Economic Outlook for Southeast Asia, China and India 2020
RETHINKING EDUCATION FOR THE DIGITAL ERA

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.

The Outlook comprises three 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 consists of a special thematic chapter addressing a major issue facing the region. The 2020 edition of the Outlook looks at human capital development, with a special focus on education for the digital era. The digital era is bringing important new developments for businesses and the workforce. As success in the digital era will require a new set of skills, education systems will need to adapt. Emerging Asian countries need to address certain challenges including improving ICT infrastructure, enhancing capacity of teachers, adapting curricula, as well as enhancing the role of TVET and lifelong learning. The third part of the report includes structural country notes offering specific recommendations for each country.
Overview

Chapter 1: Macroeconomic assessments and economic outlook for Emerging Asia

Emerging Asian economies – Southeast Asia, China and India – experienced further moderation of growth midway through 2019. Overall, Emerging Asia’s GDP growth in 2019 and 2020 is expected to come in at a slower pace than the rates projected in the Outlook Update in June 2019 (OECD, 2019). In the medium term, the region’s performance from 2020-24 is also anticipated to be less impressive than from 2013-17. The resilience of private consumption anchored the growth momentum, as in the past. However, exports continued to reel from trade tension headwinds accompanied by a softening of fixed investment.

Moving forward, and beyond tariff-related uncertainties, the grimmer growth picture in advanced economies is dampening external prospects despite historically low interest rates. Monetary tools have been used within and outside the region to spur economic growth, while some countries in the region are also considering other stimulus measures. The challenge for Emerging Asian economies is to reinforce the effectiveness of these policies. Strengthening of local government involvement in disaster resilience initiatives to address environmental and climate risks is also vital.

Overview and main findings: The economic outlook for 2024

Gross domestic product (GDP) growth in Emerging Asia is forecast to come in at 5.7% on average in 2020-24 (Figure 1), based on the OECD Development Centre’s Medium Term Projection Framework 2020. Trade tensions between the United States and China are continuing, and the broadening economic weakness in advanced economies adds substantial uncertainty to export prospects. Stability in the labour market, and in certain cases inflows of income from overseas workers, will sustain domestic consumption. Realisation of infrastructure projects that are already in the pipeline should provide more lift to domestic demand. Given this backdrop, Emerging Asia’s expected growth over the next five years will be weaker than the 2013-17 pace of 6.7%. Southeast Asia is estimated to grow by 4.9% during the period, down from the average rate of 5.0% in 2013-17. China’s growth will taper further as structural reform continues. India is also anticipated to grow relatively more modestly in 2020-24 than in 2013-17 while the banking sector regains its footing.
ASEAN-5

- **Indonesia**’s GDP growth in the medium term is forecast to reach 5.1%, in line with the 2013-17 average. A steady decline in the unemployment rate is fuelling consumption prospects, while the expansion of special economic zones (SEZs) bodes well for investment. Improving efficiency in tax administration and infrastructure spending are among the key challenges.

- Medium-term economic growth in **Malaysia** is estimated to settle at 4.4%, lower than the 2013-17 average of 5.2%. Labour market stability should continue to fuel private consumption, although real-wage growth is slowing. The country’s push to improve digital infrastructure and broaden the economy’s technology base are positive, although further policy actions are needed to increase the ease of starting a business and to strengthen tax mobilisation.

- GDP growth in the **Philippines** is projected to come in at 6.2% in 2020-24, below the 2013-17 average of 6.6%. Labour market conditions are working in favour of consumption, but a thorough examination of the declining labour force participation rate is needed to deepen the market. Infrastructure implementation delays remain a challenge.

- In **Thailand**, medium-term economic growth is estimated at 3.2%, higher than the average growth rate of 2.8% in 2013-17. An improvement in the country’s business climate metrics is encouraging for capital formation, labour market prospects and
private consumption. Facilitating an enabling environment for the growing fintech services field is a key challenge in the coming years.

- **Viet Nam**’s economy is forecast to grow by about 6.5% in the medium term, surpassing the average rate of expansion of 6.2% in 2017-13. The vibrant investment climate bodes well for the country’s privatisation and foreign investment strategies. Recently signed free-trade agreements should buttress the export sector amid external headwinds. Keeping rural areas in step with developments in urban centres is a key challenge.

**Brunei Darussalam and Singapore**

- **Brunei Darussalam**’s medium-term growth is forecast to reach 1.9%, in a reversal of the negative growth of -1.2% recorded from 2013-17. A steady improvement in business-climate metrics should buttress efforts to increase private-sector activity and bolster the labour market, while the country’s big-ticket projects should help to improve economic efficiency. Strengthening the central bank’s capacity to administer monetary policy is a crucial challenge as the country deepens its capital markets.

