

Economic Outlook for Southeast Asia, China and India 2018

FOSTERING GROWTH THROUGH DIGITALISATION



2018

Overview

Chapter 1: Macroeconomic assessments and economic outlook for Emerging Asia

Overall, growth in Emerging Asia – Southeast Asia, China and India – is projected to remain robust in 2017. Growth in many ASEAN countries and China has picked up on a strong trade rebound and resilient domestic consumption, while growth in India has edged downwards owing to taxation and monetary reforms. The region's growth is also projected to remain solid in the medium term. While growth will slow in China, it is expected to stay brisk in India. Southeast Asia is poised to maintain strong growth momentum from 2018 to 2022 on robust domestic private consumption and infrastructure initiatives planned by a number of governments.

The external positions of Emerging Asian economies have remained generally solid, although recent current account trends vary and net inflows of foreign direct investment (FDI) have weakened in some countries. Monetary authorities in the region are maintaining an accommodative monetary policy, anchored on benign inflation, despite recent manifestations of renewed price pressures. Coupled with the perception that risk is low, this is supporting optimism in financial markets. Meanwhile, fiscal policy in many economies has been expansionary and looks set to continue as such in the near term with planned increases in infrastructure spending. A widening fiscal gap may be a concern in certain economies, but positions are generally stable.

Overview and main findings: The economic outlook for 2017-22

Gross domestic product (GDP) in Emerging Asia is expected to grow by 6.4% in 2017, unchanged from the 2016 rate (Table 1), and 6.3% during 2018-22, according to the OECD Development Centre's *Medium-term Projection Framework (MPF-2018)*. Emerging Asia's estimated growth rate in 2017 is higher compared with the projected growth rates of Latin America and the Caribbean, 1.1%, and Africa, 3.4%. Growth in ASEAN and China is on a somewhat steeper upward trajectory in 2017 on the strength of the trade rebound and resilience of domestic consumption, whereas India's growth in 2017 appears to be retreating as the economy wobbles due to the effects of demonetisation and the impact of tax changes. Over the medium term, however, China's growth rate is expected to slow to an average of 6.2%, while India's average expansion rate in the next five years will remain robust at 7.3%. Structural reform challenges in China indicate that the pace of growth will slow from its 2011-15 rate. Southeast Asia is poised to achieve average growth of 5.2% between 2018 and 2022, relatively unchanged from 5.1% between 2011 and 2015. Growth prospects of ASEAN are anchored on robust domestic demand and on the infrastructure initiatives presented by a number of governments. Among the bloc's ten member countries, Cambodia, Lao PDR and Myanmar are projected to grow the fastest from now through 2022, while the Philippines and Viet Nam are expected to lead in growth among the ASEAN-5 (Indonesia, Malaysia, Philippines, Thailand and Viet Nam).

Table 1. Real GDP Growth in ASEAN, China and India
Annual percentage change

	2016	2017	2018-22 (average)	2011-15 (average)
ASEAN-5 countries				
Indonesia	5.0	5.0	5.4	5.5
Malaysia	4.2	5.5	4.9	5.3
Philippines	6.9	6.6	6.4	5.9
Thailand	3.2	3.8	3.6	2.9
Viet Nam	6.2	6.3	6.2	5.9
Brunei Darussalam and Singapore				
Brunei Darussalam	-2.5	0.0	0.5	-0.1
Singapore	2.0	3.2	2.3	4.1
CLM countries				
Cambodia	6.9	7.1	7.2	7.2
Lao PDR	7.0	6.9	7.1	7.9
Myanmar	5.9	7.2	7.4	7.3
China and India				
China	6.7	6.8	6.2	7.9
India	7.1	6.6	7.3	6.8
Average of ASEAN-10	4.8	5.1	5.2	5.1
Average of Emerging Asia	6.4	6.4	6.3	7.1

Note: The cut-off date is 31 October 2017. ASEAN and Emerging Asia are the weighted averages of those of the individual economies in these groupings. Data for India, Lao PDR and Myanmar follow fiscal years. The projections of China, India and Indonesia for 2017 are based on the results from the OECD Economics Department's Short-Term Economic Prospects (STEP) Meeting in October 2017.

Source: OECD Development Centre, MPF-2018 (Medium-term Projection Framework). For more information on the MPF, please see www.oecd.org/dev/asia-pacific/mpf.htm.

ASEAN-5

- **Indonesia** is in a position to expand by 5.4% from 2018 to 2022, roughly the same pace seen from 2011 to 2015. Growth will mainly benefit from improvements in the investment climate, better fiscal footing highlighted by recent credit-rating upgrades and resilient private consumption, which grew by about 5.1% on average in the past ten years to 2017.
- Economic growth in **Malaysia** in the next five years will slightly soften to 4.9%. The influx of foreign investments since 2011 in mining, manufacturing and financial services is expected to anchor growth stability in the country moving forward.
- In the **Philippines**, average growth from 2018 to 2022 is expected to reach 6.4%, about 50 basis points higher than from 2011 to 2015. Consumption and fixed investments, which grew 6.1% and 11.7% on average from 2011 to 2016, respectively, will continue to fuel economic growth until 2022, mainly underpinned by robust remittance inflow from overseas workers, planned big-ticket infrastructure projects and the resilience of offshoring and outsourcing industry.
- **Thailand's** medium-term growth is expected to settle at 3.6% – an improvement from the 2.9% average growth between 2011 and 2015. The pick-up in trade activity augurs well for Thailand's economy, with exports comprising more than three-quarters of GDP. Recent regulations easing investment and trade frictions, and the laying out of the Eastern Economic Corridor project, are expected to provide additional momentum.

- **Viet Nam** is likewise expected to outmatch the 5.9% average growth between 2011 and 2015, with an estimated expansion rate of 6.2% in the next five years. Private consumption, though gradually slowing, will continue to be a reliable source of growth momentum. Exports will also boost GDP growth, if global trade recovery makes progress.

Brunei Darussalam and Singapore

- **Brunei Darussalam** is showing signs of revival amid renewed (though still muted) optimism in oil and gas prices. The economy is projected to expand by 0.5% on average between 2018 and 2022, in line with better global trade prospects, barring another episode of steep energy price slides.
- **Singapore's** GDP growth is also on the upswing in 2017 as manufacturing and trade-related services gain momentum. Growth is projected to remain steady at 2.3% for the period 2018-22. Investment in areas that foster digitalisation and the government's commitment to continue pouring funds into its social and infrastructure agenda are a boon to the country's potential output.

CLM countries

- Growth of the CLM economies (Cambodia, Lao PDR and Myanmar) is expected to stay strong through 2022. **Cambodia's** growth will reach around 7.2% in the next half-decade on the back of export recovery, consumption-supportive industrialisation policy and initiatives to develop capital markets.
- Growth in **Lao PDR** from 2018 to 2022 will remain robust at 7.1%, although this is lower than the average of 7.9% from 2011 to 2015. An impressive decline in poverty and an anticipated rebound in tourist arrivals bode well for private consumption. The new competition law, amendments to the investment promotion law and initiatives to broaden linkages of special economic zones with neighbouring ASEAN members should also facilitate capital infusion and trade.
- In **Myanmar**, leading indicators suggest a marked recovery after a steep pullback in tourist arrivals and exports took its toll on GDP growth in 2016. In the medium term, the economy is expected to expand by 7.4%, above the country's average of 7.3% from 2011 to 2015. The renewed uptrend in exports and tourism, coupled with the passage of a new investment law, will likely keep investors interested in the country. Overseas remittances, which jumped in 2016, stand to provide substantial fuel to private spending in the coming years.

China and India

- **China** is expected to grow more slowly, by 6.2% in the medium term. Excess capacity issues and financial market vulnerabilities are the main drags on growth. Private consumption and investment will remain the anchors of growth. Exports are expected to contribute more significantly in the coming years as new free trade zones gain traction and following the government's initiatives to scale up the value added of China's traded goods.
- **India's** growth will rise to about 7.3% between FY 2018-19 and FY 2022-23, from the 6.8% average from FY 2011-12 to FY 2015-16, despite the structural strains due to reform measures. Economic growth will draw support from the steady expansion of private consumption and investments following foreign ownership liberalisation in some industries. The planned government spending expansion should further boost growth. However, the jump in the stock of banks' bad assets and contingent liability risks may limit the expansion of demand.

