OECD Reviews on Local Job Creation

Employment and Skills Strategies in Indonesia

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Foreword

This report comes at a time when policy makers are challenged by the COVID-19 crisis that is generating a profound reflection on economic and social well-being. All 34 Indonesian provinces have been impacted by lockdowns, and the country has the highest number of virus-related deaths among Southeast Asia countries. Key sectors of the economy, such as tourism, have ground to a halt while disadvantaged groups, such as youth and women are bearing the brunt of the crisis. The recovery will require large-scale and well-coordinated policy responses that leverage all levels of government.

Before COVID-19 hit, Indonesia had experienced remarkable economic growth, making substantial progress in poverty reduction and gains in employment. However, there are large differences in outcomes across Indonesian provinces, which often reflect the quality of local infrastructure, services, education, and jobs.

This study sheds light on programmes and policies to promote job creation at the local level in Indonesia. The analysis presented shows the importance of strengthening local institutions managing and delivering employment and skills policies. As part of this review and prior to the COVID-19 outbreak, over 100 stakeholders across national ministries, as well as within the Indonesian cities of Surabaya and Makassar, were consulted to gain insights on the main threats and opportunities facing the labour market, especially as it relates to the differing impacts across people, places, and firms.

This study by the Organisation for Economic Co-operation and Development (OECD) and the Asian Development Bank (ADB) is the result of a joint effort by both institutions, and has benefitted from their respective research and analysis. This report is part of the Programme of Work of the OECD Local Economic and Employment Development (LEED) Programme. Created in 1982, the LEED Programme aims to contribute to the creation of more and better jobs for productive and inclusive economies. It produces guidance to make the implementation of national policies more effective at the local level, while stimulating innovative bottom-up practices. The OECD LEED Directing Committee, which gathers governments of OECD member and non-member countries, oversees the work of the LEED Programme.

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Acronyms and Abbreviations

APINDO	*Asosiasi Pengusaha Indonesia* (Indonesian Employer Organisation)
ASEAN	Association of Southeast Asian Nations
BLK	*Balai Latihan Kerja* (work training centres)
DAK	*Dana Alokasi Khusus* (Special Allocation Fund)
DAU	*Dana Alokasi Umum* (General Allocation Fund)
DBH	*Dana Bagi Hasil* (Revenue-Sharing Fund)
GDP	Gross Domestic Product
ICT	Information and Communication Technology
ILO	International Labor Organization
IYEN	Indonesian Youth Employment Network
LPTK	*Lembaga Penempatan Tenaga Kerja Swasta (*private employment agencies)
MSME	Micro and small and medium-sized enterprise
NEET	Neither employed, nor in education or training
OECD	Organisation for Economic Co-operation and Development
PES	Public Employment Service
PISA	Programme for International Student Assessment
SDC	Skills Development Centre
SEZ	Special Economic Zone
SME	Small and Medium-Sized Enterprise
SMK	*Sekolah Menengah Kejuruan* (vocational high schools)
UN	United Nations
VET	Vocational Education and Training
WEF	World Economic Forum

Executive Summary

After decades of structural transformation, Indonesia is the largest economy in Southeast Asia, with a GDP of over USD 1.1 trillion (current prices as of 2019). Economic growth has been accompanied by substantial progress in expanding access to skills for all. Poverty in Indonesia declined from a peak of 24.2% in 1999 to 9.2% in 2019. Human capital has been identified as one of five priorities of the Government of Indonesia's National Medium-Term Development Plan (RPJMN) for 2020–2024 and the country's long-term vision, *Visi 2045*, aims for Indonesia to join the world's five largest economies by 2045.

To put its economy in the high-income group by 2045, it is critical that all people and places across Indonesia have access to quality job opportunities. The geography of Indonesia presents a number of challenges when designing and delivering policies. Indonesia has 34 provinces with large variations in labour market and training outcomes. For example, the unemployment rate in 2019, before the COVID-19 pandemic outbreak, ranged from a low of 1.5% in Bali to a high of 8.1% in Banten. Recognising the importance of place-based policies, the government has undertaken a series of decentralisation reforms that started in the late 1990s. These reforms have delegated more autonomy to provinces and districts in the management of employment and skills programmes.

Despite long-standing progress, COVID-19 has changed the economic situation. According to estimates from the Asian Development Bank, job losses from COVID-19 could range from a low of 1 million in the best case to a high of 7 million in the worst case scenario. Poverty is expected to jump and the impacts of COVID-19 are likely to be disproportionately felt by women and young people. Tourism and hospitality industries have experienced already massive declines, with the hope that they can rebound in 2021. Many of the jobs in these sectors are also informal, entailing little social protection or income support for these workers.

While addressing the shock from COVID-19 will be a clear priority, there is also an opportunity to use the crisis to build the capacity of local employment and training organisations. They are on the front lines of the crisis response and will be essential to increase the resilience of all Indonesian provinces against future economic, social and environmental disruptions. The Government of Indonesia has already introduced three stimulus packages to try and cushion the economy from the impacts of COVID-19. This includes advancing the disbursement of pre-employment cards to help jobseekers and laid-off workers access a broad range of training. The pre-employment cards also aim to address skills shortages across various sectors, which have become a challenge with the training system not producing the skills required by industry.

There is a clear opportunity to transform local economies across Indonesia by expanding access to job training. Labour market services are under-developed and could play an important role in supporting individuals to participate in the labour market. Well-designed vocational education and training (VET) programmes can also help people make a smooth transition to employment or retrain to transition into a new job. The following recommendations emerge from this OECD/ADB report focusing on building the implementation capacities of employment and training providers at the local level:

Local strategies to connect people to jobs across Indonesia's provinces

- **Internet, smartphone penetration and technological innovations provide opportunities to leapfrog ahead in expanding the scope and reach of labour market services**: The recently introduced pre-employment card, *kartu prakerja*, builds on internet and smartphone penetration to provide training to young people and the unemployed. The government could build on this example as well as the *3 in 1 Kiosk* to explore further opportunities of how technology can be harnessed to expand the provision of online employment and training services.
- **Strengthen the institutional capacity of local employment offices**: The Ministry of Manpower could ensure that front-line staff have the right skills and are well-trained to conduct mentoring and counselling programmes with jobseekers and engage with local firms.
- **Build stronger engagement with local firms to promote the supports and services offered by local employment offices**: The Ministry of Manpower could create an outreach function, which would assist in identifying job vacancies and matching people to firms. There could be dedicated officers within local employment offices who focus on outreach.
- **Target local employment programmes to youth and other disadvantaged groups**: An online campaign, as well as closer co-operation between the Ministry of Manpower and the Ministry of Education and Culture, could be instrumental in providing students with access to labour market information to inform their study choice or help them find a job.

Local strategies to build skills across Indonesian provinces

- **Simplify the governance of VET to promote stronger co-ordination at the local level:** While moving responsibility to a single ministry might be considered as an option, the overall governance of VET should be simplified so that these skills pathways are well known in primary and lower secondary education and allow a transition to higher education and the labour market, aligned with industry requirements.
- **Create an integrated approach to data collection, monitoring and evaluation of VET programmes:** Broadening the scope of data collection on VET trainees and their employment outcomes, and undertaking systematic analysis and evaluation of vocational programmes should be a relevant step to gauge the effectiveness of VET policy at the national and local level.
- **Promote more employer leadership in skills training by facilitating employer-led networks (especially among SMEs) at the local level:** Efforts could be made to build relationships among groups of employers, namely chambers of commerce, sectoral organisations and employers' associations to guide the development and delivery of training.
- **Place a priority on improving the overall quality and relevance of training programmes being delivered at the local level:** Indonesia could allow local industry representatives to teach programmes or enable those with adequate work experience to teach vocational education in a specific field. VET accreditation and quality assurance could also be strengthened to reduce variability in training quality across provinces.
- **Use apprenticeship programmes to promote training, while also working with firms to formalise training arrangements:** The government could develop a consistent framework defining and regulating apprenticeships. An incentives-based approach, including offering opportunities for capacity building to enterprises, access to training, business services and credit could be explored to encourage enterprises to engage with regulatory authorities on apprenticeship training.

1 Assessment and recommendations

Promoting quality jobs and people's skills across all Indonesian provinces will help put its economy in the high-income group by 2045

This report comes at a time when Indonesia is challenged by the outbreak of COVID-19, which will put pressure on local labour markets and risk drawing millions of people into poverty. Before the pandemic hit, the growth path of the Indonesian economy had been remarkable. In the 1960s, it was one of the poorest countries in Southeast Asia but it embarked on a structural transformation, shifting from agriculture to higher value added production, including manufacturing, industry and services. It is the largest economy in Southeast Asia, with a GDP of over USD 1.1 trillion in current prices in 2019. Growth has been accompanied by gains in education and labour market outcomes across the country. The unemployment rate stood at 5.3% in 2019, in line with the OECD average, but higher than the average across ASEAN countries in the same year. Approximately 64.3% of the Indonesian population was employed in 2019, slightly lower than on average across ASEAN countries (67.4%), but higher than the OECD average (57.1%).

These economic and social achievements are put at risk by the COVID-19 crisis. As a result of the pandemic, the global economy is projected to contract sharply by -3% in 2020, much worse than during the 2008–09 global financial crisis. The Indonesian government's baseline scenario is for economic growth to drop to 2.3%, the lowest in 21 years, with a worst-case scenario of an economic contraction of 0.4% this year. As measures to mitigate the health impacts of COVID-19 are implemented, the labour market has been affected. It is estimated that job losses could be in the range of one to seven million, resulting in almost a doubling of the unemployment rate. As of April 2020, the Ministry of Manpower reported that 1.5 million workers had already been put on unpaid leave or laid off. Preliminary estimates indicate that the poverty rate could increase to 12.8% in 2020, with an additional 9.5 million people falling below the national poverty line.

The government has set ambitious targets for the future with the goal that Indonesia will enter the world's top five economies by 2045. To achieve this, the government has identified five national priorities, which include infrastructure investment, regulatory simplification, civil service modernisation, economic transformation, and human capital development.

The large majority of the Indonesian population is today literate, with 60% of the working age population having completed primary or junior secondary education. That being said, individuals with higher levels of education achieve substantially higher income levels than the rest of the population. The average schooling years of the bottom 20% of the income distribution are still almost half the schooling years of the top 20%, amounting to 6.4 and 11 years respectively. The current COVID-19 crisis risks negatively affecting education outcomes in Indonesia and increasing disparities in access to education across segments of the population. The crisis is likely to lead to increased school drop-outs, particularly affecting the near poor and vulnerable, who might leave education to economically support their family.

Informality remains a significant challenge in Indonesia, where Statistics Indonesia estimates that 43.8% of non-agriculture employment and 87.5% of agriculture employment are in the informal economy in 2019.

Informal jobs typically offer low quality, unproductive and poorly paid employment opportunities with little or no social protection. As several provinces went into lockdown to mitigate the COVID-19 outbreak, this could deeply affect informal workers, who would have no income or emergency medical leave. This includes those working in shops, street food vendors, and vendors in traditional markets. In addition, one in two workers in Indonesia is in conditions of vulnerability, being a contributing family worker or own-account worker.

Differences in employment outcomes are significant across segments of the population. Young people, in particular those aged 15-19, have substantially higher unemployment rates than the rest of the population. In 2019, 22.6% of youth are not in employment, education, or training (NEET), and the proportion is higher among young women (28.7%). Comparisons with other ASEAN countries show that the share of 15-24 year-olds who are neither employed, nor in education or training is higher in Indonesia than in most other countries in the region (20.1% in Brunei Darussalam, 18.8% in the Philippines, 14.9% in Thailand, 14.6% in Viet Nam, and 4.3% in Singapore). There are also substantial gender gaps in pay and labour force participation in Indonesia. By some estimates, the gender pay gap amounts to around 20% in Indonesia, compared to less than 15% in the OECD. Women are also more likely to be in low-paid work than men in Indonesia, with the share of full-time male workers being in low-pay amounting to 20% compared to almost 40% for women. While male labour force participation is among the highest across ASEAN, only about one in two women participate in the labour force in Indonesia, among the lowest in the region. Projections show that Indonesia is unlikely to reach its Group of Twenty (G20) target of decreasing the gender gap in participation by 25% between 2014 and 2025.

The national picture hides differences across provinces within Indonesia, with some rural and remote provinces, especially in the east of the country, suffering from high illiteracy rates and lower educational attainment, as well a significant prevalence of agricultural employment and informality. For example, data from Statistics Indonesia show that about 22% of the population was illiterate in Papua in 2019. Looking at unemployment rates, there are large provincial variations ranging from a low of 1.5% in Bali to a high of 8.1% in Banten in 2019. Local institutions will be at the front-line of the crisis response across Indonesia, therefore there is an opportunity to build the capacities of employment and training institutions to ensure they effectively contribute to the recovery.

The Government of Indonesia has responded well to meet the initial public health needs. In March 2020, the government established a COVID-19 task force chaired by the head of the National Disaster Mitigation Agency with senior representatives from the Ministry of Health, the Ministry of State-Owned Enterprises, Indonesian Military, and the National Police. The central government also issued a regulation to allow local governments to formally restrict the movement of people and goods in their territory with approval from the minister of health. Measures to bring the COVID-19 pandemic under control are summarised in Table 1.1.

The government has announced measures worth USD 32.4 billion to fund substantial increases in public spending on health, social assistance to the poor and vulnerable, and support to businesses. Prior to COVID-19, the government mandated that 5% of the total national budget be spent on health. Accordingly, USD 7.6 billion had originally been allocated for 2020. To face the pandemic crisis, an additional USD 4.3 billion was allocated to health spending. Social assistance measures include family support programmes, basic food assistance, electricity subsidies and house incentives among others, for a total of USD 6.4 billion. The government has also simplified requirements for imports and exports, including raw materials, to increase the competitiveness of enterprises.

Table 1.1. Summary of measures to bring the COVID-19 pandemic under control

Measure	Description
Preparedness plan	The plan, based on technical advice from the World Health Organization, details: (i) clinical management, particularly of critical cases; (ii) infection prevention and control among health workers and the general population; and (iii) specimen management and laboratory confirmation to reduce the spread of COVID-19.
Social distancing	Some local governments have introduced social distancing measures to contain the disease, such as a ban on mass gatherings, temporary closure of schools and tourist attractions, limitations of religious activities, and urged 'physical distancing' to reduce transmission. People may still travel to fulfil basic needs.
Medical personnel	In addition to 40 320 specialist doctors, the government has deployed students from 158 universities and 15 000 volunteers. Medical personnel are promised bonuses (IDR 15 million for specialist doctors, IDR 10 million for general practitioners, IDR 7.5 million for midwives and nurses, and IDR 5 million for other medical personnel).
Test kits and equipment	The government has made available approximately 1 million kits for mass screening, while prioritizing government workers for testing. Across 2 867 hospitals throughout Indonesia, there are 8 413 ventilators available.
Repurposing and building of facilities	The government designated 132 referral hospitals containing approximately 41 000 beds for COVID-19 and repurposed the athletes' village used for the 2018 Asian Games in Jakarta into an emergency hospital containing 1 800 beds. The government purchased 175 000 new sets of protective equipment. 13 medical schools and 13 teaching hospitals were upgraded to serve as extra COVID-19 laboratories.
Visa suspension	The government temporarily suspended visa issuance for all countries and expanded restrictions to people from the worst-hit countries.

Source: Asian Development Bank.

Over the longer term, the government will need to identify strategies that promote higher productivity and innovation to ensure Indonesia achieves its goal of joining the high-income group by 2045. This requires robust investments in human capital to ensure young people have access to quality skills training, while also providing more opportunities for workers to re-skill in the workplace. It also requires working closer with employers, especially at the local level, to consider how skills training opportunities can support technological transformation in the overall production of goods and services. Automation and innovations in digital technology will provide new opportunities for Indonesia to accelerate productivity and sustainable development. The government could consider the following recommendations to support local employment and economic development opportunities across all Indonesian provinces.

Local strategies to connect people to jobs across Indonesia's provinces

The government could strengthen the institutional capacity of local employment offices

Labour market services are increasingly important in government efforts to boost overall employment outcomes. In an emerging economy context, they also play a role in reducing informality in the labour market. Strengthening their contributions to this agenda requires that services have the capacities and resources needed to help jobseekers, build connections with employers, and stimulate economic development. An important challenge for labour market services, not only in Indonesia but across several emerging economies in Southeast Asia, is overall capacity limitations, including the low coverage of rural and remote areas. In 2015, the International Labour Organisation (ILO) reported that the number of total employment offices staff in Indonesia amounted to approximately 300 people. With respect to an estimated unemployed population of more than 7 million, employment offices are substantially understaffed. In rural and remote provinces, limited hard and soft infrastructure can make the provision of labour market services even more challenging.

Within Indonesia, local offices of the Ministry of Manpower are responsible for labour market services across provinces and cities. Services include job fairs, events as well as face-to-face consultations. An online system operating through local offices enables jobseekers to access job opportunities and employers to access potential employees. However, outside urban centres, where internet access is widespread, this system does not work well. In parallel, the private sector has also begun to provide labour market services, with private employment agencies (*Lembaga Penempatan Tenaga Kerja Swasta*, LPTKS) able to provide job matching services upon authorisation from the Ministry of Manpower or Governor of the province.

Going forward, Indonesia could look for opportunities to increase the capacity of employment offices across the country and ensure that front-line staff have the right skills and are well trained to conduct mentoring and counselling with jobseekers. Stakeholder interviews conducted for this OECD study point out to high turnover of trained staff and their replacement with new and unprepared staff as one of the main challenges within employment offices. A particular focus could be devoted to rural and remote areas, as job creation programmes are often concentrated in economically advanced regions.

Indonesia could look to other examples from the ASEAN region. For example, in the Philippines, new laws were passed in October 2015 with the goal of "professionalising" employment services across the country. This law stipulated that employment service offices should be established in all provinces, cities, and municipalities, and shall be operated and maintained by local government units in the Philippines. The law also established certain staffing requirements as well as rules around monitoring local labour market information to gather more intelligence about the number and nature of jobs available.

Internet, smartphone penetration and technological innovations provide opportunities to leapfrog ahead in expanding the scope and reach of labour market services

The internet has become an increasingly important channel for the delivery of labour market services in both OECD and non-OECD countries. The service delivery channels available for labour market services have changed dramatically over the past 25 years, from traditional face-to-face and mail channels, and the introduction of electronic channels such as websites and e-mail, to the arrival of social media and mobile applications and services. Additionally, the use of new technologies for more back-office functions such as collecting labour market information is also taking on increasing importance. The Ministry of Manpower has developed two online platforms to support job search and placement: the *Info Pasar Kerja* website and the *3 in 1 Kiosk*. The *Info Pasar Kerja* website allows for the online registration of individual jobseekers and firms, and presents a list of current job openings, while the *3 in 1 Kiosk* is provided within vocational training centres (BLK) and online, combining vocational training, skill certification and employment placement. In 2018, there was a total of 539 730 registered jobseekers on the *Info Pasar Kerja* website and 485 212 job vacancies posted on the website, but only 3% of registered jobseekers (around 17 600) found a job through the website. The Government of Indonesia is also making use of internet and digital technologies to implement its new flagship programme, the pre-employment card (*kartu prakerja*). The programme aims to aid jobseekers and laid-off workers by granting them access and funding to a broad range of training. Online registration for the card is available to Indonesian citizens aged 18 and older who are not attending school. The programme specifically targets unemployed youth, but it is also open to workers and other jobseekers. During the COVID-19 outbreak, the government made changes to pre-employment cards so that they could serve as assistance for workers affected by layoffs or the workforce who had just graduated from education.

