDI.

AfT can be disaggregated into three categories: trade-related infrastructure (INF), building productive capacity (BPC), and trade policy and regulations and trade-related adjustment (TPR). Theoretically, it seems obvious that the effect of aid to INF and TPR on both greenfield and M&A investments will be positive, because aid to infrastructure or technical assistance can ease important bottlenecks in public infrastructure and FDI-related governance in poor countries. Aid to TPR can also facilitate foreign investments through market knowledge and interpersonal relations.

However, the effect of AfT to building productive capacity on FDI can be negative because of rent-seeking effects and crowding out private foreign activities in the tradable goods sector. That is, even as aid to building productive capacity suggests that it aims to increase productivity, it may decrease the marginal productivity of private capital in targeted sectors. The reason is that "foreign aid invested in physical capital competes directly with other types of capital, and thus replaces investments that private actors would have undertaken anyway" (Selaya and Sunesen 2012, p. 2,155).

According to our estimates using a semistructural gravity model, AfT increases greenfield FDI in all industries—primary, manufacturing, and services industries. Specifically,

FDI Stock and Inward FATS Sales (41 economies including 6 Asian, average 2010–2012)



AUT = Austria; BEL = Belgium; BGR = Bulgaria; CRI = Costa Rica; CYP = Cyprus; CZE = Czech Republic; DEN = Denmark; ESP = Spain; EST = Estonia; FIN = Finland; FRA = France; GER = Germany; GRC = Greece; HKG = Hong Kong, China; HRV = Croatia; HUN = Hungary; IND = India; IRE = Ireland; ISR = Israel; ITA = Italy; JPN = Japan; LTU = Lithuania; LUX = Luxembourg; LVA = Latvia; MLT = Malta; NET = Netherlands; NOR = Norway; NZL = New Zealand; POL =Poland; POR = Portugal; PRC = People's Republic of China; ROM = Romania; SRB = Serbia; SVK = Slovak Republic; SVN = Slovenia; SWE = Sweden; THA = Thailand; UKG = United Kingdom; USA = United States; VIE = Viet Nam; ZMB = Zambia.
Sources: WTO (2015, FATS) and UNCTAD (FDI); ADB calculations.

Continued on next page

Box 4.2 continued

when AfT is doubled, greenfield FDI increases by about 17.6% in numbers and about 13% in value. As an example, if AfT to Bangladesh had doubled to an annual average of $1.2 billion during 2003–2014, there would have been 40 more counts (or $2.2 billion more) of greenfield FDI flows to Bangladesh in that time.

AfT also boosts cross-border M&A, particularly in manufacturing and services industries. Specifically, when AfT doubles, cross-border M&A investment increases by about 12.4% by number of projects. If annual AfT to Bangladesh had doubled to $1.2 billion, then 4 more counts of M&A investment flows to Bangladesh during 2003–2015 would have been recorded (i.e., 40 counts from the current 36 counts).

We also estimated the effects of the different components of AfT. Aid to INF appears to promote greenfield FDI most significantly. Aid to TPR is also positively associated with greenfield FDI. Specifically, a doubling of INF aid increases greenfield FDI inflows to recipient countries by 12.5% in counts and 11.9% in value, while doubling TPR aid increases greenfield FDI inflows by 3.1% in counts. Taking examples from Bangladesh again, if INF aid had doubled to an annual average of $0.7 billion, 28 more counts (or $2.2 billion more) of greenfield FDI flows would have come during 2003–2015 (i.e., 253 counts instead of the recorded 225 counts, or $19 billion instead of $17.2 billion).

Similarly, doubling TPR aid from an annual average of $8.3 million to $16.6 million would have produced 7 more counts (for a 232 total) of greenfield FDI flows to Bangladesh during 2003–2015. Aid to INF and TPR also appears to promote M&A investment inflows to the recipient country. In contrast, aid to BPC does not appear to increase M&A investment, but it does increase greenfield FDI in the primary and manufacturing sectors.

Sources: OECD (2004), Selaya and Sunesen (2012), Shingal (2017), Lee (2017), World Bank (2011), WTO (2010).

constraints, interventions from the trade and development community should give greater priority to boosting the productive capacity and export capabilities of services companies (Hoekman and te Velde 2017).

Broad ranging capacity constraints make it difficult for services companies in developing economies to produce and trade services. Measures to help remove these hurdles should target the availability and appropriateness of human capital (including technical and export-related skills, and entrepreneurial abilities) and financial capital (notably access to credit to underpin productivity-enhancing investment). Also important are improvements to infrastructure such as roads, electrical grids, telecommunications technology, and other endowments like natural resources, the arts and creative sectors, and cultural links through a country's diaspora. Engaging services companies to meet regional standards in key services sectors, along with developing such standards, is another area in need of attention (Hoekman and te Velde 2017).

The lack of accurate services sector data also needs to be addressed since it is a major stumbling block to effective reforms and trade liberalization policy.

Facilitating trade in services requires continual trade liberalization. Given the abundance of labor in many developing countries, modern information technologies allow ever more cross-border, "disembodied" trade in services. But high barriers to trade and investment in services are impediments. Shepherd and Pasadilla (2011) also note that a restrictive services trade policy environment is correlated with poor human development outcomes.

Liberalization of services sectors may also enhance productivity in manufacturing, given that manufacturing performance very much depends on the state of service inputs; notably finance, transport, and telecommunications. In India, opening services sectors to domestic and foreign entrants was considered an important driver of productivity improvements for manufacturing companies. In 1990, for instance, the average turnaround time for a container at major ports in India was 8 days. By 2005, it had decreased to 3.5

days. For companies that compete in highly variable markets such as textiles and electronics where quick responses to changes in demand are crucial, this can make a big difference (Arnold et al 2010).

As services are increasingly subject to trade liberalization under multilateral and regional processes, adequate policy interventions and coherent approaches are necessary to shore up growth and maximize the benefits of the services economy and trade.

At the very least, national regulations and administrative capacities have to be in sync so as not to undermine the intended purposes of regulations and policies and create unintended consequences. Sound and consistent services regulations and trade policies are a must to avoid unnecessary restrictions. While there is no one size fits all type of regulation, coordinated and harmonized approaches can reduce gaps and overlaps. Ultimately, working from the principle of combining the formulation of services trade policies and programs from the top with a grassroots, inclusive, and participatory approach to implementing and enforcing regulations and policies, could help economies gain mutual and equal benefits from trade liberalization and the regulation of services in the region.

Second, there is a need to assign a prominent role to services sectors and their reforms in trade negotiations. Hoekman (2017) notes that low-income countries' neglect of services in trade negotiations has a significant opportunity cost since trade liberalization can drive productivity and increase access to better services. Regulatory concerns are one reason services can be neglected, and these should receive greater attention in the design and allocation of development assistance. In Southeast Asia for instance, Sauvé (2013) argues that ASEAN countries need to raise the bar on services liberalization. Despite progress across market-opening packages under the ASEAN Framework Agreement on Services, the region still experiences high restrictiveness in services trade and investment. This contradicts the aims of the ASEAN Economic Community and also likely acts as a punitive tax on region-wide economic efficiency. Nordås (2011) also notes the importance of trade negotiations aimed at facilitating service sector reforms, which in turn cuts service trade costs. However, without reliable data and appropriate modeling in policy formulation, negotiators do not know acceptable levels of trade costs they should target and run the risk of focusing on peripheral concerns instead.

Hoekman and Mattoo (2011) make two suggestions to expand progress in trade negotiations and liberalize trade in services. The first is for governments to create mechanisms ("services knowledge platforms") to bring together regulators, trade officials, and stakeholders to discuss regulatory reform. The mechanisms could identify priorities and opportunities for utilization of "aid for trade" resources, and therefore establish the preconditions for market opening. The second suggestion is for a new approach to negotiations in the World Trade Organization, with countries that account for the bulk of services production agreeing to lock-in applied levels of protection and precommitting to reform policies that affect foreign direct investment and international movement for service providers. These two areas are where current policy is most restrictive and potential benefits from liberalization are greatest.

Third, services trade can benefit greatly from e-commerce platforms, as was highlighted in chapter 3. AfT has helped the rise of e-commerce and digital trade in Asia and the Pacific by building ICT infrastructure and supporting the regulatory environment needed for such growth. Almost 70% of AfT in the region goes to transport and communications infrastructure. While gains from digital connectivity can be greatest for landlocked and sealocked countries, facilitating e-commerce and digitization in these economies requires nuance and appropriate sequencing. As Di Caprio and Suominen (2015) suggest, "In some economies, infrastructure issues are paramount; in others, the legal framework or other policy variables need shoring up. Building the capacity of entrepreneurs to appropriately utilize ICT and the internet may also be necessary. These areas can be fruitful targets of future AfT support." Moreover, "even as donors have invested in ICT infrastructure, the transport and logistics pertinent to trade in the digital era have received less focus"

(ADB 2015a) and these can be priority areas for future disbursements.

In sum, integrated and coherent policies, trade liberalization and regulatory reforms are critical for services trade, not only in promoting productivity and competitiveness, but also in forming productive linkages between services sectors and the general economy. Regulatory reforms in telecommunications, energy, transport, and financial services are particularly important to overcome geographic barriers (Box 4.3). The regulatory environment at least partly determines the flow of private and foreign investment essential for these sectors to grow sustainably.

Box 4.3: Advances in Services Policies and Regulations

The following section summarizes regulatory reforms in telecommunications, energy, and financial services in Asia and the Pacific, particularly for the geographically challenged economies of the region, along with their effects on sectoral performance.

Telecommunications Services

Telecommunications have a decisive influence on transaction costs, which helps determine if a country is included in global value chains. Competition for internet services in particular can have significant implications for trade facilitation. As the telecommunications sector shows, opening up the market has been useful to expand coverage, cut prices, and increase the number of ICT consumers.

Key regulatory areas in the regional telecommunications sector have included: expanding ownership of mobile phones (Tonga, Samoa); transparency in regulations and legal frameworks (Fiji, Tajikistan); increasing competition among service providers to improve market access and entry (Fiji, Papua New Guinea, Myanmar, the Republic of Korea); consumer protection and confidence (Fiji, Azerbaijan); establishment of regulatory bodies (Vanuatu); search engine marketing and optimization, aimed particularly on driving up investments in state-run companies (Samoa); and enhancing mobile broadband networks (Fiji, Tonga).

Regional and subregional regulatory and governance efforts have targeted: the development of national strategies to increase awareness of e-commerce; the introduction of policies to support infrastructure, e-payment solutions, and human resources; accession to the World Trade Organization; infrastructure sharing; imports of software and hardware; and the development of statistical benchmarks. In sum, these policies and regulations have helped make ICT services more available, affordable, and convenient to use. On another note, greater efforts are increasingly needed to improve availability and accessibility of ICT technologies and services in underserved markets, such as rural areas.