Other key points of the economic outlook and assessment

- The accommodative monetary stances of central banks in many countries in the region persist, anchored on benign inflation, even though recent data indicate some manifestation of renewed price pressures. Headline inflation still diverges across Emerging Asia. Inflation firmed up in most of the big ASEAN economies, driven by the marked rise in food and transport sub-indices. CPI growth in China is on a very gradual rise, owing to increases in housing and health care costs. Headline inflation in India is increasing gradually supported by movements in fuel, clothing and housing prices. In contrast, headline inflation has waned in the CLM countries.
- The external positions of Emerging Asia have remained generally robust. The recovery of exports and of imports have had contradictory impacts on current account (CA) balances. Net FDI inflows to Emerging Asia have stayed largely on the uptrend in recent years. Factors that have kept investors interested in the region include improvement in trade prospects, the announcement of big-ticket infrastructure projects, the resilience of domestic demand, and the aggressive drive of some governments to develop industries related to information technology and e-commerce through investment incentives.
- Fiscal policy in Emerging Asia has been largely expansionary this year. A widening gap may be a concern in some economies, but fiscal positions are generally stable. In the near term, many large ASEAN countries plan to increase spending, especially on infrastructure. China is maintaining a stable footing despite stronger spending of late. This may not be the case for India, Lao PDR and Viet Nam, which are trying to contain concerns related to budget deficits and poor performance of financial institutions.

Risks to the outlook

Overall, Emerging Asia is projected to experience favourable growth over the near and medium terms. However, maintaining robust growth momentum requires careful attention to several downside risks:

- the possibility of a more rapid monetary policy normalisation in advanced economies
- a rapid rise in private-sector debt
- the broadening of trade restrictions globally coupled by limited progress in regional trade agreements, including the Regional Comprehensive Economic Partnership (RCEP).

More rapid monetary policy normalisation in advanced economies would affect Emerging Asia

The upward march of the US policy rate since December 2015 has had benign effects on financial markets in Emerging Asia thus far, thanks largely to the advanced transmission of monetary policy direction. The commitment to accommodative monetary policy made by the European Central Bank and the Bank of Japan, at least in the next few months, has also helped to keep speculation at bay. The concern is what may happen if major central banks proceed with monetary policy normalisation at a more rapid pace than expected. With the amount of liquidity involved, economic activity in Emerging Asia could be dampened through various channels.

First, rapid monetary normalisation in advanced economies will potentially narrow interest rate differentials rather sharply and can instigate capital outflow from Emerging Asian economies. Capital flight can in turn intensify depreciation pressures, can be inflationary and can trigger central banks to raise their own policy rates.

Second, it can expose some vulnerabilities in the corporate sector. Higher interest rates can lead to capital losses and can ultimately result in a downsizing of corporate balance sheets. Financial institutions, especially those already facing some asset quality

issues, might face difficulties as corporate solvency risks rise. And as firms' spending capacity gets constrained, domestic demand will have to carry more slack.

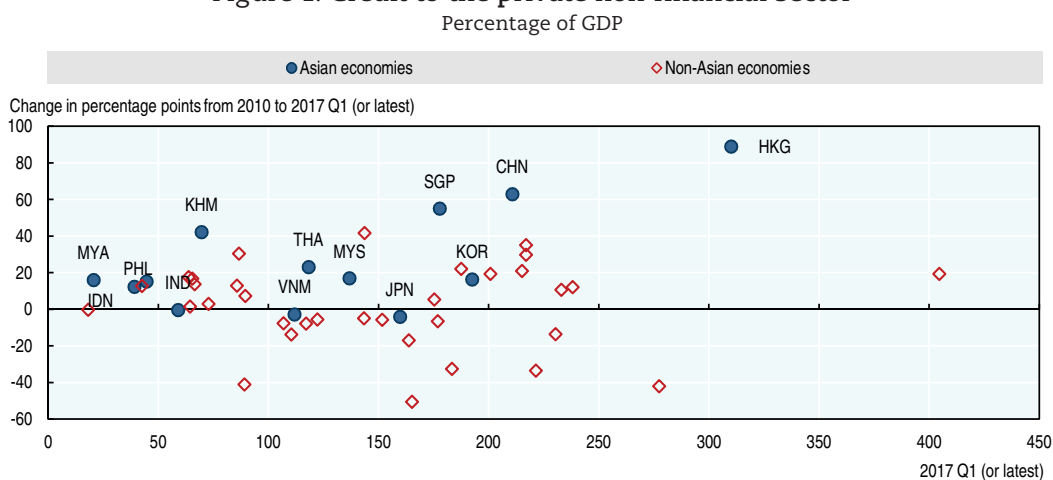
Third, liquidity reduction in advanced economies can dampen their own demand for imported goods. Imports coming from Emerging Asia can be affected directly and indirectly through global value chains.

In summary, as it is, the monetary normalisation in advanced economies will affect Emerging Asia's growth through various channels. It is arguable, however, that adjustments will not be disruptive should there be no significant deviation between the announced path of policy changes in the US, Europe or Japan and the actual policy changes. In addition, the scale of Emerging Asia's international reserves provides a considerable buffer while the generally stable macro fundamentals give the region some room for manoeuvre to mitigate negative effects.

Private-sector debt accumulation creates risks for growth

Private non-financial debt has risen considerably in many Asian economies since 2010 (Figure 1). Disentangling the private-sector credit recipients reveals that potential immediate sources of risk differ across countries. Debt-to-GDP ratios of both household and corporates have risen substantially in China; Singapore; and Hong Kong, China while debt ratio expansion was notable only in the household sector in Malaysia and Thailand. Such distinction is relevant in near-term policy-making exercises.

Figure 1. Credit to the private non-financial sector



Note: Latest data for Viet Nam is as of 2015.

Sources: OECD Development Centre calculations based on the Bank for International Settlements *Credit to the Non-financial Sector* database and the World Bank *World Development Indicators* database.

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Financial indicators suggest that economic risk exposure of countries in the region has gradually gaped in recent years though levels are still far from alarming. Moreover, some estimates of debt-to-equity ratios of non-financial corporates show that leverage has trekked up by a good margin in Emerging Asia.

On the upside, banking systems in the region are generally well capitalised and bond markets are still relatively quiet although bond default rates have reportedly risen in some countries.

Slowing credit expansion may be appropriate in many Emerging Asian economies in the near term as global liquidity is expected to tighten further in the next few quarters.

In terms of monitoring, monetary authorities in the region have been very active in upgrading their surveillance frameworks over the years. However, the progress has been asymmetric and the quality of monitoring is uneven. In this respect, regional platforms and multilateral institutions could take more prominent roles in facilitating the catch-up process by enhancing capacities of national institutions.

The RCEP trade agreement holds great potential but faces challenges

The Regional Comprehensive Economic Partnership (RCEP) free trade agreement (FTA) is believed to have the potential to reshape the region's existing economic integration framework into a more committed and binding agreement that extends beyond traditional trade agreements. RCEP, which is poised to set a higher standard than the existing ASEAN-plus-one agreements, will reap higher welfare gains by countries participating in the long term.

The RCEP process is moving forward; 19 rounds of negotiations have taken place to date. At the last round, held in Hyderabad, India, in July 2017, agreement was reached on a set of “key elements for significant outcomes” to be achieved by the end of 2017. The meeting also highlighted the need for balanced discussions to push negotiations forward across all areas. This was followed by a ministerial-level gathering in the Philippines in September.

Despite progress on the RCEP, stumbling blocks remain. While most of the participating countries have existing FTAs with one another, some do not. More time will be needed for them to negotiate from scratch, and this will have an impact on the time needed to finalise the negotiations.

Another factor that is complicating the finalisation process of RCEP negotiations concerns the large number of countries involved and their level of development, with priorities and interests differing among participants. While some countries prefer a simple manufacturing-oriented trade deal, other members are pushing for liberalisation of the services sector and freedom of movement for skilled workers.

It remains to be seen whether the final product of RCEP negotiations will be an in-depth and inclusive integration or just a basic commitment to be upgraded in the years to come. Nevertheless, due to missing chapters, the RCEP will result in a somewhat diluted form of economic integration, compared to the stalled Trans-Pacific Partnership agreement.

