

Overview

Chapter 1: Macroeconomic assessment and economic outlook

Gross domestic product (GDP) growth in Emerging Asia – Southeast Asia, China and India – has held up in 2018 despite external and domestic headwinds. In Southeast Asia, economic expansion rates have remained robust although the trends by country have somewhat diverged. While China’s economic growth is gradually slowing, GDP growth in India is expected to remain robust. Overall, the resilient private consumption story in the region continues, underpinned by stability in labour market and overseas transfers in some cases. Growth in gross exports has also withstood trade policy uncertainties rather well. Several monetary authorities in the region have raised interest rates to address monetary normalisation in advanced economies as well as price and exchange rate pressures. These moves have been accompanied by policies to provide liquidity to support growth. Fiscal positions in the region are generally stable.

Overview and main findings

GDP in Emerging Asia is estimated to grow by an annual average of 6.1% in 2019-23, based on the OECD Development Centre’s *Medium Term Projection Framework* (MPF-2019) (Table 1). Domestic demand is expected to sustain its momentum, particularly household spending, as job markets are expected to remain vibrant. However, trade is facing more uncertain prospects as tariff measures broaden. Southeast Asia is forecast to continue to grow by 5.2% in 2019-23, faster than the rate posted in 2012-16. China is forecast to have an average growth of 5.9% in 2019-23, slower than its 2012-16 average of 7.3%. Investment and government spending are likely to offset substantial weakness in trade. India’s medium-term growth is projected to be 7.3%, surpassing the average of 6.9% in 2012-16.

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

	2017	2018	2019	2019-23 (average)	2012-16 (average)
ASEAN-5 countries					
Indonesia	5.1	5.2	5.2	5.3	5.3
Malaysia	5.9	4.9	4.8	4.6	5.1
Philippines	6.7	6.4	6.5	6.6	6.6
Thailand	3.9	4.5	4.1	3.7	3.4
Viet Nam	6.8	6.9	6.7	6.5	5.9
Brunei Darussalam and Singapore					
Brunei Darussalam	1.3	2.0	2.3	2.0	-1.3
Singapore	3.6	3.5	2.9	2.7	3.5
CLM countries					
Cambodia	7.0	7.0	6.9	6.9	7.1
Lao PDR	6.9	6.6	6.8	7.0	7.6
Myanmar	6.8	6.6	6.9	7.0	7.3
China and India					
China	6.9	6.6	6.3	5.9	7.3
India	6.7	7.5	7.3	7.3	6.9
Average of ASEAN-10	5.3	5.3	5.2	5.2	5.1
Average of Emerging Asia	6.5	6.6	6.3	6.1	6.8

Note: The cut-off date for data used is 21 November 2018. ASEAN and Emerging Asia growth rates are the weighted averages of the individual economies in these groupings. Data for India and Myanmar relate to fiscal years. Myanmar’s 2018 data refers to the interim 6-month period, from April 2018 to September 2018 while the 2019 data refers to the period from October 2018 to September 2019. The 2018 and 2019 projections for China, India and Indonesia are based on the OECD Economic Outlook 104 database.

Source: OECD Development Centre, *Medium-term Projection Framework* (MPF-2019).

ASEAN-5

- In the medium term, **Indonesia's** GDP growth is projected to average 5.3%, the same rate as in 2012-16. Considering the vibrant health of the labour market, private consumption should expand robustly, consistent with the trend since 2007. Continuous improvement in the investment climate bodes well for expanding the production base and job opportunities. Public debt-to-GDP ratio is arguably manageable.
- **Malaysia** is estimated to grow by 4.6% in 2019-23, 50 basis points slower than growth in 2012-16. Private consumption will likely remain strong, supported by an absorptive labour market that maintains a low unemployment rate as the labour participation rate and real wages rise.
- In the next five years through 2023, the **Philippines** is estimated to grow annually by 6.6%, equalling the rate in 2012-16. Overseas remittances will still be an important component of private consumption. The underemployment rate, which has recently risen again despite the decline in the labour participation rate, requires attention. Robust public budgetary spending should help buoy the economy, albeit the quality of spending can still be improved.
- Between 2019 and 2023, **Thailand's** economy is projected to grow 3.7% a year, up from 3.4% in 2012-16. Fixed investment should benefit from changes in key legislations in the last two years. It helps that investment climate indicators have also generally improved recently. The effective implementation of an East Economic Corridor (EEC) infrastructure will be crucial to continuing the growth momentum.
- **Viet Nam's** medium-term growth is projected to grow to 6.5% on average in 2019-23 from 5.9% in 2012-16. Exports are expected to continue to anchor economic activity, supported by the influx of foreign direct investment (FDI). Keeping the momentum going necessitates continued efforts to improve the quality of labour. The resolution of non performing loans (NPL) is also crucial.

Brunei Darussalam and Singapore

- **Brunei Darussalam's** economy is projected to rise annually by 2.0% from 2019-23, reversing the average of -1.3% in 2012-16. The current oil price level augurs well for the country's export earnings and domestic demand. Improvements in FDI inflows and private sector development will be critical.
- **Singapore** is forecast to post 2.7% GDP annual growth in the medium term, almost a percentage point slower than its average of 3.5% in 2012-16. Fixed investment is expected to pick up in line with various infrastructure plans. The steady investment inflow into information and communication technology ventures will also help. Various initiatives to retool labour force skills are critical.

CLM countries

- **Cambodia's** economy is projected to expand by 6.9% in the next five years until 2023, more moderate than the 7.1% growth in 2012-16. The steady influx of foreign capital and the country's involvement in multilateral infrastructure projects bode well for infrastructure, exports and the job market. Capital market development ought to be pursued.
- **Lao PDR's** expected economic growth rate of 7.0% annually in 2019-23 will be down from 7.6% in 2012-16. The large energy-related deals, special economic zones and

broader fiscal incentives are engines for growth. Policies and management related to hydroelectricity would be key for sustainable growth.

- **Myanmar's** GDP growth is estimated to average 7.0% annually in 2019-23, marginally slower than the 7.3% growth in 2012-16. Planned transportation investment, the gradual improvement in investment climate indices and recent investment liberalisation measures should strengthen the economy in the coming years. Managing inflation and resolving banking sector fragilities are challenges.

China and India

- **China** is projected to register 5.9% average annual GDP growth in 2019-23, down from 7.3% in 2012-16. The willingness of the national government to stimulate domestic activity amid trade tensions and the resurgence of investment are reassuring signals for domestic demand. Improving the relatively high level of corporate debt-to-GDP ratio and wealth inequality are challenges.
- The economy of **India** is forecast to grow by 7.3% in the medium term, up from 6.9% in 2012-16. Labour market conditions point to solid growth in private consumption, although rising inflation and interest rates can be drags. The push for consolidation will most likely limit the government's spending flexibility as well. How infrastructure projects are carried out will be key. Maintaining banking sector health is another challenge.

Other key points of the economic outlook and assessment

- Inflation trends remain divergent. Inflation is on an uptrend in China, the Philippines, Thailand and CLM countries while it is relatively stable or even declining in other Emerging Asian countries. The increase in global oil prices and domestic factors affect these trends, although the moderation of global food prices provides some respite.
- Several monetary authorities in the region have raised interest rates to address monetary normalisation in advanced economies as well as price and exchange rate pressures. Some of them have introduced other liquidity measures to support growth. Meanwhile, the banking systems are generally stable, albeit asset quality issues persist.
- Overall, the external positions of Emerging Asia are sound. Trade performance is relatively stable in Emerging Asia amid rising protectionism while regional trade agreements are progressing. FDI inflows into Emerging Asia remain positive.
- A number of economies in the region look to rein in their respective fiscal deficit ratios in the near term, though fiscal positions in the region are generally stable. The persistence of deficits in current account and fiscal positions in some countries could raise a concern to growth momentum.

Risks and challenges to the outlook

Growth projections in the near and medium term are favourable for Emerging Asia. If countries are to maintain their robust growth momentum, however, appropriate policies are needed to:

- maximise the opportunities and mitigate the risks of financial technology;
- strengthen export performance amidst rising protectionism;
- mitigate the risks of natural disasters.