Energy Services

Several cooperation projects collectively improve energy security, finance, and trade in Asia and the Pacific. Examples include the South Asia Subregional Economic Cooperation (SASEC) program and ASEAN Petroleum Security Agreement (APSA). SASEC projects fund cross-border electricity transmission, power trade, energy efficiency, capacity building, and renewable sources of energy. APSA aims to enhance reliable access to oil. Most similar reforms in Pacific island countries (for example in Fiji, Papua New Guinea, Samoa, Tonga, and Vanuatu) were intended to provide reliable lower-cost electricity, decrease dependency on global energy markets, and promote environmentally sustainable power generation.

Financial Services

Regulation of systemic risks is important in financial services, and includes minimum capital requirements, liquidity percentages, and insolvency insurances. However, with increasing regulation, cross-border financial flows in Asia and the Pacific have declined for the first time in three decades. Some reforms were related to budget policies, financial management, reporting requirements, and the development and/or strengthening of the role of central banks (such as in Afghanistan, Fiji, Papua New Guinea, Samoa, and Vanuatu). However, increasing regulations to restrain financial sector risks have generally led to a decline in cross-border financial flows. Despite this, regional case studies point to positive real or expected outcomes. For instance, strict compliance with international banking standards to prevent fraud and money laundering and a strong commitment to global best practices have made Afghanistan International Bank the country's most trusted bank.

Box 4.3: continued

Government Services—Procurement

E-procurement is considered among the most efficient tools for bringing good governance to the procurement process. E-procurement significantly improves transparency and compliance, and enhances value through opening tenders to competition. E-procurement also reduces procurement and transaction costs because it standardizes and streamlines the process. These factors foster an environment conducive to economic development. Initiatives for e-Government in Asia and the Pacific (such as in Nepal and the Philippines) have helped make the delivery of government services more efficient and accountable.

Sources: ADB (2016d), ADB (2016e), ADB (2015d), ADB (2003), ADB South Asia Subregional Economic Cooperation, Biggs (2007), DiCaprio and Procak (2016), Fogarty (2012), International Energy Agency (2015), International Monetary Fund, Jamasbi et al (2014), Maunsell Limited (2008), Ministry of Finance -Government of Samoa (2012), Mitchell (2015), Nam et al (2015), Rillo and dela Cruz (2016), SASEC Energy Sector Strategy, UNESCAP (2009), Vakataki 'Ofa (2008), Vanuatu National Energy Policy Framework, Waqabaca (2000).

5

Promoting Connectivity in Geographically Challenged Economies of Asia and the Pacific

Introduction

Landlocked and small, remote island nations face unique geographic challenges to their engagement in international trade and investment. Supply-side capacity and trade-related infrastructure constraints impede access to markets and connections to global value chains for landlocked countries and amplify the isolation of small, remote island nations which are effectively "sealocked." These economies face high costs for transport, energy and intermediate inputs, and for wage costs and rents, which inhibit them from taking full advantage of their trade and development potential (World Bank 2009).

Landlocked economies have no territorial access to the seas, limited border crossings and transit dependence. Due to their remoteness, landlocked countries are dependent on neighboring transit countries for their external trade and suffer from high transaction costs. Sealocked economies face greater risk of marginalization due to their small size, remoteness from large markets, and high economic vulnerability to economic and natural shocks beyond domestic control.

Given the challenge of geography, it is especially important for these nations to undertake reforms to improve the business environment and minimize barriers to trade, while leveraging on sectors with the most potential to contribute to inclusive growth, trade flows, and generating economy-wide spillovers can help these nations overcome the challenge of geography. Channeling aid for trade into building infrastructure, creating an enabling environment, lowering trade costs, facilitating digital trade, and promoting growth in services can help geographically challenged economies to better connect with international commercial flows and achieve inclusive growth (ADB 2015a).

Asia and the Pacific has 12 landlocked countries: Afghanistan, Armenia, Azerbaijan, Bhutan, Kazakhstan, the Kyrgyz Republic, the Lao PDR, Mongolia, Nepal, Tajikistan, Turkmenistan, and Uzbekistan. That is, two of the six South Asian countries, one each among East and Southeast Asian countries, and eight of the ten Central Asian countries are landlocked. Apart from Timor-Leste, the island nations of the Pacific can be considered sealocked.

This chapter examines how AfT can help the economies of the geographically challenged nations of Asia and the Pacific overcome their geographic disadvantages. Progress in improvement of the business environment and trade facilitation is discussed, and the role of AfT in promoting trade in services is explored.

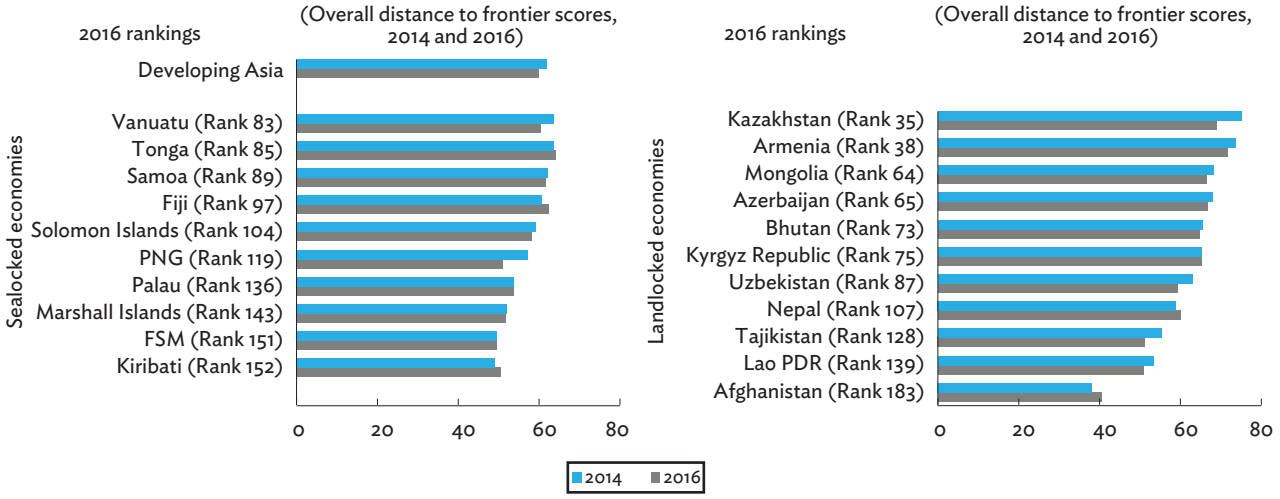
5.1 Doing Business in Landlocked and Sealocked Economies

Doing business in the geographically challenged economies of Asia and the Pacific has generally gotten easier in recent years. Particularly between 2014 and 2016, most economies experienced improvements, most notably Armenia, Kazakhstan, Papua New Guinea, and Vanuatu (Figure 5.1).[21]

Improvements can be seen in the length of time required for starting a business—a significant indicator

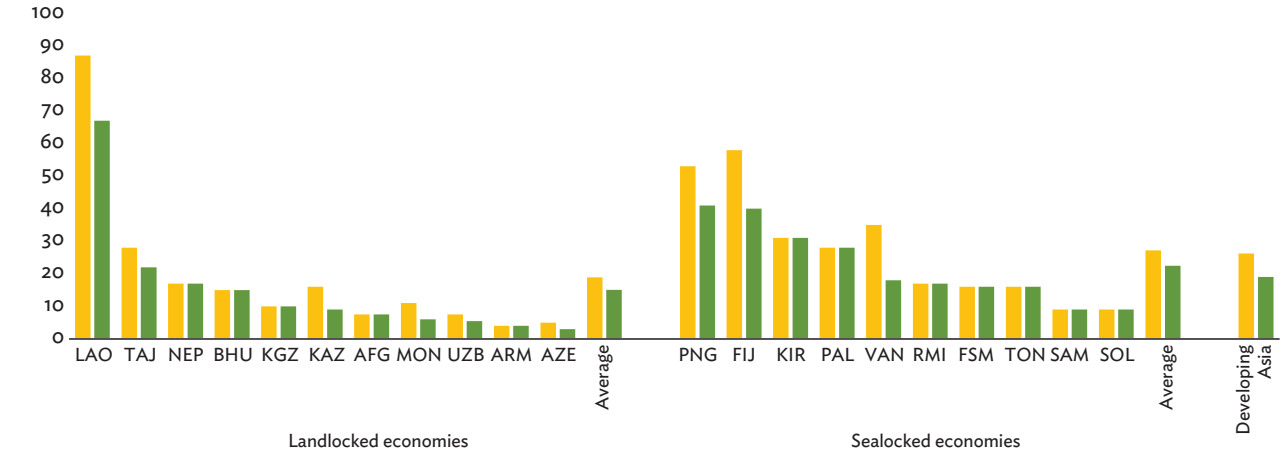
[21] The distance to frontier score is normalized to range from 0 to 100, with 100 representing the frontier. For example, a score of 75 in 2014 means that an economy is 25 percentage points away from the frontier constructed from the global best performance. A score of 80 in 2016 would indicate that an economy is improving (World Bank, *Doing Business*).

Figure 5.1: Ease of Doing Business Rankings (out of 190)



FSM = Federated States of Micronesia, Lao PDR = Lao People's Democratic Republic, PNG = Papua New Guinea.
Note: Data in Doing Business 2015 are for June 2014 (covering June 2013–June 2014) and June 2016 (covering June 2015–June 2016) for Doing Business 2017.
Source: World Bank. *Doing Business* Database (accessed March 2017).