- The RCEP agreement does not include provisions on SOEs such as guidelines on their accepted behaviour in the marketplace to promote a level playing field and prevent them from crowding out local and international firms domestically.
- Likewise, a chapter on government procurement is not included in the RCEP framework. Without this chapter, governments are free to award projects to local and international firms according to their own mechanisms, processes and standards. As with SOEs, the absence of a chapter on government procurement will result in an unlevel playing field.
- Provisions on investment and dispute settlement are vital discipline chapters that represent the backbone of the RCEP agreement, as they address the issue of backpedalling by governments when it comes to international investments. Nevertheless, the extent and depth of the penalisation commitment are still unknown.

- Although crucial, a labour chapter is also not included in the agreement. Yet it is vital to address the rights of the region's workers, both skilled and unskilled, in terms of wages, working conditions and the empowerment of unions.
- Finally, the absence of an environment chapter in the RCEP may be an issue.

Despite these caveats, the RCEP still has the potential to become a very inclusive agreement with a balanced agenda for growth in the area of trade liberalisation and for protecting the rights of consumers and workers. To speed up finalisation of the agreement, countries may wish to consider that a stricter and feasible deadline be incorporated into every negotiation.

Chapter 2: Progress and challenges of regional integration in ASEAN and Emerging Asia

Building momentum for the ASEAN Economic Community

ASEAN promotes inclusive and innovation-led economic growth to enhance the performance of the ASEAN Economic Community (AEC). In 2017, ASEAN members adopted the AEC 2025 Consolidated Strategic Action Plan to implement the 2025 AEC Blueprint. Endorsed by ASEAN economic ministers and the AEC Council, the Strategic Action Plan aims to foster regional integration by increasing trade and investment; integrating micro, small and medium-sized enterprises into the digital economy; and developing an innovation-driven economy. These measures reflect the main theme of the 30th ASEAN Summit in April 2017, “Partnering for Change, Engaging the World”.

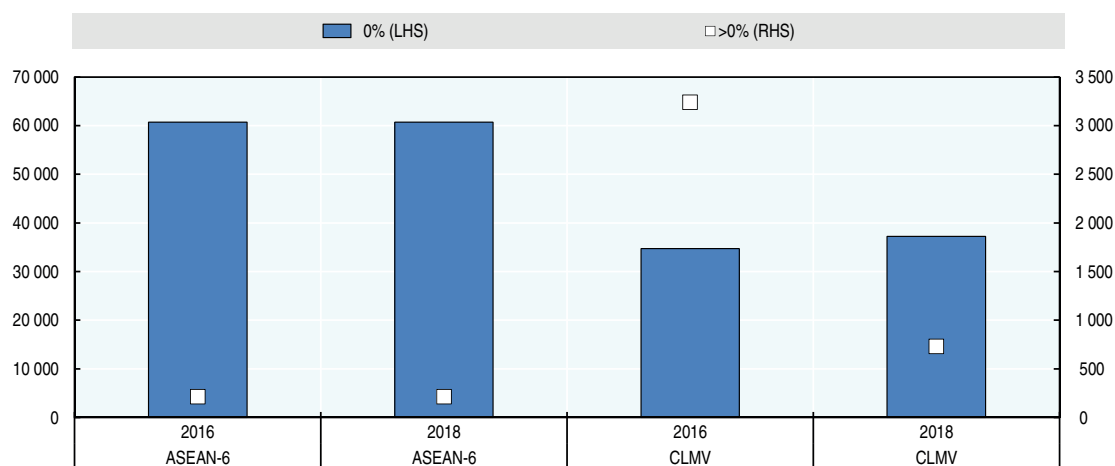
In the past year, regional integration has progressed most significantly in the trade of goods and services. The speed of implementing the ASEAN Trade in Goods Agreement (ATIGA) schedule varies by country. Cambodia, Lao PDR, Myanmar and Viet Nam (the CLMV countries) further reduced tariffs earlier in 2017 under the ATIGA schedule. Additionally, the digital economy will enhance the free flow of goods and services within ASEAN through the ASEAN Single Window initiative. ASEAN member countries' advances in implementing their National Single Windows further boosted trade activities. The ASEAN Framework Agreement on Services (AFAS) and mutual recognition arrangements (MRAs) in several sectors have helped liberalise services; the ninth package of AFAS commitments is in effect. In addition to the eight MRAs signed in the past, the ASEAN MRA for generic medicinal products was finalised recently.

Trade in goods: ASEAN is working to further reduce tariffs

ASEAN is working rapidly to further reduce tariffs to meet ATIGA commitments by 2018. ASEAN-6 (Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore and Thailand) removed all import duties by 2010, except for items in the Sensitive and Highly Sensitive Lists. Tariffs were reduced more quickly than planned in the original schedule. The CLMV countries advanced the reduction of import tariffs from 2018 to 2015 for all products except those in the Sensitive and Highly Sensitive Lists, and the tariff reduction for some sensitive products is scheduled for 2018, in accordance with the provisions of the Protocol to Amend the Common Effective Preferential Tariff (CEPT) Agreement for the Elimination of Import Duties. The AEC Blueprint has introduced the remaining products in the Sensitive List into the CEPT schedule. Tariffs on these products were decreased to between zero and 5% for Lao PDR and Myanmar in 2015, and for Cambodia in 2017.

Regarding the phasing in of the regional single market, trade in goods among ASEAN-6 countries is quite open; the percentage of goods with zero import tariffs in the Inclusion List is 99.2%. In the CLMV countries, the percentage of goods with zero import tariffs was 90.9% in 2016. Trade closedness, calculated by the percentage of products with positive tariff rates, was only 0.3% in ASEAN-6 in 2016. The percentage of goods with import duties in the CLMV countries was about 8.5% in 2016 (Figure 2). For example, all ASEAN imports enter Singapore without tariff duties, while the import tariff rate in Lao PDR is about 10%. ASEAN member countries differ in terms of priorities and progress made in the import tariff reduction schedule. In particular, rice still shows differences among some ASEAN countries. Rice-category items show various tariff rates and paces of tariff reduction. Furthermore, ASEAN member countries' different priorities could add more complexity to the efforts of reducing and eliminating tariffs for sensitive products.

Figure 2. Number of items with 0% tariffs vs. those with more than 0% tariffs in 2016 and 2018 for ASEAN-6 and CLMV



Note: The CLMV countries are Cambodia, Lao PDR, Myanmar and Viet Nam. ASEAN-6 comprises Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore and Thailand.

Source: ASEAN Secretariat.

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Trade facilitation initiatives support intra-ASEAN trade growth

Facilitating trade is a key aspect of regional integration. The ASEAN Single Window (ASW) initiative creates a regional platform to exchange the electronic version of border documents for ASEAN's public and private sectors. The ASW offers ASEAN members more efficient, effective and transparent ways of doing business in a faster processing time. The legal framework also provides for cyber security, such as data protection, confidentiality and acceptance of electronic signatures. This electronic data exchange reduces the use of paper documents and speeds up customs clearance. Consequently, the initiative accelerates cargo clearance, and strengthens trade and regional economic integration in the ASEAN Economic Community. However, the progress of ASW implementation differs among ASEAN countries. The ASW has been put into operation in Indonesia, Malaysia, Singapore and Viet Nam. The Philippines is expected to connect to the ASW in the near term. Brunei Darussalam shows slow progress, with two virtual servers provisioned for testing, and two virtual servers for production.