As internet penetration has increased across Indonesia, with almost half of the population using internet today, especially in urban centres, there is room for expanding the provision of online labour market services. In addition, more than 70 million people have a smartphone in Indonesia, accessing internet from their phone and representing an opportunity for the government to provide easily accessible services. Online technologies can be used for standardised procedures such as initial registration and posting job

vacancies; personalised interactions between staff and clients; casework counselling functions; and skills training and development. Online vacancy databases are the most used vacancy platforms in most countries, as measured by the proportion of all vacancies in the economy being notified to the employment services database. Among OECD experiences, in Germany, around 50% of all vacancies are reported to the public employment service (PES). In Korea, Work-Net is a national jobs portal providing job matching services, including various job openings and jobseeker information, with multiple search options by location, occupation, company type, and company benefits. While online services can be a cost effective way of reaching a broader audience, their use should be monitored carefully. The success of web-based channels is predicated on the level and quality of internet access, and the degree of internet usage and skills of specific client groups. While internet-based services would allow reaching a broad audience in Indonesia, especially in urban centres, the situation is different in rural and remote provinces, where internet access is limited. The Ministry of Manpower could therefore promote the provision of multiple service delivery channels, which are adapted to the specific needs of each province and city. In such provinces, face-to-face contact may continue to be the most effective way of delivering certain types of services.

Technological innovations could also help with developing good profiling tools that would more efficiently assess the prospects of jobseekers in finding employment. Profiling tools can also help improve the efficiency of services provided, which is critical when dealing with limited budget and staff resources and capacity. The Ministry of Manpower could consider integrating profiling tools within the delivery of labour market services. The most traditional ways of profiling have been rule-based profiling using eligibility criteria, such as age and unemployment duration, to classify jobseekers into groups, and caseworker-based profiling, based on caseworkers' judgement of the specific context and challenges of each jobseeker.

Alternatively, statistical profiling tools, which use statistical models to predict labour market disadvantage, could be adopted. This approach has gained prominence in Europe over the past decade, and more countries have adopted the model. Such models can also help overcome the challenges of the other two approaches to profiling, by limiting budgetary pressures, taking into account changes and the great diversity of jobseekers. The quality and type of data are critical for determining the accuracy of statistical profiling models. Therefore, this needs to be considered in assessing whether to adopt such practices in Indonesia where data quality could be difficult to ensure. Inputs to be collected include socio-economic characteristics, motivation to look for and accept a job (e.g. job-search behaviour, expectations on pay), job readiness (e.g. education, skills, potential limitations), and opportunities on jobs available at the local level. Based on the inputs collected, statistical profiling models could be used to rank jobseekers based on their risk of long-term unemployment, being classified as "low risk" and "high risk". It should be noted that profiling models are not costless to design or maintain and decisions based on wrong predictions could result in increased costs rather than improving cost efficiency. As such models are developed based on historical data, continuous updates are needed for the model to remain useful.

There is an opportunity to better engage firms in the supports and services offered by local employment offices

As the scope and penetration of labour market services in Indonesia is rather limited, an effective way to develop services that reduce informality and better match people with good jobs is to respond better to the needs of businesses and jobseekers. Local partnerships between employment offices, the business community and other local actors could improve the services currently provided. To strengthen services in Indonesia, steps could be taken to better engage employers in gathering vacancy information and job matching. Research in OECD countries identifies two general models for employer engagement, which Indonesia could draw upon; organisational models in which the same counsellors work with both employers and jobseekers, and organisational models in which employment services have dedicated employer

relationship staff. For example, in Australia, employment services providers often have a “reverse marketing” function that actively works with employers to identify job vacancies.

Employment services with dedicated employer relationship staff can be further broken down based on whether the staff specialise in particular sectors or business sizes and whether there are account managers that deal with particularly large clients. For example, in France, the PES has formal agreements with large company networks and industry sectors concerning recruitment support. France also provides dedicated spaces for jobseekers and new businesses to come together, which creates opportunities for recruitment. Another approach is to partner with private employment service providers, such as Manpower and Adecco, to share vacancy information, as done in Mexico.

The government could develop more targeted local employment programmes for youth and other disadvantaged groups

Young people face a challenging labour market context in Indonesia, with unemployment rates four times higher than for the rest of the population, low labour force participation rates and a high share of youth not in employment nor in education or training. The situation is especially critical for youth aged 15-19. Labour market services are open to the general population, while targeted programmes for disadvantaged segments of society, such as youth, women or vulnerable groups, are rare. Some youth-specific services are provided by the Ministry of Youth and Sports Affairs, although not in a comprehensive and systematic way. Labour market services in Indonesia could further reach out to those most in need, including young people. The importance of a concerted effort among ministries and across levels of government could be reinforced, for example by revitalising the role of the Indonesian Youth Employment Network (IYEN) in bringing together different stakeholders to discuss and develop policy solutions aiming to foster youth employment and placing youth job creation high on the agenda. Services specifically targeting young people could also be developed. Examples from other countries show the important role to be played by targeted counselling and career guidance for young people, together with services that foster skills development and inform young people about job opportunities.

Young people could be targeted through both online initiatives and face-to-face consultation. For the success of career guidance and counselling, capacity building programmes are needed for employment offices staff, enabling them to provide more efficient services for young people. An online targeted campaign, as well as closer co-operation between the Ministry of Manpower and the Ministry of Education and Culture, could be instrumental in providing young students and graduates with labour market information that could inform their study choice or help them find a job. For example, as the Ministry of Education and Culture organises annual SMK fairs throughout the country, these could represent an opportunity to raise awareness of the online job portals.

The government could also build on local initiatives being currently undertaken by several city governments. For example, in Surabaya, the *Pejuang Muda Surabaya* programme aims to foster youth development by engaging young people in trainings with representatives from academia, the business community and the government. The programme specifically targets young people aged 20-39 not formally employed, and proposes trainings and internships in crafts, the culinary sector and the fashion industry. In Makassar, it was observed that the poor conditions of streets and alleyways were among the main contributors to informality and poor working conditions for young people. As a consequence, a programme has been developed to build and renovate streets, leading to the creation of 5 800 new alleyways with the objective of lifting living standards and formal employment.

Local strategies to build skills across Indonesian provinces

Indonesia has achieved substantial progress in improving skills outcomes but challenges remain to ensure that regions have relevant and high levels of skills. Net enrolment in primary education has dramatically increased over the past decades, and Indonesia is today close to achieving universal basic education Indonesian adults attain higher education levels as compared to ten years ago. In 2017, 26% of the Indonesian adult population had upper secondary education, as compared to only 14.1% in 2008. Similarly, the share of tertiary educated adults has almost doubled, from 6.5% in 2008 to 11.9% in 2017.

However, the relevance and quality of education in Indonesia could further improve, bridging gaps between the skills students possess and those needed in the labour market. For example, Indonesia's performance in the OECD Programme for International Students Assessment (PISA) shows that the competences of students in areas such as mathematics, sciences, and literacy could further improve. Progress between the different editions of PISA has been limited in Indonesia, partly reflecting increases in access to education in Indonesia. There would be room for Indonesia to catch up with other regional economies, such as Singapore, Malaysia, Brunei Darussalam and Thailand. However, Indonesia performs better than the Philippines in all three areas.

Rural and remote provinces, especially those located in the east of the country, are characterised by poorer skills outcomes. For example, about one in five people in Papua are illiterate, making it the province with the lowest literacy rate in the country. Illiteracy is also substantially higher in West Nusa Tenggara then the rest of the country, while in North Sulawesi and the Special Capital Region of Jakarta less than 1% of the population is illiterate. Rural and remote areas are also characterised by poorer quality of skills, as testified by the difference in the OECD PISA scores between villages and large cities. In addition, agriculture remains the main source of employment in rural and remote provinces, compared to manufacturing and services in most western provinces. Informal employment continues to be pervasive across Indonesia. For example, while the Special Capital Region of Jakarta achieves almost 70% of formal employment, in Papua, East and West Nusa Tenggara, formal employment can be lower than 25% of total employment, where almost all employment in agriculture is within the informal sector.

As industry becomes more diversified, job requirements demand more complex and sophisticated skills. Strong vocational education programmes at the local level can play a significant role in helping national economies to adjust to changes in the labour market, advances in technology and challenges associated with globalisation. Across the ASEAN region, many countries are looking at opportunities to promote skill training leading to a job through the vocational education and training system. Many ASEAN countries are interested in work-based training programmes as a means to build pathways for youth into the labour market and to raise the skills levels of the existing workforce. Both occupation-specific and general skills are needed to ensure that workers are able to shift towards skill-intensive, capital driven production across Indonesian provinces. Vocational education and training encompasses a diversity of arrangements including apprenticeships, informal learning on the job, work placements that form part of formal vocational qualifications, and various types of internships.

Consistent international evidence indicates that employment outcomes for vocational graduates in countries with well-developed vocational education and training systems tend to be higher than the national average. For example, within the OECD, the employment rate of the working-age population with vocational education was 75% in 2018, well above the overall average employment rate of 68%.

Local vocational education and training in Indonesia is critical to promote school-to-work transitions

Local vocational education and training programmes can provide students and workers with the skills needed in local labour markets, fostering inclusive growth and reducing disparities both within and across provinces. Vocational education in Indonesia can take place at different levels. Indonesian students aged

16-18 have the opportunity to take on upper-secondary vocational education, while both students and jobseekers can access vocational trainings. Upper-secondary vocational education is provided by vocational high schools (*Sekolah Menengah Kejuruan*, *SMK*), which are overseen by the Ministry of Education and Culture, and provide vocational education in several areas, including information and communication technology, engineering, business and management, agriculture and tourism, arts and crafts. On the other hand, non-formal vocational training is mainly provided by work training centres (*Balai Latihan Kerja*, *BLK*), supervised by the Ministry of Manpower.

The Indonesian government recognises the importance of vocational education and training in reducing poverty and inequality. The government has introduced pre-employment cards which are vocational training assistance cards that will be given to jobseekers, workers, and those affected by job loss. Initially announced in 2019, the government has anticipated the disbursement in order to tackle job loss challenges linked to COVID-19. A budget of IDR 10 trillion was initially allocated to the programme, which, before the COVID-19 outbreak, was expected to be distributed to 2 million participants in 2020, with 1.5 million participants trained through digital skills programmes and the remaining 500 000 taking face to face training. The government has announced a doubling of the budget in light of COVID-19, with the objective of reaching more than 5 million people.

Participation in VET has increased in Indonesia over the last years, partly as a consequence of the government's prioritisation of VET as a tool to equip students and jobseekers with the right skills. VET took on a greater role in 2006 when the Ministry of Education developed a strategic plan aimed to tackle unemployment by improving workforce skills, building new schools and converting general high schools into vocational schools. However, the expansion of VET has not been matched by improvements in the quality of education and skills infrastructure. Alongside poor infrastructure, skills gaps have been identified as a major cause of low labour productivity in Indonesia compared to other ASEAN countries. VET curricula are set at the national level and industry needs are often not reflected into VET programmes. In addition, while initiatives have been launched over the years to increase the involvement of employers and industry organisations in the design, development and delivery of VET, their actual involvement remains limited, resulting in programmes that may not be providing students with the skills needed in local labour markets. Teacher quality also remains a major issue as it can vary substantially across schools. These challenges yield vocational graduates with the highest unemployment rates (11.4%) compared to people achieving other levels of education, from general high school (8.3%) to junior high school (5.5%), university (5.2%) and primary school (2.8%).

There is scope for Indonesia to simplify the governance of VET, which would promote stronger co-ordination at the local level

The responsibility for vocational education and training policy in Indonesia is spread across the Ministry of Manpower, the Ministry of Education and Culture, other ministries as well as provinces and cities. Around 20 work training centres are directly administered by the Ministry of Manpower, though other ministries also manage several training centres across the country. The large majority of training centres is, however, under the management of local governments. Education policy is overseen by the Ministry of Education and Culture. Provinces are directly responsible for upper secondary education, including both general and vocational education. However, the management of education policy also appears to be spread across levels of government, as primary and secondary education lies within the responsibility of the city-level government.

This results in a complex multi-governance structure, where roles and responsibilities for vocational education and training are sometimes not clearly defined or overlapping. In addition, vertical and horizontal co-ordination, between different levels of government and different ministries is often challenging, as a systematic co-ordination mechanism for vocational education and training is not in place. Fragmentation and overlapping responsibilities could generate inefficiencies, as different ministries and levels of

government adopt a different approach to VET and have different goals. In addition, as different levels of government might not adopt an integrated approach to overall education policy and rather focus on their specific area of responsibility, there seems to be a case for improved synergies.

The government in Indonesia could consider ways of improving co-ordination to establish a coherent VET policy with clear goals and an integrated approach across ministries and levels of government. While moving the responsibility of VET to a single ministry might be considered as an option, the governance of the VET system should be effectively integrated into both the education system, so that VET pathways are well-known in primary and lower secondary education and allow a transition to higher education, and the labour market, being aligned with industry requirements.

The government could therefore consider establishing a VET committee composed of representatives from the different ministries involved in VET policy formulation, as well as employer representatives and unions. An adequate set-up should be chosen to raise the committee's visibility and give it a strong political mandate. The objectives of vocational education (SMK) and vocational training (BLK) are sometimes overlapping and not harmonised. The committee could also work to harmonise vocational programmes in Indonesia, aiming to avoid duplication and developing programmes based on labour market needs.

Skills Development Centres (SDCs) set up by the Ministry of National Development Planning (BAPPENAS) represent an interesting initiative recently undertaken to tackle co-ordination inefficiencies in vocational education and training policy at the local level. SDCs have been piloted in three cities (Surakarta, Denpasar and Makassar) and four provinces (North Sumatra, Banten, East Java and East Kalimantan) between 2017 and 2018. Going forward, as the ministry plans to extend the project to other cities and provinces, it will be important to ensure an extensive representation of local actors in the field of VET in each city/province.

The government could consider creating an integrated approach to data collection, monitoring and evaluation of VET programmes at the local level

Provinces in Indonesia collect data on vocational students' performance and outcomes. Data for all provinces is then gathered by the Ministry of Education and Culture. The Ministry of Manpower instead collects data on the number of vocational trainings conducted in work training centres owned by the central and local governments. It collects information on the number of registered jobseekers in online job matching platforms as well as the number of registered job vacancies and the number of workers recruited through the matching of demand and supply. However, data collected by the Ministry of Manpower is often incomplete. For example, some provinces do not report the number of trainees who participated in vocational training. The Ministry of Manpower also fails to collect data on privately-owned vocational training centres and informal apprenticeships, as private companies are reluctant to share information with the government. Furthermore the information on employment outcomes of jobseekers who register in online job matching platforms can be limited, as some provinces only record the number of registered jobseekers but not whether they find a job through the online platforms.

Monitoring of training outcomes is needed to inform evidence-based policy making in vocational education and training in Indonesia. Broadening the scope of data collection and undertaking systematic analysis and evaluation of outcomes of vocational education and training could be an important step to gauge the effectiveness of VET policy at the national and local level in Indonesia. Data collection should be followed by appropriate evaluation on the effectiveness of VET, on their alignment with labour market needs and their ability to match jobseekers to quality jobs. The above mentioned committee could play a role in bringing together different stakeholders, defining responsibilities for data collection and evaluation and fostering a co-ordinated approach to VET and labour market services.

Indonesia could promote more employer leadership in skills training by facilitating employer-led networks (especially among SMEs) at the local level

Vocational curricula are set at the national level by the Ministry of Education and Culture. The specific focus of local vocational schools is then decided by local governments. A relevant issue is that the offer of courses is often driven by local students' preferences. For example, there is an oversupply of vocational courses in business and management and information and communication technology (ICT), as students and families see these as the most promising sectors.

One of the pre-requisites of successful skills programmes is the engagement of employers in the design and delivery of training programmes. At the local level, establishing partnerships between employers and the vocational education system can help to improve the overall quality of technical education and ensure that graduates are well-placed to transition into the world of work. Involving the private sector can also help to boost capacity, formalise employment arrangements and improve poor perceptions of vocational education that persist across many Southeast Asian countries. Engaging employers requires local leadership, particularly from community and government actors. The active engagement and involvement of employers in the design of training activities would be important for Indonesia to develop a robust skills system. Involving local actors from the third sector is particularly important in Indonesia, where the informal sector is large and traditional engagement mechanisms are unlikely to reach the private sector. Current forms of engagement in Indonesia with employers tend to feature ad-hoc collaborations between individual employers and individual vocational education and training providers. This form of engagement risks resulting in short-term partnerships that may lead to the development of overly firm-specific occupational competences. To ensure that future sectoral skills needs are accommodated, efforts could be made to build relationships among groups of employers, namely chambers of commerce, sectoral organisations and employers' associations.

International evidence points to the benefits of stimulating employer-led networks that can actively define training requirements and deliver programmes. Employers can play a role to advise other firms about how skills training can help improve their productivity. SMEs often face unique barriers to workplace training opportunities and therefore it is important to look at how policies can be customised to meet their needs. Indonesia could look at the example of Skillnet in Ireland which has been particularly successful in creating an employer-led network (especially among SMEs) to encourage more participation in training opportunities. Another example is Korea's National Human Resources Development Consortium, considered a case of best practice internationally in promoting networks for skills development. Under this programme, launched in 2001, large firms, employers' associations and universities are encouraged to set up consortiums with SMEs to share training facilities and equipment, as well as experience and knowhow in vocational training.

A priority could be placed on improving the overall quality of training programmes being delivered at the local level

Teaching and training quality is fundamental for students to achieve effective learning at all levels of education. While the supply of VET providers has increased significantly over the last decade, in several cases, this has not aligned with local demand. Additionally, the quality of VET providers is uneven, affecting training quality across provinces in Indonesia. Accreditation of institutions and quality assurance remain significant challenges, which contribute to the variability of VET across provinces.

Quality teaching could also contribute to making vocational education effective and preparing students for the labour market in Indonesia. Vocational teachers in Indonesia are often recruited by the same school they graduated from following graduation. As a result, teachers often lack professional experience outside of school, resulting in courses that might not address the needs of the labour market. The Government of Indonesia and the Ministry of Education and Culture could consider several options to ensure a high quality

of teaching in vocational schools and programming based on industry needs. Although teacher internship programmes exist, they are conducted on an ad-hoc basis. It would be important to mainstream programmes to provide teachers with work experience, which they can then transmit to students. Some initiatives to foster teacher on-the-job experience have been taken, for example in the tourism industry, where a recently launched programme allows vocational education teachers to spend one month of internship at major companies in the accommodation and food and beverage sectors. Such internship programmes could be relevant to upgrade teachers' skills and keep them up to date with employer skills requirements. Indonesia could learn from the experience of other countries that have been taking positive steps in teachers' continuous skills development. For example, in Singapore, SkillsFuture SG has put in place an Adult Education Network, i.e. a professional membership scheme that enhances professionalisation and continual skills development of adult educators, which offers a series of continuing professional development programmes and access to resources.

Policy makers could also take steps to allow industry representatives to teach vocational education and could consider including the possession of adequate work experience as a requirement for being able to teach vocational education in a specific field. Vocational trainers could also be hired from local companies on short-term contracts to fill trainer vacancies. In several countries, staff work part time as vocational trainers and part time in industry. This type of arrangement could be particularly beneficial, as trainers would remain up to date with the changing characteristics and skills needs of the industry, therefore providing relevant vocational courses.

The government could look for opportunities to update local school infrastructure while also rationalising new school construction

Appropriate school infrastructure, including both basic and training infrastructure, is needed for the effective delivery of vocational education. Lacking education and training infrastructure represents an issue in Indonesia, with several institutions facing challenges in acquiring and maintaining appropriate infrastructure. Although the number of vocational schools across provinces in Indonesia has dramatically increased over the last years, this has not been accompanied by an increase in the quality of infrastructure and services provided within schools. This is especially the case of rural and remote provinces, where the number of laboratories to undertake vocational trainings are low, and schools also struggle to have access to decent water and medical facilities. The Government of Indonesia has recently taken steps to prioritise the improvement of vocational school's infrastructure, by placing the revitalisation of vocational school's existing equipment at the core of the government's "3R strategy", which also aims to re-brand vocational education and re-orient students' course choice.