In addition, the pace of monetary policy in advanced economies, along with geopolitical tensions and the trends in global oil prices, need to be carefully monitored.

Maximising opportunities and mitigating the risks of financial technology

The growing influence of technology in financial services (Fintech) in Emerging Asia carries with it economic opportunities through deeper financial inclusion. But it can also be an economic pitfall if the regulatory environment fails to appropriately guide future developments in the sector. National authorities in Emerging Asia are aware of this trade-off. Several national and cross-border initiatives have been launched, both by public and private institutions. However, regulatory progress has been uneven, and policy gaps related to potential risks remain.

In Southeast Asia, Singapore is leading the way in raising capital, market penetration and degree of sophistication. Other ASEAN-5 economies are slowly catching up. Target market coverage has gradually expanded from enterprises involved in e-commerce to farmers, social housing groups, students and even bank clients seeking to restructure debt. Fintech subindustries have also widened in the region (Table 2). In Indonesia, Malaysia, Singapore and Brunei Darussalam, sharia-compliant or Islamic Fintech services have gained investors' attention.

Table 2. Availability of Fintech services in Emerging Asia

Country	Remittance	Mobile payment/Domestic money transfer (DMT)	Mobile Banking	Insurtech	Crowdfunding	P2P Lending	Credit Scoring	Accounting and POS System	Wealth management	Comparison of loans and other financial products	Cryptocurrency payments	Cryptocurrency exchange	Bank-Fintech collaboration
Brunei Darussalam	nci	X	X	nci	X	nci	nci	nci	nci	nci	X	X	X
Cambodia	X	X	X	X	X	X	X	X	nci	X	X	X	X
China	X	X	X	X	X	X	X	X	X	X	nci	X	X
India	X	X	X	X	X	X	X	X	X	X	X	X	X
Indonesia	X	X	X	X	X	X	X	X	X	X	nci	X	X
Lao PDR	nci	X	nci	nci	nci	nci	nci	nci	nci	nci	nci	X	X
Malaysia	X	X	X	X	X	X	X	X	X	X	X	X	X
Myanmar	nci	X	X	nci	nci	nci	nci	nci	nci	nci	nci	X	X
Philippines	X	X	X	X	X	X	X	X	X	X	X	X	X
Singapore	X	X	X	X	X	X	X	X	X	X	X	X	X
Thailand	X	X	X	X	X	X	X	X	X	X	X	X	X
Viet Nam	X	X	X	X	X	X	X	X	X	X	nci	X	X

Note: The table only shows the availability of Fintech services in Emerging Asian economies and does not pass judgement on the depth of Fintech markets or the degree of sophistication of the services offered, which vary widely across countries. "X" means existent; "nci" means no clear information. None of the countries considers any cryptocurrency as legal tender. Participation of financial institutions in cryptocurrency exchange is heavily regulated in Cambodia, China and India. Data are as of 30 September 2018.

Source: OECD Development Centre compilation based on various sources.

Similarly, supervision and regulations have broadened in all Emerging Asian countries but vary in scope and depth (Table 3). Central banks have mainly opted for an overview role in Fintech matters. Many of them have set up separate entities under their supervision to cover issues in this area. In some countries, the ministry of economy, the ministry of telecommunications, the securities commission and the insurance commission also support the central bank, essentially forming an inter-agency supervisory body.

Fintech can be a source of financial system vulnerabilities. Fintech firms participating in lending businesses in the region are arguably not yet systemically important based on capitalisation. However, the steady inflow of capital and sizeable expansion of operations

every year might change the picture in a few years. Policy areas requiring attention include regulatory risk management, financial literacy and cybersecurity.

Table 3. Fintech-related regulations in Emerging Asia

Country	Formal regulatory sandbox	CP: General framework	CP: E-commerce (Redress)	CP and IP: Fintech lending (Redress)	P2P: Licensing	P2P: Risk regulation	Data protection	Cyber security	National digital identity verification	AML/CFT	Cryptocurrency: Platform licensing	Cryptocurrency: Risk regulation
Brunei Darussalam	X	X	X	nci	nci	nci	X	nci	nci	X	nci	nci
Cambodia	nci	L	L	nci	nci	nci	nci	nci	nci	X	X	nci
China	X	X	X	X	X	X	X	X	X	X	nci	nci
India	X	X	X	X	X	X	X	X	X	X	X	nci
Indonesia	X	X	X	L	X	X	X	X	nci	X	X	nci
Lao PDR	nci	X	X	nci	nci	nci	X	nci	nci	X	nci	nci
Malaysia	X	X	X	X	X	X	X	X	L	X	X	nci
Myanmar	nci	X	L	nci	nci	nci	X	nci	nci	X	nci	nci
Philippines	X	X	X	nci	nci	nci	X	X	nci	X	X	nci
Singapore	X	X	X	X	X	X	X	X	X	X	X	nci
Thailand	X	X	X	X	nci	nci	L	L	L	X	X	nci
Viet Nam	nci	X	X	nci	nci	nci	X	X	nci	X	nci	nci

Note: The table only shows the availability of Fintech regulations in Emerging Asian economies and does not pass judgement on coverage, which varies widely across countries. "X" means existent. "nci" means no clear information or non-existent. "L" means being legislated/developed or under study. "CP" means consumer protection. "IP" means investor protection. "P2P" means peer-to-peer. "AML/CFT" means Anti-Money Laundering/Combating the Financing of Terrorism. In China, there is no national regulatory sandbox. However, some local government units like Ganzhou, Jiangxi have established their own mechanisms. In India, the central government is still preparing for a national regulatory sandbox but the state of Maharashtra has launched its own sandbox. In the Philippines, BSP has established internal mechanisms following a "test and learn" approach to financial innovations. Data are as of 14 September 2018.

Source: OECD Development Centre compilation based on various sources.

Alternative lending platforms have features akin to shadow banking. This can incentivise risk taking. One possible problem is a mismatch between loans and committed investment duration, which can lead to higher credit and default risks. Licensing protocols are good, but surveillance could be carried out more meaningfully with more regular and detailed reporting requirements. The possibility that Fintech firms will be used as tools for regulatory arbitrage cannot be discounted. Proper disclosure of equity and debt investment as well as management participation by traditional financial institutions in Fintech companies should be considered. Clarity of financial institutions' participation in the cryptocurrency sphere is just as vital.

Enhancing financial literacy can help maximise the use of Fintech products as well as manage risk at the household level. In the same way, deeper Fintech penetration can improve financial literacy, as more people get involved in the industry. Many Emerging Asian economies have national strategies for financial education, which is a step in the right direction. Nonetheless, the data suggest that there is ample room to improve strategies to advance these plans.

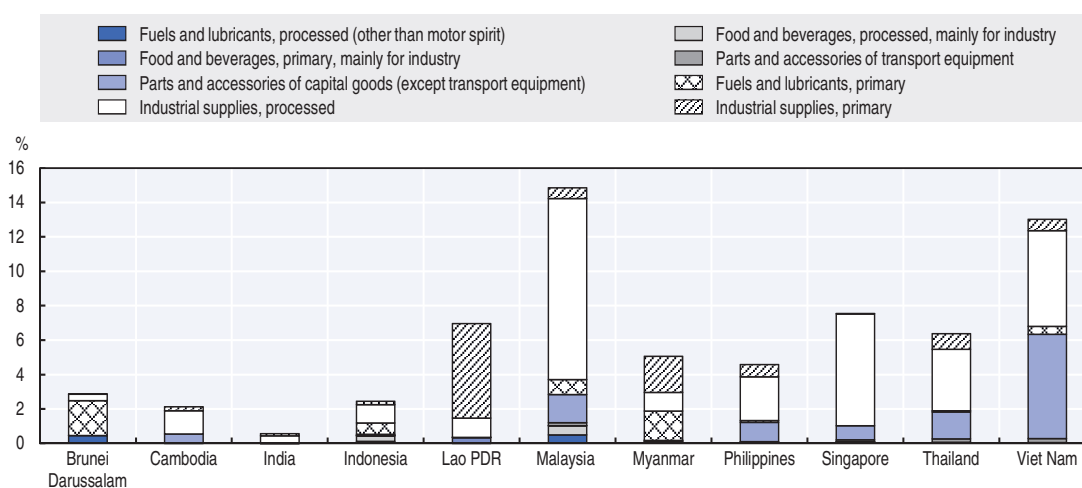
Cybersecurity weakness is a threat to the potential of Fintech. Cybersecurity, being a nonpoint source issue, requires cross-border coordination. This is especially important because some countries are still building their frameworks at the national level. Key

challenges are financial resources and the ability of the public sector to acquire the talent needed to build and maintain the needed cybersecurity systems. On the legal front, one source of friction is the difficulty in balancing censorship rules and the free flow of legitimate information. Some countries have institutional credibility issues. Additionally, much can be done to enhance AML/CFT (Anti-money laundering/Combating the financing of terrorism) measures. Even though statutes pertaining to AML/CFT are well developed and cross-border institutional arrangements exist, room remains to enhance legitimate surveillance, monitoring and dispute resolution frameworks.