- **Singapore**’s economy is forecast to grow by 2.3% in 2020-24, below the 2013-17 average of 3.7%. Trade will likely dominate the growth story in the next few years. The start-up ecosystem is showing considerable promise, though it requires targeted support. Addressing participation barriers in lifelong learning programmes is another challenge.

**Cambodia, Lao PDR and Myanmar**

- **Cambodia**’s average GDP growth in 2020-24 is estimated to come in at 6.7%, slower than the 2013-17 rate of 7.1%. Fixed investment will remain a key growth anchor as infrastructure development continues. Corporate bond issuances in local currency are helpful for capital market development and facilitate the use of the riel, which is essential for monetary policy efficacy. Continued progress in addressing deficiencies in capital flow regulations is vital.

- The economy of **Lao PDR** is projected to grow by 6.8% in 2020-24, a milder expansion than the 7.4% seen in 2013-17. Infrastructure projects and energy exports are expected to provide much of the growth steam. However, limited improvement in the ease of doing business could hold back the development of other sectors. Coming up with a sound framework to deal with environmental hazards is another challenge for broadening the sources of economic growth.

- **Myanmar**’s GDP is forecast to grow by 6.9% in the medium term, slightly softer than the 2013-17 average of 7.2%. Fixed investment backed by foreign direct investment (FDI) is set to propel economic activity. Exports should gain from a planned expansion of SEZ operations. Nonetheless, the business climate could be improved. Stability and sufficiency of power supply is one issue. As for education (including digital literacy), access and quality, though improving, remain a challenge.

**China and India**

- **China**’s GDP growth will continue to slow, at 5.6% in the medium term from its 2013-17 average of 7.1%. Growth started to slow a few years ago as the economy is rebalancing from investment-led to consumption-led growth. Investment slows on the back of excess capacity in some manufacturing industries, while consumption is not picking up in a lack of structural reforms to reduce precautionary savings. Nevertheless, consumption remains robust against the backdrop of steadily rising incomes. Ageing pressures are increasing, even though the population is still
growing, but the working age population has been falling for several years already. Productivity-boosting structural reforms, including dismantling administrative monopolies and further opening up the economy would lift the growth potential.

- GDP growth in India in 2020-24 is forecast to reach about 6.6%, lower than its 2013-17 average of 7.4%. While reliance on consumption will continue, the large informal labour share indicates that there is room to strengthen the consumption base. Sustaining efforts to prop up the health of the banking sector is a vital challenge, while bridging the disparity in urban and rural infrastructure is important for spreading investment and economic opportunities while addressing urbanisation.

Other key points and challenges

Navigating increasingly restrictive trade policies

Countries in the region need to pay careful attention to several challenges. One is navigating the ongoing trade tensions between the United States and China at a time when real sectors in advanced economies are weakening. The broadening economic weakness in advanced economies affects export prospects. The policy signals are still quite mixed and the risk remains high even for countries where export growth is stabilising. The contraction in China’s exports may have eased but there are no indications of a strong rebound. Weak sentiment is more palpable on the import side due to the combined effects of the trade war and structural transformation.

Interesting contrasts can be observed by zeroing in on the recent trade performance of ASEAN and India on the one hand with China and the United States on the other. In general, growth in US imports from Emerging Asia, excluding China, has been sturdier (Figure 2), with hints of trade rerouting through the smaller economies. The larger ASEAN economies and India show susceptibility to the trade frictions in the China and US markets, although the depth of impact on imports differs between the two markets.

Figure 2. Growth in goods imports of China and United States by partner, 2017-19

![Figure 2. Growth in goods imports of China and United States by partner, 2017-19](image)

Note: The EU grouping is based on the definitions of the national source and may not necessarily be the same in China and the United States.

Source: OECD Development Centre calculations based on data from CEIC and national sources.
As exports cave in to trade tensions, real growth in fixed investment is pulling back in a number of Emerging Asian economies, leaving private consumption to do the heavy lifting to support economic activity (Figure 3). Business sentiment further signals growing cautiousness in a number of economies. Production data show that offshore market-dependent manufacturing sectors are feeling external pressures quite strongly relative to services sectors, which tend to have a bigger domestic driver component.

Figure 3. Real growth in selected GDP components in Indonesia, Malaysia, Philippines, Singapore and Thailand, 2018-19
Year-on-year percentage change

<table>
<thead>
<tr>
<th></th>
<th>Private consumption</th>
<th>Exports</th>
<th>Fixed investment</th>
<th>Manufacturing</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
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<tr>
<td>Malaysia</td>
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<td>Philippines</td>
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<td>Singapore</td>
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<tr>
<td>Thailand</td>
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</table>

Note: For Singapore, services include ownership of dwellings.
Source: OECD Development Centre based on data from CEIC and national sources.