Transfers from the central government are a substantial source of funding for public SMKs and other vocational institutions. However, the bulk of the general funds transferred from the central government to local governments, including provinces and cities, is devoted to salaries of public officials, including teachers and lecturers, with only a limited share of these grants set aside for education devoted to non-salary purposes. Given this gap, there is a case for some local governments to increase the effectiveness of spending on vocational education and devote more resources to upgrading infrastructure of existing schools.

In addition, while the government has built new vocational schools, contributing to improving access to education for many, some provinces seem to contain too many schools given the number of local vocational students, resulting in gaps in capacity utilisation. For example, the Ministry of Education and Culture reports that more than 7 000 SMK schools in the country have less than 200 students, making it hard for schools to have complete equipment. A case might therefore exist for rationalising the number of schools within some provinces while building new schools in others based on the analysis of the local context. On one hand, this could increase the utilisation of vocational schools, while on the other hand triggering economies of scale in the provision of vocational infrastructure, such as technical laboratories.

Apprenticeship programmes can be used to promote employer participation in training and formal employment arrangements

Apprenticeships can offer an opportunity for young people to combine theoretical learning with on-the-job experience. In Indonesia, apprenticeships have taken a prominent role as a result of the launch of the National Apprenticeship Program Movement in 2016, which aimed to tackle skills mismatches and improve school-to-work transitions by promoting apprenticeships. Formal apprenticeships exist in Indonesia as part of the VET system. They are regulated by the Ministry of Manpower. As skills gaps are identified as a main challenge by employers in Indonesia, apprenticeships could play a role in reducing gaps between labour demand and supply, and be of particular help for young people, as they suffer most from unemployment. Apprenticeships take place in most sectors in Indonesia and across different enterprise sizes. The vast majority of apprenticeships are, however, informal, therefore making it hard to assess the actual diffusion of apprenticeships in the country. Between 2007 and 2013, it is reported that only 100 000 formal apprenticeship agreements were signed throughout the country. Due to the high levels of informality, data on apprenticeships is often limited or missing.

As a first step, the government could mainstream apprenticeships by developing a consistent national framework defining and regulating apprenticeships. So far, a Regulation adopted by the Ministry of Manpower in 2009 defines apprenticeships, but different ministries reportedly establish their own apprenticeship programmes, adopting different definitions and not co-operating with each other. Programmes are industry-specific, and ministries often do not recognise the legitimacy of each other's certifications.

The Indonesian Employer Organisation (APINDO) is well-placed to engage members in apprenticeships. However, interviews conducted in the context of this report showed that limited organisation funding represents an important challenge, hampering APINDO's capacity to support the development of apprenticeships. Support measures to increase the capacity of APINDO by expanding membership could be considered. Given the diffusion of informal apprenticeship and traineeship arrangements, especially within micro and small and medium enterprises (MSMEs), an incentives-based approach, including offering opportunities for capacity building to enterprises, access to training, business services and credit, could be explored to encourage them to engage with regulatory authorities on apprenticeship training.

2 Setting the stage for good local employment and skills policies in Indonesia

To understand employment and skills outcomes at the local level in Indonesia, it is important to delve into the country's economic development context. While the ongoing COVID-19 pandemic poses unexpected challenges to local development, Indonesia has experienced strong economic growth over the last decades. However, there are large provincial disparities with western provinces characterised by better economic performance as compared to rural and remote provinces, especially in the east of the country. In the late 1990s, Indonesia embarked on an ambitious reform programme, by transferring responsibilities to local governments. This chapter outlines recent socio-economic trends across Indonesian provinces.

In Brief

Indonesia has achieved strong growth and poverty reduction, but disparities across provinces persist

- Economic growth has reduced poverty and lifted living standards. The number of people in poverty at USD 1.90 a day has decreased from 50.4 million in 2008 to less than 15 in 2018. However, inequalities seem to have worsened in the country. The Gini Index, measuring inequality in the income distribution, has increased for much of the 2000s.
- Disparities persist in terms of economic performance and living standards, hampering employment and skills opportunities in some provinces. Western provinces enjoy better living conditions, while rural and remote provinces, especially in the east, often lag behind. The concentration of economic activity has not changed over the last decades, with the islands of Java, Bali, Sumatra and Kalimantan experiencing better economic performance than eastern regions.
- The ongoing COVID-19 pandemic crisis puts pressure on the country's labour market, by drawing millions of people into poverty and exacerbating inequalities. As of September 2020, all provinces in Indonesia have confirmed COVID-19 cases. Some provinces are better prepared than others. The government has announced extraordinary measures in support of the economy.
- In the 1990s, Indonesia embarked on a decentralisation programme, granting significant spending autonomy to local governments. However, the way decentralisation has been implemented in Indonesia has made local governments highly dependent on transfers and has made the access to adequate technical capacities more challenging.

Introduction

Looking at Indonesia's economic development trends over the past years is a prerequisite for understanding employment and skills outcomes across provinces, analysed in Chapters 3 and 4 of this report. Driven by remarkable economic growth, Indonesia is today the largest economy in Southeast Asia by GDP. Despite progress, substantial differences persist across segments of the population and provinces, which require stepping up efforts to boost local economic development across the country in order to create good employment opportunities. The ongoing COVID-19 pandemic crisis poses new and unexpected challenges to Indonesia's health system and local development opportunities. Some provinces are better prepared than others in facing the pandemic, which risks exacerbating inequalities.

Section 2.1 provides a snapshot of Indonesia and its administrative structure. Section 2.2 presents economic development trends in Indonesia, focusing on economic performance, poverty and inequality. Section 2.3 delves into provincial differences in socio-economic performance across Indonesia. Section 2.4 outlines the main characteristics of decentralisation in Indonesia.

2.1. Indonesia country overview

With a population of 270.6 million in 2019 dispersed around more than 17 000 islands, Indonesia is the fourth most populated country and the largest archipelago in the world. Annual population growth has declined since the mid-2000s, but remains above 1% per year. The Indonesian population is projected to reach 305 million in 2035 and 319 million in 2050, according to OECD estimates (OECD, 2019[1]). The island of Java alone gathers 56% of the population, and the island of Sumatra a further 20%. Indonesia continues to urbanise at a steady pace. In 2017, 55% of the population lived in urban areas, up from 45% in 2005. Indonesia has a young population compared to other Southeast Asian economies. The median age of the Indonesian population is 31.1 years, lower than many countries across Southeast Asia (39 in Thailand, 35.6 in Singapore, 31.9 in Viet Nam and 31.1 in Brunei Darussalam).

Indonesia is the largest economy in Southeast Asia, with a GDP of over USD 1.1 trillion (current prices) in 2019, but disparities across provinces are wide. The poverty headcount ratio, defined as the percentage of people living below the international poverty line of USD 1.90 a day, amounted to almost 60% in 1990, while it is today more than ten times lower. However, socio-economic outcomes vary widely across provinces. There are wide disparities across provinces in gross regional domestic product per capita, ranging from more than IDR 230 million (around USD 16 000) in the Special Capital Region of Jakarta to less than IDR 20 million (less than USD 1 500) in East Nusa Tenggara. Regions with higher GDP per capita are more resource-rich, such as East Kalimantan (oil), Papua (copper and gold), Riau and Riau Island (oil, gas and palm oil). On the other hand, provinces with lower GDP per capita tend to be rural and remote islands lacking natural resources, such as Maluku. Previous OECD work shows that disparities in GDP per capita are larger in Indonesia than in other emerging economies, such as Mexico, Brazil, the People's Republic of China (hereafter "China") and India. In addition, poverty is substantially more severe in provinces in the East than the rest of the country.

The administrative structure of Indonesia delegates substantial power to local policy makers to foster economic development opportunities. Indonesia consists of 34 provinces, 410 districts (known as regencies) and 98 cities. The population size of provinces ranges from less than 700 000 inhabitants in North Kalimantan to almost 50 million in West Java (see Table 2.1). At the same time, some provinces cover a significantly larger area than others (e.g. 320 000 squared kilometre in Papua, while only 664 in the Special Capital Region of Jakarta). Consequently, population density varies, and it can be as high as 15 000 inhabitants per squared kilometre in the Special Capital Region of Jakarta, while lower than 10 North Kalimantan, Papua and West Papua. Regencies and cities also have different demographic sizes and economic characteristics, with small regencies being home to 6 000 inhabitants, while the population of the largest cities can amount to 4.8 million (Bogor in West Java). Each province, district and city has its own administration, which has the right to establish local regulations. Subnational administrations have wide autonomy except on matters reserved for the central government. Indonesia embarked in a process of decentralised in the early 2000s, which resulted in increased administrative and fiscal power in the hands of local governments.

Figure 2.1. Indonesia is the largest archipelago in the world

Map of Indonesia

Source: Asian Development Bank.

Table 2.1. List of Indonesian provinces

English name	Indonesian name	Population (2015)	Area (sq. km, 2016)	Population density (per sq.km)
Aceh	Aceh	4 993 385	57 956	86
Bali	Bali	4 148 588	5 780	718
Banten	Banten	11 934 373	9 663	1 235
Bengkulu	Bengkulu	1 872 136	19 919	94
Special Region of Yogyakarta	DI Yogyakarta	3 675 768	3 133	1 173
Special Capital Region of Jakarta	DKI Jakarta	10 154 134	664	15 292
Gorontalo	Gorontalo	1 131 670	11 257	101
Jambi	Jambi	3 397 164	50 058	68
West Java	Jawa Barat	46 668 214	35 378	1 319
Central Java	Jawa Tengah	33 753 023	32 801	1 029
East Java	Jawa Timur	38 828 061	47 800	812
West Kalimantan	Kalimantan Barat	4 783 209	147 307	32
South Kalimantan	Kalimantan Selatan	3 984 315	38 744	103
Central Kalimantan	Kalimantan Tengah	2 490 178	153 565	16

East Kalimantan	Kalimantan Timur	3 422 676	129 067	27
North Kalimantan	Kalimantan Utara	639 639	75 468	8
Bangka Belitung Islands	Kep. Bangka Belitung	1 370 331	16 424	83
Riau Islands	Kep. Riau	1 968 313	8 202	240
Lampung	Lampung	8 109 601	34 624	234
Maluku	Maluku	1 683 856	46 914	36
North Maluku	Maluku Utara	1 160 275	31 983	36
West Nusa Tenggara	Nusa Tenggara Barat	4 830 118	18 572	260
East Nusa Tenggara	Nusa Tenggara Timur	5 112 760	48 718	105
Papua	Papua	3 143 088	319 036	10
West Papua	Papua Barat	868 819	99 672	9
Riau	Riau	6 330 941	87 024	73
West Sulawesi	Sulawesi Barat	1 279 994	16 787	76
South Sulawesi	Sulawesi Selatan	8 512 608	46 717	182
Central Sulawesi	Sulawesi Tengah	2 872 857	61 841	46
Southeast Sulawesi	Sulawesi Tenggara	2 495 248	38 068	66
North Sulawesi	Sulawesi Utara	2 409 921	13 852	174
West Sumatra	Sumatera Barat	5 190 577	42 013	124
South Sumatra	Sumatera Selatan	8 043 042	91 592	88
North Sumatra	Sumatera Utara	13 923 262	72 981	191

Source: Statistics Indonesia.

2.2. Trends in economic development in Indonesia

A strong economic performance, reduced poverty and inequality, are a pre-requisite for good employment and skills outcomes. Indonesia's economic performance is remarkable looking at where the country stood in the 1960s: the Indonesian GDP was equivalent to that of many low-income African countries at the time and ranked very low in the Asian context. A gradual process of industrialisation drove Indonesia's growth and falling oil prices in the 1980s supported economic diversification.

While growth has dramatically reduced poverty and lifted living standards, profound differences exist across provinces and segments of the population. Western provinces typically drive economic activity, also thanks to supporting infrastructure and access to services, while rural and remote regions, predominantly in the east of the country, lag behind. While decentralisation reforms have aimed to improve the effectiveness of service delivery at the local level, they have also made local governments highly reliant on transfers from the central government, and made access to adequate skills in the public service more challenging.

The ongoing COVID-19 pandemic crisis puts substantial pressure on Indonesia's health system and poses challenges to future economic growth. As of 9 April 2020, all 34 provinces in Indonesia have confirmed COVID-19 cases, with Jakarta recording half of the confirmed cases. Few people are being tested and the availability of Intensive Care Unit (ICU) is poor, with the availability of medical infrastructure varying substantially across provinces. In addition, on 1 April, the government officially revised down its growth forecast from 5.3% to 2.3%. The government has taken measures to support the economy, including increased budget deficit and social assistance measures.

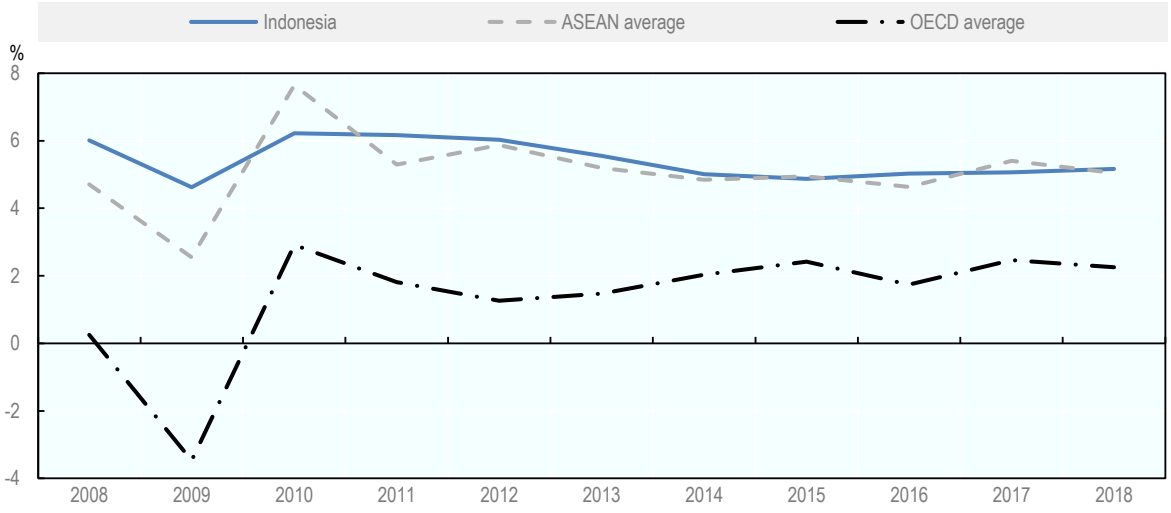
2.2.1. The Indonesian economy has experienced strong economic growth over the last decades

With a GDP of over USD 1.1 trillion (current prices) and a population of 270.6 million in 2019, Indonesia is the largest economy in Southeast Asia and one of the largest emerging economies in the world. The

Indonesian economy has been characterised by sustained GDP growth over the last decade, averaging more than 5% almost every year, substantially higher than growth in the OECD and in line with the average across ASEAN countries (see Figure 2.2). The size of the Indonesian economy is even more remarkable considering a larger timeframe. Starting from similar GDP levels as other ASEAN economies as early as in the 1960s, the size of the Indonesian economy today is substantially larger than other ASEAN countries (see Figure 2.3). Supportive macroeconomic policies, greater confidence and strong external demand have benefitted economic activity in recent years. Consumption continues to be an important driver underpinning Indonesia's growth (OECD, 2018[2]). However, Indonesia runs the risk of remaining stuck in a middle-income trap as, by some estimates, the economy should grow at least 6% per year as a pre-condition for being able to escape the middle-income trap and shift towards higher development levels (Sukmana, 2019[3]). Human capital has been identified as one of five priorities for the government which has set an ambitious target that Indonesia will leave the middle-income trap by 2045. Closing the gap in Global Value Chain (GVC) participation could yield significant productivity and income benefits, speeding up the rate of transfer out of the agricultural sector and informality (OECD, forthcoming[4]).

Figure 2.2. Indonesia has experienced sustained growth over the last decade

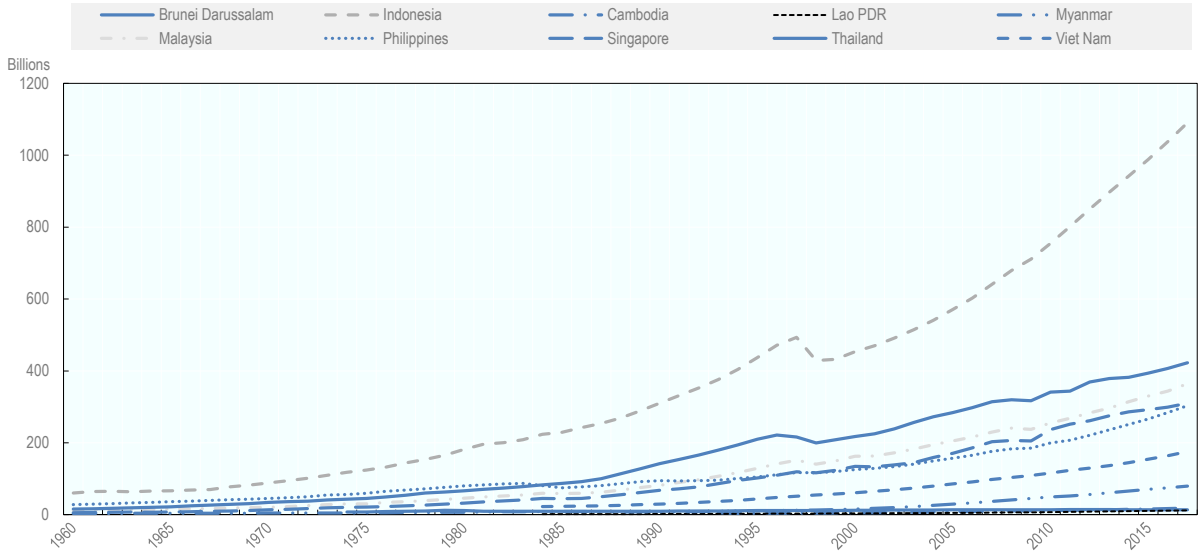
Annual GDP growth at market price based on current local currency, Indonesia, average across ASEAN countries and OECD, 2008-2018



Source: World Bank, World Development Indicators.

Figure 2.3. The Indonesian economy is substantially larger than its ASEAN peers

GDP (constant 2010 USD), ASEAN countries, 1960-2018



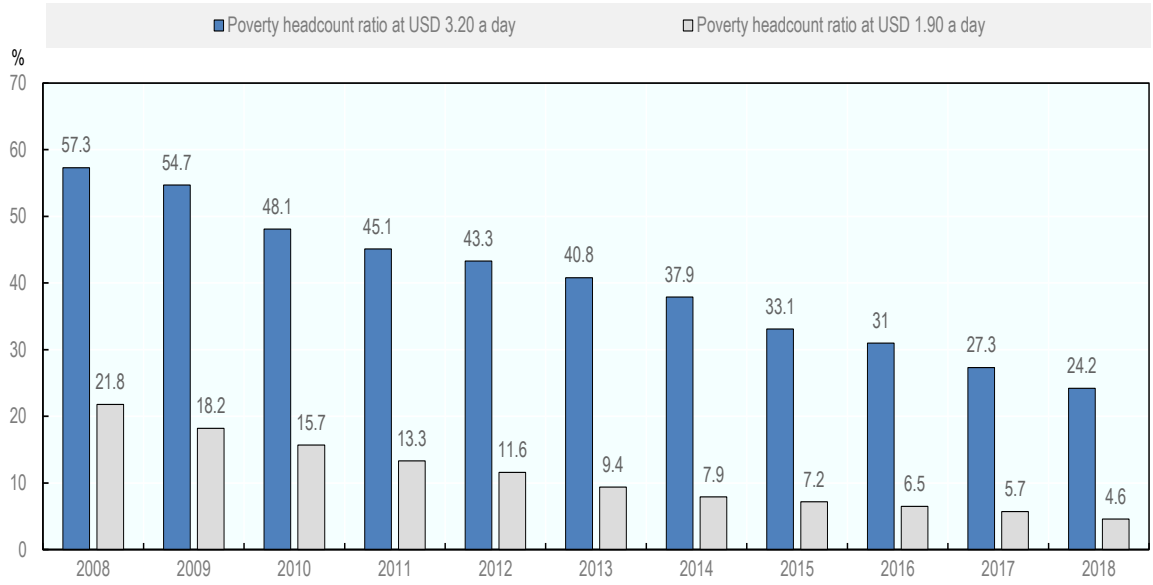
Source: World Bank, World Development Indicators.