Strengthening export performance amidst rising protectionism

At the beginning of the ongoing trade war between two large economies, bilateral trade between China and ASEAN economies reached USD 232.64 billion in the first five months of this year, an increase of 18.9% year-on-year. Last year, trade hit a record high of USD 514.8 billion. For now at least, trade data have yet to show a significant impact from the trade war. This may change as the tariff hikes have been extended to USD 200 billion worth of US goods imports from China. The rate as of September 2018 is 10%. This rate will be raised to 25% in January 2019.

Figure 1. Intermediate goods exports to China, 2017
Percentage of GDP



Note: The calculations made use of broad economic categories classification.

Source: OECD Development Centre calculations based on UN Comtrade.

StatLink <https://doi.org/10.1787/888933886246>

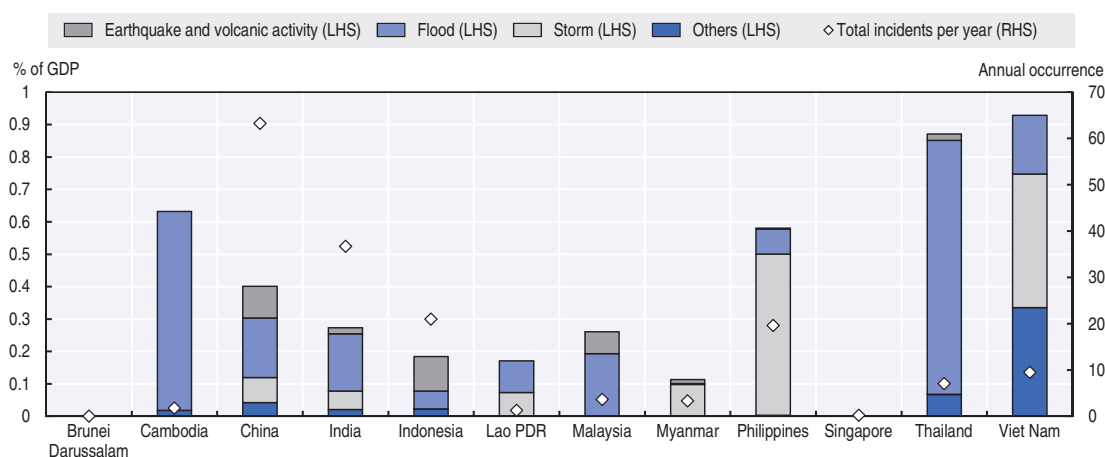
Figure 1 shows the importance of intermediate goods exports to China with respect to GDP for Emerging Asia, broken down by type. As export-related activity in China slows down, Malaysia, Viet Nam and Singapore are most at risk through Global Value Chains (GVCs), since intermediate goods exports to China represent 14.9%, 13.0% and 7.5% of their respective GDPs. It is also important to underline the composition of intermediate goods exports. Viet Nam, as a large supplier of inputs for the production of capital goods to China, might experience a delayed impact in the event of a China-United States exports slowdown.

Mitigating the downsides of broadening trade protectionism requires continued progress in structural reforms. These include making investments easier, a better logistics infrastructure and more predictability in the regulatory environment. Progress on both existing and pending free trade agreements will be just as crucial.

Mitigating natural disaster risks

Natural disasters pose a serious threat to Emerging Asia. All countries of the region are affected by calamities, although costs vary substantially depending on the type and size of the disaster. Floods are the most significant calamity, both in cost and frequency, but at the country level the picture is different. The Philippines and Viet Nam are principally victims of storms, and Indonesia of earthquakes due to their geographic locations. For most other countries in the region, floods are the most important threat (Figure 2).

Figure 2. Average annual damage as percentage of GDP and average annual occurrence of natural disasters, 1998-2018



Source: OECD Development Centre calculations based on Centre for Research on the Epidemiology of Disasters Emergency Events Database and World Bank World Development Indicators Database.

StatLink <https://doi.org/10.1787/888933886265>

In addition to high human costs, natural disasters often inflict high economic costs by damaging infrastructure, physical capital, inventories, agricultural and natural resources, and by disrupting normal economic activity. The medium- to long-term impact on growth generally depends on the speed and quality of the rehabilitation of affected sectors.

The threat and impact of natural disasters is uneven across sectors and geographic agglomerations. For instance, damage to the agriculture sector, one of the most vulnerable sectors, entails a risk to food security in many cases. Additionally, the social impact can be substantial because the sector employs a large share of low-income households in many countries in the region. This often far exceeds the estimated value of damage based on crop and property values. Small entrepreneurs are particularly exposed to risks associated with natural disasters and they usually lack the financial capacity to rebuild their livelihoods after extreme weather events. Many urban areas in Emerging Asia are similarly susceptible to multi-hazard risks. These are growing rapidly, particularly in fragile areas with inadequate infrastructure and dense populations.

Several multilateral arrangements to improve resilience to natural disasters have been launched in recent years, including the Sendai Framework for Disaster Risk Reduction 2015-30, the Paris Agreement on Climate Change and the New Urban Agenda. Fostering resiliency requires taking a long-term and comprehensive view of preparedness, disaster response, and rebuilding. It also needs co-ordinated risk assessment, capacity building and planning that takes into account ground conditions.

After every large-scale natural disaster, finance and the quality of rehabilitation projects are major issues. Disaster risk funds are available in some countries like India,

Malaysia and the Philippines. National governments also contribute emergency funds and sometimes come up with supplementary budgets. An important goal would be to develop market-based instruments to address high-severity and low-frequency events. Insurance, covering a small share of losses from disasters in much of the region, may be useful in cases of disasters damaging wealth. But it is often not immediately available.

Chapter 2: Towards smart urban transportation

Rapid urbanisation is creating opportunities for economic growth and development in Emerging Asia. As elsewhere around the world, approaches to these challenges are being used as a part of smart city initiatives. In addition, supportive efforts are being made at the regional level. Amongst the strategic objectives for achieving sustainable infrastructure, outlined in the Master Plan on ASEAN Connectivity 2025, is the increased use of smart urbanisation models. A total of 26 pilot smart cities have been selected from the ten ASEAN Member States for inclusion in the ASEAN Smart Cities Network (ASCN), a collaborative platform for smart and sustainable urban development through the use of technology.

Traffic congestion is one of the key negative externalities of urban agglomeration. Urban population growth, rising incomes and limited transportation alternatives have all contributed to growing automobile use in the region. Congestion is a considerable challenge in many of the region's cities, and travel time along selected major roads in five large cities (Jakarta, Kuala Lumpur, Metro Manila, Singapore and Bangkok) is generally quite high during peak hours. Some cities experience congestion throughout the day (Figure 3). This congestion imposes a range of economic, environmental and social costs. Policy options to improve urban transportation systems include developing efficient public transportation systems, implementing pricing and other mechanisms to affect vehicle ownership and use, incorporating new technologies in managing transportation challenges, adopting new modes of work, and reforming land use and urban planning.