Meanwhile, current account positions remain solid amid trade uncertainties. The region’s lacklustre export earnings were offset by a pullback in import payments. Volatility in financial flows has been contained, as has the movement in exchange rate and equity prices.

Enhancing the impact of monetary policy in a changing economic landscape

Against a backdrop of benign inflationary pressures, monetary authorities are easing liquidity conditions to lift consumer and investment sentiment. Enhancing the effectiveness of monetary policy is a challenge in this environment. One of the changes is the weakening of the relationship between inflation and the output gap or unemployment. In this context, the Phillips curve – the inverse relationship between unemployment and inflation – is attracting increasing attention. The idea of the Phillips curve is that when unused labour market capacity, or labour market slack, is reduced, prices are expected to rise through wage adjustments and consumer demand. Indeed, the shape of the curve in advanced economies has posed policy questions, as inflation has generally stayed weak despite the recovery of the labour market, supported by monetary interventions. Recently the Phillips curve has been flattening in advanced economies such as the euro area and the United States, as well as in Emerging Asia, though the extent differs. Possible explanations for the flattening of Phillips curves include domestic wage rigidities, structural changes, technological shifts, global competitive pressures and changing expectations of inflationary pressures.
In Southeast Asia, inflation has declined in general from previous decades, in line with the global picture (Figure 4). Similar to advanced economies, the gradual flattening of the Phillips curve in ASEAN countries like Thailand and Singapore can also be observed. Nonetheless, the economic environment in these two countries is different.

In general, the flattening of the Phillips curve in Southeast Asia is argued to be associated more with the increasing role of global factors, including the “global output gap”, than with the domestic factors seen in the euro area and the United States. Inflation expectations are also gaining importance in determining price trends and they are considered to be well anchored thanks to policy regimes such as inflation targeting in many Southeast Asian countries (Figure 5).

**Figure 4. The Phillips curve for Thailand and Singapore**

<table>
<thead>
<tr>
<th>Output gap</th>
<th>Inflation (% YoY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thailand</td>
<td>Q1 2000 - Q4 2008</td>
</tr>
<tr>
<td>Singapore</td>
<td>Q1 2010 - Q1 2019</td>
</tr>
</tbody>
</table>

Note: The sample was split in two, from Q1 2000 to Q4 2008, and from Q1 2010 to Q1 2019; the estimation therefore does not include the global financial crisis.

Source: OECD Development Centre based on data from CEIC and national sources.

**Figure 5. Target inflation band and actual inflation in Thailand and Indonesia**

<table>
<thead>
<tr>
<th>Percentage</th>
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<tbody>
<tr>
<td>Thailand</td>
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<tr>
<td>Indonesia</td>
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</table>

Source: OECD Development Centre based on data from CEIC and national sources.

On the fiscal front, the stance of many Emerging Asian economies is favouring contained expansion in the near-term overall. The potential impact of the trade tensions on public revenue in the near term is hard to pin down given the lack of clear direction in the ongoing negotiations.
Strengthening the capacity of local governments to deal with natural disasters

Strengthening local government participation and capacity in disaster resilience initiatives is another challenge facing the region given the current environmental and climate risks. Emerging Asia is relatively exposed to the risk of natural disasters, which can lead to heavy loss of life and which carry enormous opportunity costs, interrupt normal life and disproportionately affect lower-income citizens. The impact of natural disasters also tends to linger in the areas directly affected and the effects of natural disasters cannot be captured fully by economic performance data.

Disaster resilience initiatives have been launched in Emerging Asia at the national and international levels. However, the integration of disaster risk reduction and climate change adaptation (CCA) with urban development ultimately needs to be driven at subnational levels. An example of a local-level approach that was instrumental in mitigating the impact of a disaster can be seen in the Thai city of Nonthaburi, which preventively mapped and identified at-risk areas along the Chao Phraya River before disaster struck.

A similar local-level example was the establishment in the Philippines in 1995 of the Albay Public Safety and Emergency Management Office, the country’s first permanent disaster management office. Its goal was to integrate disaster risk reduction into the local government’s development plans. This has enabled local government units in Albay province to develop hazard maps, area- and hazard-specific plans, community-based early warning systems and well-tested rescue and evacuation protocols.

Restricted institutional capacity can limit the disaster risk management strategies of local governments. Cities often lack personnel and a well-resourced department or division dedicated to disaster management. The tendency of governments to transfer personnel is another factor. Since disasters may occur years or decades apart, the valuable know-how and experience of city personnel who responded to past disasters is seldom properly documented and transmitted to their successors. Community involvement at all stages of disaster planning can help overcome some of these challenges.