2.2.2. Economic growth has gone hand in hand with poverty reduction

Indonesia's achievements in tackling poverty over the last decades have been remarkable. Poverty in Indonesia declined from a peak of 24.2% of people living below the national poverty line in 1999 to 9.2% in 2019. The poverty headcount ratio, defined as the percentage of people living below the international poverty line of USD 1.90 a day, amounted to almost 60% in 1990, while it is today more than ten times lower. A temporary backlash took place as a consequence of the Asian financial crisis in 1997-1998, causing the poverty headcount ratio to increase by almost 6% between 1996 and 1999, and causing almost 18.5% of non-poor urban households to fall into poverty (Dartanto et al., 2017[5]). Poverty has continued to decline in Indonesia over the last decade: the number of people in poverty at USD 1.90 a day has decreased from 50.4 million in 2008 to less than 15 million in 2018. Accordingly, the poverty headcount ratio has decreased from 21.8% in 2008 to 4.6% in 2018 (see Figure 2.4). While efforts to reduce poverty have delivered significant results for the population, about 24.2% of the population, accounting for more than 60 million people, still live on less than the lower middle-income class poverty line, amounting to USD 3.20 per day. This suggests that, although extreme poverty has decreased, further efforts are needed to lift living standards. It should be noted however that poverty measures based on specific monetary values (e.g. USD 1.90 and 3.20 a day) risk not taking into account the effect of inflation.

Figure 2.4. Extreme poverty has dropped in Indonesia, but many people earn less than the lower-middle income

People living below the international poverty lines of USD 1.90 and 3.20 a day, 2011 PPP, percentage of the population, 2008-2018



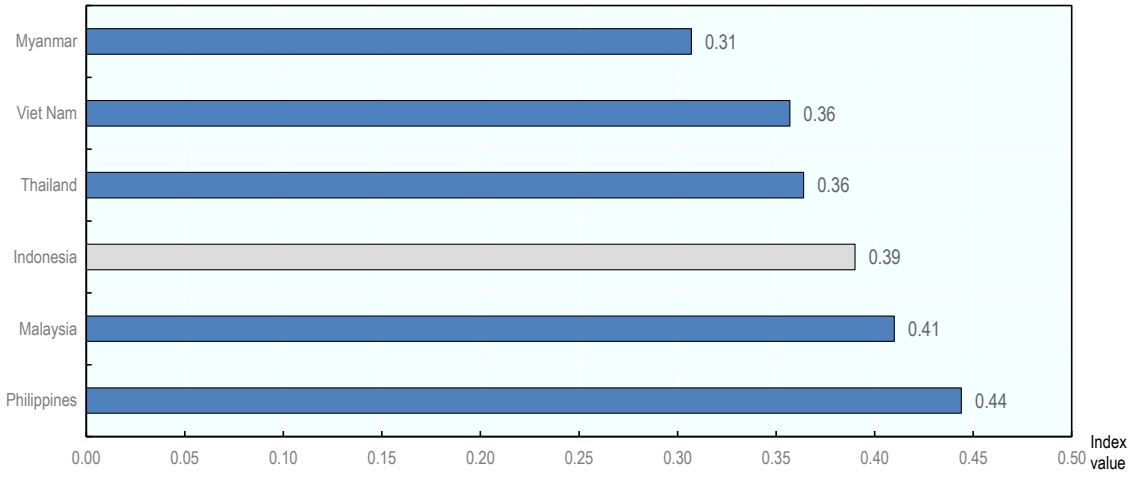
Source: World Bank, World Development Indicators.

2.2.3. Despite poverty reduction, inequalities have worsened in Indonesia

Declining poverty rates do not seem to have translated into decreased inequalities in the country. The Gini Index, measuring inequality in the income distribution, has increased for much of the 2000s, and has continued to rise after 2010, reaching a peak of 0.39 in 2013. It stands to 0.39 in 2018, but the levels are still higher than the beginning of the decade. Structural transformation might be one of the driving factors of rising inequality in Indonesia. The trends of the Gini Index and the share of agriculture to GDP have moved in opposite directions, while the Index and the share of services to GDP move in a similar direction. Inequalities could be rising because capital-intensive and skills-intensive sectors, including finance, telecommunications and other services, employ fewer people, and less educated and unskilled people may not benefit from a rising economy (Dartanto et al., 2017[5]). Inequalities also seem to be more accentuated in Indonesia than in some other ASEAN economies for which data is available. Viet Nam, Thailand and Myanmar all have lower Gini Indices than Indonesia (see Figure 2.5). Consumption data across different segments of the population confirm that substantial inequalities persist in Indonesia. Between 2015 and 2017, the mean consumption of the bottom 40% of the income distribution has increased from USD 2.51 to USD 2.75 per day, as compared to USD 5.68 and 6.24 for the total population. The annualised growth in mean consumption per capita shows a negative shared prosperity premium, with the consumption of the bottom 40% growing less than the mean between 2015 and 2017.

Figure 2.5. Inequalities are higher in Indonesia than many ASEAN economies

Gini Index, selected ASEAN countries, latest available year



Note: Latest available year is 2018 for Indonesia, Thailand and Viet Nam, 2017 for Myanmar, and 2015 for Malaysia and the Philippines.
Source: World Bank, World Development Indicators.

2.2.4. The ongoing COVID-19 pandemic crisis will have a large economic and social impact

Recent estimates show that the COVID-19 outbreak will heavily affect economic growth worldwide. The pandemic is inflicting high and rising human costs worldwide and severely impacting economic activity. As a result of the pandemic, the global economy is projected to contract sharply by -3% in 2020, much worse than during the 2008–2009 financial crisis (International Monetary Fund, 2020[6]). The Indonesian government's baseline scenario is for Indonesia's economic growth to drop to 2.3%, the lowest in 21 years, with a worst-case scenario of an economic contraction of 0.4% (The Jakarta Post, 2020[7]). The International Monetary Fund (IMF) forecasts that GDP growth in Indonesia should drop to 0.5% in 2020.

Millions are likely to fall into poverty, as Indonesia puts in place the necessary protection measures. The government has projected that millions of people will fall into poverty and unemployment as the COVID-19 pandemic batters the Indonesian economy. Under the "bad" scenario, 1.1 million new poor and 2.9 million new unemployed people would be added. The worst-case scenario projected 3.78 million people would fall into poverty and 5.2 million would lose their jobs (The Jakarta Post, 2020[8]).

2.3. Differences in socio-economic performance across provinces in Indonesia

The Indonesian economy's growth over the last decades has been remarkable and it has contributed to lifting living standards across regions. Poverty has decreased, and education and labour market outcomes have improved. However, substantial disparities across regions persist in both economic performance and living standards. Differences across provinces in Indonesia emerge when looking at indicators of economic performance as well as living standards. The availability of natural resources is dispersed in Indonesia, contributing to regional disparities (Mokoginta, 2018[9]). The concentration of economic activity has not changed significantly over the last decades, with Java, Bali, Sumatra and Kalimantan experiencing better economic performance than eastern regions (Hill, Resosudarmo and Vidyattama, 2008[10]). The better performing regions in Indonesia are the most connected to the global economy. Jakarta has grown richer

than the rest over the last decades, standing out as a special case (ibid.). The regional distribution of growth can be linked to historically poor areas (Hill and Vidyattama, 2016[11]). Western provinces tend to enjoy better living conditions, while more rural and remote provinces, especially in the east of the country, often lag behind in both economic terms and living standards.

As the performance of provinces across Indonesian varies substantially, place-based policies can help each of them make use of their specific strengths to generate economic development. Place-based development policies can provide solutions to help regions utilise their full economic potential (OECD, 2019[12]). Indeed, the Indonesian government has recently taken steps to promote more equitable growth in Indonesia, identifying tourism as a potential driver of growth for regions lagging behind (see Box 2.1). The role of tourism as a driver of growth across provinces in Indonesia is however is facing substantial challenges due to the COVID-19 pandemic as tourism has been one of the most heavily-affected sectors.

Box 2.1. The Indonesian government has prioritised tourism to promote regional development, but the COVID-19 crisis places substantial pressure on the industry

Tourism can play a role in boosting economic and employment growth in regions that are lagging behind, complementing other policies tackling inequalities in Indonesia. A diverse and rich environment and ecosystem make Indonesia a very attractive destination for tourists. Tourism in Indonesia has boomed over the past years. The province of Bali, accounting for less than 1% of the Indonesian land mass, is the main destination, attracting half of foreign visitors to Indonesia.

Tourism has been high in the agenda of Indonesian policy makers since 2014, when the National Medium-Term Development Plan (RPJMN) for 2015-2019 was approved. As part of the plan, the government has identified 10 new destinations showing a substantial potential, the so-called “new Balis”. The plan seeks to learn from the very successful experience of Bali, and export the development model to other provinces, by tapping into local resources and potential attractions. The plan sets ambitious goals for 2019, which include:

- 20 million international arrivals, up from 9 million in 2014;
- 275 million domestic visits, up from 250 million in 2014;
- 8% share in GDP, up from about 4% in 2013;
- Doubling of foreign exchange revenues from tourism to IDR 240 trillion (about USD 16 billion);
- Increase in employment in industry by 2 million to nearly 12 million;
- Improvement in the World Economic Forum ranking of tourism competitiveness to 30th from 70th.

Table 2.2. Tourist arrivals objectives for the 10 priority destinations

Number of people

Destination/Province	2013	2019 target
Borobudur (Central Java)	227 337	2 000 000
Mandalika (West Nusa Tenggara)	125 307	1 000 000
Lake Toba (North Sumatra)	10 680	1 000 000
Labuan Bajo (East Nusa Tenggara)	54 147	500 000
Morotai (Maluku Utara)	500	500 000
Mount Bromo (East Java)	33 387	1 000 000
Tanjung Kelayan (Belitung)	451	500 000
Tanjung Lesung (Banten)	1 739	1 000 000
Thousand Islands (DKI Jakarta)	16 384	500 000
Wakatobi National Park (Southeast Sulawesi)	3 315	500 000

Source: Ministry of Tourism.

The ongoing COVID-19 pandemic crisis has however put substantial pressure on the tourism industry. Tourist destinations have been heavily affected by the halt in travels and the lockdown of countries worldwide. Early data published by Statistics Indonesia shows that the number of foreign tourist arrivals to Indonesia has started to decline as of February 2020. There were less than 900 000 foreign tourist in February 2020, compared to about 1 250 000 in the same month in 2019. Tourists from countries identified as Indonesia's main tourist markets such as China, Malaysia, Singapore and Australia fell. Arrival from China alone fell by 93.5% to only 11 780 people in February 2020 from 199 960 tourists in the same period in 2019 (The Jakarta Post, 2020[13]). The Indonesian government unveiled an economic stimulus package to counter the impact from the COVID-19 pandemic. The package will provide financial incentives for the tourism, airline and housing sectors hit by the outbreak.

Source: OECD (2018[2]), *OECD Economic Surveys: Indonesia 2018*, OECD Publishing, Paris, https://dx.doi.org/10.1787/eco_surveys-idn-2018-en; The Jakarta Post (2020[13]), *Tourism will take at least a year to recover from COVID-19 outbreak: Economists*, https://www.thejakartapost.com/news/2020/04/06/tourism-will-take-at-least-a-year-to-recover-from-covid-19-outbreak-economists.html (accessed on 15 April 2020).

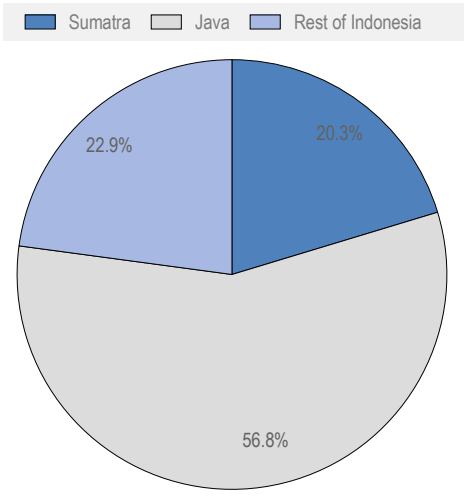
2.3.1. The Indonesian population is concentrated in Java and Sumatra, and it is projected to become more and more urban

The Indonesian population is concentrated in the islands of Java and Sumatra, which account for more than three quarters of the total population in the country (see Figure 2.6). High concentration of population and economic activity in some islands generates environmental and infrastructure challenges. For example, excessive subterranean water extraction is causing land subsidence and increasing the risk of flooding in Jakarta, while traffic jams and urban air pollution are amongst the worst in the world (OECD, 2019[14]). Concentration can however also permit economies of agglomeration necessary for thriving highly productive services in sectors such as finance and information technology (OECD, forthcoming[4]). The provinces of West Java, East Java and Central Java are the most populous, being home to 18.3%, 15.2% and 13.2% respectively of the total Indonesian population. The Special Capital Region of Jakarta has the highest population density, which can be as high as 15 300 inhabitants per squared kilometre. On the other hand, density levels can be as low as 10 inhabitants per squared kilometre in West Papua, Papua and North Kalimantan.

In addition, it is projected that gap between urban and rural population will exacerbate in Indonesia, as more and more people will move to urban areas (see Figure 2.7). It is expected that the rural population will number barely over 100 million by 2035, whereas the urban population will exceed 200 million, having increased by 71% since 2010 (Jones, 2014[15]). By 2045, 220 million Indonesians will live in urban areas. Urbanisation can boost economic prosperity, by fostering positive agglomeration forces, creating an environment that is conducive to innovation and enhanced productivity. However, not everyone may benefit from the prosperity and liveability generated by urbanisation, as the benefits may fail to spill over to those who remain in the countryside, worsening gaps between urban and rural areas. This requires adequate connectivity both across and within places, to ensure that prosperity does not remain locked up in the cores of the urban areas but is shared more broadly (Roberts, Gil Sander and Tiwari, 2019[16]). Population shifts from rural to urban areas will have profound implications for the labour market, putting pressure on urban areas to get an increasingly larger working age population into jobs (Allen, 2016[17]).

Figure 2.6. The islands of Java and Sumatra are home to more than three quarters of the Indonesian population

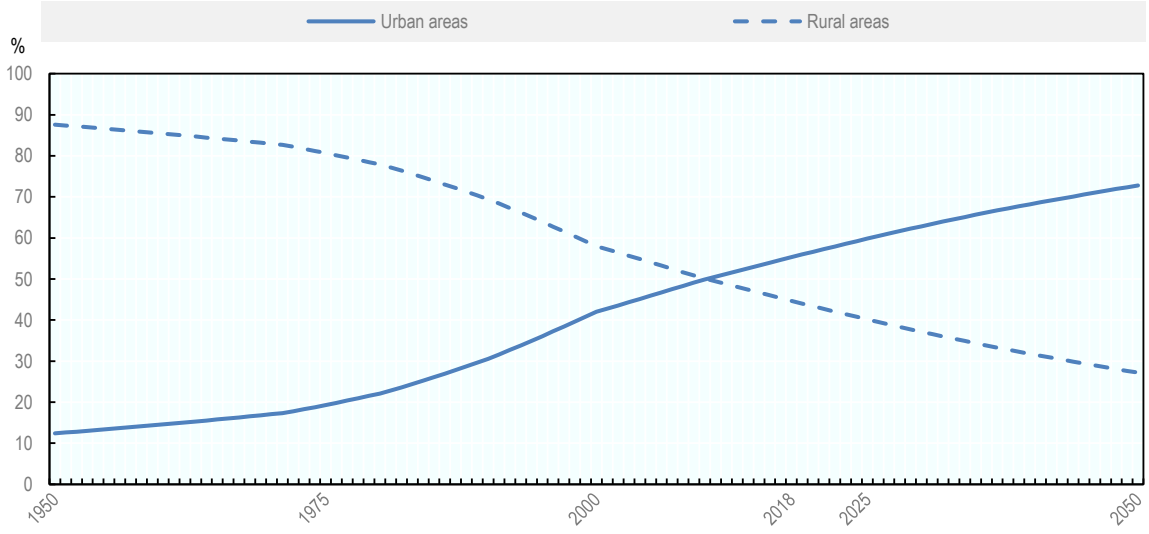
Percentage of total population



Source: Statistics Indonesia.

Figure 2.7. More and more people will be living in urban areas in Indonesia

Share of total population living in urban and rural areas, 1950-2018 data and 2019-2050 projections



Source: UN Department of Economic and Social Affairs (2018), World Urbanization Prospects 2018: The 2018 Revision.

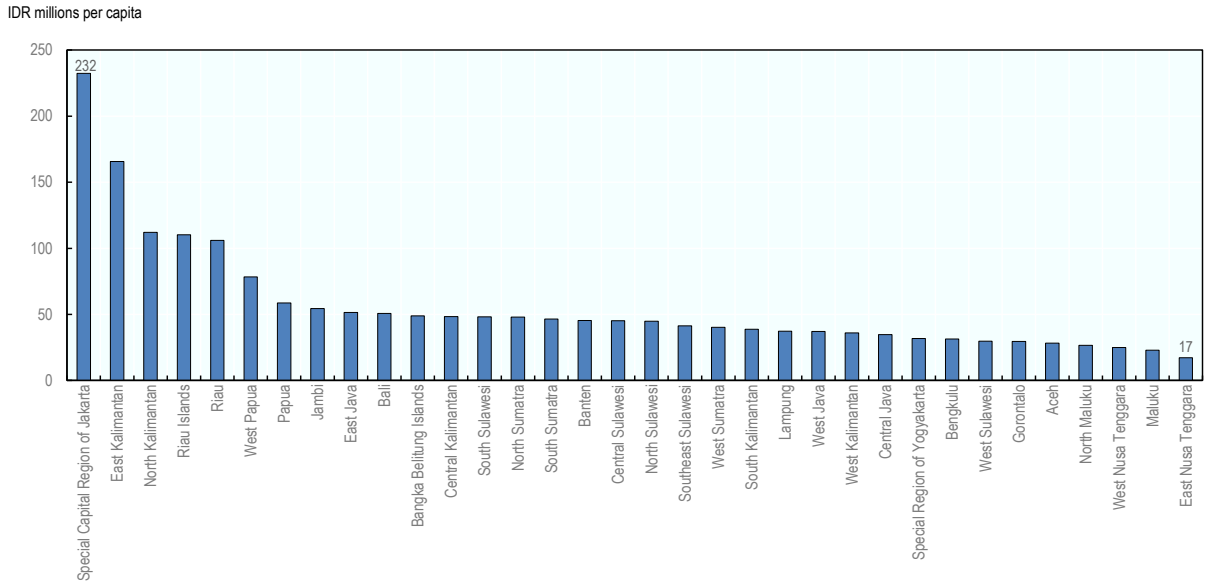
2.3.2. Western provinces enjoy better economic performance than rural and remote provinces in the east of the country

The Special Capital Region of Jakarta is the province with by far the highest gross regional domestic product per capita, amounting to more than IDR 230 million per capita (more than USD 16 000). It is followed by East Kalimantan, North Kalimantan, Riau Islands, Riau, and West Papua. Substantial differences exist between the six top performing provinces in terms of gross regional product per capita and the rest of the country (see Figure 2.8). The remaining 28 provinces have a GDP per capita ranging from IDR 60 to 15 million. While the higher values for the Special Capital Region of Jakarta can be linked to its centrality in the Indonesian economy, regional differences also denote disparities in natural resource endowments. Regions with higher GDP per capita are more resource-rich, such as East Kalimantan (oil), Papua (copper and gold), Riau and Riau Island (oil, gas and palm oil). On the other hand, provinces with lower GDP per capita tend to be rural and remote islands lacking natural resources, such as Maluku (OECD, 2016[18]).