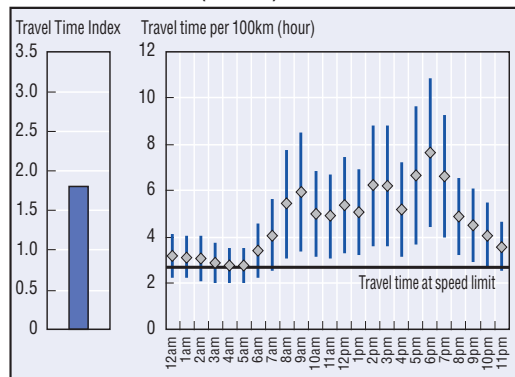
Public transportation systems in the region will need to be upgraded and expanded

In replacing the use of private motor vehicles, publicly available transportation systems are critical components of efficient urban transportation systems. Public transportation accounts for a large share of travel in many Emerging Asian cities. For example, bus and bus rapid transit (BRT) account for 36% of trips to work in Hyderabad, 35% in Bangalore and 35% in Guangzhou, and rail services account for 45% in Mumbai and 39% in Pune. Supportive policies can lead to further growth in public transportation use in absolute terms and as a share of total travel in the region.

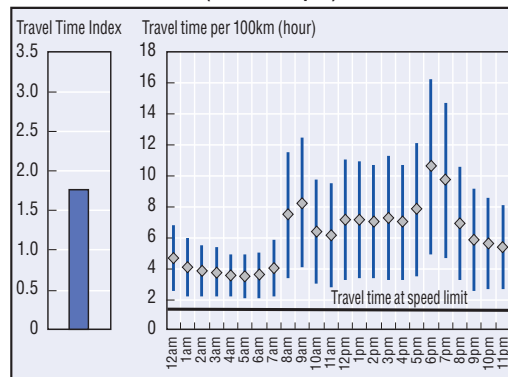
Institutional reforms may be needed to realise needed changes in public transportation systems. In many countries in the region, and in Southeast Asia in particular, public transportation organisations and local authorities lack sufficient powers and capacities to effectively manage urban transportation issues. Combined metropolitan transport authorities may be the answer to managing public transportation in larger urban areas. Regionally, initiatives such as those under the Master Plan on ASEAN Connectivity 2025, offer co-operation for the development of sustainable urbanisation strategies in ASEAN cities.

Figure 3. Traffic congestion for selected roads of Southeast Asian cities, 2018

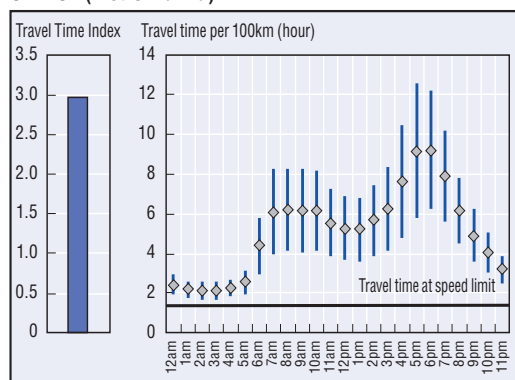
A. Sudirman-Thamrin (Jakarta)



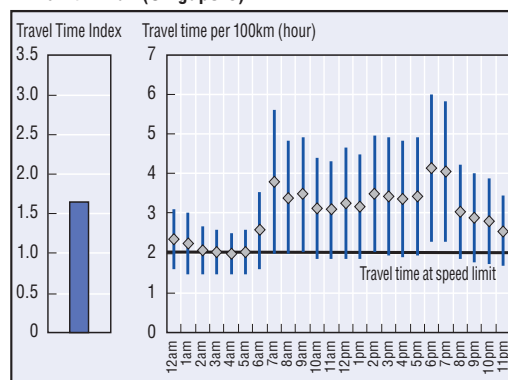
B. Jalan Sultan Ismail (Kuala Lumpur)



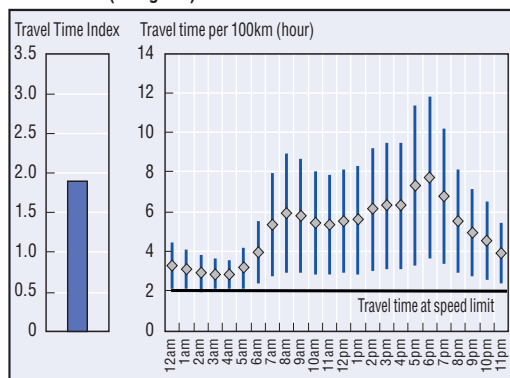
C. EDSA (Metro Manila)



D. Bukit Timah (Singapore)



E. Rama IV (Bangkok)



Note: Travel Time Index is defined as peak hour travel time divided by free-flow hour travel time, where 1=no congestion and higher values indicate worse traffic. Free-flow hour is set to be midnight-12 a.m. for all cities without loss of generality. Peak hours are 7 a.m.-10 a.m. and 4 p.m.-8 p.m. for the road in Jakarta, 8 a.m.-10 a.m. and 6 p.m.-8 p.m. for the road in Kuala Lumpur, 7 a.m.-10 a.m., and 4 p.m.-8 p.m. for the road in Metro Manila, 8 a.m.-9 a.m. and 6 p.m.-7 p.m. for the road in Singapore, and 7 a.m.-10 a.m. and 5 p.m.-8 p.m. for the road in Bangkok. In travel time figures, markers refer to average travel time at a specific hour in the day while the vertical bars represent the ranges of travel time. Speed limits are set to be 40 km/h on the road in Jakarta, 60 km/h on the road in Malaysia, 60 km/h on the road in Metro Manila, 50 km/h on the road in Singapore and 50 km/h on the road in Bangkok. Traffic congestion data are based either on the entire specified road if possible or a selected representative segment of a specified road. Data are not necessarily comparable across the five areas shown above.

Source: OECD Development Centre calculations based on data from Google Maps (accessed on 24 September 2018).

StatLink <https://doi.org/10.1787/888933886284>

Financially sustainable systems may take advantage of new forms of financing for their operations, development, expansion and upgrading. Public and private funds, along with Official Development Assistance, all have roles to play in financing sustainable investments in public transportation. User fares also contribute to capital and operating costs, although these are often offset by subsidies. For example, Singapore’s bus network costs USD 742.8 million (in 2007 PPP) to operate and collects USD 631.9 million in fares. Fares need to balance fiscal sustainability and the goal of making public transportation more attractive or accessible, especially for lower-income users.

Cities must also decide on the appropriate modes of public transportation and how best to facilitate intermodal travel. Buses are common to public transportation systems (Table 4). High-speed and high-capacity mass transit options include metros, which use tunnels or other physically separated infrastructure to provide high-frequency service, and other light rail systems, such as streetcars that operate at surface level with segregated routes or rights-of-way at intersections. BRT systems could increase passenger capacity (compared to buses in regular traffic) by operating at surface level with exclusive rights-of-way. While metro and light rail systems can be cost-effective in large cities due to their high capacities, BRT systems tend to be the least expensive to develop. Integration between different modes of public transportation – as well as with other modes of transportation, including non-motorised transportation – is needed to attract users and increase the system’s efficiency. This requires the consideration of physical infrastructure, fare payment, routes, information for users, and institutions and management.

Table 4. Publicly accessible transportation modes in selected Emerging Asian cities

City	Bus	BRT	Metro and light rail
Bandar Seri Begawan, Brunei Darussalam	✓		
Phnom Penh, Cambodia	✓		
Jakarta, Indonesia*	✓	✓	
Vientiane, Lao PDR	✓		
Kuala Lumpur, Malaysia	✓		✓
Yangon, Myanmar	✓		
Metro Manila, Philippines	✓		✓
Singapore, Singapore	✓		✓
Bangkok, Thailand	✓	✓	✓
Hanoi, Viet Nam*	✓	✓	
Ho Chi Minh City, Viet Nam*	✓		
Beijing, China	✓	✓	✓
Shanghai, China	✓		✓
Delhi, India	✓		✓
Mumbai, India	✓		✓

Note: (*) Metro or light rail system currently under construction.

Source: OECD Development Centre compilation, using national sources.

Pricing and other policies can affect vehicle ownership and use

Along with improved access to alternative modes of transportation, policies to affect vehicle ownership and use can help manage demand for private transportation (Table 5). These policies may be either price-based or non-priced based.