Figure 5.2: Days Required for Starting a Business, 2014 and 2016



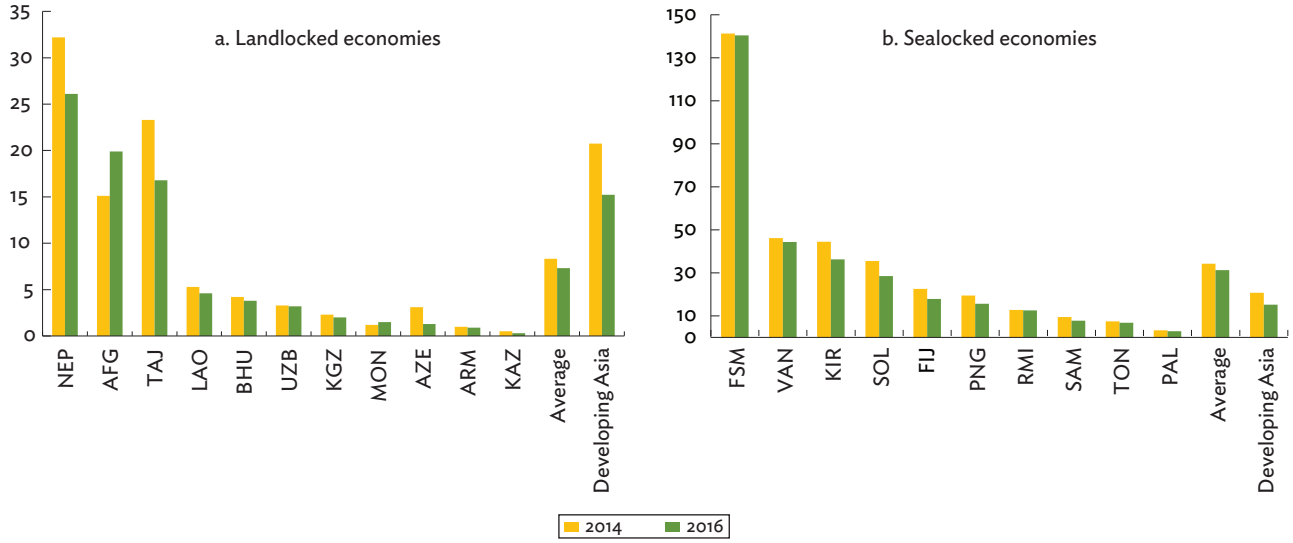
	Landlocked economies													Sealocked economies											
2014	87	28	17	15	10	16	8	11	8	4	5	19		53	58	31	28	35	17	16	16	9	9	27		26
2016	67	22	17	15	10	9	8	6	6	4	3	15		41	40	31	28	18	17	16	16	9	9	23		19

AFG = Afghanistan, ARM = Armenia, AZE = Azerbaijan, BHU = Bhutan, FIJ = Fiji, FSM = Federated States of Micronesia, KAZ = Kazakhstan, KIR = Kiribati, KGZ = Kyrgyz Republic, LAO = Lao People's Democratic Republic, MON = Mongolia, NEP = Nepal, PAL = Palau, PNG = Papua New Guinea, RMI = Marshall Islands, SAM = Samoa, SOL = Solomon Islands, TAJ = Tajikistan, TON = Tonga, UZB = Uzbekistan, VAN = Vanuatu.
Source: World Bank. *Doing Business* Database (accessed March 2017).

for the ease of doing business. The required time in the region's geographically challenged economies declined from an average of 23 days in 2014 to 19 days in 2016 across all sample countries. This is the same number of days as in developing Asia (Figure 5.2). That said, it takes longer to start a business in sealocked economies, with an average of 23 days in 2016 compared to 15 days in landlocked economies. Variations are large across economies: it takes 3 days to start a business in Azerbaijan, 67 days in the Lao PDR, and 41 days in Papua New Guinea.

The overall cost of starting a business is falling (Figure 5.3). It declined from an average of 20.6% of per capita income in 2014 to 18.7% in 2016. The cost is significantly higher in sealocked economies, at 31.3%, than in landlocked economies, at 7.3% of per capita income. Notably, the average cost of starting a business in landlocked economies is much lower than that of developing Asia, while for sealocked economies it is significantly higher. The largest declines were in Kiribati (from 44.4% in 2014 to 36.3% in 2016), Tajikistan

Figure 5.3: Cost of Starting a Business, 2014 and 2016 (% of per capita income)



AFG = Afghanistan, ARM = Armenia, AZE = Azerbaijan, BHU = Bhutan, FIJ = Fiji, FSM = Federated States of Micronesia, KAZ = Kazakhstan, KIR = Kiribati, KGZ = Kyrgyz Republic, LAO = Lao People's Democratic Republic, MON = Mongolia, NEP = Nepal, PAL = Palau, PNG = Papua New Guinea, RMI = Marshall Islands, SAM = Samoa, SOL = Solomon Islands, TAJ = Tajikistan, TON = Tonga, UZB = Uzbekistan, VAN = Vanuatu.
Source: World Bank. *Doing Business* Database (accessed March 2017).

(from 23.3% to 16.8%), Fiji (from 22.5% to 17.9%), Solomon Islands (from 35.5% to 28.5%), Nepal (from 32.2% to 26.1%), and Papua New Guinea (from 19.4% to 15.6%). However, the cost of starting a business still exceeds average income in the Federated States of Micronesia (140.4% of per capita income in 2016). Costs have even slightly increased in Afghanistan (from 15.1% in 2014 to 19.9% in 2016) and Mongolia (from 1.2% to 1.5%).

Access to Credit Is Improving

The strength of credit reporting systems and the effectiveness of collateral and bankruptcy laws are important for facilitating access to credit, especially for small and medium-sized enterprises and companies owned by women. Accordingly, support for the legal rights of borrowers and lenders in secured transactions and in bankruptcy laws, and widening the coverage and quality of information available through credit registries and bureaus can help improve access to finance and its allocation.

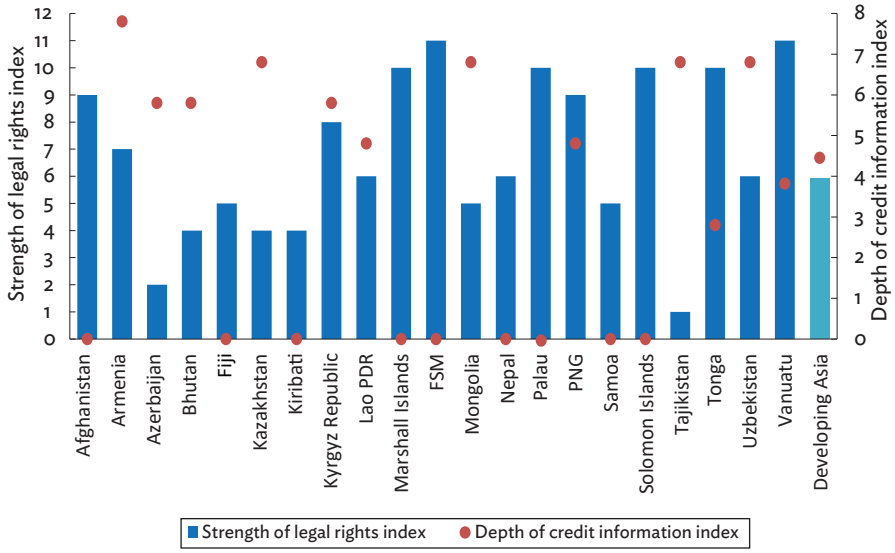
Ease of obtaining credit in geographically challenged economies has improved in recent years. However, significant cross-country variations persist, particularly in legal rights and credit information. Figure 5.4 shows that collateral and bankruptcy laws in 13 out of the 21 Asia and the Pacific landlocked and sealocked states in the study are designed to expand access to credit (based on their scores in the legal rights index[22] of the World Bank's Doing Business report 2017).

The strength of credit reporting systems remains a challenge for most landlocked and sealocked states. Nine out of these 21 economies scored 0, the lowest score, in the depth of credit information index,[23] indicating that in almost half of the reporting economies, credit bureaus or registries are either not operational or are only available to less than 5% of adults.

[22] "The strength of legal rights index measures the degree to which collateral and bankruptcy laws protect the rights of borrowers and lenders and thus facilitate lending. The index ranges from 0 to 12, with higher scores indicating that collateral and bankruptcy laws are better designed to expand access to credit." (World Bank, *Doing Business*)

[23] "The depth of credit information index measures rules and practices affecting the coverage, scope and accessibility of credit information available through either a credit bureau or a credit registry. The index ranges from 0 to 8, with higher values indicating the availability of more credit information, from either a credit bureau or a credit registry, to facilitate lending decisions." (World Bank, *Doing Business*).

Figure 5.4: Strength of Legal Rights and Depth of Credit Information, 2016



FSM = Federated States of Micronesia, Lao PDR = Lao People's Democratic Republic, PNG = Papua New Guinea.
Source: World Bank. *Doing Business* Database (March 2017).

Similarly, a survey of exporters in the Pacific conducted by ADB and the Pacific Islands Forum Secretariat (PIFS) in 2017 shows that lack of access to finance and difficulty of obtaining credit are among critical constraints to doing business for exporters, especially smaller companies (Box 5.1).

Indeed, access to credit remains a key challenge. While strengthening legal rights institutions is vital for landlocked economies, improvement in the quality and accessibility of credit information systems is critical for sealocked economies.

Legal rights of borrowers and lenders under collateral and bankruptcy laws, along with enhanced coverage, scope, and accessibility of credit information through reporting services, are required to create sound financial infrastructures and secured transaction systems, and to relieve limited access to equitable credit. Expanding access to financial services could benefit small and medium-sized enterprises and companies owned by women (of which most are small or medium-sized) in particular, given that it would overcome some of their biggest hurdles to obtaining formal credit.

5.2 Challenges to Increasing Trade Facilitation and Promoting Connectivity

Fostering a more productive and growth-generating economic environment requires strategic synergies between domestic and cross-border business conditions, along with regulatory reform. This section describes the present state of cross-border trade in the geographically challenged economies of Asia and the Pacific.

Trade Costs and Times Have Further to Fall

Figure 5.5 shows improved logistics performance based on the World Bank's Logistics Performance Index in 2016 for 10 of the 14 geographically challenged economies in Asia and the Pacific for which data are available. Afghanistan, Armenia, Bhutan, Kazakhstan, Mongolia, Nepal, Papua New Guinea, Solomon Islands, Tajikistan, and Uzbekistan made gains between 2007 and 2016. However, most landlocked and sealocked economies still lag other regional economies. Across all

Box 5.1: Pacific Exporters Survey 2017

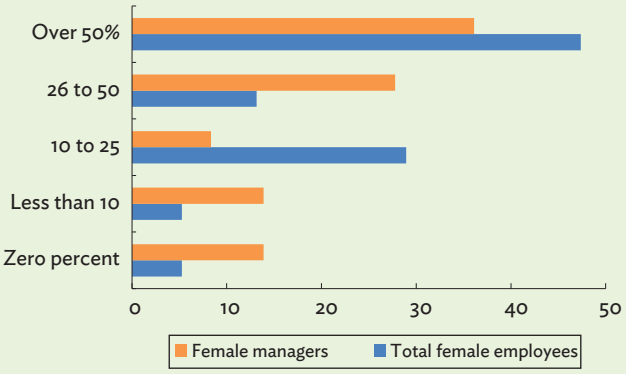
The 2017 Pacific Exporters Survey aims primarily to examine the potential for e-commerce, telecommunications, and internet networks to: reduce trade costs and barriers; promote product/service development; and gain a better understanding of gaps in national and regional trade-related infrastructure, gender mainstreaming in trade operations and policies related to enterprises. The survey also looked at the role of Aid for Trade and national and regional interventions in trade facilitation and performance. The following provides an overview of the results.

Exporter Characteristics

Most of the respondent companies are from Fiji. Most are micro and small enterprises that started between 2001 and 2010. Of the microenterprises, most are manufacturers of consumer goods, small enterprises in agriculture, or medium-sized enterprises in other services. Of the 41 respondents, two are large manufacturers of consumer goods. About 69% of respondent companies report total annual sales of less than A$1 million (about $745,000). Most report exports comprising over 50% of sales.