There is also a need to raise the policy focus on several preventive measures: flood-risk-integrated water resources management; construction of disaster-resilient multipurpose evacuation and community centres; mangrove afforestation to protect shorelines from storms and floods; and hydroponics projects that could generate incomes during normal times and maintain food security when disaster occurs. Tsunamis are of particular concern in the region and could become more damaging in future due to increased urbanisation along coastlines. Tsunami early warning systems are therefore of increasing importance in at-risk areas, although their deployment and maintenance are costly. Protecting coral reefs is another way for local authorities to reduce natural disaster risks.

Policy makers should also consider how natural disasters influence internal migration. Natural disasters result in the displacement of people in the affected areas during preemptive operations and post-disaster relocation. An estimated 13 million people were displaced by environmental calamities in 2018 alone, with China and the Philippines accounting for 7.6 million. Population movements of such magnitude, which could ultimately lead to forced migration, necessitate strategic planning that puts a premium on constant needs assessment and engagement with affected communities. Such planning can make guidelines more responsive to ground-level conditions.

Other prominent challenges in the region include the uncertainties surrounding Brexit and its aftermath, and the influence on global oil prices of the volatile geopolitical situation in the oil-producing countries.
Chapter 2. Upgrading education for the digital era

Digitalisation is bringing important developments for businesses and the workforce. New technologies, such as robotics, artificial intelligence and advances in information and computer technology (ICT), are changing the way societies interact, produce and create. These developments present a huge opportunity to improve human welfare and well-being through increased productivity. Yet the changes also carry significant risks. Automation of jobs can obligate affected workers to acquire new skills for jobs that are still in demand. New technologies can also change non-automated jobs, necessitating upskilling and reskilling of employees, and digitalisation can create new types of jobs that require new skill sets.

As success in the digital era requires new sets of skills, education systems need to adapt. They notably need to provide the tools necessary for people to keep up with digitalisation and succeed under the new circumstances. Emerging Asian countries must address certain challenges to ensure that their education systems are ready to provide the right ICT skills to all citizens. This means providing sufficient ICT infrastructure to schools; training teachers to boost their digital skills and learn how to incorporate ICT in the classroom; and adapting curricula to include ICT – not for its own sake, but rather to support teaching at all levels. Closing the gender digital divide is also crucial, while technical and vocational education and training (TVET) and lifelong learning need to be enhanced as paths to digital inclusion.

Digital readiness needs to be enhanced in Emerging Asia

For countries to be internationally competitive in the digital era, a skilled labour force is needed. Emerging Asian countries are in the process of closing the gap between demand for skills and supply of skilled personnel. For example, Cambodia, Indonesia, Malaysia and Thailand are currently experiencing a shortage of skilled labour to varying degrees, according to a recent study (Figure 6). The trends show that skills mismatch in both skilled and unskilled labour is likely to decrease in 2021, but a shortage of skilled labour will remain high in many countries. In general, the lack of skilled labour is a key challenge in the region.
Rising demand for specialised ICT skills in Emerging Asia

The demand for ICT skills is increasing, both in OECD countries and in Emerging Asia. As digitalisation changes the tasks associated with various occupations, new industries requiring advanced and specialised ICT skills are arising. All Emerging Asian countries have workers employed in the new ICT services sector (Figure 7). As for reaping the benefits of this growing sector, differences can be observed across the region. The sector represents a large share of employment in Singapore and is strong in the Philippines, while greater numbers are participating in Brunei Darussalam, Indonesia and Cambodia. According to the latest available data, however, the ICT services sector has stagnated in Thailand and Viet Nam in recent years. In China, based on a broader definition that includes more than purely ICT-related sectors (due to data constraints), the sector has grown steadily in the last years.
Enhancing the curriculum and updating teachers’ skills

In light of digitalisation’s job-market implications, many countries are taking advantage of ICT to retool the delivery of education and strengthen the resilience of the workforce. Retooling education for the digital era involves two key facets: the curriculum and the quality of teachers, especially in the context of Emerging Asia. The curriculum plays a pivotal role in programmes to incorporate ICT into education. Facilitating a seamless transition for students from one level to another and from school to the job market is another key consideration. Factors affecting curriculum-based outcomes include the availability, sufficiency and quality of materials and academic facilities and, importantly, the quality of teachers. As regards the quality of teachers, the rigorousness of tertiary training for aspiring educators and the responsiveness of professional training programmes that help them adapt to developments are two of the key concerns.

Addressing Emerging Asia’s gender digital divide

Women in Emerging Asia continue to face challenges due to their limited access to ICT. In the Asia-Pacific region, the estimated gender gap in Internet use was 17% in 2017. In other words, the proportion of women using the Internet was 17% lower than the proportion of men. By comparison, the Internet-use gender gap in Europe stood at 7.9% in the same year. Improving ICT access for women and increasing their digital skills would boost their participation in the modern economy. Yet a gender gap also persists in terms of employment of ICT specialists. This is partly due to the low proportion of female students in ICT-related training and studies, including in the TVET sector. Strategies to increase the participation of girls and young women in ICT studies are therefore also needed in the region.