Table 5. Examples of vehicle ownership and use policies

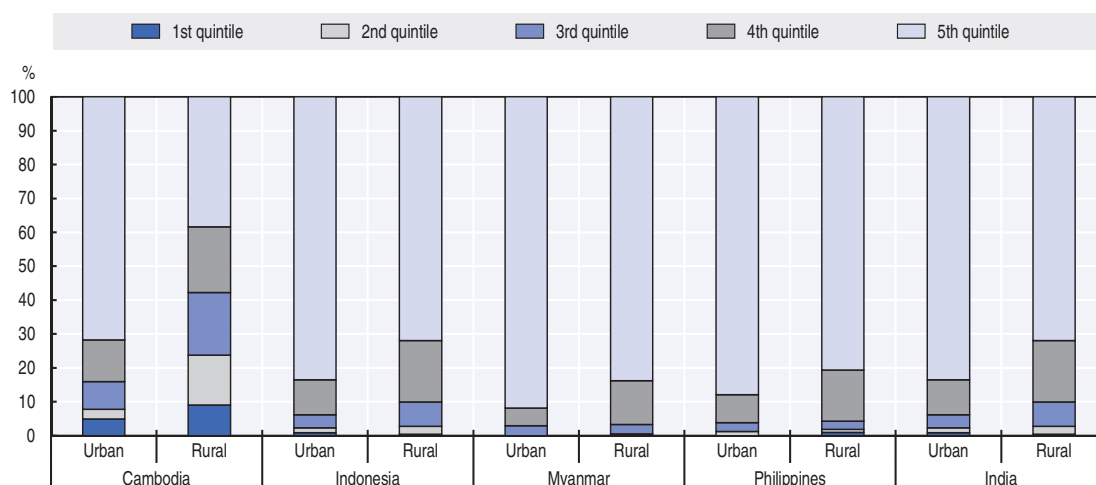
	Price-based	Non-price-based
Vehicle ownership	Vehicle purchase taxes Recurring taxes and charges	Licence quotas
Vehicle use	Fuel taxes and subsidies Road use pricing and parking fees	Road rationing

Source: OECD Development Centre compilation.

Vehicle ownership has increased rapidly in many Emerging Asian cities. The estimated number of motor vehicles in use increased between 2005 and 2015 in Emerging Asia (excluding the CLM countries, for which data were not available) by an average of 13.2% per year. Many of the region's motor vehicles are used in cities, with increasing use accompanying urban population growth. Including both two- and four-wheeled motor vehicles, there are 10.7 million registered vehicles in Delhi, 9.7 million registered vehicles in Bangkok and 5.4 million registered vehicles in Chennai. Increases in vehicle ownership look set to continue in the region as incomes rise.


High income elasticities of demand for motor vehicles imply that price-based mechanisms need to be substantial in size to have a significant effect on vehicle ownership, with emphasis on the wealthier social segments. Car owners in Emerging Asia's urban areas tend to be amongst the wealthiest, and the differences in rates of ownership by household wealth category tend to be greater than in rural areas, based on data from Cambodia, Indonesia, Myanmar, the Philippines and India (Figure 4).

Figure 4. Households owning cars by wealth quintile in selected Emerging Asian countries



Notes: Results are taken from household surveys from Cambodia (2014), Indonesia (2012), Myanmar (2015/16), the Philippines (2013) and India (2015/16). Wealth indices are calculated using information on household ownership of selected assets, housing construction materials, and access to water and sanitation facilities.

Source: OECD Development Centre's calculations, using USAID (2012), Indonesia: Standard DHS, 2012; USAID (2013), Philippines: Standard DHS, 2013; USAID (2014), Cambodia: Standard DHS, 2014; USAID (2016), Myanmar: Standard DHS, 2015-16; USAID (2016), India: Standard DHS, 2015-16.

StatLink  <https://doi.org/10.1787/888933886303>

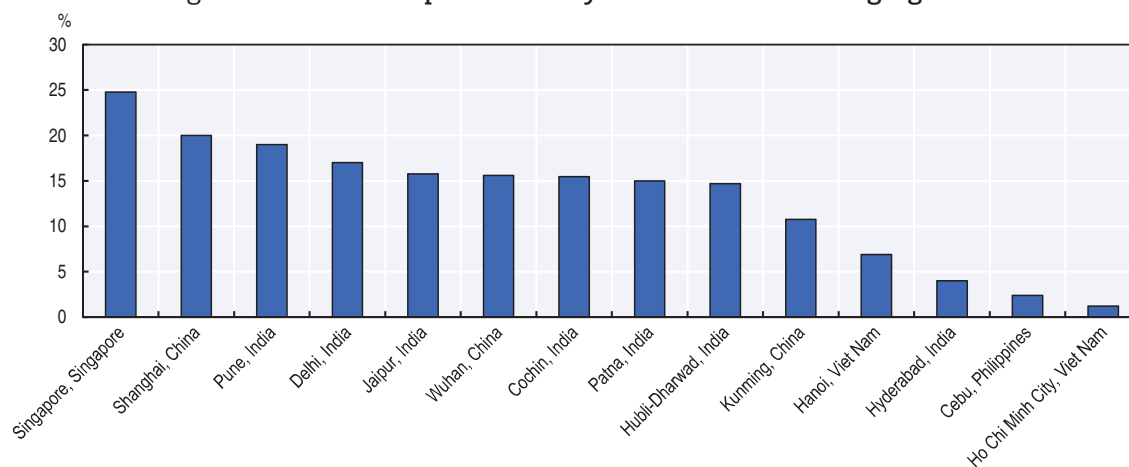
Price-based mechanisms may be imposed at the time of purchase, on a recurring basis or both. Current excise taxes and similar charges on the sale of motor vehicles in Emerging Asia are applied on an *ad valorem* basis. These rates vary in each country with factors such as the vehicle type, seating capacity, or price range, as well as the number of cars already registered to the owner. All Emerging Asian countries impose some form


of recurring tax on the ownership of motor vehicles, typically with lower rates for two-wheeled vehicles, though they differ in their form, based on vehicle weight, engine capacity, value, use and other characteristics. Regular vehicle inspections, to test the roadworthiness and emissions of older vehicles, also raise the cost of holding vehicles. Total tax revenue from motor vehicles and transport represented, on average, 0.44% of GDP in OECD member countries in 2013, below the 0.52% in China and 0.45% in India, but above the 0.24% in Malaysia and the 0.13% in the Philippines.

In addition to taxes, the purchase of new cars by residents of cities may be explicitly limited through quota systems, or the limited distribution of car registrations through auctions and lotteries. Licences and other quotas in different forms are used to restrict car ownership in Singapore, Shanghai, Beijing, Guangzhou, Hangzhou, Shenzhen and Tianjin.

Vehicle use policies are used in the region to affect incentives for driving generally and in specific areas, such as cities and their central districts. Since they can be used to more precisely target use in the busiest areas and times of day, policies to reduce the unnecessary use of vehicles may be a useful alternative to pricing and other policies discouraging vehicle ownership in addressing urban traffic congestion. The extent of car use in urban transportation varies considerably across Emerging Asian cities. In Singapore and Shanghai, 24.8% and 20.0% of trips to work are made by car (Figure 5). In Ho Chi Minh City, however, only 1.2% of trips to work are made by car, although motorcycles are used for 61.8% of such journeys. Distances travelled vary considerably between cities as well; the length of the average trip by car is 14.2 kilometres in Mumbai, but only 3.1 kilometres in Bhopal.

Figure 5. Share of trips to work by car in selected Emerging Asian cities



Source: World Bank (2014), *Urban Transport Data Analysis Tool*.
 StatLink  <https://doi.org/10.1787/888933886322>

Fuel prices, which can be a major factor affecting individuals' decisions on the use of private vehicles, vary considerably across the region. The pump price per litre of diesel varies across the region, from USD 0.22 in Brunei Darussalam to USD 0.81 in China and India, while that of gasoline ranges between USD 0.37 in Brunei Darussalam to USD 1.25 in Singapore. Fuel excise taxes are applied in all Emerging Asian countries except Brunei Darussalam, Indonesia and Viet Nam. Fuel subsidies, while considerable in several Emerging Asian countries, have been reduced or eliminated in recent reforms, though rising global oil prices pose a challenge.