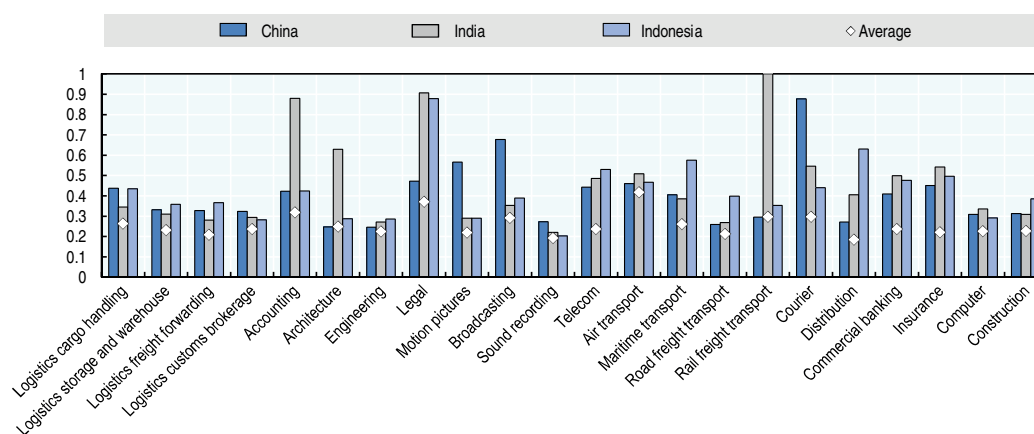
Trade in services: ASEAN strives to liberalise services, but progress is slow

To date, ASEAN member states are intensifying efforts to finalise the outstanding tenth package of commitments under AFAS with the schedule for completion in 2017. The ninth package, signed in 2015 and the latest in effect, resulted from negotiations among ASEAN countries on measures that affect trade in selected services. This agreement highlights detailed commitments to liberalise the services sub-sectors in different ASEAN countries. The steps towards liberalisation are based on the targeted services and deadlines set in the AEC Blueprint 2025. One of the ninth package's most ambitious targets is the requirement for members to increase their minimum ASEAN equity participation to 70% in logistics services. Efforts to liberalise logistics services have been ongoing since 2005, when ASEAN members ratified the fifth package of AFAS commitments.

On the ground, it is worthwhile to estimate the level of openness in trade in services in ASEAN. The OECD's Services Trade Restrictiveness Index (STRI) helps participating countries compare their position with that of their trading partners (Figure 3). Not all the Emerging Asian economies are included in the database, but the depth of its coverage is unique nevertheless. With this index, openness in services sectors can be compared among countries or among different regions. The index takes values between zero (complete openness) and one (complete closure to foreign service providers). China, India and Indonesia are more restrictive than average on trade in most services sectors.

Figure 3. Services Trade Restrictiveness Index by sector in 2016

Index, scale 0-1 from open to closed



Note: "Average" refers to the sample average of 44 countries, including 35 OECD member countries and nine non-member countries: Brazil, China, Colombia, Costa Rica, India, Indonesia, Lithuania, the Russian Federation and South Africa.

Source: OECD (2016), *Services Trade Restrictiveness Index* (database), www.oecd.org/tad/services-trade/services-trade-restrictiveness-index.htm.

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Co-operation on the movement of skilled labour has grown modestly in recent years

Skilled workers' mobility within ASEAN is imperative to promote trade in services in the region. In terms of AFAS commitments, the legal framework to support skilled labour mobility on the ground has not seen much progress. A key priority of the ASEAN Capital Markets Forum (ACMF) is to foster better mobility for professionals within ASEAN, thus contributing to greater regional integration. The ACMF will explore opportunities for greater co-operation in facilitating the mobility of ASEAN capital market professionals. It also aims to promote and strengthen the ASEAN identity of capital market services firms and professionals. The Movement of Natural Persons Agreement, ratified by all

ASEAN countries in 2016, has boosted these efforts. Because the ratification is quite recent, each country's implementation of the commitment remains a challenge and needs to be examined in the near future.

In addition to the eight previous MRAs, ASEAN recently finalised an MRA for generic medicinal products to encourage a smoother flow of generic drugs within ASEAN. In addition to the MRAs signed for selected occupations, the MRAs on automotive products, processed food, and building and construction material are poised to be included in the list as soon as negotiations are finished (Table 2).

Table 2. Timeline of ASEAN MRAs

Type of MRA	Date	Status
ASEAN MRA on Engineering Services	9 December 2005	Signed
ASEAN MRA on Nursing Services	8 December 2006	Signed
ASEAN MRA on Architectural Services	19 November 2007	Signed
ASEAN Framework Arrangement for the Mutual Recognition of Surveying Qualifications	19 November 2007	Signed
ASEAN MRA Framework on Accountancy Services	26 February 2009	Signed
ASEAN MRA on Medical Practitioners	26 February 2009	Signed
ASEAN MRA on Dental Practitioners	26 February 2009	Signed
ASEAN MRA on Tourism Professionals	9 November 2012	Signed
ASEAN MRA for Bio-Equivalence (BE) Study Reports of Generic Medicinal Products	Mid-2016	Finalised
ASEAN MRA for Automotive Products	Ongoing	Under negotiation
ASEAN MRA for Processed Food Products	Ongoing	Under negotiation
ASEAN MRA for Building and Construction Materials	Ongoing	Under negotiation

Source: OECD Development Centre compilation, based on ASEAN Secretariat.

Chapter 3: Digitalisation in manufacturing and services in Emerging Asia

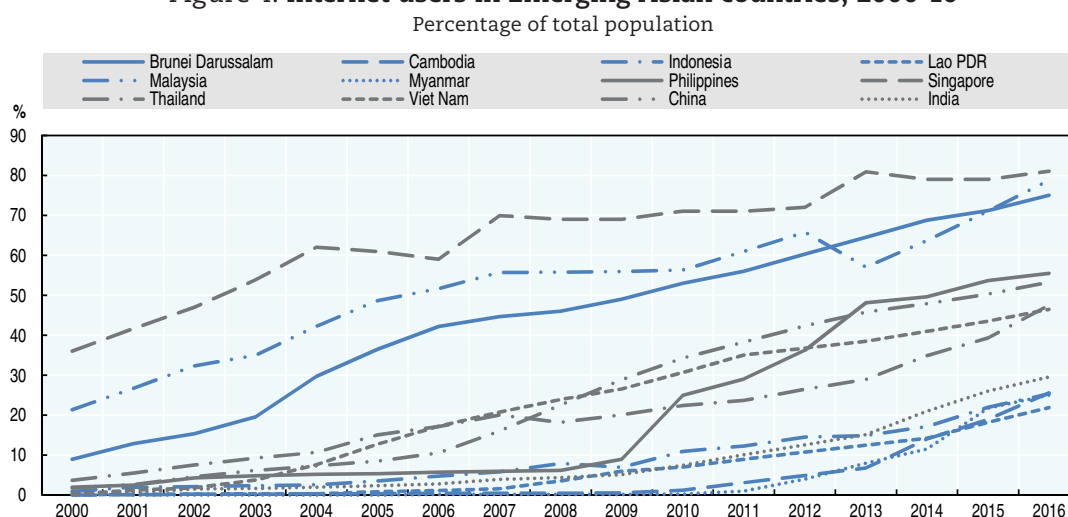
The digital economy includes the convergence of fixed, mobile and broadcast networks, the increasing connectivity of devices and objects, and the changes in social interactions and personal relationships that these developments bring about. Through digitalisation, digital technologies and processes are being integrated into more areas of economic activity. This transformation presents opportunities for growth and development alongside economic and social challenges. In Emerging Asia, the increased use of information and communication technology (ICT) in manufacturing and services is affecting business activities, trade and productivity. Policy makers in the region can help manufacturing and services firms to seize the opportunities presented by digitalisation through reforms to trade and investment policies, the development of supportive infrastructure, addressing labour market challenges and other reforms targeting the main constraints facing their economies.

Digital technologies are transforming Emerging Asian economies

Emerging Asian countries have been enthusiastic adopters of new technologies, although further progress is needed to foster inclusive digitalisation across the region. Internet use, a prerequisite for participation in much of the activity in the digital economy, has increased across the region in recent years (Figure 4). Differences remain considerable at the country level; in 2016, 81.0% of Singapore's population were Internet users, compared with only 21.9% of the population in Lao PDR. Many firms are also making use of ICT. According to surveys conducted between 2012 and 2016 in much

of the region (excluding Brunei Darussalam and Singapore), the use of websites varied from 11.4% in manufacturing and 13.2% in services in Lao PDR to 71.9% in manufacturing and 60.0% in services in China. E-mail use by firms is more common, ranging from 18.9% in manufacturing and 25.6% in services in Lao PDR to 91.2% in manufacturing and 91.5% in services in Viet Nam. The fact that many firms still do not make use of these more accessible technologies highlights the potential for further digitalisation.

Figure 4. Internet users in Emerging Asian countries, 2000-16



Note: Data on Internet use in Myanmar is not available for the year 2000.