Addressing country-specific challenges

While digitalisation brings common challenges in Emerging Asia, each country’s government also needs to focus on specific challenges (Table 1). Indonesia would need...
to address the uneven access to technology at schools across the country, while Malaysia needs to bridge the skills mismatch between ICT graduates and industry demands. Providing ICT infrastructure to schools and training for teachers are the main challenges in the Philippines. Teachers’ readiness for digital education requires more attention in Thailand, while Viet Nam will need to strengthen TVET for digital skills training. The benefit of advanced ICT infrastructure in schools can be further maximised in Brunei Darussalam by improving teachers’ capacity in using digital technologies, while Singapore needs to foster teachers’ and school leaders’ belief in the value-added impact of ICT use in the classroom. Improving ICT infrastructure and electricity supplies is critical in Cambodia. Lao PDR is also facing challenges in ICT infrastructure, particularly in the high cost and low speed of Internet. Limited access to ICT infrastructure and equipment is also one of the main challenges in Myanmar. China would need to bridge the gap between demand and supply of digital talent, while improving digital literacy and increasing access to digital devices are critical in India.

As a general trend, some countries including Cambodia, Lao PDR and Myanmar, need to address a lack of ICT infrastructure and to increase access to ICT tools. In countries where infrastructure is relatively better, such as Thailand, Brunei Darussalam and Singapore, teaching capacity and teachers’ digital skills need more attention. A mismatch between demand for skills and supply of talent is another major issue in countries including Malaysia and China.

### Table 1. Country-specific challenges for digital education in Emerging Asia

<table>
<thead>
<tr>
<th>Country</th>
<th>Digital education challenges</th>
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<tbody>
<tr>
<td><strong>ASEAN-5</strong></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>Ensuring access to technology at schools across the country</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Bridging the gap between ICT graduates and industry demands</td>
</tr>
<tr>
<td>Philippines</td>
<td>Providing schools with more ICT infrastructure and trained teachers</td>
</tr>
<tr>
<td>Thailand</td>
<td>Improving teachers’ readiness for digital education</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>Strengthening vocational education to meet demand for digital skills</td>
</tr>
<tr>
<td><strong>Brunei and Singapore</strong></td>
<td></td>
</tr>
<tr>
<td>Brunei Darussalam</td>
<td>Fostering teachers’ capacity for ICT use in classrooms</td>
</tr>
<tr>
<td>Singapore</td>
<td>Strengthening teachers’ belief in ICT use in the classroom</td>
</tr>
<tr>
<td><strong>CLM</strong></td>
<td></td>
</tr>
<tr>
<td>Cambodia</td>
<td>Improving ICT infrastructure and power supplies for better access</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>Increasing access to ICT tools for both teachers and students</td>
</tr>
<tr>
<td>Myanmar</td>
<td>Providing quality ICT to all at schools</td>
</tr>
<tr>
<td><strong>China and India</strong></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>Bridging the digital talent gap between demand and supply</td>
</tr>
<tr>
<td>India</td>
<td>Raising digital literacy through broader access to digital devices</td>
</tr>
</tbody>
</table>

### Vocational education and lifelong learning in the digital era

As alternative paths of education, TVET and lifelong learning have the potential to provide digital skills while at the same time taking inclusion into account. However, certain challenges need to be addressed: enhancing the image and attractiveness of TVET; encouraging private-sector involvement; improving monitoring of lifelong learning programmes; and broadening publicity campaigns to boost participation.

TVET focuses on preparing students for work, with education and training programmes that are designed for, and typically lead to, a particular job or type of job. TVET usually begins at upper secondary level (ISCED 3), and typically continues at the post-secondary...
level, although in some countries it starts as early as lower secondary level (ISCED 2). Digitalisation involves science, technology and engineering as well as ICT skills, and vocational education is playing a role in these areas. Within the region, countries like Brunei Darussalam, Indonesia, Malaysia, Philippines and Singapore have taken initiatives on ICT use in vocational institutions (Table 2).

<table>
<thead>
<tr>
<th>Country</th>
<th>Initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brunei Darussalam</td>
<td>•  Project 4C-Minecraft</td>
</tr>
</tbody>
</table>
| Indonesia        | •  Digital Simulation (mainly for all fields of studies in vocational secondary school level)  
|                  | •  Course Development Plans for e-commerce and Industry 4.0 in vocational higher institutions. |
| Malaysia         | •  Internet of Things Expertise in Agriculture  
|                  | •  Diploma in Database Management System and Application  
|                  | •  Industrial Centre of Excellence for Integrated Welding Program          |
| Philippines      | •  National Technical Education Skills Development Plan 2018-22             |
| Singapore        | •  Interactive Scenario-Based Learning Experience  
|                  | •  Project-Based Learning with Webinar                                      |
|                  | •  Learning Through Filming                                                 |

Source: OECD Development Centre compilation based on national sources.