Taxes and charges on road use can be more targeted ways of addressing congestion in urban areas. Congestion pricing schemes, for example, charge drivers in high-use areas, often with rates that are higher at times of peak demand. While road and bridge

tolls, along with express toll lanes, are already used in much of the region to pay for infrastructure and to manage traffic flows, cordon charges to reduce traffic congestion in urban areas are less common. Singapore is a notable exception; it has used cordon charges in its current Electronic Road Pricing (ERP) scheme since 1998, when it replaced the Area Licensing Scheme (ALS) introduced in 1975. The experience of Singapore and other cities around the world using cordon charges suggests that they are successful in reducing the traffic volume and improving traffic speeds in the areas that they cover.

Other types of policies have also been used in the region. Vehicle use in cities can also be targeted through policies on street parking charges and the use of private parking facilities. Some cities use non-price-based initiatives or rules for rationing road access amongst drivers, such as the implementation of high occupancy vehicle lanes and similar restrictions. In a stricter example, under the Three-in-One policy, vehicles in central Jakarta were required to have at least two passengers in addition to the driver during peak hours until the policy was abandoned in 2016. Road use may also be rationed over time, such as by allowing cars with licence plates ending in odd and even numbers the right to drive on alternate days, which is typically a response to periods of high pollution.

New technologies offer tools for increasing efficiencies in urban transportation

Smart city initiatives can be applied in a range of policy areas, including transportation, to improve efficiency. The benefits of combining the use of technology and data are evident in traffic management, in line with efforts to build intelligent transport systems (ITS).

Public transportation systems may be limited by their lack of flexibility, which can be addressed through the use of new technologies. Low-cost and widespread sensors, the growth of data storage, and improvements in analytical capacities can be used in assessing long-term trends to inform future decisions on system design and operations and in the management of day-to-day issues. Information on transportation options for travellers can be made more accessible through personal devices. Innovations in mobility outside the sector also present opportunities for public transportation systems, as they can co-operate with other transportation providers, including taxis and, increasingly, ride-sourcing and ride-sharing services. In addition to making personal transportation more efficient, improvements to urban transportation systems can improve the efficiency of cities in general by reducing costs involved in delivery and logistics services.

Successful ITS policies are people-oriented and based on user demand. They are inclusive, facilitating participation by lower-income individuals and other marginalised groups. They are open to use by new arrivals and visitors. The selection of appropriate technologies is also important; mature and established technologies may be the best option in many cases, although consideration should also be given to the interactions between technologies and their future developments. Implementing these innovations requires leadership at local and higher levels, along with the involvement of a range of stakeholders. Cities can also learn from the experiences of others.

Examples from inside Emerging Asia and from OECD member countries illustrate the many ways in which ITS policies have been applied to improve urban transportation. Technology use in traffic management has been common in Singapore since the early 1980s. Japan's Universal Traffic Management System (UTMS), established in 1993, provides additional examples of technology-based traffic management mechanisms. In other OECD member countries, technological innovations have been used in cities to connect bus and taxi systems, improve real-time access to traffic information, increase the ease of access to various modes of transportation, make traffic signals responsive to current conditions, and facilitate toll payments.

Fostering flexible work arrangements can help alleviate congestion

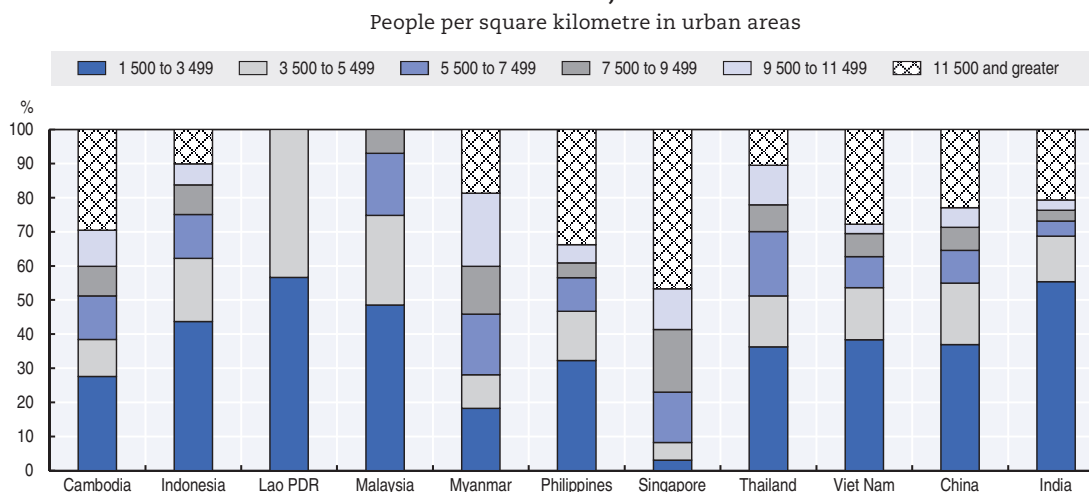
Since commuters travelling to and from work account for much of the traffic volume during peak hours, the use of flexible work arrangements (FWAs) can help reduce traffic congestion. Forms of FWA relevant to managing transportation demand include flexibility in setting work-day start and end times, part-time work, compressed work weeks, telecommuting and working from home, and job sharing. Currently, FWAs are not widely used in Emerging Asian countries, although flexible working hours are the most common arrangement offered across Asia amongst firms that do make these arrangements available to staff. In addition to the social benefits, FWAs can help firms to attract and retain staff who see these as improving work-life balance.

The wider use of FWAs in the region is constrained by the nature of work, insufficient infrastructure, including Internet access and speed, and cultural factors. A lack of clear frameworks on FWAs may also discourage their use. Most Emerging Asian governments have not taken clear steps to foster the use of FWAs, with leadership instead coming from the private sector. The Philippines and Singapore are notable exceptions to this; both countries have recently introduced policies and initiatives designed to encourage the use of FWAs. In the Philippines, the Telecommuting Act, which passed final reading in the House of Representatives in May 2018, requires that workers telecommuting be covered by no less than the minimum labour standards under law and that firms offer similar treatment to these workers as to those working on the employers' premises. In Singapore, the Tripartite Standard on Flexible Work Arrangements establishes voluntary standards for employers introducing FWAs.

The design of cities affects transportation demand

Over the longer term, urban planning can have significant effects on cities' transportation systems. While compact cities can create other social, environmental and economic challenges, dense urban areas limit travel distances, reduce car dependence and facilitate the development of public transport systems. Asian cities have tended to have higher population densities than Australian, New Zealander, American or Western European cities. However, urban population density varies considerably within and across countries in the region, and Asia's highly-populated cities take up considerable land area (Figure 6).

Figure 6. Share of total urban population by density in Emerging Asian countries, 2015



Note: Using gridded data covering areas of approximately five square kilometres, areas with population densities of at least 1 500 people per square kilometre are defined as urban, following OECD (2013).

Source: OECD Development Centre calculations based on CIESIN (2017), *Gridded Population of the World, Version 4*.

StatLink  <https://doi.org/10.1787/888933886341>

Flexible, mixed-use zoning can also reduce transportation demand in cities. Less segregation between land uses reduces travel distances between home, work and other destinations. Similarly, transit-oriented development strategies can be employed to reduce travel distances. An example is the concentration of various functions of the city along public transit corridors. Density credits and other incentives for developers and the overhaul of zoning codes help implement these strategies.

Urbanisation should also be balanced across multiple areas to avoid cities growing past their period of increased returns. Some governments respond to urban congestion by moving government functions from large cities, as in the relocation of government administrative functions from Kuala Lumpur to Putrajaya in 1999 and the relocation of the capital of Myanmar from Yangon to Nay Pyi Taw in 2005. The potential exists for diversified urban development across the large cities of several countries in the region. Urban sprawl is a related challenge that can be limited by developing transportation systems, implementing land-use policies that encourage increased density, and fostering economic linkages between large- and medium-sized cities to create sites of further growth.

Chapter 3: Structural policy country notes

The *Outlook's* country notes highlight structural policy challenges in Emerging Asian countries, covering policy areas including education and training, tourism, financial inclusion, taxation, digitalisation, the Eastern Economic Corridor, small- and medium-sized enterprises (SMEs), energy, innovation, and FDI (Table 6).