Furthermore, the GDP per capita distribution in Indonesia appears more dispersed than for other emerging market economies, suggesting that Indonesia's economic development has been characterised by more regional disparities as compared to other emerging economies (see Figure 2.9). Regions lagging behind are characterised by a predominantly agricultural economy. For example, in East Nusa Tenggara employment in agriculture (1.3 million people) is almost four times higher than employment in services (355 000) and six times higher than employment in manufacturing (217 000). In Maluku, agriculture employs almost twice as many people (258 000) as the services sector (143 000) and more than four times more people than manufacturing (59 000). The government's Fourth National Medium-Term Development Plan (or RPJMN 2020-2025) aims to realise an Indonesia that is self-reliant, advanced, just and prosperous through the acceleration of development on the basis of solid economic structures, supported by high-quality and competitive human resources. As part of the plan, the Indonesian government has designated six regions as "economic corridors" in order to foster investment attraction and develop specific industrial clusters around regional strengths. The corridors include Bali-Nusa Tenggara, Java, Kalimantan, Papua-Maluku Islands, Sulawesi and Sumatra (OECD/ADB, 2015[19]). The corridors aims to generate a more balanced economic base in Indonesia, fostering the potential of provinces other than the Special Capital Region of Jakarta, East and West Java, which today account for nearly half of Indonesia's GDP. In addition, Indonesia has also been experimenting the use of Special Economic Zones (SEZ) to maximise foreign direct investment (FDI) attraction in different areas of the country (see Box 2.2).

Figure 2.8. Some provinces are substantially richer than others

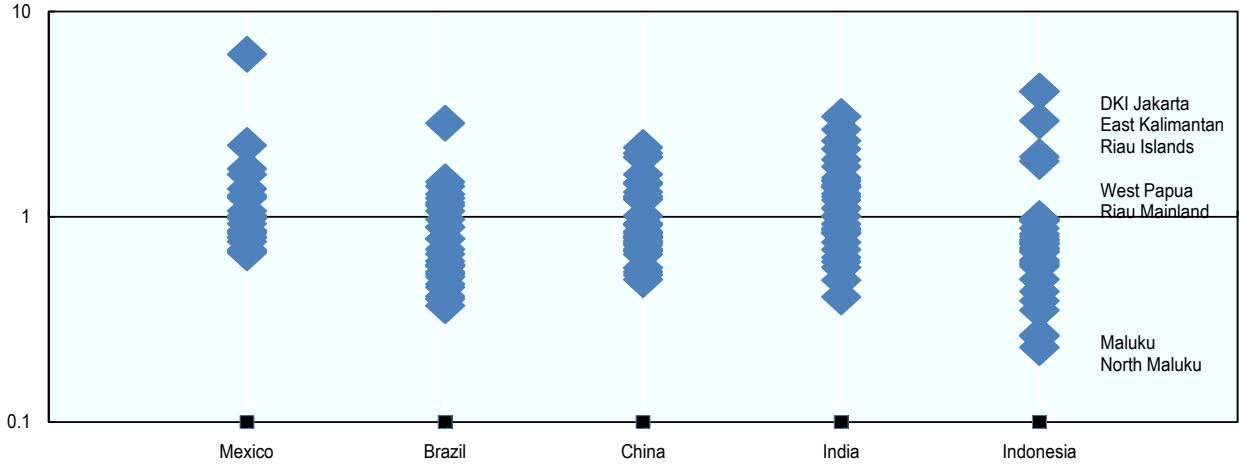
Gross Regional Domestic Product at current market prices by province, 2017



Source: Statistics Indonesia.

Figure 2.9. Regional disparities in GDP per capita are stronger in Indonesia than in other emerging economies

Log of ratio of regional GDP per capita (current local currency) to national average, 2013



Source: OECD (2016), Economic Surveys: Indonesia 2016, based on OECD Regional Database.

Box 2.2. Boosting FDI through Special Economic Zones (SEZs)

Special economic zones (also referred to as free zones) represent designated geographical areas within an economy, where business activity is subject to different rules from those prevailing in the rest of the economy. Zones can be established with different policy goals. The most common objective around the world is to attract foreign direct investment (FDI), as a means of boosting exports, links to global value chains (GVCs) and/or structural transformation of the economy. In countries suffering from high levels of unemployment, SEZs have been used to boost job creation by attracting investment in highly labour-intensive industries.

Indonesia currently operates 13 SEZs located throughout the country, offering opportunities for investments in manufacturing, agriculture, natural resources, and tourism among others. SEZs in Indonesia are open to foreign investment and offer investors access to preferential regulatory infrastructure and taxation in an attempt to channel investment into specific locations. Three SEZs were launched in 2019, including one in East Kalimantan, and an additional seven SEZs are currently in the development phase for 2020. Indonesia aims to attract more than USD 50 billion in investments into its zones over the next decade. As of October 2019, the total investments into Indonesia's SEZs reached USD 6 billion, still far below that of neighbours such as Thailand.

Source: ASEAN Briefing (2019[20]), *Special Economic Zones in ASEAN: An Introduction for Foreign Investors*, https://www.aseanbriefing.com/news/2019/10/15/special-economic-zones-in-asean-an-introduction-for-foreign-investors.html (accessed on 6 February 2020); Rothenberg and Temenggung (2019[21]), *Place-based policies in Indonesia: a critical review*, http://documents.worldbank.org/curated/en/376361571412939496/pdf/Place-Based-Policies-in-Indonesia-A-Critical-Review.pdf (accessed on 6 February 2020); ASEAN Briefing (2018[22]), *Indonesia's Growing Special Economic Zones - Opportunities and Challenges*, https://www.aseanbriefing.com/news/2018/08/24/indonesias-growing-special-economic-zones-opportunities-and-challenges.html (accessed on 6 February 2020); OECD (2017[23]), *Tracking Special Economic Zones in the Western Balkans: Objectives, Features and Key Challenges*, http://www.oecd.org/south-east-europe/SEZ_WB_2017.pdf (accessed on 6 February 2020).

2.3.3. Supporting infrastructure is lacking in rural and remote provinces

Good infrastructure is an important component of a quality business environment, and can be a facilitator of economic growth. As part of the National Medium-Term Development Plan 2015-2019, the government has highlighted infrastructure development as instrumental in fostering connectivity, accessibility and integration of rural and remote regions. However, the quantity and quality of infrastructure across provinces in Indonesia remains uneven (see Figure 2.10). This reflects the uneven development between Indonesia's regions and contributing to further exacerbating differences in economic performance. Disparities in road infrastructure remain a significant challenge in Indonesia, with predominantly rural and remote regions, such as Kalimantan, Papua and Maluku, where roads are substantially shorter as a proportion of their land than other regions, such as Sumatra, Java and Sulawesi. The quality of road infrastructure also varies between urban and rural regions, with over 20% of roads classified as damaged in Kalimantan and Maluku, while only 19% of them are considered to be in good quality in Papua (OECD, 2013[24]).

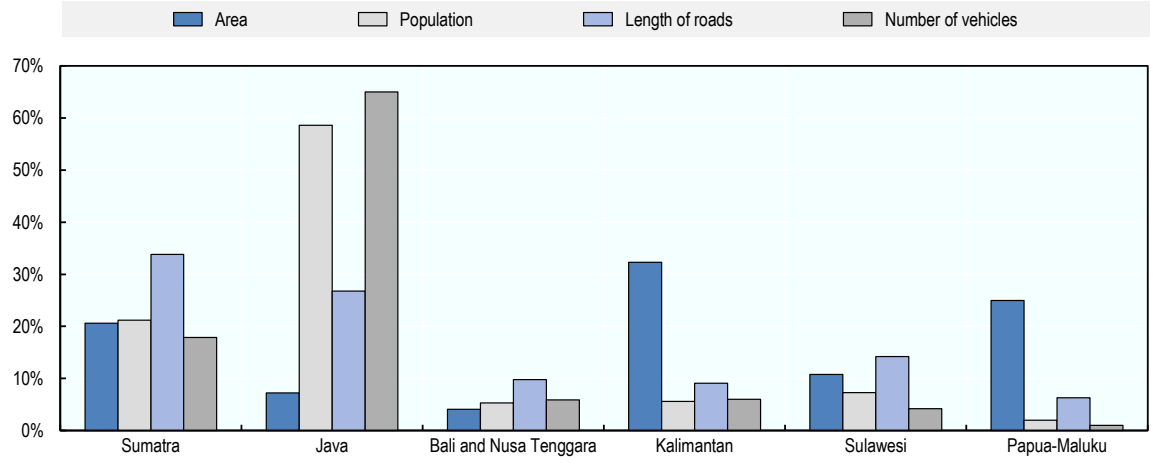
Being an archipelago of more than 17 000 islands, the economic performance of Indonesia depends heavily on the capacity and quality of its port infrastructure. The Quality of Port Infrastructure index developed by the World Economic Forum (WEF) measures business executives' perception of their country's port facilities. The index shows that, while the perception of Indonesia's port infrastructure has been improving, it still lags behind compared to other ASEAN countries such as Singapore, Malaysia and Thailand. The capacity of port infrastructure could be improved in Indonesia. There are more than 100 commercial ports in the country, but most of them only cater to small vessels on domestic routes and lack container facilities. In addition, there are 725 public ports across the country, which appear insufficient to

serve the number of islands and the vast area of Indonesia (Leung, 2016[25]). The *Tanjung Priok* port in Jakarta, Indonesia's largest port, manages around two thirds of national shipments and traditionally suffers from high dwelling times, hampering the competitiveness of export-oriented industries in the country. The *Tanjung Perak* port in Surabaya represents the second most important port in the country. Port infrastructure remains underdeveloped in the rest of the country, especially in eastern provinces, with the exception of Makassar, where the Makassar New Port project launched by the government aimed to increase its capacity. The government has recently launched several projects to upgrade the quality of existing port infrastructure in large ports and expand port infrastructure in eastern provinces (see Box 2.3).

Finally, airport infrastructure also plays an important role to foster connectivity across Indonesian provinces. Passenger numbers throughout Indonesian airports have been consistently growing over the last decades and today exceed 120 million on domestic and 21 million on international flights. Jakarta's *Soekarno-Hatta International Airport* is the largest airport in the country and one of the busiest in the world, with more than 50 million passengers per year. Other large airports in Indonesia include Surabaya, Bali, Makassar and Medan. Plans to expand and renovate airport infrastructure across Indonesia have taken a prominent role in Indonesia over the last years. Chronic under-capacity of existing airports has been, however, identified by the government as a relevant challenge hampering the potential of air transportation (UK Trade & Investment, 2013[26]). The Masterplan for Acceleration and Expansion of Indonesian Economic Development (MP3EI) 2011-2025 lists 13 airport expansion and refurbishment projects across both western and eastern Indonesia.

Figure 2.10. Infrastructure is substantially more developed in Java and Sumatra

Area, population, length of roads and number of vehicles in Indonesia by region, percentage of total, 2011



Source: OECD (2013[24]), *Southeast Asian Economic Outlook 2013: With Perspectives on China and India*, OECD Publishing, Paris, https://dx.doi.org/10.1787/saeo-2013-en.

Box 2.3. Improving port infrastructure in Indonesia

In 2014, the government placed strong emphasis on infrastructure development. As part of the Global Maritime Fulcrum master plan, the government aimed to increase the contribution of the maritime sector to GDP from 11% to 25%. The port had customs handling processes that were six times longer than Singapore. As such, the New *Priok* Development project, started in 2014, aimed to expand the port capacity and tackle its inefficiencies. A first phase, consisting of the construction of a new container terminal, was completed in 2016 and lead to increased volume of production. Steps have also been taken to simplify permit procedures, reducing dwelling times from seven to almost three days since the project was initiated.

Another government project aimed to implement sea tolls connecting the *Tanjung Priok* port in Jakarta and the *Tanjung Perak* port in Surabaya with 41 new ports throughout Indonesia. The programme has resulted in 212 000 tonnes of cargo being shipped from western Indonesia to eastern Indonesia between 2015 and 2018, while only 20 000 tonnes were shipped from eastern Indonesia to western provinces over the same period, mainly due to poor supporting infrastructure.

Source: Global Business Guide (2018[27]), *Indonesia's Maritime Infrastructure: Key Challenges Remain*, http://www.gbgindonesia.com/en/services/article/2018/indonesia_s_maritime_infrastructure_key_challenges_remain_11873.php (accessed on 25 June 2019).

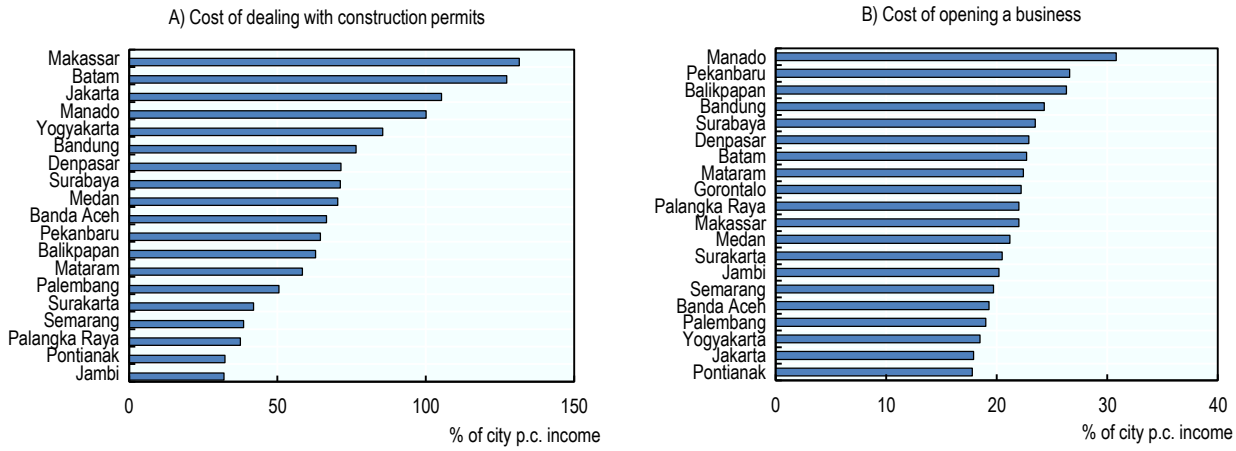
2.3.4. The quality of the business environment varies across cities

The large informal sector contributes to the prevalence of micro-enterprises across regions in Indonesia. However, the density of the SME population is influenced by local factors, including the presence of large employers, natural resource endowments, the size of the informal sector as well as whether the province is mostly rural or urban. Central Java, Bali and East Java have between 21 and 31 industry-based businesses with 1-19 employees per 1 000 people, as compared to 2-3 in West Papua, Papua, North and East Kalimantan and Riau (OECD, 2018[28]).

The World Bank Doing Business surveys undertaken in 2010 and 2012, which benchmark 14 Indonesian cities, found substantial differences in the quality of the business environment SMEs and other businesses face across cities in Indonesia (see Figure 2.11). For example, the cost of dealing with construction permits was as high as 132% of the annual per capita income in Makassar (South Sulawesi), compared to only 32% in Jambi, while the cost of opening a new business amounted to 31% of the annual income per capita in Manado (North Sulawesi), compared to 18% in Pontianak (West Kalimantan). The variation in the regulatory environment among cities can be partly attributed to different degree of enforcement of national laws at the local level, suggesting that improvement in the regulatory environment can be attained independently from reforms at the national level. However, the large majority of cities surveyed by the World Bank showed progress between the two surveys, suggesting that there is scope for lagging regions to learn from their Indonesian peers (OECD, 2016[18]). The city of Surabaya has recently stepped up efforts to tackle informality and improve the business environment in the city, making it easier for businesses to register and obtain licences (see Box 2.4).

Figure 2.11. Ease of doing business across Indonesian cities

Percentage of city per capita income, 2012



Note: Data for Jakarta and Surabaya are for 2018; all other data are for 2012.
Source: World Bank (2018), *Doing Business in Indonesia 2018*; and World Bank (2012[29]), *Doing business in Indonesia 2012*, World Bank, Washington, DC, http://www.doingbusiness.org/content/dam/doingBusiness/media/Subnational-Reports/DB12-Indonesia.pdf (accessed on 3 June 2019).

Box 2.4. Case study of local development: improving the business environment in Surabaya

Located in the province of East Java, Surabaya is the second largest city in Indonesia. Over the last decade, the city has experienced strong growth, mainly driven by sectors such as wholesale and retail trade, repair of motor vehicles and motorcycles, manufacturing, and accommodation and food service activities. The city port is an important infrastructure driving the city's economy. The port counts more than 330 000 passengers per year. In 2018, the number of international and domestic passengers grew by 17.06% and 5.71% respectively. Under the guidance of the Mayor Tri Rismaharini, the number of registered businesses has increased in the city. This has led to an increase in the local budget. The city revenues in 2018 amounted to IDR 8 175 billion, up from 3 044 billion in 2010.

Data provided from the city administration shows that 98% of the businesses in Surabaya are SMEs. Because of the Mayor's measure to make it free to obtain business licences to tackle poverty and informality, the number of SMEs has increased over the last decade, amounting to more than 10 500 in 2018. Going forward, the city aims to become a global tech and creative hub, following the motto "go global – go digital – go financial". The Mayor's strategy focuses on creating an enabling environment, developing infrastructure for making business and lifting people from poverty. Much of the city's strategy over the last decade has also focused on greening, by creating new parks and tackling pollution, and on fostering an effective learning environment for all.

Figure 2.12. Location of Surabaya

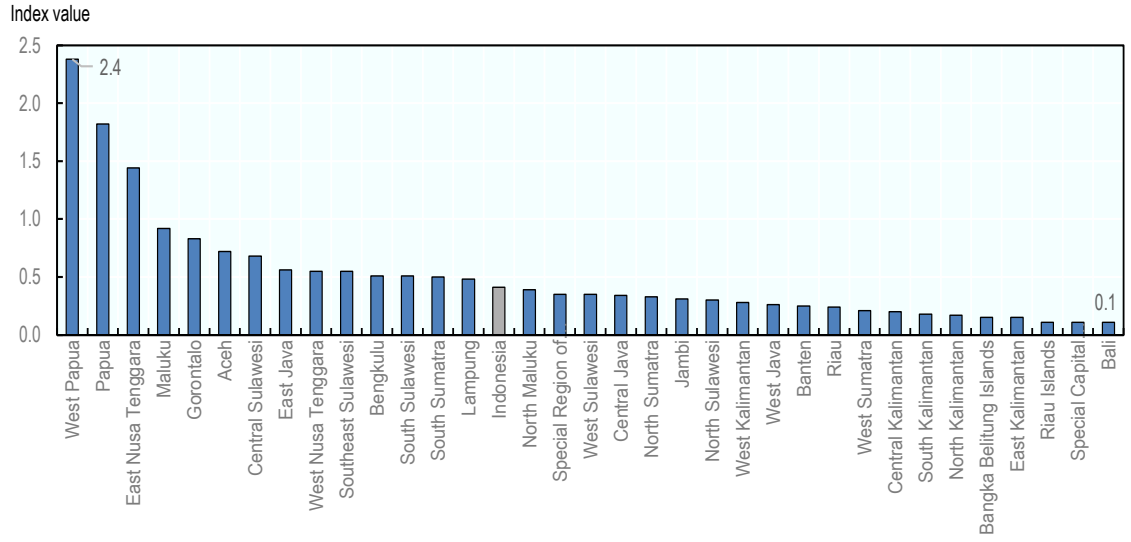
Source: Asian Development Bank; Case study interviews.