Attracting students to vocational schools remains one of the biggest challenges. Vocational education is often overshadowed by the increasing emphasis on general education and preparing students for university studies, and TVET is often seen as having a low status. This is the case in Emerging Asia. In many countries in the region, vocational education is viewed as second-class education, with a lower status than general education, holding no prestige and as a choice for students who are less qualified academically.

Indeed, in most Emerging Asian countries, enrolment is generally much lower in vocational schools than in general education. In some countries, almost 100% of secondary school students are enrolled in general education institutions. In contrast, students in some OECD countries participate almost equally in general and vocational secondary education. In these countries, TVET has a better image and is seen more as a choice than a last resort. It is perceived as offering high-quality programmes to prepare people for the world of work by developing the skills required to get a job.

Enhancing the image of TVET in Emerging Asia

Most countries in Emerging Asia have recognised that enhancing the image and attractiveness of TVET is crucial. However, despite initiatives to improve the image of vocational education, further efforts are needed. One possibility is to promote pathways for TVET students to move onto a university track. TVET programmes can be designed to prepare students not only for the job market but also for continuing to a higher level of education. Furthermore, a balance is needed between occupation-specific, practical skills and broader education, including core academic competencies and theoretical knowledge. To achieve this, efforts are needed by all stakeholders. Governments should formulate policy that supports the acceptance of TVET students by universities. At the same time, universities need to embrace TVET not only by accepting TVET students, but also by contributing to the development of TVET programmes.

In some OECD countries, education systems are more flexible, offering different paths at various levels to avoid dead ends. In Emerging Asia, some countries already allow TVET students to move on to general education, although usually not directly after graduating from secondary level but rather after completing a post-secondary non-tertiary level.
For TVET to be attractive, it should provide flexible programmes rather than focusing only on occupation-specific skills. One possible approach is to offer students the option of combining studies from different TVET programmes, for example robotic technology with mechanical and software engineering. Promotional campaigns and publicity about the benefits of TVET can help enhance the image of vocational education among students and their parents.

However, the rapid pace of digitalisation is already affecting the labour market and the skills it requires, while improving the image of TVET will take time. To meet this challenge, the digital skills provided by vocational schools should complement those provided by general education, and vice versa.

Maximising the role of the private sector in TVET

The private sector can play a key role in helping TVET to adapt to an evolving labour market in the digital era. It can provide a clearer view of the changes occurring amid rapid digitalisation and can offer information on the skills needed by industry. To ensure that TVET prepares its students to be ready for work, companies and other key stakeholders must be encouraged to co-operate and become more engaged in TVET planning and processes, including curriculum design, training and mentoring. In some OECD countries, the private sector plays a significant role. In Germany, for example, stakeholders including the government, employers and trade unions take part in decision making, with influence on the form and content of TVET. In Germany’s dual system of vocational education, students spend part of their time in school and the rest as employees in companies. This allows a smooth transition of students to the labour market and fosters partnership with employers. This system should be integrated into all vocational programmes while also being systematic, quality assured, assessed and credit bearing.

Recognising the importance of lifelong learning in the digital era

Lifelong learning involves efforts to skill, upskill and reskill people across the social spectrum. As such, it is one of the key aspects of the human capital development agenda in Emerging Asia. It can help the working population adapt to changing labour market conditions and can assist people with limited education in improving their social condition. Lifelong learning is also associated with initiatives that encourage older people to stay economically active. Collaborators in lifelong learning initiatives can include traditional educational institutions, portals for open online courses, open high schools and universities, and community-based learning groups, as well as technical and vocational schools.

Using monitoring and publicity to boost participation in lifelong learning

Globally, there have been improvements in key pillars of adult education and lifelong learning, including targeting of policy, governance, consultation and financing. In terms of financing, schemes can vary, taking the form of public-private partnerships or government grants and subsidies. However, substantial gaps remain in areas such as monitoring and participation. Figure 8 shows that six Emerging Asian economies indicated an increase in adult learning participation among residents of rural areas and workers in low-skilled jobs between 2009 and 2015, while one indicated a deterioration. The other five countries either had no information or failed to answer. Worryingly, the number of countries noting improved participation for other target groups is lower, and the number that did not provide any information is higher, especially regarding migrants and adults seeking recognition for prior learning.
The lack of information on participation in adult learning programmes suggests that systematic data collection is absent in the region. Indeed, only seven Emerging Asian countries monitor adult learning certificates, and just six monitor labour market outcomes (Figure 9). The number that monitor completion rates and social outcomes is even lower.