Table 6. Structural policy challenges in Emerging Asian countries

Country	Topic	Focus
ASEAN-5		
Indonesia	Financial inclusion	Leveraging financial technology to bring banking services closer to the people
Malaysia	Taxation	Reintroducing a sales and services tax after the scrapping of the goods and services tax
Philippines	Digitalisation	Coping with the risk of job automation in the offshoring and outsourcing industry
Thailand	Eastern Economic Corridor	Developing human capital to strengthen the Eastern Economic Corridor
Viet Nam	Education and training	Improving access to secondary education as a driver for social equality and social mobility
Brunei Darussalam and Singapore		
Brunei Darussalam	SMEs	Strengthening local small and medium-sized enterprises
Singapore	Education and training	Enhancing strategies for lifelong learning programmes
CLM		
Cambodia	Tourism	Addressing challenges in developing ecotourism
Lao PDR	Energy	Diversifying Lao PDR's energy portfolio by developing solar power
Myanmar	Tourism	Fostering the inclusive development of the travel and tourism sector
China and India		
China	Innovation	Making innovation a new driver of growth
India	FDI	Continuing FDI reforms and develop opportunities for technology transfer

Source: OECD Development Centre.

ASEAN-5

Indonesia

Financial inclusion: Financial technologies offer new tools for increasing financial inclusion in Indonesia, where many lack access to traditional banking services. Financial literacy and awareness, ICT (Information and communications technology) and related infrastructure are challenges for Fintech's growth. While the development of regulation for the sector is at an early stage, actions are being taken by the financial services authority, Otoritas Jasa Keuangan (OJK) and Bank Indonesia. Going forward, it will be crucial that the work of multiple regulatory bodies is well co-ordinated. Banks are increasingly investing in the use of new technologies, though Fintech also widens potential sources of financing.

Malaysia

Taxation: Following its election in May 2018, the new government of Malaysia announced plans to abolish the goods and services tax, which had come into force in April 2015. The government is expected to introduce other fiscal measures to make up for some of the fall in revenue and to support the reinstatement of the petrol and diesel subsidies. A bill restoring the sales and services tax, which is only imposed when goods are manufactured or imported or when specific services are provided, was passed by the legislature in August 2018. Ongoing structural and administrative reforms are being pursued to address the increasing national debt.

Philippines

Digitalisation: While the information technology and business-process management sector has contributed significantly to employment in the Philippines, automation is likely to affect job creation in the sector in the future. Although the ultimate extent of effects of automation on total employment are unclear, automation may reduce demand for outsourcing of business functions and could increase the focus on innovation and creativity. Most employment in the sector in the Philippines is concentrated on the management of customer relationships, which tend to be susceptible to automation, although employment has remained robust thus far. Efforts are being made to raise skill levels in the sector, but scope remains ample for policy support; existing programmes can be expanded, funding allocated more efficiently, reforms made to formal education and infrastructure quality upgraded.

Thailand

Eastern Economic Corridor: As part of its actions towards Thailand 4.0, the country is developing its eastern provinces with the government's Eastern Economic Corridor initiative (EEC) to become a leading economic zone within ASEAN, as well as a hub for technological manufacturing and services. While a range of programmes and regulations has been put in place to support the EEC initiative, some challenges remain to be addressed. Developing human capital is crucial to meet the demand of highly skilled workers, particularly those with sufficient knowledge of science, engineering and technology. Ensuring the transfer of skills and technology from foreign investment is also important for further developing local human resources.

Viet Nam

Education and training: Viet Nam's strategic plan for the development of education in 2011-20 targets a fundamental and comprehensive reform of the system. Past education reforms have improved the quality of the system, but inequalities in access to education

remain to be addressed. High student drop-out rates can be lowered by providing extra coaching, partnering with multinational companies, and improving and making visible job opportunities for graduates.

Brunei Darussalam and Singapore

Brunei Darussalam

SMEs: The development of SMEs has the potential to help diversify Brunei Darussalam's economy. In its push to diversify, the government is paying particular attention to business services, financial services, hospitality and tourism, transport and logistics, manufacturing, primary resources, and the food and halal industries. Policies targeting SMEs in particular include financial assistance, promoting technological transfers and overcoming other challenges. The sector remains at an early stage of development, however, and Brunei Darussalam has no specific policy for SMEs to date.

Singapore

Education and training: With an ageing population, Singapore can merge schools with declining enrolment and redirect resources toward supporting lifelong learning. Retraining programmes can help to prepare workers with digital and other needed skills. The SkillsFuture programme can provide a framework for such training. Its transformational map for training and adult education focuses on three aspects of education: driving innovation, improving careers and skills, and increasing productivity.

GLM

Cambodia

Tourism: Growing numbers of international visitors and the growth in Cambodia's tourism sector, including the potential for ecotourism, have made important contributions to economic growth. While the government recognises this in its economic planning, development has been slow. Key challenges in promoting ecotourism in Cambodia include improving quality, offering distinct experiences to visitors, marketing ecotourism, and tapping into regional co-operation.

Lao PDR

Energy: Lao PDR's energy mix is heavily reliant on hydroelectricity, which also produces a major share of the country's exports. The potential to further develop hydroelectricity will reach its limits in the near future. The government emphasises the development of other renewable sources of energy. Solar power, for example, has the potential for further development and to improve electricity access. Falling costs also make solar power a more attractive alternative.

Myanmar

Tourism: Myanmar has significant potential to develop its travel and tourism sector and has seen impressive growth in the number of arrivals and receipts as it has opened up in recent years. However, the sector's further growth may be constrained by the general business environment, insufficient investment flows, and the geographic concentration of tourist destinations. Government initiatives are needed to improve training for the sector and to address related challenges. Sectors supplying the travel and tourism industry must also become more competitive and improve linkages with the industry to increase indirect income from the sector.

China and India

China

Innovation: Productivity growth through continuous innovation is needed to drive ongoing economic growth in China. The number of patent applications has increased rapidly in recent years. China has now become the country with the greatest number of patents filed. While patents suggest innovative activity, it appears to be weakly linked to productivity. The country must address the relatively limited collaboration amongst firms and with research institutions. It must also consider concerns about the protection of intellectual property rights.

India

FDI: Reforms to FDI regulation are being made under the *Make in India* initiative, liberalising inflows in a number of sectors. Along with this initiative, efforts are being made to improve the business environment generally. However, more can be done to realise the full potential of foreign investment, particularly in fostering technology transfers and productivity growth. Policy options include training and education, protecting intellectual property rights, promoting FDI in technology-intensive sectors, enhancing performance requirements linked to the transfer of technology, offering investment incentives, and retooling policies restricting FDI. At the same time, it is important that FDI supports inclusive growth by generating employment through balanced geographical distribution.

Chapter 4: Progress of regional integration in Emerging Asia

Integration can improve the prospects for economic growth and resilience. While ASEAN has played a central role in many of the integration efforts in Emerging Asia, broader frameworks are increasingly being used to address common challenges. ASEAN+3 (the ten ASEAN Member States, China, Japan and Korea) has been particularly active on financial issues, and the ASEAN+6 countries (the ASEAN+3 members, Australia, India and New Zealand) were the original participants in the East Asia Summit, which has since been joined by the Russian Federation and United States. Since 2012, the ASEAN+6 countries have also been negotiating the Regional Comprehensive Economic Partnership (RCEP), a proposed free trade agreement. Several countries in the region – Brunei Darussalam, Malaysia, Singapore and Viet Nam – are also signatories to the Comprehensive and Progressive Agreements for Trans-Pacific Partnership (CPTPP). Most Emerging Asian countries (with the exceptions of Cambodia, Lao PDR, Myanmar and India) are also members of Asia-Pacific Economic Co-operation (APEC).

Through these frameworks, gradual progress is being made toward regional goals regarding trade in goods and services, investment and capital market liberalisation, competition and consumer protection, intellectual property, infrastructure and connectivity, small- and medium-sized enterprises, food, agriculture and forestry, tourism, human and social development, energy and the Initiative for ASEAN Integration (IAI) (Table 7).