A few (22%) are foreign-owned and most (77%) have women business owners. Most of the companies owned by women produce consumer goods and 47% are microenterprises. Further, 47% of the respondents employ more women than men while 36% have more female than male managers. This better representation in companies owned and led by women is consistent with findings that female-business owners tend to hire more full-time female staff than male business owners (Roberson-Saunders, Smith, and Goel 2014).

Women's Representation and Participation in Enterprises



Top Export Destinations, 2016 (% of sales)

[1] United States, New Caledonia, Germany, Czech Republic, United Kingdom

Within their management, 64% of the companies have training initiatives to prepare supervisors for managerial roles. However, despite the good representation of women, 74% of respondents still lack training modules for female staff who show managerial potential.

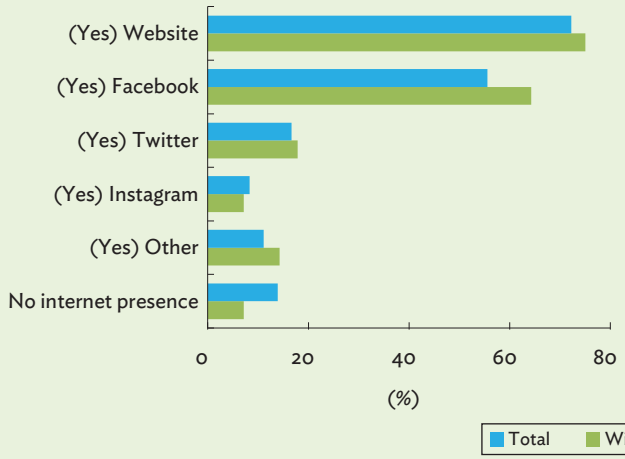
Most of the companies are new to the exporting business. Most began exporting only in 2009—with consumer goods and products and services related to the agriculture and fisheries sectors dominant and largely oriented towards Australia, New Zealand, other Pacific island economies, and the United States. Other export destinations include Germany, the Czech Republic, and the United Kingdom.

Internet Presence, E-commerce, and Digital Trade

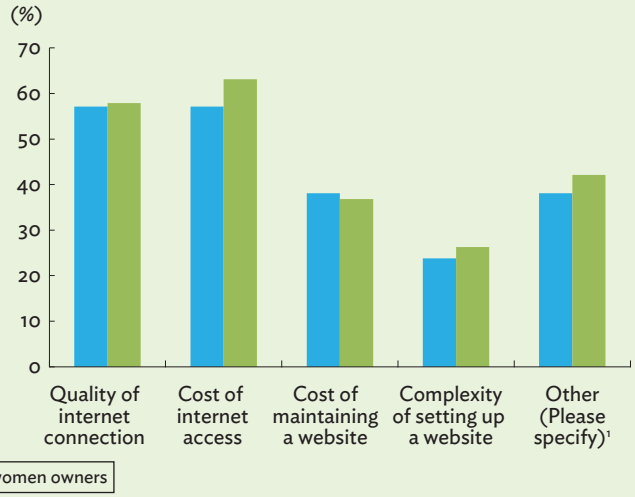
86% have internet presence, mainly through their own websites and Facebook; 72% have a website, 56% use Facebook, 17% use Twitter, 8% post on Instagram, and 11% use other platforms such as Pinterest. 93% of companies with women owners have internet presence. However, only 64% have used the web to generate direct online sales. The quality and cost of internet connections, and of maintaining a website and domain name, are cited as the main challenges to e-commerce. As to why companies do not sell online, most say online selling is either not relevant (39%) or not applicable (24%) to their needs.

Most respondents report that recent developments in information and communication technology (ICT) and telecom infrastructure, with increased capacity and scale of business, have made it easier to use e-commerce and digital trade. A higher proportion of enterprises owned by women cite the same trend.

Internet Presence of Enterprises

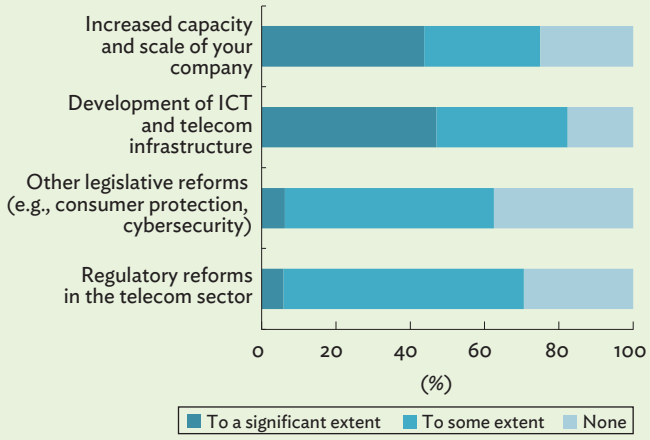


Main Challenges to Making Online Sales

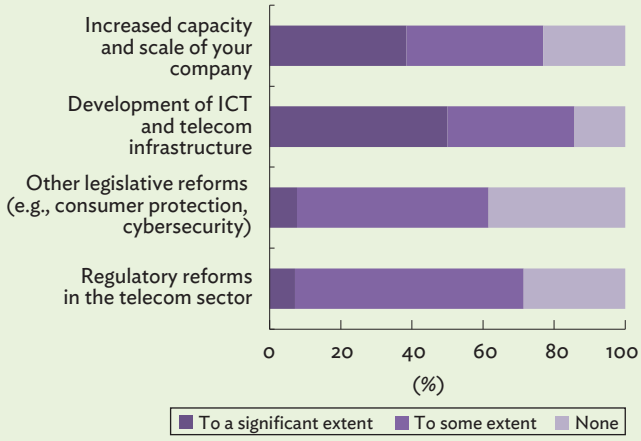


[1] Includes risks/costs associated to online payments, increased cost of social media advertising, clients' limited online skills, high shipping costs, and lack of consolidation in national/regional web portals

To what extent do you attribute easier access to e-commerce to the following: (Total)



To what extent do you attribute easier access to e-commerce to the following: (Companies with women owners)



Almost all enterprises for which data are available report that e-mail, mobile phones, and the internet are easier to employ for e-commerce and digital trade.

Business and Trade Finance

Most participating Pacific companies used personal savings and bank loans as initial capital. Gender issues are evident, however, with women lacking access to formal sources such as bank loans. While enterprises owned by men predominantly used bank loans as initial capital, enterprises owned by women used personal savings. Further, while male owners cited personal savings and other sources, women resorted to more varied sources such as loans from family and friends and loans from nonbank lending institutions.

Continued on next page

Box 5.1 continued

Lack of access to finance and difficulty in obtaining credit are more pronounced for smaller companies. Bank loans comprised 79% of initial capital for large companies, while smaller ones, particularly micro and small enterprises, reported that bank loans comprised about 30% of initial capital at most. Further, while initial capital for large enterprises was derived mainly from bank loans and personal savings, micro, small and medium-sized enterprises had more varied sources.

Moreover, personal savings, bank loans, and profits from sales are most extensively used to fund business operations. The same trend in accessibility and/or availability of funding is seen for men- and women-owned enterprises. That is, men tend to have better access to more formal funding sources for their business operations while women seem to have a harder time obtaining it. A similar trend is observed for companies when disaggregated by size. Large enterprises most extensively use bank loans to finance operations, small and medium-sized enterprises mostly use personal savings, while microenterprises largely depend on sales profits.

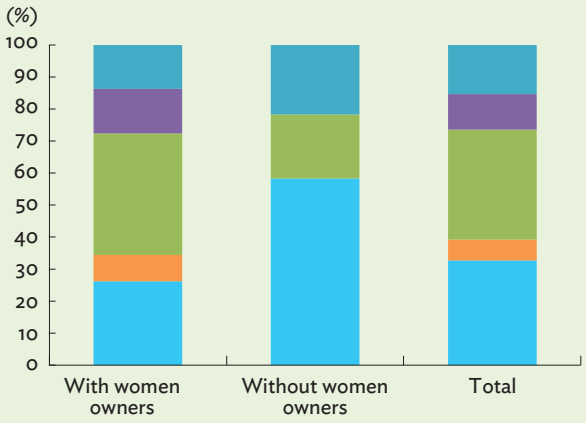
The gender gap in access to finance seems to reflect a prevailing inequality for women in business, as embedded in historical customs and cultural beliefs, and where defined gender roles create fewer opportunities for women than men. Women's disadvantaged position in asset ownership impedes entrepreneurial advancement. For instance, lack of rights to assets means women have fewer resources to pledge as collateral for institutional/formal sources such as bank loans (ADB 2015a).

Meanwhile, in access to trade finance, only 26% of companies report sales funded by some form of trade finance. Among companies with women owners, four out of five have not received trade finance. Moreover, 89% of microenterprises and 69% of small enterprises have not received any trade finance assistance. Indeed, creating more inclusive opportunities for aid distribution and obtaining credit are essential to increasing the participation of women-owned and smaller enterprises in domestic and international trade and business.

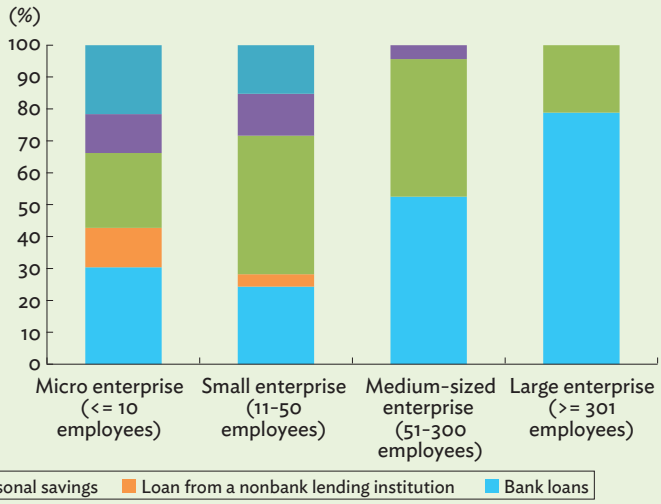
Critical Factors for Business and Trade

Most surveyed companies consider the quality of ICT and telecom infrastructure, cross-border market access, and ease of obtaining credit as critical factors for their business as exporters. Lack of computerized/automated government