2.3.5. Poverty is more severe in rural provinces, while inequality is an urban phenomenon

GDP per capita can fail to measure standards of living, especially for resource-rich provinces. Provinces with high GDP per capita due to the exploitation of natural resources might not fully reap the benefits of it, as part of the income traditionally flows out of the province. For instance, national poverty data shows that the provinces of Papua and West Papua, although having high GDP per capita, have the highest poverty severity across Indonesia. Poverty is mostly a rural and agricultural phenomenon in Indonesia, although not exclusively (OECD, 2015[30]). In remote eastern islands of Indonesia, up to 95% of people in rural communities can be poor. On the other hand, inequalities are higher within urban areas, suggesting that the urbanisation trend that has taken place over the last decades has reduced poverty but accentuated inequalities (OECD, 2016[18]). The city of Makassar, located in the eastern province of South Sulawesi, has recently undertaken several initiatives aiming to tackle poverty and reduce inequalities, getting people into jobs (see Box 2.5).

Figure 2.13. Poverty is more widespread in eastern provinces

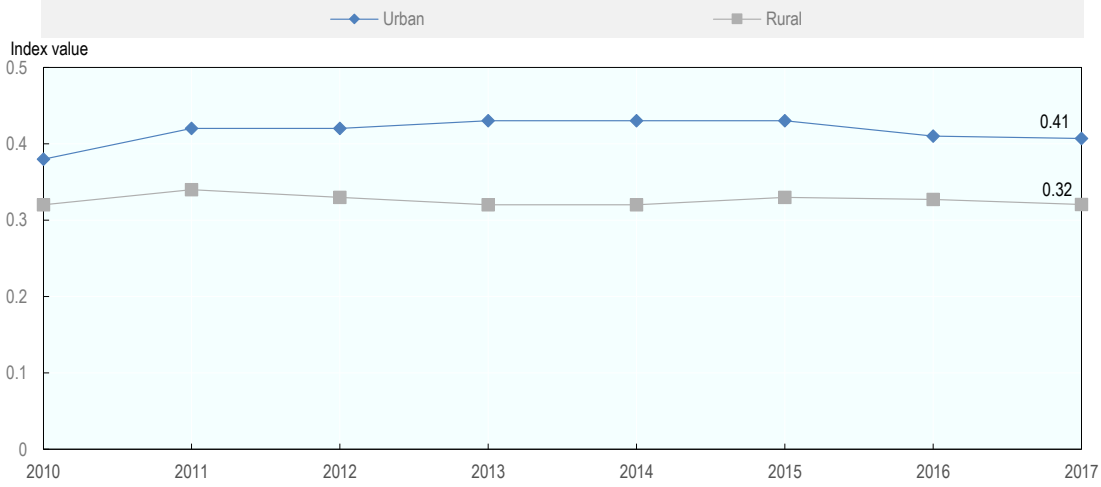
Poverty severity index by province, second semester 2018



Note: Poverty severity is defined as the total of the squared income/expenditure shortfall of families/ individuals with income/expenditure below the poverty threshold, divided by the total number of families/ individuals.
Source: Statistics Indonesia.

Figure 2.14. Inequalities prevail in urban areas

Gini Index, urban and rural areas in Indonesia, 2010-2017



Source: Statistics Indonesia.

Box 2.5. Lifting people out of poverty: the experience of Makassar

Makassar is the eighth largest city in Indonesia. It lies in the province of South Sulawesi, representing an important connection point between western and eastern Indonesia. The economy of the city is based on four pillars: the food and beverage sector, the agro-industry and maritime sector, trade and properties. Makassar represents a hub in the province of South Sulawesi, which is characterised by a larger rural population compared to other Indonesian provinces and low population density levels. The process of urbanisation has been notable in South Sulawesi, causing people to move from rural areas to the city in search of better opportunities, leading to more people without jobs and living in conditions of poverty. Stakeholder interviews with the City of Makassar conducted as part of this study also pointed to the challenge of high unemployment within the city, which might be inflated by the inflow of workers from other Eastern provinces in Indonesia.

The City of Makassar has developed a strategy going forward, called "Sombere Smart City", that focuses on tackling poverty, creating jobs and unlocking the potential of digital technologies and innovations, that has the motto "High touch with the high tech". The objective is to introduce new technologies in the provision of services, such as the internet of things, artificial intelligence and big data, ensuring that the introduction of such innovations takes place in a way that everybody can understand and take advantage from them. The word "*Sombere*" comes from the local language and means hospitality, kindness and brotherhood. The concept behind "*Sombere* Smart City" is that progress in take up of innovations and digital technologies should go hand in hand with attention to the provision of better services for the citizens, such as health services. As part of the strategy, several priority areas have been identified. For each area, the priorities are identified with a broad range of stakeholders, including relevant local governments, academia, civil society and businesses. Broadband technology and various online applications are also being developed as part of the strategy's push for technological development. Main objectives include the development of a smart approach to governance, including:

- Availability of online administrative services and their accessibility by all segments of society;
- Accountability and transparency, through the use of e-planning, e-budgeting systems and e-procurement;
- Community involvement in public policy formulation and transparency of public policy processes.

Figure 2.15. Location of Makassar

Source: Asian Development Bank; Madani and Nasrulhaq (2017[31]), *Concept of Smart City Governance in Makassar City*, Atlantis Press, Paris, France, http://dx.doi.org/10.2991/icas-17.2017.37; Case study interviews.

2.3.6. Rural and remote provinces have poorer health outcomes

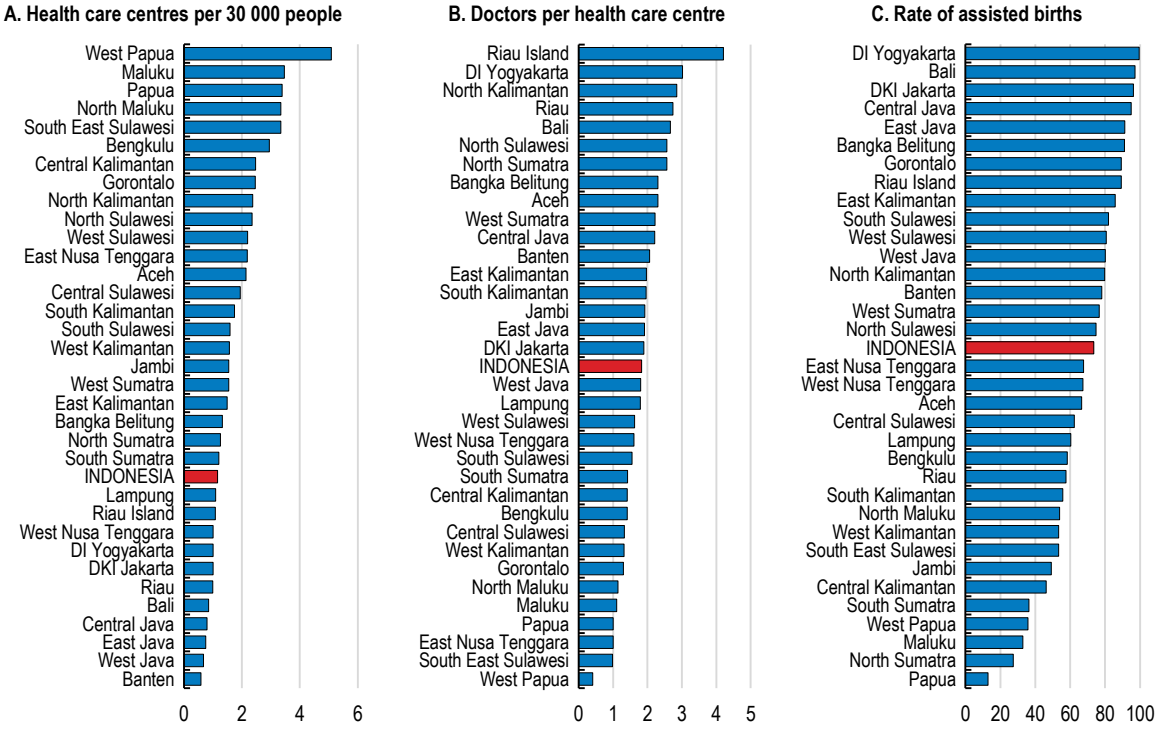
Health conditions have considerably improved in Indonesia over the past decades. The average life expectancy at birth in Indonesia was over 71 years in 2017 and has steadily increased across the country. Richer provinces however average as many as 10 years of life expectancy more than poorer ones. The Special Region of Yogyakarta has the highest life expectancy in Indonesia, amounting to almost 75 years, while the population of West Sulawesi is expected to live on average less than 65 years.

However, disparities in access to health are wide across Indonesian provinces, and the ongoing COVID-19 pandemic crisis threatens the ability of some provinces to answer adequately. Only 36 in every million people are currently being tested for COVID-19 using the standard polymerase chain reaction (PCR) kits. In comparison, Korea tests 8 996 for every million people, Singapore 6 666, and Malaysia 1 605. The authorities claim that a much larger number of rapid tests are performed, but the figures are disputed and such tests are less reliable. Indicators of access to health show that disparities across provinces are wide (see Figure 2.16). Eastern provinces, which have substantially lower population density levels, are characterised by higher number of health centres per 30 000 people than the rest of the country. However, this does not necessarily reflect the high quality of health services provided. The number of doctors per health centre varies substantially across the country, and the low rate of assisted birth in some province shows that, although hospitals are in place, a health-specialised workforce might be lacking (OECD, 2016[18]). The incidence of diseases such as malaria and tuberculosis also varies across provinces. In 2010, provinces such as Java and Sumatra recorded very low levels of malaria incidence. Meanwhile, incidence amounted to more than 50 cases per 1 000 people in Papua and West Papua. In 2016, most of the provinces had an incidence of malaria of less than one case per 1 000 people, while it remained at 45

cases in Papua. While the incidence of tuberculosis is not correlated with affluence across provinces, success rates vary considerably. In Lampung, more than 95% of cases are treated successfully, while less than 40% are treated in Central Kalimantan.

Figure 2.16. Access to health varies substantially across provinces

Health indicators, 2014



Source: OECD (2016), Economic Surveys: Indonesia 2016, based on Ministry of Health data.

2.4. Decentralisation in Indonesia

At the end of the 1990s, hand in hand with the democratic transition, Indonesia embarked on a program of decentralisation, revolutionising the previously centralised governance system. The “Big Bang” decentralisation led to a fast transferral of the government apparatus to the regions, corresponding with a hike in the regional share in government spending and the introduction of a new inter-governmental transfer system (Hofman and Kaiser, 2002[32]). Sub-national entities include provinces, regencies and cities, districts and villages (see Table 2.3). They were made responsible for the delivery of public services, with the rationale that increased responsiveness to local needs would allow for better accountability and service delivery. Among these, the state devolved the greatest share of responsibilities to regencies and cities as compared to provinces, which mainly play a supervisory role, represent the government at the regional level, and intervene in matters requiring cross-jurisdictional co-operation (Malley, 2009[33]) (Nasution, 2016[34]). The role of the central government, meanwhile, has been limited to six broad areas, including finance, foreign affairs, defence, security, religion, and state administration and justice (Nasution, 2016[34]).

The size of provinces ranges from 640 000 inhabitants in North Kalimantan to almost 50 million in West Java. The provinces of Aceh, the Special Capital Region of Jakarta, the Special Region of Yogyakarta, Papua and West Papua have special status, enjoying more autonomy. Regencies and cities have different

demographic sizes and economic characteristics, with small regencies being home to 6 000 inhabitants, while the population of the largest cities can amount to 4.8 million (Bogor in West Java). Regencies and cities are then divided into more than 7 000 districts that are managed by a civil servant appointed by the regency or city.

Local governments have been granted significant spending autonomy. However, although they can collect minor taxes such as on land and buildings, vehicles, hotels, restaurant, entertainment, base metal and mineral extraction and water, taxing power remains with the central government (Nasution, 2016[34]). The way decentralisation has been implemented in Indonesia has therefore made local governments highly dependent on transfers from the central government, particularly through shared taxes and grants. The entity of transfers varies from one sub-national unit to the other, as some of them do not have substantial own-source revenues. The speed of decentralisation also meant that the required accompanying skills, technical capacities, resources and oversight were sometimes lacking (Vujanovic, 2017[35]). Decentralisation of government functions was not often followed up with equipping subnational governments with the capacity to produce public goods, increase productivity and employment and promote growth in their jurisdiction (Nasution, 2016[34]). Decentralisation can foster competition among regions in the efficient provision of services and attracting businesses, and generate good practice and lessons learnt exchanges among regions (Blöchliger and Kim, 2016[36]), but it can also exacerbate regional disparities. The way decentralisation is implemented has an impact on regional disparities (see Box 2.6). Since decentralisation was launched in Indonesia, the government has made efforts to encourage participatory approaches in community and regional planning and has developed entry points for local communities to get involved (UNDP, 2017[37]). These have been implemented for example through the *Musrenbang* process, officially started with the adoption of the Law of the National Development Planning System in 2004 (see Box 2.7).

Table 2.3. Levels of government in Indonesia

As at 2019/Q1

Type		Head of administration		Number
English	Indonesian	English	Indonesian	
Central	Central	President (elected)	Presiden	1
Province	Provinsi	Governor(elected)	Gubernur	34
Regency and City	Kabupaten and Kota	Regent and Mayor (elected)	Bupati and Wali kota	416 & 98
District	Kecamatan	Head of district (appointed)	Camat	7 160*
Village	Desa and Kelurahan	Chief (elected for village, appointed for Kelurahan)	Kepala desa/Lurah	83 931

Note: *refers to end of 2015.
Source: Update of Vujanovic (2017), Decentralisation to Promote Regional Development in Indonesia; Statistics Indonesia.

Box 2.6. Well-designed decentralisation can reduce regional disparities

OECD research on fiscal decentralisation shows that the way decentralisation is implemented matters for regional disparities. The literature is traditionally divided into two opposite approaches towards fiscal decentralisation: some researchers point out the importance of devolution to foster the creation of growth-friendly reforms at the local level, therefore reducing differences in competitiveness across regions, while others emphasise that, as regions have a different starting base, devolution can exacerbate regional disparities.

There are two main sources of spending at the disposal of local governments. The first is local governments' own sources (such as local taxation and fee for services), which provide an incentive for local governments to expand their tax base and be more efficient in the provision of services. The second is central government transfers, which aim to equalise the fiscal capacity of regions, allowing similar standards in the provision of public goods across a country, but providing little incentive for lagging regions to catch up.

OECD research suggests that decentralisation should be implemented in a balanced way, with sub-central spending largely covered by own tax revenue. On the other hand, transfers from the central government can be beneficial as long as they do not counteract the incentive to raise tax revenues. While intervention by the central government may be necessary to achieve common standards in the provision of public goods across the country in the short run, a trade-off exists with the incentive necessary to foster regional conversion.

Source: Bartolini, Stossberg and Blöchliger (2016[38]), "Fiscal Decentralisation and Regional Disparities", *OECD Economics Department Working Papers*, No. 1330, OECD Publishing, Paris, https://dx.doi.org/10.1787/5jlpq7v3j237-en.

Box 2.7. Engaging local communities in local development in Indonesia: the experience of *Musrenbang*

Musrenbang (*Musyawarah Rencana Pembangunan*, or Multi Stakeholder Consultation Forum for Development Planning) is a multi-stakeholder forum seeking to identify and prioritise community development policies and initiatives (OECD, 2016[39]). Gatherings at the community level take place during the first half of the year to identifying local priorities to be funded by the local annual budget and village allocation funds. Selected representatives from the community-level gather at the sub-district and district level, where the *Musrebang* agrees on the final draft of the Annual Local Government Work Plan and Budget (OECD, 2016[39]). The process continues in provinces and ends in the capital city, and the discussions at each level result in the development of a programme and a budget proposal based on the discussions.

These grassroots consultations aim to foster local ownership in community projects, build and sustain democratic institutions, reducing conflicts and achieving development objectives (UNDP, 2017[37]). *Musrenbang* also represent an opportunity for the central government to gather information on subnational governments' budget formulation processes and policy priorities.

Although *Musrenbang* represent an opportunity to involve the civil society in policy prioritisation, the forums face some challenges. For example, consultations have become more ceremonial over the last years as the level of civil society participation and local government commitment have decreased. Civil

society representatives can find it hard to see their inputs implemented, while for the government it can be challenging to identify the right civil society representatives to involve in the discussions.

Source: UNDP (2017[37]), *Good practices integrating the SDGs into development planning*, https://www.undp.org/content/dam/rbap/docs/meetTheSDGs/IndonesiaGood%20Practices.pdf (accessed on 22 May 2019); OECD (2016[39]), "Open Government in Indonesia", *OECD Public Governance Reviews*, http://dx.doi.org/10.1787/ISBN.

2.4.1. Local governments' responsibilities

Today, provinces mainly play a co-ordinating and supervisory role, while regencies and cities retain responsibilities in the large majority of policy areas, including health, education, public works, transportation, and many more (see Table 2.4). Regencies and cities therefore play an important role in prioritising local development policies.

Reforms at the beginning of the 2000s provided local governments with increased autonomy, responsibilities, personnel, assets and resources. With a local government law introduced in 2004, Indonesia introduced direct elections for governors, regents and mayors, and expanded their responsibilities. The law delegated most responsibilities to regencies and cities, while it also strengthened the role of provinces as representatives of the central government at the local level and granted them supervisory powers. More recently, a new Local Government Law introduced in 2014 aimed to redefine responsibilities of different levels of governments to make the provision of public services more effective. De facto, it has contributed to transfer some responsibilities back to the central government. The Law outlines exclusive responsibilities for the central government, concurrent and general affairs responsibilities, as well as a list of mandatory and discretionary functions. The law also transferred responsibilities in several areas from regencies and cities to provinces, including in high school education, mining, forestry and coastal management. Despite the efforts, some overlap in responsibilities across levels of government, especially between regencies and cities on one side and provinces on the other, persist. Another 2014 law, the so-called Village Law, has strengthened the authority and resources of villages, recognising them as self-governing bodies.

Table 2.4. Main responsibilities of provinces and regencies/cities in Indonesia

Policy area	Provinces	Regencies/Cities
1. General public services	Provision of public administrative services including inter-regental/municipal services; Provision of other basic services that cannot yet be provided by regencies/municipalities; Population administration and civil registration; Community empowerment and village; Statistics	Provision of local public administrative services; Community and village empowerment
2. Public order and safety	Maintenance of public peace and order	Fire-fighting
3. Economic affairs /transports	Provincial economic development; SMEs policy (except for providing education, training and guidance) and inter-regental/ municipal businesses; Agricultural services; Capital investment services including inter-regental/municipal services; Provision of inter-regental/municipal manpower services; Provincial roads; Coastal management	Local economic development including responsibility for the development of microenterprises (except for providing education, training and guidance); Manpower services; Agrarian services; Provision of capital investment services; Local roads; Management of fisheries
4.Environmental protection	Protection of bio-diversity; Hazardous work; Environmental licences; Waste management; Conservation of natural resources and eco-system and national parks (but limited power on forestry)	Sanitation; Waste collection and management

5. Housing and community amenities	Provision and rehabilitation of victims of provincial disasters; Facilitation for the provision of housing for people affected by the relocation of provincial government programmes	Spatial and urban planning; Water provision; Provision and rehabilitation of victims of district or city disasters; Provision of housing for people affected by the relocation of the district or city government programmes; Issuance of building permits and housing development; Issuance of building ownership certificates (SKBG)
6. Health	Medical licences; Regulation concerning medicines and medical equipment; Food and beverage production; Provincial Referral Health Hospitals; Provincial centres	Primary healthcare services; Small local hospitals/clinics; Local health centres
7. Recreation, culture & religion	Youth and sport; Culture	Youth and sport; Culture; Library; Archives
8. Education	Senior secondary education, including infrastructure and teachers' salaries; Vocational education; Special education service	Early childhood education; Primary and junior secondary education, including infrastructure and teachers' salaries; Non-formal education
9. Social protection	Social assistance policies and control of inter regental/municipal social problem	Social services

Source: OECD/UCLG (2019[40]), *2019 Report World Observatory on Subnational Government Finance and Investment - Country Profiles*, http://www.sng-wofi.org/publications/SNGWOFI_2019_report_country_profiles.pdf (accessed on 26 June 2019).