Table 7. Summary of progress of regional integration in Emerging Asia

Policy area	Summary of progress
Trade in goods and services	ASEAN countries have made progress in reducing tariffs, but non-tariff barriers remain. Recent developments are liberalising trade in services.
Investment and capital market liberalisation	Investment integration is progressing through ASEAN's FAST Action Agenda and the 3rd AFMGM (ASEAN Finance Ministers' and Central Bank Governors' Meeting). Liberalisation in financial services is opening new opportunities for innovation and modernisation.
Competition and consumer protection	A common framework on cross-border consumer protection is being developed. Regional co-operation is strengthening competition law.
Intellectual property	Progress is being made at the national and regional levels in strengthening intellectual property protection frameworks, though additional efforts will be needed.
Infrastructure and connectivity	Regional road, rail and air connectivity is improving. While the development of roll-on/roll-off shipping routes is progressing, limited port capacities remain a constraint.
Small- and medium-sized enterprises	Work on small- and medium-sized enterprises by ASEAN is progressing, including work with young and female entrepreneurs and integration into global value chains.
Food, agriculture and forestry	Progress is being made in implementing the ASEAN Integrated Food Security Framework and the Strategic Plan of Action on ASEAN Food Security 2015-20.
Tourism	Efforts are being made to strengthen and co-ordinate national tourism policies, as well as to promote the region as a tourism destination, such as through the Visit ASEAN@50 campaign.
Human and social development	Extreme poverty is declining in Emerging Asian countries. Plans for regional co-operation on the issue are outlined in the ASEAN Framework Action Plan on Rural Development and Poverty Eradication 2016-20.
Energy	Amongst other programme areas, the ASEAN Plan of Action for Energy Co-operation outlines strategies for improving energy efficiency, which is improving in much of the region.
Initiative for ASEAN Integration	IAI Work Plan III outlines actions to be taken to reduce development gaps in a number of important policy areas. Differences between the ASEAN-6 and CLMV countries are more pronounced in some of these areas than others.

Source: OECD Development Centre.

The liberalisation of **trade in goods and services** in the region is progressing. Tariff reductions by the CLMV countries (Cambodia, Lao PDR, Myanmar and Viet Nam) and other ASEAN Member States continue as these countries also address non-tariff barriers. National authorised economic operator programmes are being introduced and work is being done on customs integration and co-operation. Trade in services has been growing rapidly in recent years. While services in the region remain relatively closed to FDI inflows, liberalising measures have been introduced through various ASEAN Framework Agreement on Services (AFAS) packages. Commitments have also been made to open air transport services under AFAS. While the movement of skilled labour remains constrained, the issue is being addressed through initiatives such as the ASEAN Qualifications Reference Framework (AQRF), which was published in 2016. Realising the potential offered by the region's mutual recognition arrangements requires strengthening the AQRF. Progress is being made in negotiating the RCEP, and many countries in the region have signed the CPTPP.

Investment and capital market integration in the region are being supported through initiatives such as the Focused and Strategic (FAST) Action Agenda on Investment and the work of the 3rd ASEAN Finance Ministers' and Central Bank Governors' Meeting (AFMGM). The FAST Action Agenda is intended to promote the competitiveness of small firms, while the April 2017 AFMGM marked significant progress on financial integration and capital market liberalisation. The ASEAN Green Bond Standards, which were launched by the ASEAN Capital Markets Forum in November 2017, are intended to strengthen connectivity in the region's capital markets and help ensure corporate governance practices that yield environmental and climate-related benefits.

Increasing cross-border transactions in the region underline the importance of co-operation on **competition and consumer protection**, a common framework for which is being developed. The development of national-level competition frameworks remains

uneven, however. ASEAN provides information on Member States' policies and laws. Countries in the region are also supported by international partners in building the capacity of their competition authorities. ASEAN plans to establish an ASEAN Research Centre for Competition by 2020 and is working on a Regional Cooperation Framework as the basis for a Regional Co-operation Agreement.

Intellectual property is a policy area identified in the ASEAN Economic Community Blueprint 2025 as in need of attention to build an innovative and competitive region. The value of intellectual property rights (IPRs) and geographical indications has been recognised at the national level. Institutions to support innovation, patenting and related activities have been established, with the World Intellectual Property Organisation (WIPO) also helping countries in the region to strengthen IPRs. Regional co-operation takes place mainly through the ASEAN Working Group on Intellectual Property Co-operation (AWGIPC). And the ASEAN Patent Examination Co-operation (ASPEC) is working to streamline patent application procedures.

Improvements to **infrastructure and connectivity** at the regional level are being made, but the extent of progress varies by sector and project. Work remains to be done on the ASEAN Highway Network, with a few missing links remaining. The construction of several sections of the Singapore-Kunming Rail Link remains stalled. Progress has been made toward the development of the ASEAN Single Aviation Market, but port capacities and connectivity will need to be improved to facilitate maritime transportation and the establishment of a roll-on/roll-off network. Efforts to facilitate logistics in the region would also improve trade and transportation flows.

ASEAN efforts regarding **small- and medium-sized enterprises** are outlined in the ASEAN Strategic Action Plan for SME Development 2016-25. The empowerment of young and female entrepreneurs in particular was the focus of the ASEAN Plus Three Young Entrepreneurs Forum in August 2017 in Phnom Penh. At the regional level, work is being done on internationalising and integrating small firms into global value chains. APEC is also working on this issue through its Committee on Trade and Investment and Promoting E-commerce to Globalise MSMEs, a 2017 study on the challenges and means of facilitating e-commerce participation amongst these firms.

Co-operation is improving in the **food, agriculture and forestry** sectors. Regional efforts to improve food security and safety and enhance farmers' livelihoods are being made through the ASEAN Integrated Food Security Framework (AIFS) and the Strategic Plan of Action on ASEAN Food Security (SPAFS) 2015-20. Further progress in the harmonisation of non-tariff measures affecting trade in the sector could be made, however. Regional integration is progressing through capacity-building initiatives amongst ASEAN Member States and the standardisation of rules and regulations, including increasing compatibility with international standards.

The harmonisation of **tourism** policies in the region is central to the ASEAN Economic Community Blueprint 2025 vision regarding the sector. This vision aims to make the region a single destination where tourism contributes to sustainable and inclusive growth. Issues related to this were discussed during meetings of the ASEAN Tourism Forum (ATF). During the 2017 ATF meeting, the Visit ASEAN@50 campaign was officially launched. Cruise tourism has the potential for further development in the region.

Goals regarding **human and social development** in ASEAN are primarily outlined in the ASEAN Socio-Cultural Community (ASCC) Blueprint 2025. Recently released regional plans on human and social development relevant to the ASCC include the ASEAN Work Plan on Securing Communities Against Illicit Drugs 2016-25, which was adopted in October 2016, and the ASEAN Framework Action Plan on Rural Development and Poverty

Eradication 2016-20, published in September 2017. The latter document targets improving access to and control of productive natural resources, financial and support services, and social protection. It aims to enable participation in socio-economic opportunities and create a convergence of local, national and regional actions. Poverty is also addressed through regional frameworks, including at the East Asia Summit.

Regional **energy** co-operation, as outlined in Phase I of the ASEAN Plan of Action for Energy Co-operation (APAEC), covers seven programme areas: the ASEAN Power Grid, the Trans-ASEAN Gas Pipeline, coal and clean coal technology, energy efficiency and conservation, renewable energy, regional energy policy and planning, and civilian nuclear energy. Almost all ASEAN member countries have improved energy efficiency and have drawn up policies and programmes to continue improvements. Collective efforts on improving efficiency include the work of the Energy Efficiency and Conservation Sub-sector Network (EE&CSSN) and discussions at the East Asia Summit and amongst the energy ministers of the ASEAN+3 countries.

The **Initiative for ASEAN Integration** Work Plan III outlines enabling actions relating to regulatory, legal and judicial frameworks, digital government strategies, crisis and disaster management, administration and public policy, safety standards and systems, and sustainable development. Differences between the ASEAN-6 and CLMV countries are more pronounced in some of the policy areas covered by Work Plan III's objectives than in others. The implementation of past work plans has proven to be challenging, but Work Plan III includes additional details about implementation. Further work on monitoring and evaluation will be needed as well.