Source: World Bank (2017a), World Development Indicators, World Bank, Washington, DC.

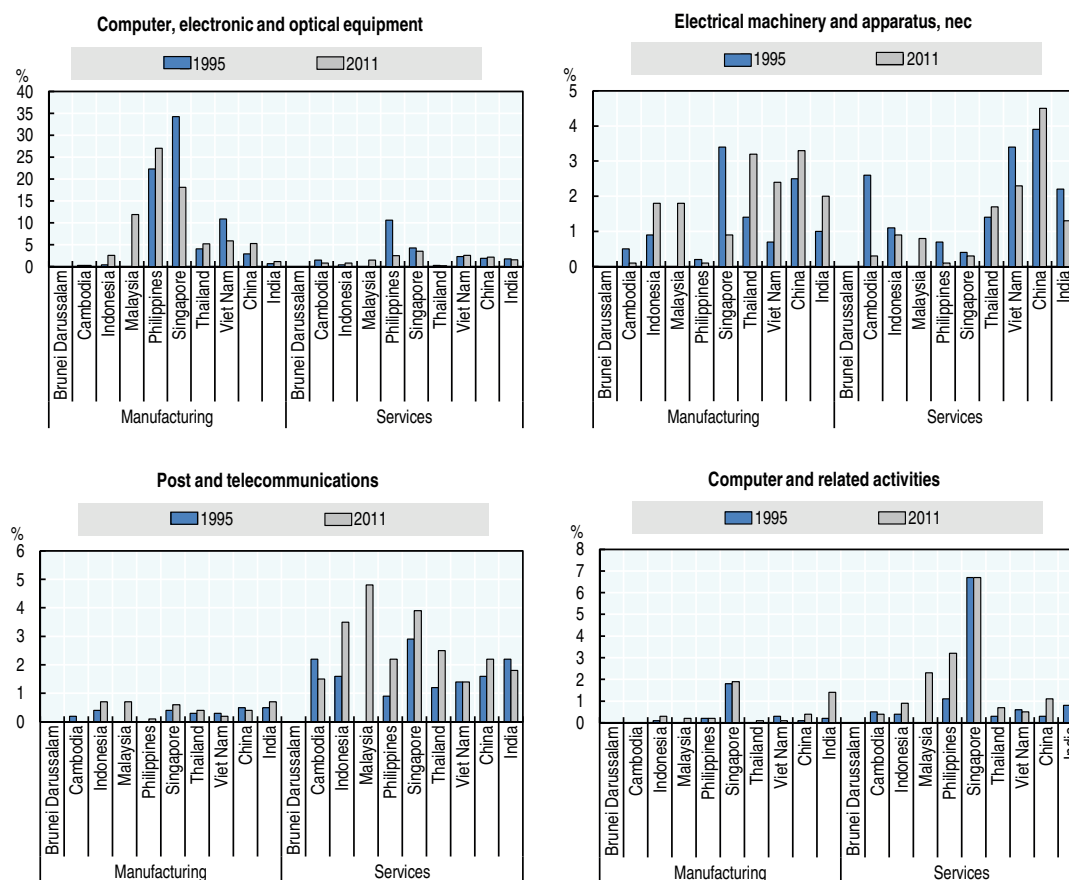
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Digitalisation affects manufacturing in several ways. Most directly, ICT manufacturing activities are important contributors to growth and development in Emerging Asia. Over 2012-16, greenfield FDI in ICT and electronics manufacturing as a share of the manufacturing total exceeded 10% in Viet Nam (26.5%), China (22.3%), Malaysia (20.4%) and the Philippines (12.4%). More generally, manufacturing is changing as digitalisation allows for new production methods, unconventional relationships with suppliers and clients, and the responsiveness to match supply with demand in real time (Kagermann, 2015; Kleinau, 2005). “Industry 4.0”, “the fourth industrial revolution” or the “fourth wave” of technological advancement refers to an industrial ecosystem in which all processes and functions of manufacturing and distribution are interactively connected through digital networks. The region stands to benefit further from these developments as it has not fully leveraged its extensive activities related to ICT, and has so far not successfully linked increasing ICT-goods production capacity with the extensive application of such technologies in the manufacturing process.

Increased ICT use has also transformed services sectors by making many services storable, transportable over the Internet and telephone connections, and tradeable through digital and other means. In Emerging Asia, existing services industries have expanded and new industries have emerged as a result of digitalisation. For example, IT-enabled services, such as software services and business process outsourcing (BPO), are growing in Viet Nam; knowledge process offshoring, a movement from BPO into higher-value-added activities, is becoming more common in the Philippines; and mobile payments and related services have taken off rapidly in China. The spread of production processes

in manufacturing and services dependent on new technologies is visible in their use as inputs. In 2011, the most recent year for which data are available, a sizeable share of inputs in manufacturing and services came from sectors linked to ICT (Figure 5).

Figure 5. Share of intermediate inputs in manufacturing and services from selected sectors, 1995 and 2011



Notes: Compiled from national input-output tables. Data were not available for Lao PDR and Myanmar. Manufacturing is defined as sectors 15-37 and services as sectors 40-93 (ISI Rev. 3).

Source: Compiled by OECD Development Centre, using OECD (2017a), *OECD.Stat* (database), OECD, Paris.

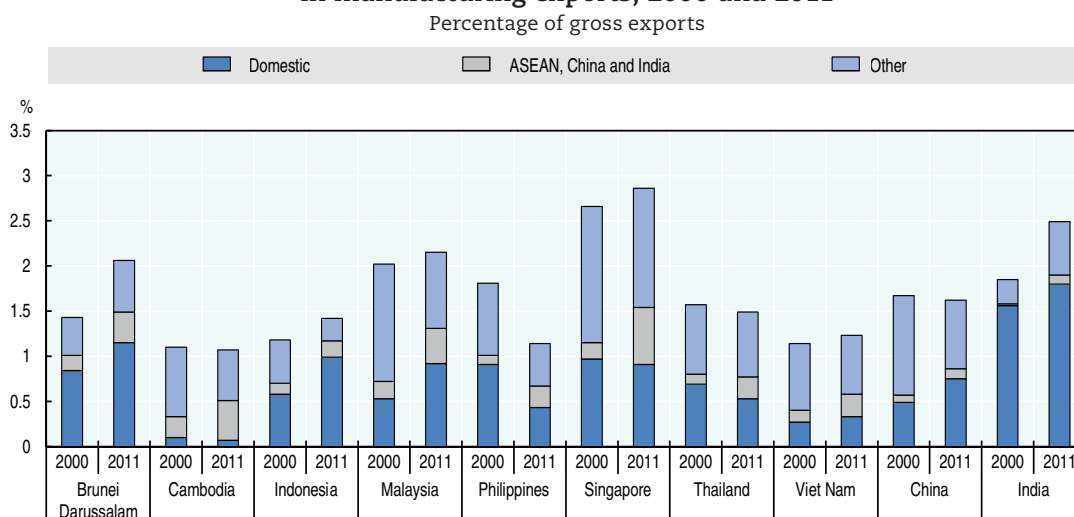
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Digitalisation affects trade and productivity in the region

Digital technologies also affect trade in several ways. In manufacturing, goods related to ICT and electronics have been among the most dynamic components of trade for many countries in Emerging Asia. In addition, across most of the region, exporting firms are more likely to embrace ICT by using e-mail and having websites. Conducting business on line is an important way of reducing trade costs, in particular for small and medium-sized enterprises. Digital economy services are also having important inputs in trade as embodied and embedded services in goods and services exports. In most countries in the region, between 2000 and 2011, there was a noticeable increase in the share of manufacturing exports that originated in added value from embodied digital services (Figure 6). Interestingly, Emerging Asia is an important source of this added value, relative to other parts of the world. In some countries, the impact of digitalisation on trade has been even more pronounced in services than in manufacturing. However,

the data in question capture exports of computer and telecommunications services directly, so it is no surprise that the percentages are higher for services (Figure 7).