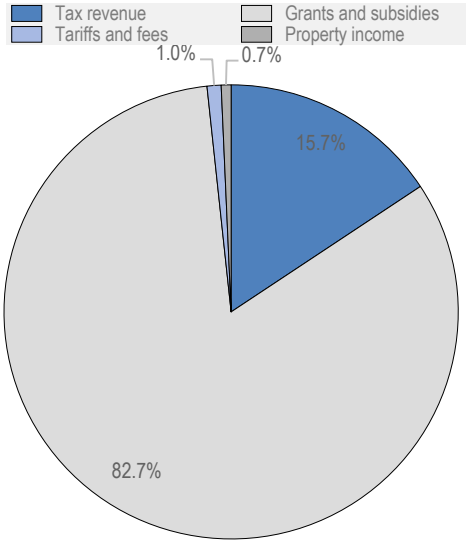
2.4.2. Local governments' budget

Inter-governmental transfers represent the core of local governments' budgets in Indonesia, as their capacity to raise taxes is limited. A challenge linked to inter-governmental fiscal systems is whether they create the right incentives for local governments to act in a responsible, productive and accountable manner, as transfers may not generate improved quantity, mix, quality and impact of local government spending and might distort expenditure behaviour (Lewis and Smoke, 2017[41]). In 2016, transfers from the central government amounted to 82.7% of local governments' budget, while tax revenues accounted for only 15.7% of their total revenues, and non-tax revenues for the remaining portion (see Figure 2.17). The high reliance of local governments on inter-governmental transfers emerges even more clearly when comparing Indonesia to the OECD average, where transfers from the central government amount to 37.2% of local governments' budget and revenues to 44.6%. Regencies, cities and villages account for more than 70% of all revenues at the sub-national level. While regencies, cities and villages are highly reliant on transfers from the central government, provinces' budget mainly derives from taxes (41% of provinces' revenue). Provinces collect 73% of all sub-national tax revenue, but overall tax revenue of local governments is limited, as the central government retains the power to collect major taxes and prohibits local governments from collecting other taxes than those set in national regulations. Provinces are mainly responsible for collecting motor vehicle taxes (an annual tax on the value as well as a tax levied when the motor vehicle is sold), as well as fuel, surface water and other taxes (OECD/UCLG, 2019[40]).

Several types of grants exist as part of the inter-governmental transfer system in Indonesia. The main grants include the General Allocation Fund (*Dana Alokasi Umum,* DAU), the Special Allocation Fund (*Dana Alokasi Khusus,* DAK), and the Revenue-Sharing Fund (*Dana Bagi Hasil,* DBH). The former accounts for around half of all central government transfers and, despite being a general purpose block grant, half of it is devoted to wages and salaries, while there are no restrictions for the remaining portion. On the other hand, the DAK is a special purpose grant, aiming to financing responsibilities considered as national priorities, including both capital expenditures and additional financing for the cost of service delivery. DBH aims to redistribute revenues from taxes as well as natural resources. About 20% of the DBH on the personal income tax is redistributed to provinces (40%) and regencies/cities (60%). In addition, other grants exist, aiming to support villages' financing (the Village Fund) as well as autonomy funds with the special regions of Aceh, Papua and West Papua, a special fund for Yogyakarta, regional incentive grants and so-called "de-concentration funds", granted from line ministries to local governments for specific projects (OECD/UCLG, 2019[40]).

Figure 2.17. Grants and subsidies are the main source of local governments' budget

Percentage of local government budget



Source: OECD/UCLG (2019[40]), *2019 Report World Observatory on Subnational Government Finance and Investment - Country Profiles*, http://www.sng-wofi.org/publications/SNGWOFI_2019_report_country_profiles.pdf (accessed on 26 June 2019).

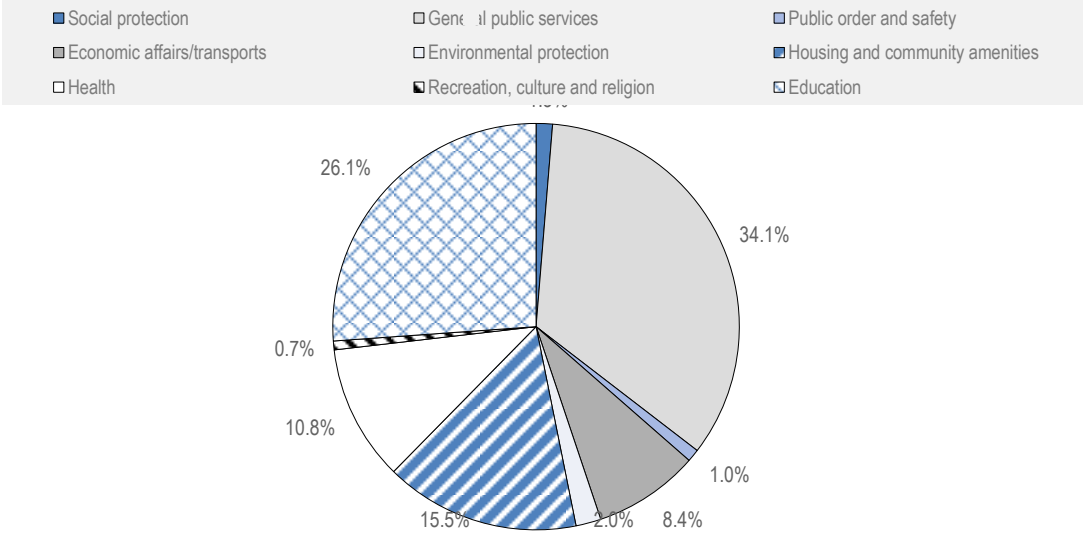
2.4.3. Local governments' expenditure

Expenditure of local governments in Indonesia accounted for 8.1% of GDP and 47.7% of public expenditure in 2016, compared to the OECD averages of 16.2% and 40.4% respectively. This suggests that while expenditure is rather low as a percentage of GDP, it is quite high as a share of total public expenditure. Expenditure in public staff amounts to 53.4% of general government expenditure, compared to 43% for OECD unitary countries. Staff expenditure represents 40% of total expenditure for regencies and cities, compared to 18% for provinces. Regency and city governments and villages make up roughly two thirds of total expenditure of sub-national governments, and account for 6% of GDP and 35.2% of total public expenditure respectively, as compared to provinces, whose expenditure amounts to only 2.1% of GDP and 12.6% of total public expenditure (OECD/UCLG, 2019[40]).

The large majority of sub-national government spending in Indonesia pertains to general public services, education and housing and community amenities, amounting to 34.1%, 26.1% and 15.5% of sub-national government expenditure respectively (see Figure 2.18). General public services, including housing and community amenities, economic affairs and transport and health, represented more than 60% of provinces' expenditure in 2016. On the other hand, the largest spending items for regencies and cities are education (34% of their expenditure), general public services (24%), housing and community amenities (16%) and health (12%) (OECD/UCLG, 2019[40]).

Figure 2.18. Local government expenditure in Indonesia

Percentage of local government total expenditure



Source: OECD/UCLG (2019[40]), *2019 Report World Observatory on Subnational Government Finance and Investment - Country Profiles*, http://www.sng-wofi.org/publications/SNGWOFI_2019_report_country_profiles.pdf (accessed on 26 June 2019).

Conclusion

The analysis of the economic development context in Indonesia is a pre-requisite to understand employment and skills outcomes at the local level. Economic growth has gone hand in hand with poverty reduction in Indonesia over the past decades, but disparities among provinces are wide. While the delegation of responsibilities to lower levels of government can make the delivery of public services closer to the needs of the local communities, a coherent governance system will be instrumental to achieve effective local development strategies. Building on the overview provided by this chapter, Chapters 3 and 4 delve into differences in employment and skills outcomes across provinces in Indonesia and policies and programmes being implemented at the local level to foster job opportunities.

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3 Fostering local approaches to skills in Indonesia

Indonesia has achieved substantial progress in increasing access to education and skills development. That being said, there are large disparities in terms of access and relevance across Indonesian provinces. In some rural and remote areas, literacy rates are substantially lower than the rest of the country. Disparities in education outcomes risk being exacerbated by the ongoing COVID-19 crisis, as rural and remote provinces may lack the infrastructure needed to ensure access to education. This chapter outlines trends as it relates to skills outcomes across Indonesian provinces. A special focus is given to looking at local vocational education and training opportunities that provide people with skills training that directly leads to a job.

In Brief

Skills will be a significant driver of local economic development across Indonesian provinces

- Access to basic education and participation in secondary and tertiary education have increased in Indonesia over the last decades. However, Indonesia has room to catch up with other ASEAN countries in terms of educational attainment, which will be critical for future growth and development.
- Substantial differences exist among provinces in terms of access and relevance of education and training opportunities. About one in five people in Papua are illiterate. Literacy rates are also substantially lower in West Nusa Tenggara than the rest of the country. On the contrary, in the Special Capital Region of Jakarta almost the totality of the population is literate.
- The ongoing COVID-19 crisis risks negatively affecting education outcomes in Indonesia and increase disparities across provinces. The crisis is likely to lead to increased school drop-outs, hitting particularly hard disadvantaged segments of the population, who might leave education to support economically their households. In addition, provinces that are not equipped for virtual learning might face more challenges than others.
- The government has invested in expanding access to vocational education and training (VET), which has resulted in higher VET student participation. VET in Indonesia is offered mainly by upper secondary education institutions (SMKs) and by work training centres (BLKs). Apprenticeships also exist in Indonesia, but they are often provided informally.
- The complexity of VET governance, with many ministries and levels of government involved in the development and provision of VET, represents a challenge, often leading to fragmented local implementation. Improving teacher quality, aligning curricula with local labour market needs, and enhancing infrastructure also emerge as priorities to improve the impact of VET at the local level.

Introduction

As the Indonesian economy continues its growth path, the provision of vocational education and training will be important to address potential skills mismatches, boosting job creation and supporting productivity and competitiveness. Skills are a critical driver of local economic development opportunity. Therefore, provinces in Indonesia need to look at how to develop a skilled workforce now and in the future to ensure new sources of growth and sustainable development. Indonesia has made substantial progress in expanding skills development opportunities over the last decades, and it is now close to achieving universal basic education. However, skills outcomes are uneven across provinces, with rural and remote regions in the east of the country often performing worse than their western peers. The ongoing COVID-19 crisis risks posing unexpected challenges to access to education, especially for disadvantaged groups, and increase disparities in education outcomes across provinces, as the level of readiness to the crisis of local education systems is uneven.

This chapter provides information on how Indonesia is promoting more opportunities for skills development. It provides data and analysis on the main skills development challenges facing Indonesia (sections 3.1 and 3.2), as well as recent efforts that have been introduced to promote vocational education and training

(section 3.3). Finally, the chapter outlines some challenges facing the skills development system from a local development perspective and presents international good practices examples on skills development (sections 3.4 and 3.5).

3.1. Skills outcomes in Indonesia

Alongside poor infrastructure, skills gaps have been identified as main drivers of low labour productivity in Indonesia compared to other ASEAN countries. Recent work by the Asian Development Bank has noted that Indonesia is characterised by an oversupply of semi-skilled workers, and the education and training system is not providing students and jobseekers with the right skills needed to perform the jobs available in the country (Asian Development Bank, 2018[1]). VET can provide students and jobseekers with the skills needed in local labour markets, and it is identified as a powerful tool to address developmental challenges and inequalities in the ASEAN region (OECD, 2018[2]). Ensuring that people not only participate and achieve higher skills levels, but also access high-quality training opportunities that narrow the gap between the supply and demand of skills in the labour market, can therefore be a driver of productivity growth in Indonesia, supporting the country's transition to higher economic performance levels.

As part of current efforts to expand access to training and skills development opportunities, the Government of Indonesia has introduced a pre-employment card, aiming to provide more than 2 million people with the skills needed in the labour market (see Box 3.1). The introduction of the card has been anticipated to early 2020, to provide support to students and jobseekers in the face of the COVID-19 outbreak. Individual learning schemes, defined as training schemes attached to individuals, have been introduced in many OECD countries to boost individual choice and responsibility concerning training and competition among providers, therefore increasing the quality and relevance of training provision. Recent OECD work shows that simplicity of use is instrumental to the success of individual learning schemes. In addition, individuals (the low-skilled in particular) also need effective face-to-face information, advice and guidance to enable them to convert their training rights into valuable training outcomes, tools that are often lacking in practice (OECD, 2019[3]).

Box 3.1. Boosting skills development in Indonesia through the pre-employment card

The Government of Indonesia is placing skills development high in the political agenda, acknowledging that increasing training opportunities can promote the development of a work-ready workforce, placing people into good jobs and helping to boost productivity. To this end, the government has introduced a pre-employment card (*kartu prakerja*), providing access to vocational training and up-skilling opportunities for jobseekers, workers and people facing career transitions.

The programme aims to help bridge the gap between the skills that workers have and those required in the labour market. The card initially aimed to involve 2 million people in 2020 through an integrated and digital-based system, with the government allocating more than IDR 10 trillion (around USD 620 million) to the programme. Criteria for receiving the card include the possession of the Indonesian citizenship and at least 18 years of age, and not being enrolled in formal education. Benefits stemming from the card would include access to vocational training, recognised competency certificates and training incentives. Trainings accessible through the card would enable participants to obtain practical competencies, and would be aimed to address the needs of relevant industries, including food and beverages, IT, sales and marketing, banking and finance, and agriculture among others.

A well-designed pre-employment card could play an important role in providing training opportunities for those categories that already suffer from the most disadvantage, such as the unemployed and young people. The experience of OECD countries with similar financial incentives for trainings shows that such instruments should be made more generous for certain vulnerable groups as well as for training in shortage or in-demand fields.

Developments linked to the COVID-19 outbreak in March 2020 have brought the Indonesian Government to anticipate the disbursement of the card, in an effort to support workers and jobseekers. In light of COVID-19, the government has also doubled the budget allocated to the card to IDR 20 trillion and is targeting to expand its outreach and involve more than 5 million people.

Source: The Jakarta Post (2020[4]), *Indonesia advances pre-employment card program to tackle pandemic impacts*, https://www.thejakartapost.com/news/2020/03/13/indonesia-advances-pre-employment-card-program-to-tackle-pandemic-impacts.html (accessed on 8 April 2020); The Jakarta Post (2019[5]), *Discourse: Preemployment card all about skills, not salary for unemployed*, https://www.thejakartapost.com/news/2019/08/19/discourse-preemployment-card-all-about-skills-not-salary-unemployed.html (accessed on 5 February 2020); The Jakarta Post (2019[6]), *Government to roll out preemployment card in early 2020*, https://www.thejakartapost.com/news/2019/11/13/government-to-roll-out-preemployment-card-in-early-2020.html (accessed on 5 February 2020).

3.1.1. Indonesia is working to improve access to basic foundational skills

Good skills are critical for both workers and firms. Across the OECD, adults with higher levels of skills tend to have better outcomes in the labour market and are more productive in their jobs (OECD, 2018[7]). Indonesia has achieved substantial progress in reducing adult illiteracy over the last decades. Illiteracy rates have dropped substantially across all age groups over the last decades: while 2.3% of the 15-44 aged population were illiterate in 2011, this fell to 0.8% as of 2019. Similarly, for people aged 45 and over, the rate was 18.1% in 2011 but dropped to 9.9% in 2018 (Statistics Indonesia, 2019[8]). Net enrolment in primary education has dramatically increased from around 70% in the 1970s to almost 95% today, as Indonesia is close to achieving universal basic education (OECD, 2015[9]). Compulsory education lasts nine years in Indonesia, from age 7 to age 15.

Within Indonesia, there has been a strong focus on improving secondary and tertiary educational attainment. In 2017, 26% of the Indonesian adult population had attained upper secondary education, as

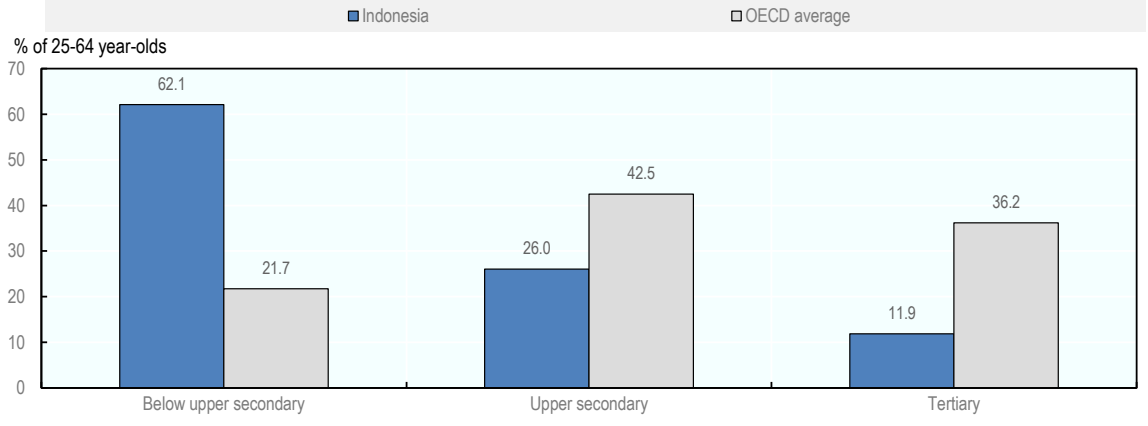
compared to only 14.1% in 2008. Similarly, the share of tertiary educated adults 25-64 years old has almost doubled, from 6.5% in 2008 to 11.9% in 2017. However, the majority of 25-64 year olds in Indonesia continue to possess below upper secondary education (62.1%), and there is room to catch up in educational attainment with the OECD average (see Figure 3.1). In addition, despite tertiary education enrolment almost doubled between 2000 and 2016, from 14.9% and 27.9%, Indonesia could further catch up with some ASEAN countries, such as Malaysia, Thailand and the Philippines (OECD, 2019[10]).

The relevance and quality of education in Indonesia could be further improved. For example, Indonesia's performance in the OECD Programme for International Students Assessment (PISA) 2018 shows that the competences of students in areas such as mathematics, sciences, and literacy lag behind the OECD average. There would also be room for Indonesia to catch up with other regional economies, such as Singapore, Malaysia, Brunei Darussalam and Thailand. However, Indonesia performs better than the Philippines in all three areas (see Table 3.1). Since Indonesia's first participation in PISA in 2001, performance in science has fluctuated but remained flat overall, while performance in both reading and mathematics has been hump-shaped. Reading performance in 2018 fell back to its 2001 level after a peak in 2009, while mathematics performance fluctuated more in the early years of PISA but remained relatively stable since 2009. These results need to be interpreted in the context of the vast strides that Indonesia has made in increasing enrolment in education over the past years. While in 2001, the PISA sample covered only 46% of 15- year-olds, in 2018 85% of students were covered. It is often the case that the best performing students remain in education, while new students who were not in education and were brought into the school system are weaker than those who were already included (OECD, 2019[11]).

The ongoing COVID-19 pandemic poses challenges to ensure continued school participation and improvement in learning outcomes in Indonesia. While enrolment at all levels of education has been increasing over the past decades, many children and adolescents are out-of-school. The number of out-of-school children was higher in 2018 than in 2010 (1 555 014 and 763 385 children respectively), and the number of out-of-school adolescents was slightly lower in 2018 than in 2010 but remains high (2 299 116 and 2 274 037 respectively) (UNESCO Institute for Statistics, 2020[12]). In addition, as an answer to the virus outbreak, several regions and provinces in Indonesia restricted public events, closed schools and tourist destination as of early March. In a following public address, the government urged people nationwide to work and study from home (The Jakarta Post, 2020[13]). This risk putting further pressure on students and the school system in general, as some segments of the population and some provinces might not have the skills and infrastructure needed to undertake remote learning.

Figure 3.1. The majority of the Indonesian population attains below upper secondary education

Educational attainment (percentage of 25-64 year-olds), Indonesia and the OECD average, 2017



Source: OECD (2020), Adult education level (indicator). https://doi.org/10.1787/36bce3fe-en (Accessed on 28 January 2020).