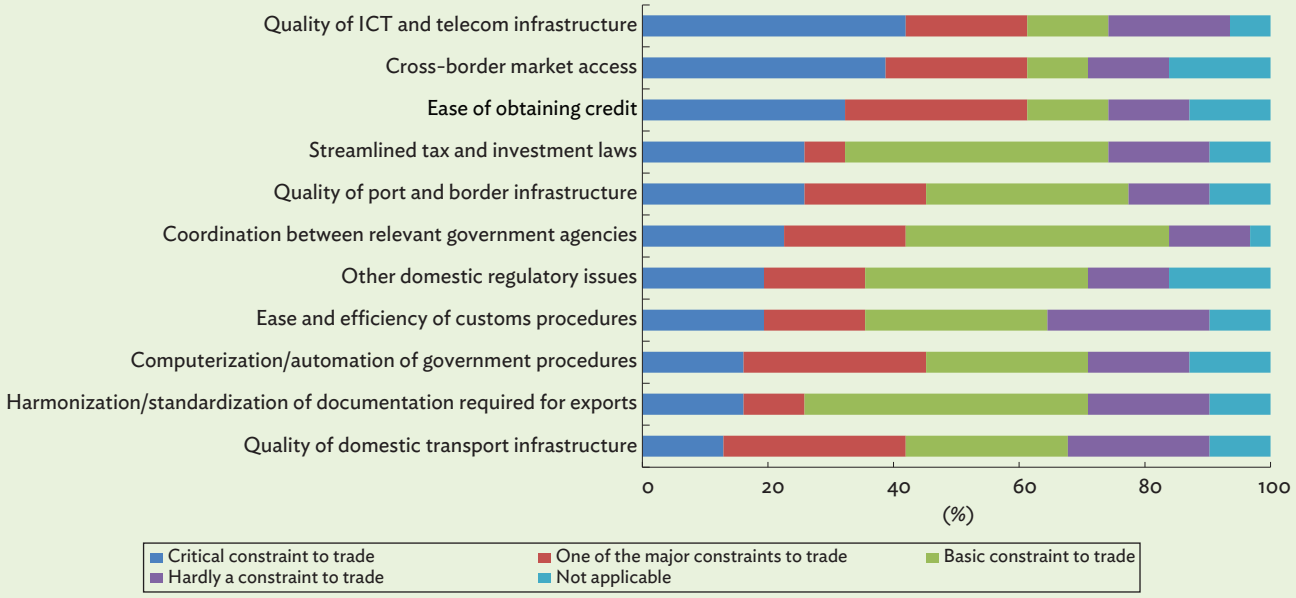
Sources of Initial Capital for Business



Sources of Initial Capital for Business



Factors Critical to Business for Pacific Exporters



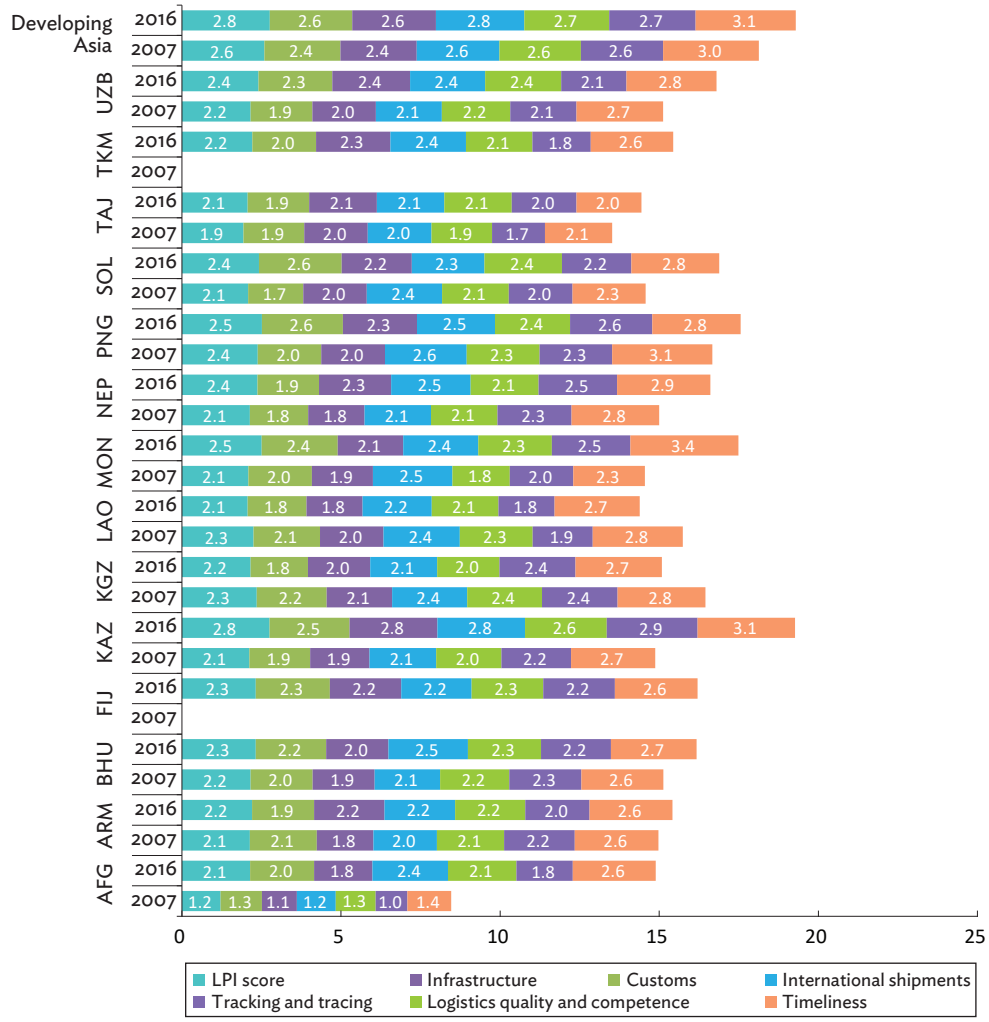
procedures and the poor quality of domestic transport infrastructure are cited as major constraints to trade. Tax and investment laws, coordination between government agencies, the quality of port and border infrastructure, other domestic regulatory issues, the ease and efficiency of customs procedures, and absence of harmonized and/or standardized documentation for exports are seen as areas for improvements to promote trade. Enterprises owned by women report the same concerns.

In light of these critical factors for Pacific exporters, easing access to credit, improving the quality of ICT and telecom infrastructure, enhancing the coordination between government agencies, streamlining tax and investment laws, and improving the quality of port and border infrastructure are key intervention areas for national/regional authorities. Other significant interventions include harmonizing/standardizing documentation required for exports; easing customs procedures; improving the quality of domestic transport infrastructure; reducing cross-border barriers to trade; computerizing/automating government procedures; and improving the domestic regulatory environment.

In sum, trends shown in this year's survey call for greater effort in improving ICT, telecom, and domestic infrastructures; enhancing access to finance and creating more inclusive avenues and opportunities for obtaining credit for smaller companies and those owned by women. Fostering good governance through regulatory reforms and advancing policy and program linkages such as women's rights to asset ownership, capacity-building for small and medium-sized enterprises and companies owned by women are also important, as is the promotion of coordination and collective action among all stakeholders, including enterprises, governments, business associations, civil society, donors, and international organizations.

Sources: ADB (2017); Roberson-Saunders, Smith, and Goel (2014).

Figure 5.5: Logistics Performance Index in Selected Economies, 2007 and 2016



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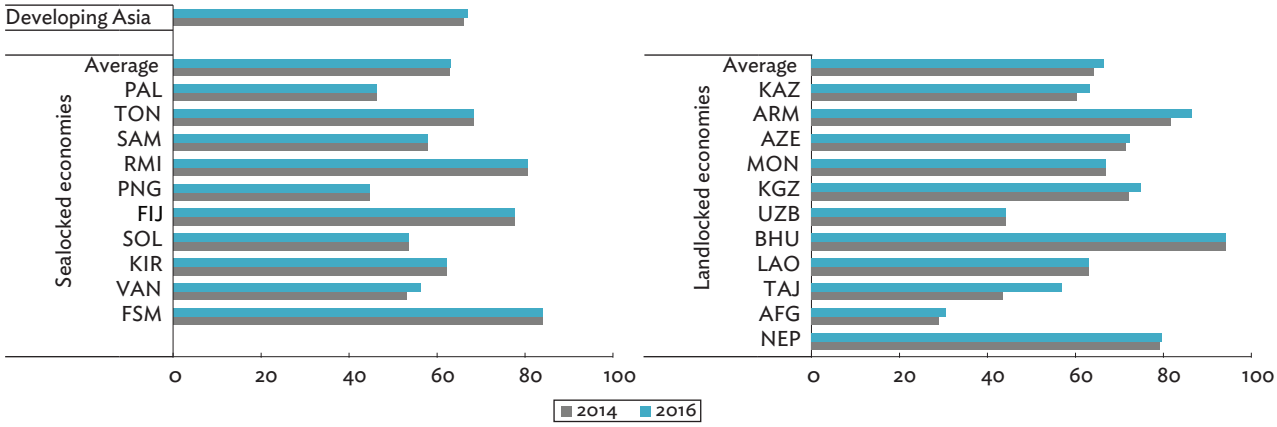
Note: LPI scores are measured from 1 to 5, where 1 is rated as "poorest performance" and 5 as "best performance." Countries are analyzed in the following dimensions: efficiency of customs and border management clearance, quality of trade and transport infrastructure, ease of arranging competitively priced shipments, competence and quality of logistics services, ability to track and trace consignments, and frequency with which shipments reach consignees within scheduled or expected delivery times.
Source: World Bank. Logistics Performance Index Database. http://lpi.worldbank.org/ (accessed May 2017).

indicators, geographically challenged economies also scored lower than developing Asia as a whole.

In general, the timeliness indicator has generally strengthened, but there is significant room for improvement across all other indicators. Greater efforts to improve the efficiency of customs and border management clearance procedures, the quality of trade and transport infrastructure, the ease of arranging competitively priced shipments, competence and quality of logistics services, ability to track and trace consignments, and frequency with which shipments reach consignees within expected delivery times are a necessity.

For landlocked economies, better customs procedures, infrastructure, and quality and competence of logistics services, along with improvements in tracking and tracing systems are especially critical. For sealocked economies, the 2017 Pacific Exporters Survey revealed

Figure 5.6 : Distance to Frontier in the Ease of Trading Across Borders, 2014 and 2016



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Note: Data in Doing Business 2015 are for June 2014 (covering June 2013–June 2014) and June 2016 (covering June 2015–June 2016) for Doing Business 2017.
Source: World Bank. *Doing Business* Database (accessed March 2017).

the biggest gains could be made from improving trade facilitation infrastructure and the overall business environment. Measures could include easing access to credit, improving the quality of information and communication technology and telecom infrastructure, and enhancing coordination between government agencies. Streamlining tax and investment laws, and improving port and border infrastructure also help (Box 5.1).

Meanwhile, most Central Asian economies have cut trade costs and made progress in reducing the time and cost associated with border and documentary compliance.[24] In 2016, out of the 11 landlocked economies in the study,[25] three (Armenia, Bhutan, and Nepal) scored 80 or higher in the distance to best performer frontier in trading across borders (Figure 5.6).[26] On the other hand, Vanuatu was the only one of the 10 sealocked countries to make progress, and only the Federated States of Micronesia and the Marshall Islands scored 80 or higher in 2016. In general, the average distance to frontier score in trading across borders for all geographically challenged economies in the region has moderately increased since 2014. It is also slightly below the developing Asia average for 2016.