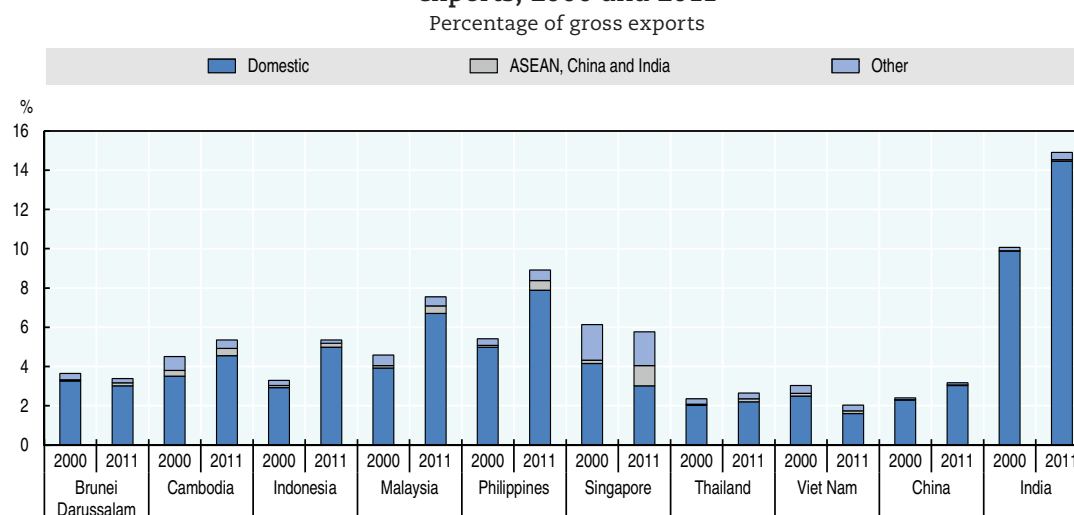
Figure 6. Computer and telecommunications services embodied in manufacturing exports, 2000 and 2011



Source: OECD (2017b), OECD-WTO TiVA (database), OECD, Paris.

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Figure 7. Computer and telecommunications services embodied in services exports, 2000 and 2011



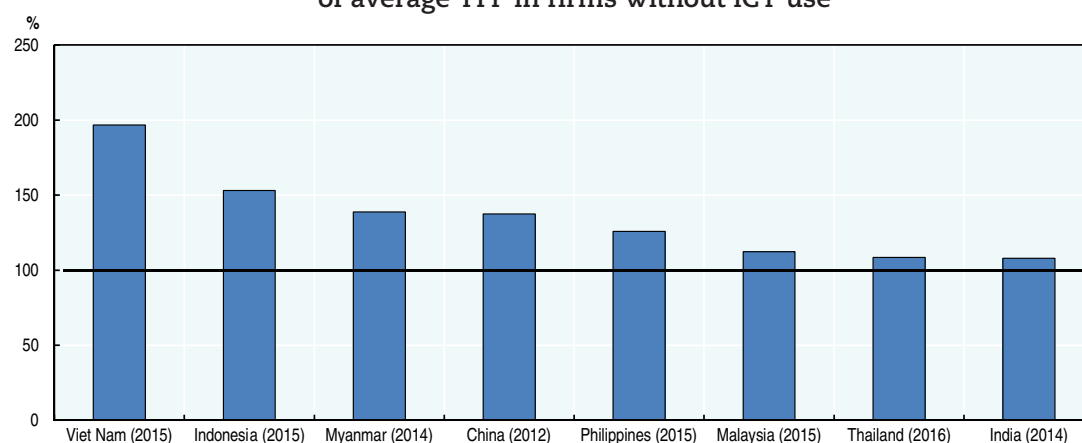
Source: OECD (2017b), OECD-WTO TiVA (database), OECD, Paris.

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While the accumulation of IT capital has not made a very large contribution to growth directly in much of the region, in comparison with other growth drivers, it can also affect growth through total-factor productivity (TFP) in industries that produce and use ICT. New technologies permit the development of new industries and increased value in goods and services produced. ICT use can improve firms' flexibility in the face of economic shocks and may therefore improve industry productivity through more efficient entry, exit and reallocation among firms. It may also positively affect

productivity by increasing transparency and market competition. Individual firms can also realise productivity gains through investments in technology by reducing production costs, improving management and logistics, and improving connections with suppliers and customers. In the eight countries in the region with recent survey results and sufficient data, the average TFP was higher among firms using at least one website or e-mail in their operations (Figure 8). On average, firms using these technologies had 196.6% of the average TFP level of firms with no use of these ICT tools in Viet Nam, with similarly large gaps in Indonesia (153.0%), Myanmar (138.8%) and China (138.8%). Even in Thailand and India, where the productivity difference by firms' technology use was not as great, these figures were 108.6% in Thailand and 107.9% in India.

Figure 8. Average TFP in manufacturing firms with ICT use as a percentage of average TFP in firms without ICT use



Note: Average TFP in firms with websites and/or using email is presented as a percentage of the average TFP of firms using neither technology. 100% represents no difference in the average productivity of these two groups. Cambodia and Lao PDR were excluded from this analysis since they contained too few observations with sufficient data.

Source: OECD Development Centre's calculations, using World Bank (2017b), *Enterprise Surveys*, World Bank, Washington, DC.

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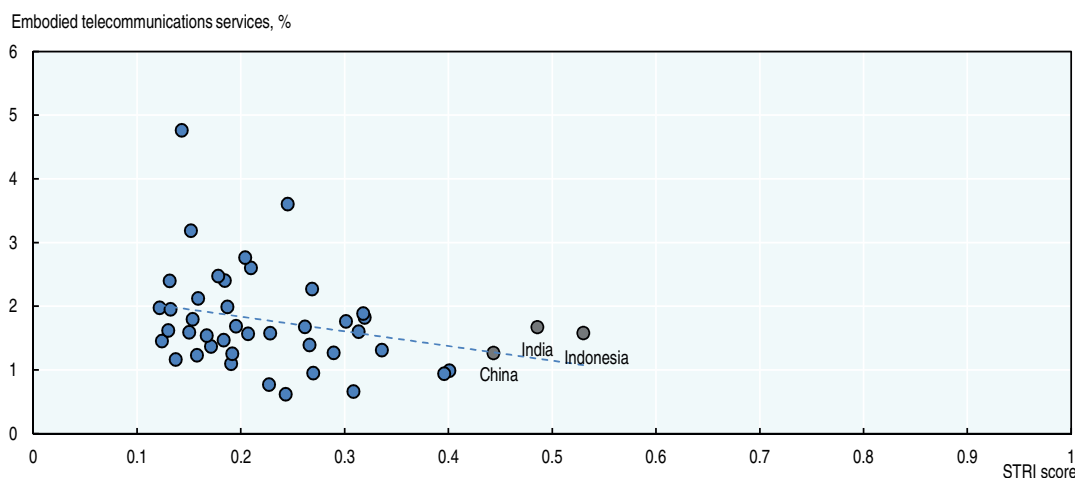
A wide range of policy issues affect digitalisation

To make the most of the opportunities presented by digitalisation in manufacturing and services, countries in the region should consider a range of reforms. The implementation of responsible policies on trade and investment are among the most important policy issues facing the entire region. It is also critical to develop and reform physical and regulatory infrastructure as well as to address labour market challenges. Other policy areas that require action will need to be managed differently across Emerging Asia.

Since trade in services is an important factor in Emerging Asia's digital economy, restrictions on this kind of trade can affect the development of digitalisation in manufacturing and services. In each of the three countries included in the OECD Services Trade Restrictiveness Index – China, India and Indonesia – telecommunications and computer services face greater restrictions than the OECD average, and telecommunications services are more restricted than computer services. There is a negative relationship between the STRI in telecommunications services and the proportion of telecommunications services embodied in gross exports (Figure 9). Limits to foreign ownership of equity, restrictions on the nationality of boards of directors and managers, and barriers to the movement of skilled labour all contribute to services

trade restrictions. Any reform of trade restrictions should keep in mind that the bulk of international trade in services, particularly in the digital economy, takes place on a wholesale basis rather than a retail one.

Figure 9. Policy restrictiveness in telecommunications and the proportion of telecommunications services embodied in gross exports (aggregate), 2016



Source: OECD (2017d), *OECD Services Trade Restrictiveness Index*, OECD, Paris; OECD (2017b), *OECD-WTO TiVA* (database), OECD, Paris.