Formulating effective ways forward in policy on adult learning requires an extensive information base of good quality. Better data collection and monitoring is therefore needed. This applies to the extent of participation at the very least, preferably with the addition of data on outcomes and implementation. The labour force survey is one instrument that can be exploited to gather data on this policy area with regularity.
To enhance participation, adult learning campaigns can be publicised through mass, social and other media. In many countries in the region, programme delivery is still fragmented. Countries need a clear national plan on how to get various stakeholders involved and on how to connect the different learning channels, including community learning centres. Anchoring the expectations of potential participants is also crucial for the credibility of adult learning programmes. Participation can be constrained by perceptions that the programmes offer limited value, as well as by cultural sensitivities and lack of awareness.

Scaling up open learning in Emerging Asia

Digitalisation can facilitate lifelong learning in the region through massive open online courses (MOOCs), open educational resources and online open university courses. It is encouraging that the use of such open and distance learning is increasing in Asia, since these platforms not only widen the scope of training, but make access to learning materials more flexible. There are also promising initiatives to make the most of mobile phones and mobile Internet penetration to promote learning opportunities through applications.

However, capitalising on these developments requires an enabling environment. Digital literacy is still uneven across and within countries in the region. Raising digital know-how should go beyond the working age or midstream population to reach older people and young children. With this in mind, an effective national programme for promoting digital learning tools requires a thorough understanding of the learning preferences of people of different age groups and different socio-economic backgrounds. In addition, deeper private-sector engagement can help scale up the use of MOOCs. Private firms can be a valuable source of insight concerning course content, as well as a source of capital. They can also make learning platforms more sustainable by taking maintenance and the updating of materials into account. The integrity of MOOC modules must be reaffirmed regularly. This can be done via a system that validates their quality following a standardised set of parameters. Finally, collaboration among institutions can yield significant synergy gains. Strengthening interscholastic ties can help to broaden the network, while incorporating community learning centres into the network can bolster awareness, especially in rural areas.

In terms of financing, schemes can vary, taking the form of public-private partnerships or government grants and subsidies. Earmarking income from certain industries for ICT training of target sectors is also being practised.
Chapter 3. Structural policy country notes

The Outlook’s country notes highlight key structural policy challenges in Emerging Asia (Table 3).

Table 3. Structural policy challenges in Emerging Asian countries

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**ASEAN-5**

**Indonesia**

**Education:** TVET is an important part of Indonesia’s Industry 4.0 strategy. Vocational education still faces many challenges, however, including a skills mismatch and negative perceptions among the general public. The government began a revitalisation process in 2016 and overhauled curricula to improve the skills of TVET graduates and increase employability through closer connection with industry. Further efforts are needed to promote public-private partnerships in the TVET sector, address a shortage of qualified vocational teachers, strengthen interagency co-ordination, and harmonise the national skills certification system.

**Malaysia**

**SMEs:** Malaysia has made significant strides in improving its domestic business climate for small and medium-sized enterprises. Government initiatives that support SMEs include programmes to develop human capital, foster innovation, facilitate digitalisation and nurture technology-oriented start-ups. Malaysia could improve the effectiveness of its SME policies by strengthening monitoring and evaluation, leveraging entrepreneurship programmes to encourage informal enterprises to enter the formal sector, setting policy targets in terms of firm-level competitiveness and growth contribution, and building a comprehensive firm-level database.
Philippines

**Education**: The Philippines has rolled out a new K-12 basic education framework aimed at aligning education duration with international practice, tackling congestion in core course curricula and increasing the employability of high school graduates. Despite some positive outcomes, resource-related issues such as budgetary constraints, poor resource management and uneven teaching quality continue to pose a challenge for state-funded education. To address the challenge, the government should adopt a more transparent and responsive approach to resource management, improve efficiency in policy implementation and strengthen private-sector participation for additional funding. The involvement of multiple stakeholders in programme appraisal would also be valuable, as would strengthening collaboration between schools and local government.

Thailand

**Social safety net**: Changes in Thailand’s demography have resulted in an ageing population. With increasing numbers of senior citizens relying on the government’s allowance for the elderly, the authorities may need to improve their capacity to provide income security. Increasing the budget allocation for the elderly and improving management of the social security fund are important. The government should also encourage saving for retirement by offering incentives, carrying out targeted communication and education campaigns, and improving registration procedures.