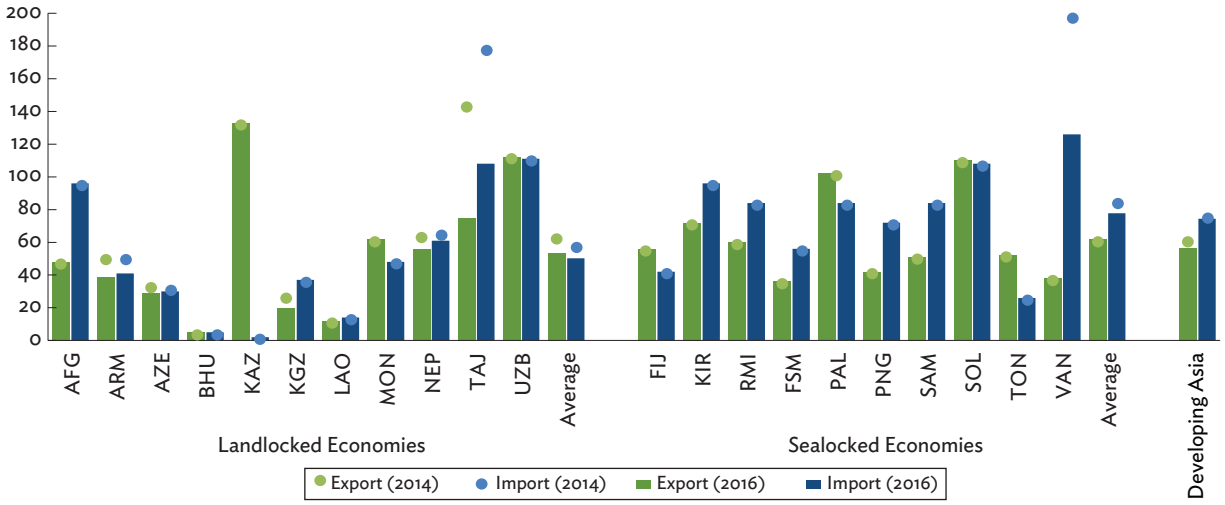
Landlocked economies made progress in reducing border and documentary compliance times. Among them, the shortest times to export for border compliance were in Bhutan, the Kyrgyz Republic, and Lao PDR, while Armenia, Bhutan, the Kyrgyz Republic, and Nepal achieved documentary compliance in less than 24 hours (Figure 5.7). Of the 11 landlocked economies, Armenia, Azerbaijan, the Kyrgyz Republic, Nepal, and Tajikistan reduced border compliance time for exports between 2014 and 2016, while time needed for documentary compliance was cut in Afghanistan, Azerbaijan, Kazakhstan, the Kyrgyz Republic, and Tajikistan. Similarly, for time associated with the

[24] Border compliance captures the time and cost associated with compliance with the economy's customs regulations and with regulations relating to other inspections that are mandatory in order for the shipment to cross the economy's border, as well as the time and cost for handling that takes place at its port or border. The time and cost for this segment includes time and cost for customs clearance and inspection procedures conducted by other government agencies. On the other hand, documentary compliance captures the time and cost associated with compliance with the documentary requirements of all government agencies of the origin economy, the destination economy and any transit economies. (World Bank, *Doing Business*)

[25] While there are 12 landlocked countries in Asia, Turkmenistan is missing from the analysis as it is not included in the World Bank's Doing Business database.

[26] The distance to frontier score is normalized to range from 0 to 100, with 100 representing the frontier. For example, a score of 75 in 2015 means that an economy is 25 percentage points away from the frontier constructed from the global best performance. A score of 80 in 2016 would indicate that an economy is improving (World Bank, Doing Business).

Figure 5.7a : Time to Export and Import—Border Compliance, 2014 and 2016 (hours)



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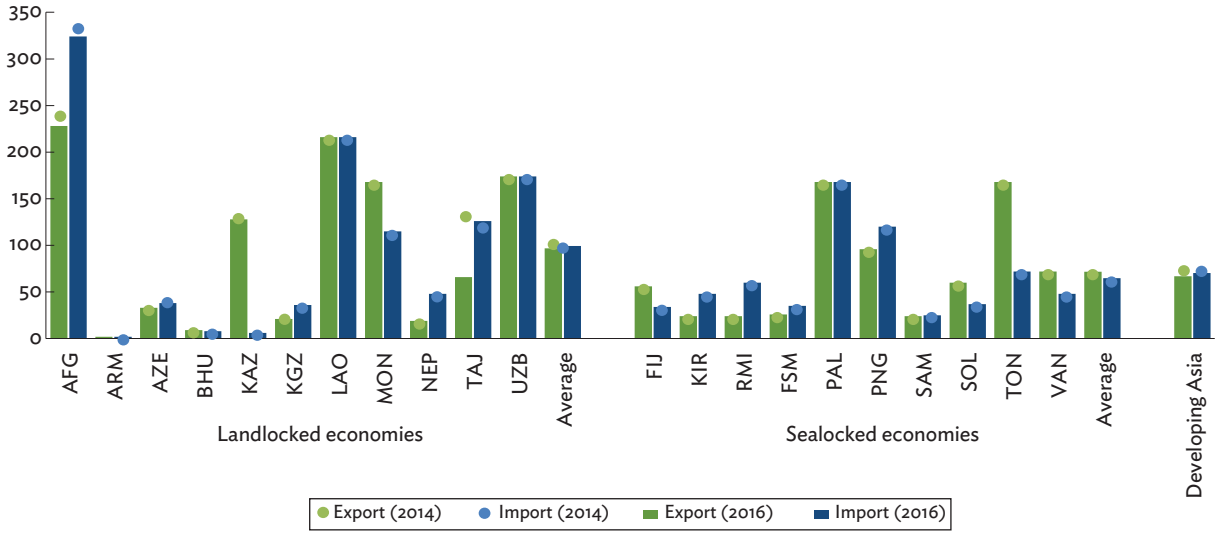
Source: World Bank. *Doing Business* Database (accessed March 2017).

Figure 5.7b: Time to Export and Import—Documentary Compliance, 2014 and 2016 (hours)



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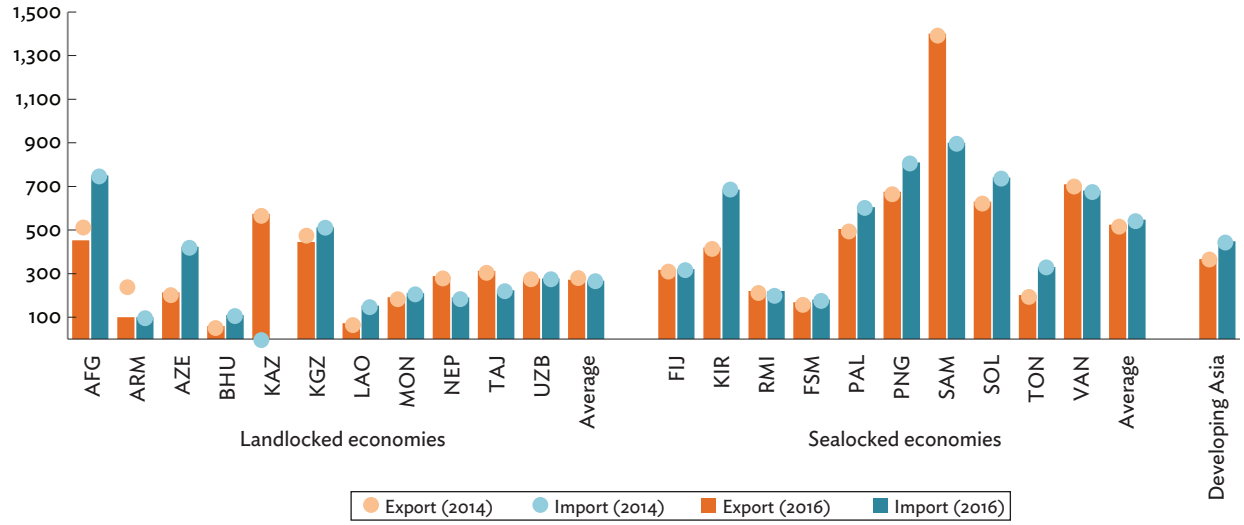
Source: World Bank. *Doing Business* database (accessed March 2017).

logistics of importing goods, improvements were made between 2014 and 2016 in Armenia, Azerbaijan, Nepal, and Tajikistan. Armenia in particular required only 2 hours of documentary compliance time to import. Bhutan and Kazakhstan also fared well, taking less than 24 hours to complete compliance procedures. In contrast, Uzbekistan (111 hours), Tajikistan (108 hours), and Afghanistan (96 hours) had the highest import border compliance time. Meanwhile, among the sealocked economies, only Vanuatu made progress in reducing the border compliance time for imports.

On the whole, landlocked and sealocked economies still lag the regional average times for border and

Figure 5.8a: Cost to Export and Import—Border Compliance, 2014 and 2016 ($)



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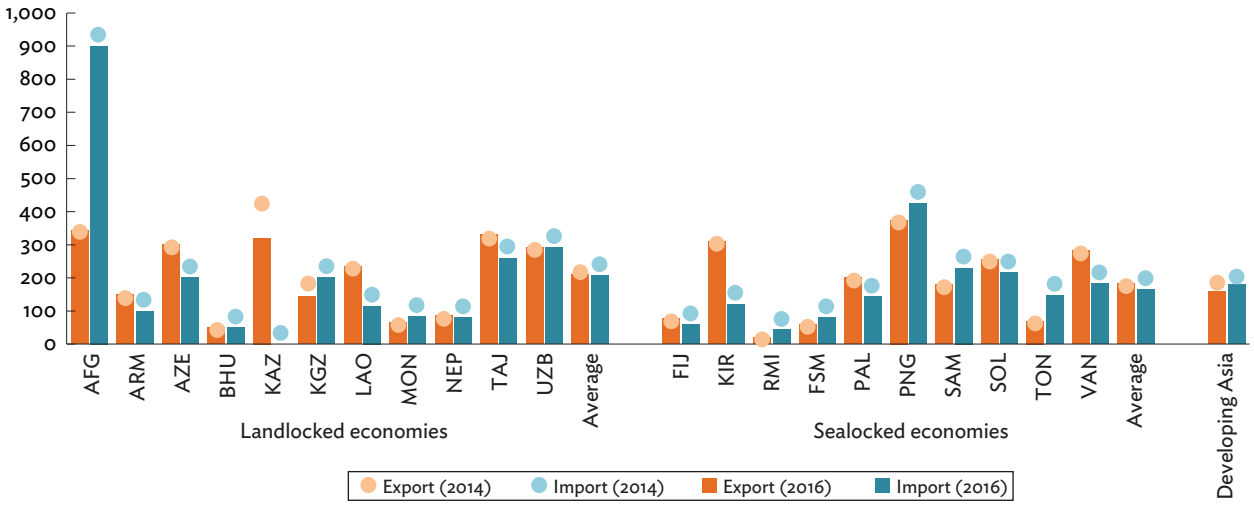
Source: World Bank. *Doing Business* Database (accessed March 2017).