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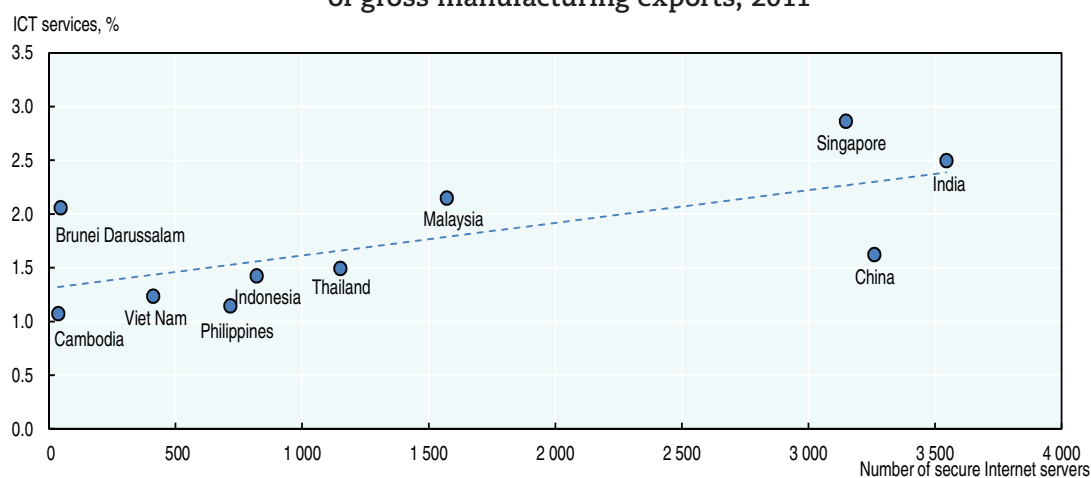
Inward FDI flows provide the necessary capital to fund investment in ICT and are arguably among the best ways to access technological spillovers. Openness to trade and attracting FDI into the ICT sector have played a notable role in supporting the rise of China, Malaysia, Singapore, Thailand and Viet Nam as major global suppliers and exporters of ICT. Nevertheless, restrictions on FDI remain relatively high in much of the region, according to the OECD's FDI Regulatory Restrictiveness Index. In all the countries of ASEAN plus China and India, the electronics-manufacturing sector is more open to FDI, compared with the national averages for all sectors combined. In Malaysia, the Philippines, Viet Nam and China, however, restrictions on FDI in the communications sector are more stringent than those in the economy generally.

Underdeveloped infrastructure also significantly constrains the development of the digital economy in much of Emerging Asia. Less than 30% of the population is on line in India, Indonesia and the CLM countries, which have the fewest number of secure Internet servers for their population, less high-speed broadband Internet (minus Indonesia) and relatively high Internet prices (along with the Philippines). The number of secure Internet servers relative to the total population is significantly higher in Singapore than in the rest of the region, with 932.1 servers per million people, though Brunei Darussalam and Malaysia also have more than 100 secure servers for every million people. Over the past 15 years, all countries in the region have experienced rapid growth in the number of secure Internet servers. The number of secure servers in a country tends to be positively associated with the share of ICT services in the value-added component of that country's gross manufacturing exports (Figure 10). Internet speeds also vary considerably across the region, and many people do not have access to affordable broadband Internet.

Digitalisation also poses challenges, particularly as it reinforces trends in automation. Like all examples of skill-based technical change, digitalisation has the potential to

increase the relative demand for skilled workers, such as engineers and technicians, as it reduces the demand for unskilled labour. Developing the skills of workers using new technologies is critical to reaping the benefits of digitalisation. Workers will need generic ICT skills, such as the ability to use technologies and access information on line; specialist ICT skills, necessary for the production of ICT products and services; and complementary ICT skills, such as the capacity to process complex information and communicate with co-workers and clients. Investing in tertiary education, technical and vocational education and training (TVET) and continuing education programmes will be important in developing these skills. ICT skills can also be better integrated in basic education at early ages. Policy makers in the region will also have to pay attention to the social effects of digitalisation. While new technologies can be used to promote social inclusion and to work towards targets such as the Sustainable Development Goals (SDGs), disadvantaged groups may also have less access to ICT and fewer opportunities to acquire relevant skills.

Figure 10. Number of secure Internet servers in Emerging Asia and the percentage of ICT services in the value-added component of gross manufacturing exports, 2011



Source: World Bank (2017a), *World Development Indicators* (database), World Bank, Washington, DC; OECD (2017b), *OECD-WTO TiVA* (database), OECD, Paris.

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While the region faces common policy challenges, the considerable differences in the level of development of the digital economy across Emerging Asia mean that unique strategies and sets of priorities will also be needed. In Indonesia, ICT infrastructure quality, Internet prices and worker skills need to be addressed. Slow Internet speeds and challenges in online payment affect e-commerce and the digital economy more generally in the Philippines. Thailand can boost digitalisation by improving infrastructure and ICT skills. While Viet Nam is relatively well positioned to benefit from digitalisation, it faces several challenges: new and small firms may be left out unless they have better access to financing, e-commerce growth has been slowed by security concerns and the risks of automation will need to be addressed. The digital economy is a major component of Singapore's economy, and more could be done to leverage worker skills to stay at the forefront of the digital revolution. The CLM countries, on the other hand, should focus on developing basic ICT infrastructure and fostering foreign investment in the sector. China's continued progress in digitalisation can be supported through the development of clear plans for using digitalisation to move up the manufacturing value chain. India's IT services sector could be restructured to reduce its dependence on exports as the

country also encourages the expansion of e-commerce and a more inclusive digital economy. Regional and international co-operation is also needed to foster digitalisation for inclusive growth. Issues including consumer protection, digital security and digital infrastructure have already been addressed through regional frameworks.

Chapter 4: Key structural policy challenges in Emerging Asia

The Outlook's country notes highlight key structural policy challenges in Emerging Asia (Table 4).

Table 4. Medium-term policy challenges and responses in Emerging Asia

Country	Topic	Focus
ASEAN-5		
Indonesia	Green finance	Fostering green finance
Malaysia	Trade	Enhancing trade growth by strengthening the halal sector
Philippines	Infrastructure	Optimising infrastructure financing
Thailand	ICT skills	Strengthening information and communications technology (ICT) skills to develop the digital economy
Viet Nam	SOEs	Building momentum towards greater privatisation of state-owned enterprises (SOEs)
Brunei Darussalam and Singapore		
Brunei Darussalam	FDI	Attracting foreign direct investment (FDI) to diversify the economy and create more jobs
Singapore	Land use	Optimising the use of Singapore's limited land
CLM		
Cambodia	Financial education	Strengthening financial education
Lao PDR	Education	Improving access to education and reducing disparities
Myanmar	FDI	Continuing reforms to attract FDI for development
China and India		
China	Connectivity and integration	Unlocking synergies with the Belt and Road Initiative
India	Innovation	Fostering inclusive innovation to boost growth and development

Source: OECD Development Centre.

ASEAN-5

Indonesia

- **Green finance:** The financial sector plays an important role in managing environmental risks as Indonesia works to fulfil its commitment to reduce greenhouse gas emissions and other environmental targets. Bank Indonesia regulations promote green finance by requiring environmental impact analyses for large or high-risk loans. The Financial Services Authority (OJK) published a sustainable-finance roadmap in 2014 covering a range of measures to increase the supply of sustainable financing. Green financing in equity and bond markets has progressed since the introduction of the 29-company Sri-Kehati index in 2009 and the first green-themed bond by PT Ciputra Residence, a property developer. FDI can be fostered for investment in renewables. Banks are also set to play a role in green finance, such as through the OJK's new pilot project focused on the palm oil sector. Islamic bonds may also bring new sources of funding.

Malaysia

- **Trade:** While Malaysia is the leading exporter of halal products compliant with Islamic sharia law among member countries of the Organisation of Islamic Cooperation, these products represented only 5% of its total exports in 2016. The country's main halal exports are processed food and cosmetic products. The strict rules applied to exporters of halal meat abroad pose challenges to Malaysian

producers, and Malaysia itself depends to a large extent on exporters such as Australia and New Zealand to supply halal meat. Co-ordinated efforts are being made under the Halal Industry Master Plan to achieve Malaysia's goal of becoming a halal hub by 2025. Enhanced international co-operation through the Department of Islamic Development Malaysia would encourage both knowledge transfer and the delegation of responsibility to representatives abroad.