Viet Nam

**Digital trade**: There is broad consensus that digital trade can bring significant benefits to Viet Nam’s economy, both through domestic trade and digital exports. In order to facilitate the development of digital trade, the government is paying particular attention to promoting electronic payment, expanding ICT infrastructure and ensuring network security. Challenges include insufficient high-quality human resources with digital knowledge, lack of trust among customers of online businesses and the limited capacity of logistics services. In order to further promote digital trade, the government needs to address these challenges and also eliminate barriers affecting the competitiveness of the country’s digital exports.

Brunei Darussalam and Singapore

**Brunei Darussalam**

**Start-up eco-system**: Brunei Darussalam already has several competitive advantages for developing a start-up friendly ecosystem, including a highly educated English-speaking population, access to the vast ASEAN market, abundance of financial resources and an existing embryonic start-up ecosystem to build upon. The government could further support innovative start-ups by financing special centres at universities to foster entrepreneurship among students, provide business guidance and raise awareness about intellectual property rights. The government could also enhance equity financing for start-ups through support for venture capital, either by assuming the role of venture capital investor or by providing support for private venture-capital firms.

**Singapore**

**Education**: The pre-school education system in Singapore has two major shortfalls: insufficient teachers and a lack of parental involvement. Increasing public spending on pre-school education offers a clear way to reduce the child-to-teacher ratio without
affecting accessibility. In addition, the government could strengthen home learning environment by supporting parents of young children through Early Childhood Education and Care (ECEC). It could, for example, provide parenting instructions through ECEC centres and create a constructive and supportive relationship between parents and teachers. In addition, further efforts are needed to encourage young parents to participate in parental engagement activities.

CLM

Cambodia

**SMEs:** Micro, small and medium-sized enterprises (MSMEs) form the backbone of Cambodia’s economy and account for more than half of national employment and GDP. However, lack of qualified human resources is a pressing issue due to the limited size of the skilled labour force and competition for talent from larger corporations with better employee welfare. Better training and education, such as a high-quality TVET system, could help to address this challenge. To reap the benefits of vocational training for MSMEs, policy makers need to foster a positive image of TVET, address a mismatch between training and market demands, and improve the quality of vocational education through closer collaboration with the private sector and other stakeholders.

Lao PDR

**Agriculture:** Development of export-oriented organic agriculture could energise the stagnant growth of the agriculture and forestry sectors in Lao PDR. Although organic agriculture development is at early stage in the country, with relatively little available farmland and a limited domestic market, there is vast potential for expansion. Most farmers rely on subsistence agriculture, which is convertible to organic methods at relatively little extra cost. The organic agriculture sector could benefit from tapping into regional and international markets that are more mature. However, the country first needs to improve the quality of its organic products, develop recognisable organic brands, enhance coordination among stakeholders, establish national regulations on organic agriculture and trade, and boost marketing efforts via ICT technologies.

Myanmar

**Infrastructure:** The railway sector in Myanmar has been in decline in terms of both passenger transport and freight traffic. To revive the sector, the government needs to shift the focus of its investment policy to improving the operational performance of critical railway assets. The railway sector needs to achieve an adequate ratio of cost coverage and become self-sustaining. Potential policy measures include building efficient and consistent pricing systems, improving railway services, modernising equipment for efficient handling of freight, introducing container train services and intermodal facilities, and renovating and upgrading existing locomotives.

China and India

China

**Investment:** Investment has been the main driver of China’s robust growth for many years. Following the global financial crisis, the Chinese economy started to rebalance away from investment and towards consumption. At present, against a backdrop of slowing investment, China needs to place greater emphasis on the efficiency of investment projects and let the market play a greater role in the allocation of resources and pricing of the factors of production. This could be done, for example, by removing implicit guarantees to public entities and ending bailouts. The government should also
ensure greater transparency in the investment process and with procurement contracts, as well as rigorous feasibility studies before and after investing in projects.

India

Urban transportation: Cities in India have adopted smart technologies to deliver better urban transport services in response to long-standing issues of congestion, pollution and transport inefficiency. In order to encourage more people to use mass transport, the absorptive capacity and quality of public transportation need to be addressed comprehensively. Attracting talent is another concern for the development of intelligent transport systems. To address the fragmented nature of urban-transport management, unified metropolitan transport authorities and urban transport funds can play a critical role. It is also important to make full use of innovations in technology, strengthen the management of road transport infrastructure and involve the private sector in transport management.
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.

The Outlook comprises three 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 consists of a special thematic chapter addressing a major issue facing the region. The 2020 edition of the Outlook looks at human capital development, with a special focus on education for the digital era. The digital era is bringing important new developments for businesses and the workforce. As success in the digital era will require a new set of skills, education systems will need to adapt. Emerging Asian countries need to address certain challenges including improving ICT infrastructure, enhancing capacity of teachers, adapting curricula, as well as enhancing the role of TVET and lifelong learning. The third part of the report includes structural country notes offering specific recommendations for each country.