Figure 5.8b: Cost to Export and Import—Documentary Compliance, 2014 and 2016 ($)



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Source: World Bank. Doing Business database (accessed March 2017).

documentary compliance. Most notably, documentary compliance time in 2016 was at least 10 hours longer than the average for developing Asia. However, border compliance time to import is higher in developing Asia by 12 hours than the average for the sample economies.

Logistics costs remain high. In 2016, the average export cost related to compliance with customs regulations, cross-border shipping and other inspections, and other costs for port or border handling was $272 for landlocked economies and $524 for sealocked economies (Figure 5.8). Between 2014 and 2016 border compliance costs to export fell in just three

economies: Afghanistan (from $511 to $453), Armenia (from $250 to $100), and the Kyrgyz Republic (from $485 to $445).

Meanwhile, the average cost for obtaining, preparing, processing, presenting, and submitting documents for exports in 2016 was $210 for landlocked economies and $183 for sealocked economies. Export costs fell in just two landlocked economies, Kazakhstan, and the Kyrgyz Republic. On the other hand, import costs for border and documentary compliance remain unchanged and significantly high. Compared to developing Asia's average, the export cost for border compliance in geographically challenged economies in 2016 was $13 higher, and documentary compliance cost $42 more.

E-commerce Offers Potential

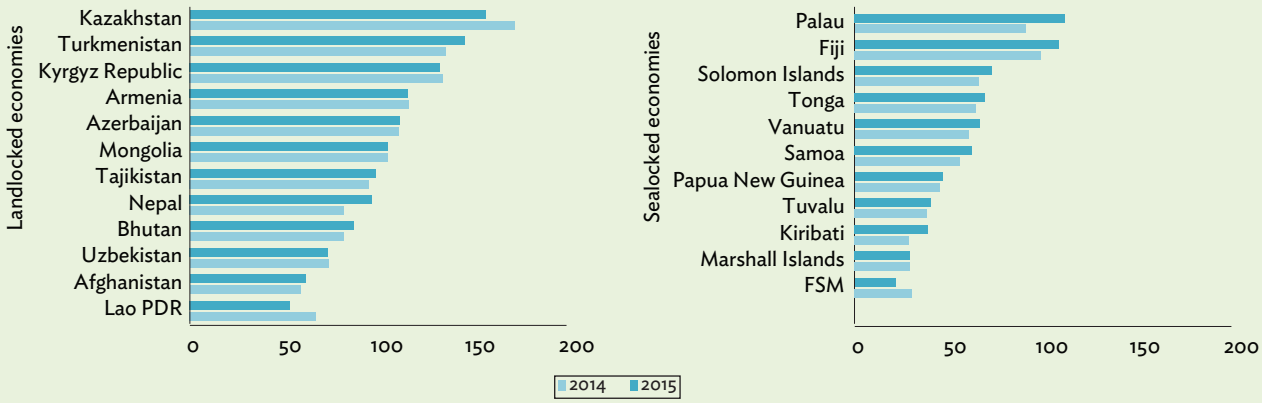
E-commerce can bring opportunities for geographically challenged economies to increase trade and promote inclusive growth (Box 5.2). First, it promotes connectivity, reduce barriers to market access and entry, lower trade costs, and enhance competitiveness and productivity. Secondly, given the low capital needed to engage in e-commerce, it encourages traditionally underrepresented populations, such as women, small businesses, and rural entrepreneurs, to get involved in export markets.

Box 5.2: ICT Access in Geographically Challenged Economies

Access to ICT devices has grown in Central Asian and Pacific economies. In 2015, the highest mobile subscriptions per 100 people were found in Kazakhstan, Turkmenistan, the Kyrgyz Republic, Armenia, Palau, Azerbaijan, Fiji, and Mongolia, with more than 100 mobile subscriptions per 100 inhabitants (see the figure below). Even as the number of people using the internet has grown—with the biggest increases in 2014–2015 in Bhutan, Tonga, and Uzbekistan—more than half of the population uses the internet in just three economies (Armenia, 58.2%; Kazakhstan, 70.8%; and Azerbaijan, 77%). Similarly, despite progress in fixed broadband access, penetration rates remain low and vary widely.

Companies in these geographically challenged economies have become more connected. On average, over 30% have their own websites, and most use e-mail to interact with clients and suppliers. In Armenia, 75.6% of companies have

Mobile Cellular Subscriptions, 2014 and 2015 (per 100 people)



FSM = Federated States of Micronesia, Lao PDR = Lao People's Democratic Republic.
Source: World Bank. World Development Indicators. http://www.data.worldbank.org (accessed April 2017).

Box 5.2 continued

their own websites, while Papua New Guinea has the biggest share of companies using e-mail (96.9%).

Broadband is available in most CAREC countries,[1] and in some cases internet infrastructure has prompted strong growth in internet use among both urban and rural populations. Yet business usage underperforms other regions in Asia (DiCaprio and Procak, 2016). A trusted regulatory framework for e-commerce needs in place to protect both buyers and sellers. Government officials in Turkmenistan and the Kyrgyz Republic report that low consumer trust limits e-commerce growth. E-commerce in CAREC is largely domestic and urban, but countries are putting in place the structures needed to make cross-border purchases. Many CAREC countries report targeting efforts at immediate neighbors. Afghanistan is looking toward India. Kazakhstan plans to use the Almaty-Bishkek Corridor Initiative to expand e-commerce with the Kyrgyz Republic, and the hopes are that the corridor can help leverage the Kyrgyz Republic's membership in the Eurasian Economic Union and Kazakhstan's accession to the World Trade Organization.

For the Pacific, DiCaprio and Laps (2016) note that although most companies have websites, many do not appear in online searches related to the products or services they offer, based on an e-commerce survey of tourism companies in Samoa. Without search-engine visibility, companies struggle to capitalize on the digital economy. Another hurdle is that fewer than half of websites have installed Google Analytics, which is essential to operate a business online. Visibility can be improved through paid searches, utilizing social media, and investing in optimization tools. Confidence can be boosted by developing quality websites that drive traffic and revenue. Improving ICT infrastructure, raising awareness, and capacity building among businesses and governments, along with fostering an enabling regulatory environment are vital for these economies to seize the opportunities and benefits offered by the digital economy.

Source: DiCaprio and Laps (2016), DiCaprio and Procak (2016).

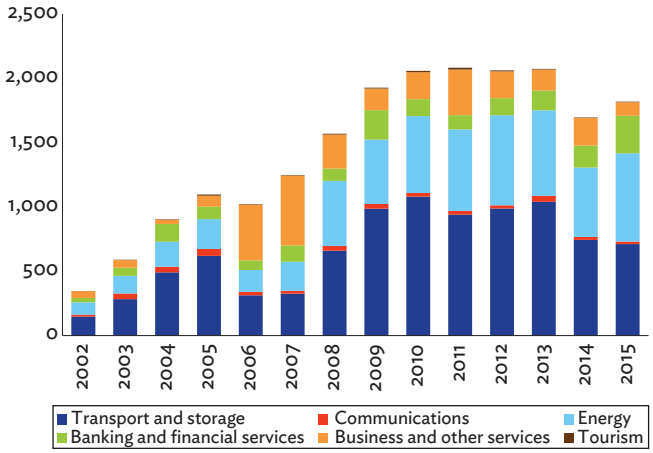
[1] These include Afghanistan, Azerbaijan, People's Republic of China (focusing on Xinjiang Uygur Autonomous Region), Kazakhstan, the Kyrgyz Republic, Mongolia, Pakistan, and Tajikistan.

5.3 Impacts of Aid for Trade on Services

The benefits of AfT are increasingly recognized in international trade and development circles, but empirical evidence on the linkages between aid and services sectors remains limited. This section explores the impact of AfT on services trade, especially in the landlocked and sealocked economies of Asia and the Pacific, and presents case studies on services sectors with growth potential.

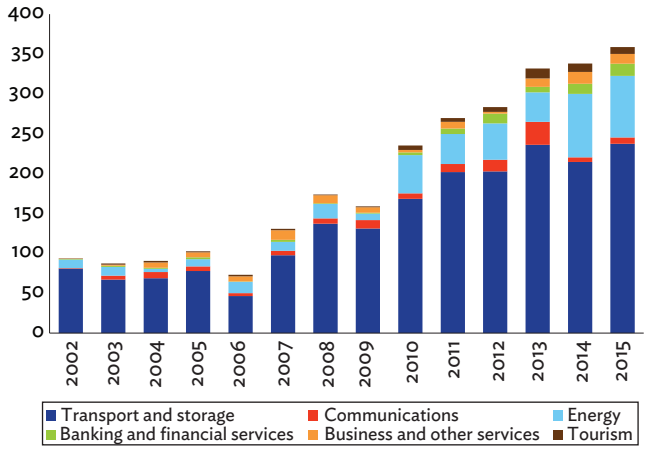
For the region's landlocked economies, total official development assistance increased to $9,130.3 million in 2015 from $2,739.9 million in 2002. AfT in services increased to $1,818.5 million in 2015 from $346.1 million in 2002 (Figure 5.9). The sectoral

Figure 5.9: Sectoral Distribution of AfT Flows for Landlocked Economies, 2002–2015 ($ million)



Source: ADB calculations using data from OECD. Creditor Reporting System. http://www.oecd.org/ (accessed April 2017).

Figure 5.10: Sectoral Distribution of AfT Flows for Sealocked Economies, 2002–2015 ($ million)



Source: ADB calculations using data from OECD. Creditor Reporting System. http://www.oecd.org/ (accessed April 2017).

distribution of AfT in services suggests a dominance in transport, energy, and business services, which is a departure from the global distribution where banking and financial services were the third-largest recipients after transport and energy services. Transport, energy and business services accounted for 45.5%, 28.7% and 14.1%, respectively, of AfT in services over 2002–2015.

For sealocked economies, total official development assistance peaked at $1,591 million in 2015, from $559.4 million in 2002. AfT in services for this group increased to $358.7 million in 2015 from $93.8 million in 2002 (Figure 5.10). By sector, transport received the most in nominal terms. However, as a share of total AfT in services, tourism has been more important beneficiary in sealocked economies.

The positive relationship between AfT and overall trade in services (TiS), as was shown in chapter 4, holds true for Asia's landlocked economies. By sector, AfT and TiS are positively related for business, financial, and transport services. Econometric analysis reveals that a doubling of AfT in services for landlocked economies would lead to a 7% increase in average services trade. The robust, positive TiS-AfT relationship for landlocked economies suggests that directing global aid to their services sectors—especially to business, financial and transport services—would improve trading opportunities. Analysis also reveals that the relationship between AfT and TiS in sealocked economies is positive overall. That holds for the different services sectors in sealocked economies: communications, financial services, business services, transport, and travel and tourism, with the biggest impact being for tourism.

Given the development impact of backbone services for landlocked economies and tourism for sealocked, and the efficacy of AfT in fostering these sectors (based on the econometric analysis), the case studies that follow this section discuss the experience of Central Asia and the Pacific in promoting growth and tradability in these sectors.