Philippines

- **Infrastructure:** As highlighted in the Philippine Development Plan 2017-2022, there is a need to address the country's underdeveloped infrastructure. While improvements have been made in recent years, additional capital and efficient investments will be needed to keep up with demand for infrastructure development in the fast-growing economy. The government is looking to attract investors for public-private partnerships (PPPs), but faces challenges such as the absence of a deep long-term fund pool, which means that private project developers bear higher costs of credit. The PPP Center could be strengthened in terms of its mandate and resources. While the bond market could provide an alternative source of financing, these markets need further development; the ratio of the total outstanding value of local-currency bonds to GDP remains relatively small.

Thailand

- **ICT skills:** The Digital Thailand plan aims to develop the use of digital technologies in all socio-economic activities over a 20-year timeframe. Recent initiatives in support of this goal include the five-year Digital Government Development Plan and an operational plan for promoting the digital economy. High-capacity broadband Internet and data centres are among the infrastructure facilities needed, and the government plans to establish a digital park in the Chon Buri province by 2018 as part of the Eastern Economic Corridor. While Internet use has improved, many people lack access or the skills needed to use new technologies. According to a survey from the National Statistical Office of Thailand, a lack of knowledge is the principal reason people have for not using the Internet. Training on basic skills should take into consideration that needs vary with different demographics' use of the Internet. More advanced ICT skills will be needed to develop the labour market, which can be developed through exposure at younger ages and encouraging specialisation in these subjects in tertiary education.

Viet Nam

- **SOEs:** While state-owned enterprises are numerous and account for about a third of Viet Nam's GDP, they are becoming less efficient. Opening up this sector therefore offers an opportunity to raise productivity and boost FDI. A 2012 decision required government-linked companies to prepare detailed restructuring plans concentrating on their core business lines and the provision of essential public goods and services. The government is also restructuring large SOEs through divestment. Progress on privatisation and divestment has slowed, however. Additional goals for SOEs should include enhanced transparency. In addition to reforming SOEs, it should be ensured that privatisation leads to deep managerial and administrative restructuring, such as through the election of a board of directors drawn from the private sector. The government can also clarify a list of non-commercial obligations performed by SOEs and establish an arm's-length relationship with them to limit interference.

Brunei Darussalam and Singapore

Brunei Darussalam

- **FDI:** Attracting increased FDI inflows is a key element of Brunei Darussalam's long-term vision to 2035 and would help to boost economic growth and job creation. To support diversification, steps have been taken to encourage FDI in sectors outside of oil and gas, which have long dominated the economy. While inflows have declined in recent years, the sectoral diversity of these flows is improving. A greater share of employment is also found in the services sector. Several key sectors – including technology, halal products, and downstream oil and gas – have been identified as priority clusters for investment. More generally, boosting FDI in Brunei Darussalam requires the government to improve the business climate for foreign investors through reforms in policy areas, including entrepreneurship promotion and competition policy. At the same time, greater efforts are needed in promoting privatisation and PPPs.

Singapore

- **Land use:** Singapore's population is expected to increase considerably in the coming decades. This population growth can be handled with the country's limited supply of land by reclaiming land from the sea, developing reserve areas, intensifying new development and redeveloping land with low-intensity uses, such as old industrial areas and golf courses, to achieve higher productivity. The government's current master plan has shown flexibility in accommodating economic change in Singapore, such as the growth of services provided by manufacturers and the growth of new services industries. The plan allows Business 1 category companies (encompassing sectors ranging from computer software to distribution services) to use land more flexibly by easing some land-use zoning rules. Firms in this category are also allowed to take part in the pilot development of the Woodlands regional centre.

CLM

Cambodia

- **Financial education:** The expansion of financial markets in Cambodia is making financial education in the country more important. According to the results of a 2014 survey, only 18% of adults are considered financially literate in Cambodia, placing the country 135th out of 144 surveyed nations, and the lowest among all Southeast Asian countries included in the survey. Improved financial literacy could help to support the inclusive development of the financial sector. Education initiatives have been conducted sporadically, relying heavily upon contributions from the private sector and non-governmental organisations (NGOs). The issue would be better addressed with the support of the highest levels of government, the integration of lessons in classrooms and the establishment of a comprehensive national strategy for financial education.

Lao PDR

- **Education:** Lao PDR's Eighth National Socio-Economic Development Plan, covering 2016-20, targets an increase in the education budget, the development of education infrastructure and improved learning at all levels. While progress has been made in improving access to secondary education, enrolment is lower than in much of

the rest of the region, and there is a lack of trained teachers. The effectiveness of tertiary education, meanwhile, is limited by the poor alignment between what is taught in the universities and what is required in the labour market. Achieving the goal of universal access to education requires an effort to address disparities in access by income level, gender, ethnicity and location. Policy options for improving the inclusiveness of education include investments in basic education infrastructure, the provision of scholarships to poor students and non-financial assistance for those facing difficulty in reaching schools.

Myanmar

- **FDI:** Inflows of foreign capital, and the technology and knowledge flows that accompany them, will be crucial for the growth of Myanmar's economy. While openness has increased and liberalising reforms have been implemented, constraints to FDI remain. FDI inflows have not rebounded significantly since many international sanctions were lifted in 2012 and 2013, although flows are diversifying in terms of their sector composition and country of origin. The energy sector is receiving relatively less investment, and China's share has declined from 93.6% in 2011-12 to 35.1% in 2015-16. The new investment law outlines new processes for approving investments through the Myanmar Investment Commission, simplifying the review process. Regulatory constraints on FDI, an underdeveloped financial system and structural challenges such as poor infrastructure all discourage additional growth in investment. Special economic zones (SEZs) being developed under the 2014 Special Economic Zone Law are set to play a significant role in attracting investment into industry and services in Myanmar.

China and India

China

- **Connectivity and integration:** The Belt and Road Initiative is a large-scale project of economic integration, now including 65 countries representing two-thirds of the world's population and one-third of its GDP. Promoting trade and investment in Asia and Europe, it aims to enhance connectivity as well as co-ordination and harmonisation in many other areas. The initiative aligns well with the focus areas of China's current five-year plan, particularly openness, by encouraging trade integration and FDI flows; sharing in development, through enhanced infrastructure; co-ordination and reduced regulatory uncertainty; green development and co-operation on shared environmental challenges; and innovation, with countries working closer together. The initiative will also facilitate shared development and market integration within China, contributing to the process of productivity convergence already seen among provinces. A 2015 document designated 18 Chinese provinces and province-level municipalities – most of which are among those with lower service-sector productivity – as major participants in the Belt and Road Initiative.

India

- **Innovation:** Increasing innovative activities in India would contribute significantly to continued growth, and can also be directed to help address inequalities in growth and development. Spending on research and development (R&D) in India relative to GDP is lower than in most of the wealthier Emerging Asian countries. Innovation capacities have improved in the recent past, however. The number of researchers in R&D has increased faster than the population and patent applications have grown with legislative reform and participation in international agreements. The potential for innovation in meeting development needs has been recognised. Small

and medium-sized enterprises (SMEs) have a role to play in promoting inclusive participation, but tend to be less likely to implement innovations developed autonomously or by others. Worker and management skills, regulatory barriers and financing constraints are among the greatest challenges to overcome in encouraging innovation and technology use among SMEs.

Economic Outlook for Southeast Asia, China and India 2018

FOSTERING GROWTH THROUGH DIGITALISATION

The *Economic Outlook for Southeast Asia, China and India* is a bi-annual publication on regional economic growth, development and regional integration in Emerging Asia. It focuses on the economic conditions of Association of Southeast Asian Nations (ASEAN) member countries: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Viet Nam. It also addresses relevant economic issues in China and India to fully reflect economic developments in the region. Each edition of the Outlook comprises four main parts, each highlighting a particular dimension of recent economic developments in the region. The first part presents the regional economic monitor, depicting the economic outlook and macroeconomic challenges in the region. The second part takes stock of recent progress made in key aspects of regional integration. The third part consists of a special thematic chapter addressing a major issue facing the region. The 2018 edition focuses on fostering growth through digitalisation. And the fourth part includes structural policy country notes offering country-specific reviews and recommendations.

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