Case Study 1: Central Asia's Landlocked States Seek to Open Up Trade in Backbone Services

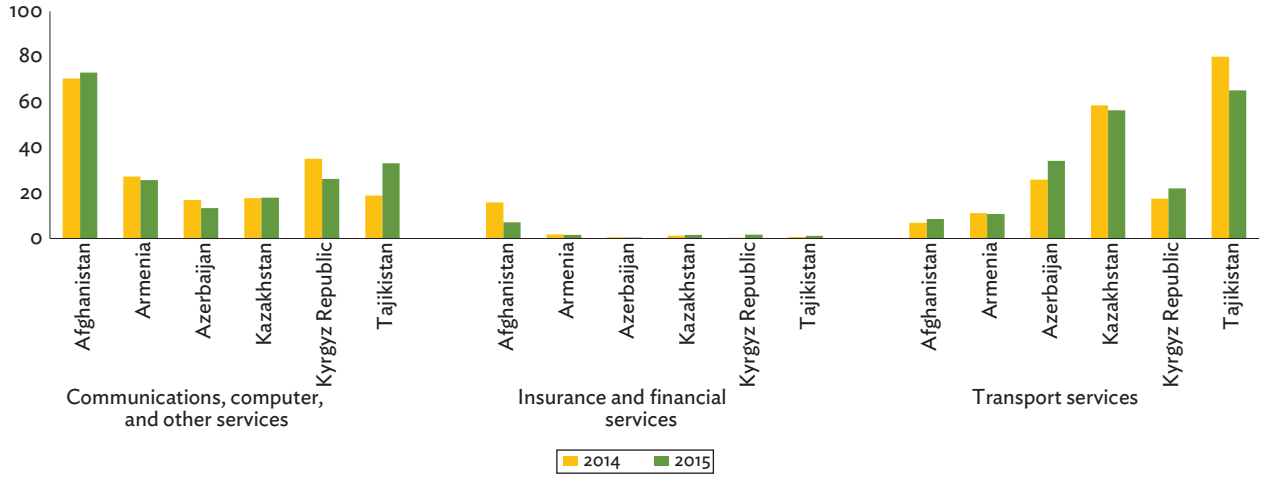
The CAREC Trade Policy Strategic Action Plan recognizes the expansion of trade in services as a core policy goal to help reduce barriers faced by landlocked Central Asian economies. Of the 10 CAREC countries, only Pakistan and the PRC have seaports, while exports from many Central Asian countries must travel great distances. Consequently, transportation costs for some CAREC countries' goods to reach high-income countries are a significant share of delivered prices. Other natural barriers compound these costs.

Total average services trade for the region's landlocked economies increased from $4.8 billion in 2002 to peak at $23.8 billion in 2014. Noland, Park, and Estrada (2012) note that Central Asia services sectors surged after economies gained independence in the 1990s. Further expansion of trade in services may offer a path to trade integration (CAREC 2013).

Transport and telecommunications services comprise a larger share of exports. Transport comprised most service exports in Kazakhstan and Tajikistan, while communications, computer, and other services were the largest service exports in Afghanistan during 2014 and 2015 (Figure 5.11).

Starting from a low base, cross-border trade in services grew rapidly in Kazakhstan, the Kyrgyz Republic, and Tajikistan in the 10 years to 2007 (CAREC, 2013). Citing the work of Goswami, Mattoo, and Saez (2012),

Figure 5.11 : Backbone Services, 2014–2015 (% of service exports, BoP)



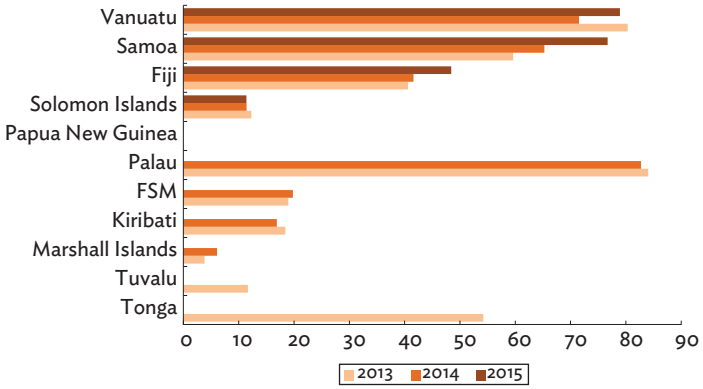
BoP = Balance of payments.
Source: World Bank. World Development Indicators (accessed 24 May 2017).

CAREC's Trade Policy Strategic Action Plan for 2013–17 listed crucial factors for developing services exports, including human capital for exporting skilled services, cultural endowments for attracting tourists, infrastructure (especially telecommunications networks that facilitate service delivery), and institutional quality. The ability of institutions to tackle corruption, simplify export procedures, and create flexible employment laws is important for increasing services exports. Policies that encourage inward foreign direct investment can increase services exports. A regulatory framework that encourages efficient delivery, including competition through foreign direct investment, is important too. There is strong evidence, especially in the telecommunication sector, that efficient delivery is crucial for exporters of services. Good policies are important for creating an economy-wide environment conducive to developing business, in which services exporters thrive alongside other internationally competitive sectors.

Case Study 2: Trade Potential of Tourism Services in Sealocked Pacific Nations

Tourism plays an important role in the export earnings of most Pacific island economies. It was the largest single source of export earnings in 2013 and 2015 for Samoa and Vanuatu, accounting for over 50% of their exports (Figure 5.12). Tourism has brought in most of

Figure 5.12: International Tourism Receipts, 2013–2015
(% of total exports)



FSM = Federated States of Micronesia.
Source: World Bank. World Development Indicators (accessed April 2017).

Palau's export earnings since 2005. Significant growth potential exists for the industry in the exports of the Marshall Islands.

Tourism is a significant employer in some Pacific economies. Estimates from the South Pacific Tourism Organization, as reported in World Bank (2016), indicate that in 2014, its share of employment was 15% in Tonga, 18% in Samoa, and 50% in Palau. Moreover, estimates from national statistics offices indicate the following shares (as proxied by accommodation and

food services) in total employment: 9.3%[27] as of 2014 in Fiji; 0.7% as of 2010 in Kiribati; 1.5% as of 2009 in Solomon Islands; and 0.8% as of 2010 in Timor-Leste.[28]

Globally, tourism also provides opportunities for the economic empowerment of women. Key findings from a 2010 joint report by UNWTO and UN Women showed tourism employs almost twice as many women as other sectors do, yet women in tourism typically earn 10% to 15% less than male counterparts or carry out a lot of unpaid work in family businesses. It also reported that one in five tourism ministers worldwide were women.

Tourism relies on air connectivity, while aspects of aviation such as airport structure and capacity to handle big aircraft also seem to matter. Visa requirements are another constraint in the Pacific (ADB 2015c). To date, the Cook Islands and the Federated States of Micronesia scored a maximum of 100 in UNWTO's 2015 visa openness index.[29] Among the least restrictive Pacific destinations are Vanuatu (with a score of 79), Fiji (78), and Palau (71). Other Pacific economies could benefit from their experiences. For example, between 2010 and 2015, the Federated States of Micronesia and Palau each introduced 194 improvements, while Nauru implemented 45 improvements in visa procedures (UNWTO 2016).

Apart from dealing with air connectivity, visa requirements, and related hard and soft infrastructure, Pacific islands can learn from the experiences and practices of Caribbean Islands with similar challenges.

The Caribbean's framework for sustainable tourism is grounded in integrating facets of the economy and island life on which tourism depends (Caribbean Tourism Organization, Caribbean Sustainable Tourism Policy Framework 2008):

- A policy on tourism management capacity, guided by good governance, public awareness of the strategic importance of tourism, human resource development in the contexts of tourism planning, public perception, education and training, and the labor market; tourism research and development; and the uptake of ICT.
- A tourism marketing policy hinged on market intelligence, using ICT in marketing; a comprehensive and diverse tourism product development; and addressing quality issues and effective marketing.
- A policy for developing efficient and cost-effective transportation options for air, marine, and ground transportation.
- A policy on tourism and the environment that involves planning, managing, and monitoring sustainable patterns of resource use, and adaptation and mitigation strategies for tackling climate change.
- Strengthening policy linkages between tourism and other economic sectors through institutional capacity building, supporting public–private partnerships, integrating skills development in tourism-related trades, and promoting community-based tourism.
- Policy guidance on managing health, safety, and security issues that impact the sustainability of tourism.

A key lesson from the Caribbean is that responsible and sustainable tourism can be achieved mainly through comprehensive and integrated policies that improve efficiency by establishing linkages in the local economy, enhancing tourism management capacity through institutional and human capacity development, tapping private sector resources, and pursuing regional integration strategies, among others.

27 Preliminary figure.

28 Derived figures based on data from ADB Statistical Database System.

29 Scores in the Visa Openness Index range from 0 to 100; the higher the score, the better. Destinations with the same score are tied, and so have the same rank. Openness indicates to what extent a destination is facilitating tourism. It is calculated by summing the percentage of the world population exempt from obtaining a visa, with the percentages of no visa weighted by 1, visa on arrival weighted by 0.7, eVisa by 0.5 and traditional visa weighted by 0. (UNWTO 2016, Visa Openness Report 2015)

5.4 Conclusion: The Rational for Targeted Interventions

Aid for Trade is an increasingly important part of official development assistance. At a time when uncertainty about the global economic environment has reduced trade growth and protectionist tendencies are in the ascendancy, the capacity of Aid for Trade measures to produce positive results comes into prominence.

This report and particularly its final chapter demonstrates the rationale for well-targeted interventions to generate inclusive growth, and has shown their potency to boost trade in services and e-commerce. While a dynamic services economy can be a key driver of development, more so a functional and tradable services economy fosters universal access and helps ensure more efficient and equitable delivery. E-commerce in particular has been shown to offer a widening conduit for economies to increase trade and promote inclusive growth, and its great potential is recognized in its capacity to link businesses in the landlocked and sealocked nations of Asia and the Pacific to markets that otherwise would be well beyond their reach.

However, the quality of policies, regulations and institutional frameworks is a vital consideration in realizing the full potential of the services and digital economies. Efforts to draw coherent domestic and international policies can improve the performance and competitiveness of services sectors, which provide vital support for all parts of an economy and play increasingly important roles in creating jobs, and in opening up entrepreneurial opportunities for women. Regulations can facilitate modern trade in services, and also deepen integration into regional markets, especially for those economies of Asia and the Pacific that face difficult trading conditions due to being remote.

The experience of geographically challenged nations, and in particular those in Pacific islands, demonstrates the important role of an enabling infrastructure and complimentary policy measures in improving the performance of services sectors. Analysis in this review of Aid for Trade suggests that well-targeted interventions, coordinated among implementing agencies and partnering institutions, can and do make a significant difference to the cost and quality of trade and to inclusive growth.

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Promoting Connectivity for Inclusive Development

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