Table 3.1. There would be room for Indonesian students to catch up with their peers in the OECD and in some ASEAN countries

OECD Programme for International Student Assessment (PISA) scores, participating ASEAN countries and OECD average, 2018

Country	Reading	Mathematics	Science
Singapore	549	569	551
Malaysia	415	440	438
Brunei Darussalam	408	430	431
Thailand	393	419	426
Indonesia	371	379	396
Philippines	340	353	357
OECD	487	489	489

Source: OECD (2019), Reading, Mathematics and Science performance (PISA) (indicators). (Accessed on 28 January 2020).

3.1.2. Differences in education attainment exist by gender and income status

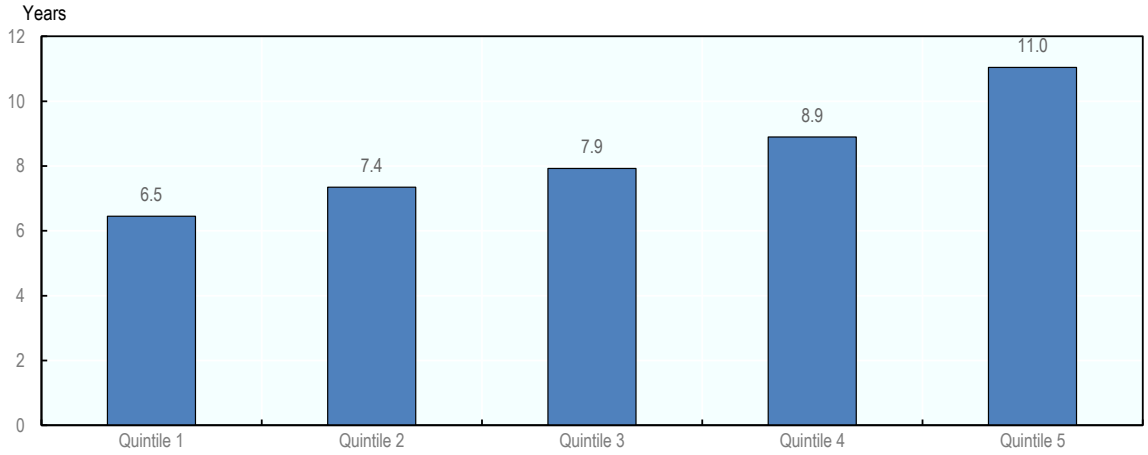
Indonesian women attain slightly lower education levels than men. About 31% of the women population aged 25 and more attaining more than upper secondary education, as compared to 38.3% for men (UNESCO Institute for Statistics, 2020[14]). However, more young women than men are attaining a tertiary degree. Gender gaps in educational attainment in Indonesia follow the same trend as across OECD countries: 18% of 25-34 year-old women in Indonesia now have a tertiary degree compared to 14% of 25-34 year-old men (OECD, 2019[15]). Young people tend to face a challenging context in accessing skills development and labour market opportunities in Indonesia: more than one in five youth is neither in employment, nor in education or training (so-called NEETs) in Indonesia. Although this share has decreased over the last decade, it is still higher than all ASEAN countries except for Lao PDR (International Labour Organization, 2020[16]).

Furthermore, people with higher income levels achieve substantially higher levels of education. The average schooling years of the bottom 20% of the expenditure distribution are still almost half the schooling years of the top 20%, amounting to 6.5 and 11 years respectively (see Figure 3.2). The government has given a boost to education and skills training through the approval of a constitutional mandate in 2002, allocating at least 20% of the total government budget (APBN) and 20% of the local budget (APBD), including both provincial and district budget, to education. The large majority of the additional resources went to teacher salaries and certification, but adding teachers is not correlated with improved educational results (World Bank, 2013[17]).

Inequalities in education outcomes across segments of the population risk being further exacerbated by the ongoing COVID-19 crisis. Young and poorer people could be hit particularly hard by the economic crisis generated by the COVID-19 outbreak, as well as by related policy measures such as school closure. Disadvantaged groups might not have the means to work or study from home, and might focus on supporting their household's income during times of crisis rather than continuing education.

Figure 3.2. Poorer people complete nearly half of the schooling time completed by wealthier people in Indonesia

Years of schooling by expenditure quintile, 2016



Source: Statistics Indonesia, Average School Duration Population Age ≥ 15 Years by Expenditure Group, 2015 – 2016.

3.1.3. Skills gaps and shortages represent a challenge in Indonesia

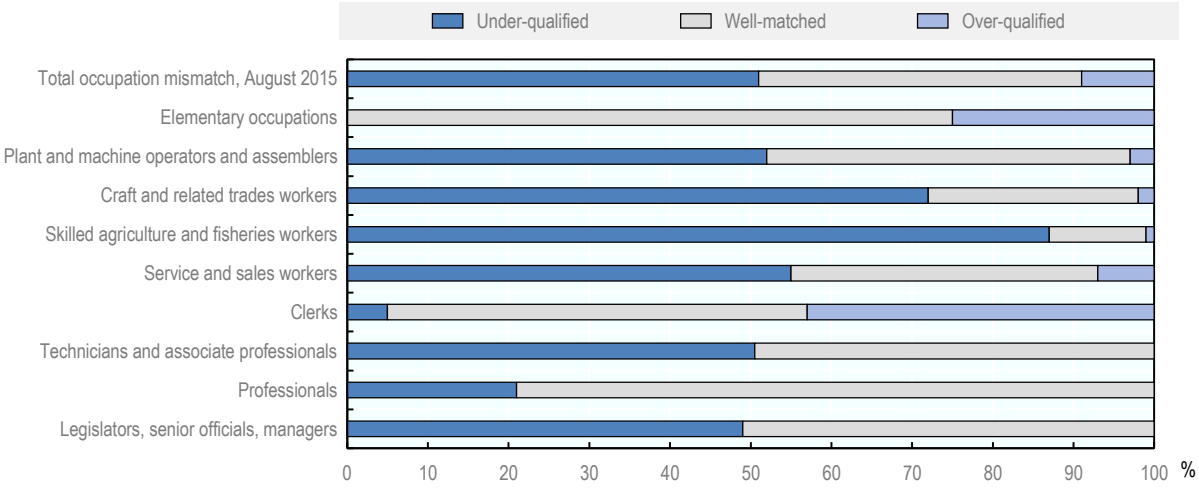
Despite substantial increases in educational attainment, the education system struggles to provide the skills needed in the labour market. From 2010 to 2015, the number of workers with senior secondary and tertiary education has risen by an annual 1 and 2 million respectively, but the quality of tertiary education is low and the learning achievement of most students is not adequate. In some sectors, the education system does not provide enough graduates, while in other sectors graduates lack the right skills needed for the job. A large share of workers with post-secondary education work in low-skill occupations, suggesting that despite holding degrees, graduates lack the right skills (Allen, 2016[18]). An ILO survey of ASEAN employers conducted in 2014 found that over 40% of respondents perceived the quality of public education as poor, higher than on average across ASEAN respondents (International Labour Organization, 2014[19]).

Skills shortages are also prevalent, with under-qualified workers filling many positions across sectors (see Figure 3.3). Insights from the 2015 World Bank Enterprise Survey show that the lack of required skills are the main problem when trying to fill a position for about 40% of Indonesian firms. Inadequate skills are a greater obstacle to filling managers and higher-level non-production positions, including technicians, sales associates and other professionals, than for unskilled production and non-production workers. Filling managerial position is more challenging for Indonesian firms than for firms in Malaysia, Thailand and the Philippines (Calì, Hidayat and Hollweg, 2019[20]). It is estimated that, while 40% of workers are well-matched to their occupation, 51.5 % of them are under-qualified and 8.5% over-qualified (Allen, 2016[18]). Occupation mismatch in Indonesia is linked to the low education levels of production workers and agriculture labourers, as well as a large share of clerks being over-qualified for their jobs, but under-qualification is also a challenge in higher-level occupations. High levels of under-qualification and lower levels of over-qualification suggests that skills mismatches represent an issue in Indonesia. This can be an important challenge, as high levels of mismatch are typically associated with lower levels of labour productivity (Adalet McGowan and Andrews, 2017[21]).

In addition, the largest majority of Indonesian workers do not have access to trainings, suggesting that workers' skills development is rarely conducted (see Figure 3.4). Training can play an important role in

upgrading people's skills and fostering continuous skills development during adults' work life. Substantial differences in access to trainings exist between rural and urban workers as well as between women and men. Out of the 13% of the working population who receives training, less than one third works in rural areas, and more than 60% of them are men. This suggests that not only adult skills development does not take place systematically, but also that rural workers and women are considerably less likely to undertake trainings than urban workers and men. Furthermore, access to training increases with educational attainment in Indonesia. World Bank estimates show that around 25% of the labour force attaining higher education has received training, compared to around 7% for those attaining senior secondary education, and close to zero for those with junior secondary, primary education or less (World Bank, 2019[22]). The availability of training also depends on firm size, with less than 8% of firms in Indonesia providing formal trainings to their workers, and small firms being almost ten times less likely to offer formal trainings than large firms (World Bank, 2015[23]).

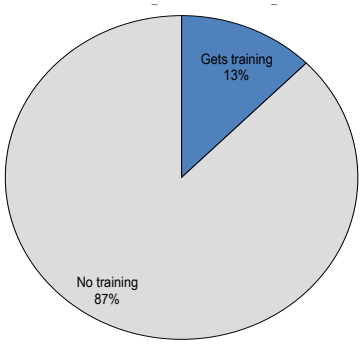
Figure 3.3. Under-qualification prevails across sectors in Indonesia



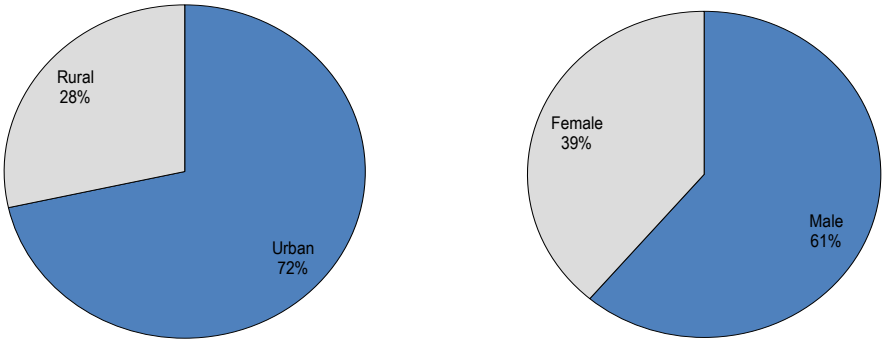
Note: Measurement of this type of skills mismatch is based analysis using the International Standard Classification of Occupations (ISCO) and the International Standard Classification of Education (ISCED). This measure of mismatch divides major occupational groups (first-digit ISCO levels) into four groups and assigns a level of education to each occupational group in accordance with the ISCED. Workers in a particular group who have the assigned level of education are considered well matched. Those who have a higher (lower) level of education are considered overeducated (undereducated). The figure excludes armed forces occupations.
Source: Allen, E. (2016[18]), *Analysis of Trends and Challenges in the Indonesian Labor Market*, Asian Development Bank, https://www.adb.org/sites/default/files/publication/182935/ino-paper-16-2016.pdf (accessed on 11 March 2019).

Figure 3.4. Few workers get trainings, and those who do are mainly men living in urban areas

Share of working population accessing training, August 2016



Share of urban/rural and female/male population in the working population accessing training, August 2016



Source: OECD calculations based on National Labour Force Survey (SAKERNAS), August 2016.

3.2. Skills outcomes at the local level within Indonesia

3.2.1. Rural and remote provinces lack access to skills

People living in rural and remote provinces often lack basic education. About one in five people in Papua are illiterate, making it the province with by far the lowest literacy rate in the country. Illiteracy is also substantially higher in West Nusa Tenggara than the rest of the country. On the contrary, in other provinces, including North Sulawesi and the Special Capital Region of Jakarta, less than 1% of the population is illiterate (see Figure 3.5).

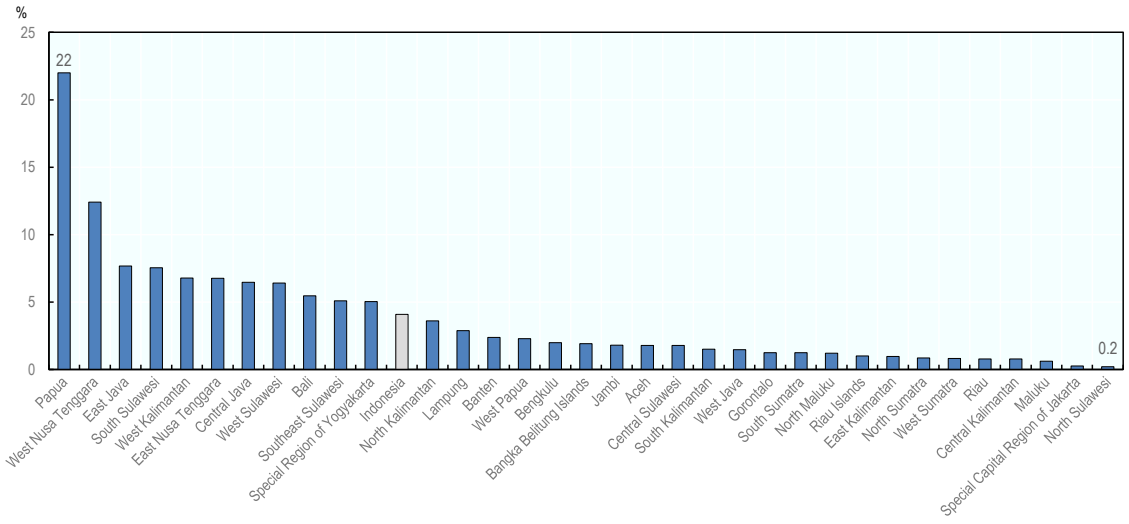
Enrolment in primary education has substantially increased over the last decades and is estimated today at more than 90% across all Indonesian provinces, except for Papua where the net enrolment rate in primary education stands at only 79.2% in 2019. However, enrolment gaps across provinces become wider at the secondary education levels. Net enrolment in junior high school ranges from more than 85% in the provinces of Aceh and Bali to 57.2% in Papua, and it is below 70% in several remote regions. Similarly, enrolment rates in senior high school can be higher than 70% in Bali, Riau Islands and Aceh, while they amount to 44.3% in Papua and less than 55% in Central Kalimantan, East Nusa Tenggara and West Kalimantan (Statistics Indonesia, 2020[24]).

Differences in enrolment rates generate disparities in the expectation of schooling years. In the Special Region of Yogyakarta, children of school entrance age can expect to receive more than 15 years of schooling, as compared to 10.5 in Papua and less than 12 years in the Bangka Belitung Islands, resulting in a differently skilled workforce. These different expectations reinforce regional development disparities

across provinces, with poorer and more remote provinces developing a workforce with lower skills, which will in turn negatively affect local productivity and economic growth. Disparities in education are also reflected in the different performance of students across provinces. While a PISA score by province is not available, the breakdown by villages and large cities undertaken as part of the 2012 PISA survey shows that the performance difference between the two is higher in Indonesia than in other developing countries (see Figure 3.6). Acknowledging the large gaps in access to education, some cities have taken initiatives to make education accessible for all and better aligned to the labour market (see Box 3.2).

Figure 3.5. About one in five is illiterate in Papua, while North Sulawesi and Jakarta achieve almost universal literacy

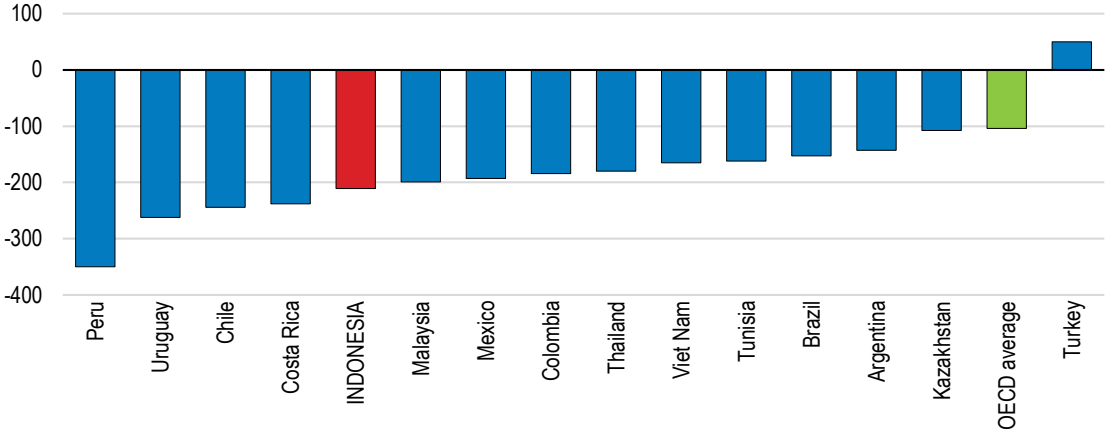
Illiteracy rates by province, percentage of population aged 15+, 2019



Source: Statistics Indonesia, Percentage of Illiteracy (Percent), 2017-2019.

Figure 3.6. Rural areas perform worse than urban areas in education

Difference in PISA scores between villages and large cities



Note: Sum of PISA reading, science and mathematics scores.
Source: OECD 2012 PISA database.

Box 3.2. A case study in making learning accessible for all: actions being taken in the City of Surabaya

The city of Surabaya, located in East Java, faces several challenges related to poverty, with more than 164 000 people in the city living below the poverty line. The city has therefore concrete made efforts over the last years to improve learning outcomes of the population, and specifically target disadvantaged groups As an acknowledgement of the city's efforts, Surabaya was one of sixteen cities in the world to receive the UNESCO Learning City Award in 2017. Cities were selected by an international jury based on the achievements made in promoting lifelong learning and education in their communities.

Surabaya has recently undertaken several initiatives to promote access to education and foster inclusion. For example, access to schools has been made free in the city, and the number of facilities providing learning opportunities, such as libraries, has been increased to foster accessibility to learning. Free ICT literacy and language classes are provided by the Broadband Learning Centre and the House of Languages centre in the city. The latter brings together 85 volunteer teachers who teach 13 different languages to more than 2 200 visitors per month. The provision of free online tools has also been prioritised with the creation of Wi-Fi hotspots to ensure everyone can access the internet. The Surabaya Education Department portal provides information on schools, the education system, as well as free courses and academic journals available on line. A website offering information on the healthcare system in the country as well as information on local hospitals has also been created.

Initiatives also exist to motivate students to remain and succeed in education in Surabaya. For example, a literacy competition between districts is organised every year in the context of the Surabaya *Akseliterasi* programme. Annual festivals, such as the *Budaya Pustaka*, and the Surabaya Cross Culture, Folks and Art Festival are organised to promote a lifelong reading culture, as well as local culture and arts. The city has also established community-based learning groups *(Layanan Kelompok Belajar*), targeting people who are unable to continue formal education. The groups receive funding from the city and, as of August 2017, there were 36 such groups operating in the city. Students undertaking informal education receive prizes and awards during the *Widya Wahana Pendidikan*, a fair and ceremony celebrating achievements of VET and community-based learning groups of students. Another initiative, known as *Tantangan Membaca*, was launched in 2015 to increase students' interest in reading, making reading a daily habit and promoting "lifelong reading". As part of the initiatives, students were challenged to read an amount of extracurricular books of their choice. Successful students received a certificate from the Surabaya Education Department.

Source: UNESCO Institute for Lifelong Learning (2017[25]), *Surabaya*, https://uil.unesco.org/case-study/gnlc/surabaya (accessed on 19 June 2019); UNESCO Institute for Lifelong Learning (2017[26]), *Unlocking the potential of urban communities, volume II: case studies of sixteen learning cities*, https://unesdoc.unesco.org/ark:/48223/pf0000258944 (accessed on 7 February 2020); Case study interviews.

3.2.2. The on-going COVID-19 pandemic crisis poses further challenges to access to education in rural and remote provinces

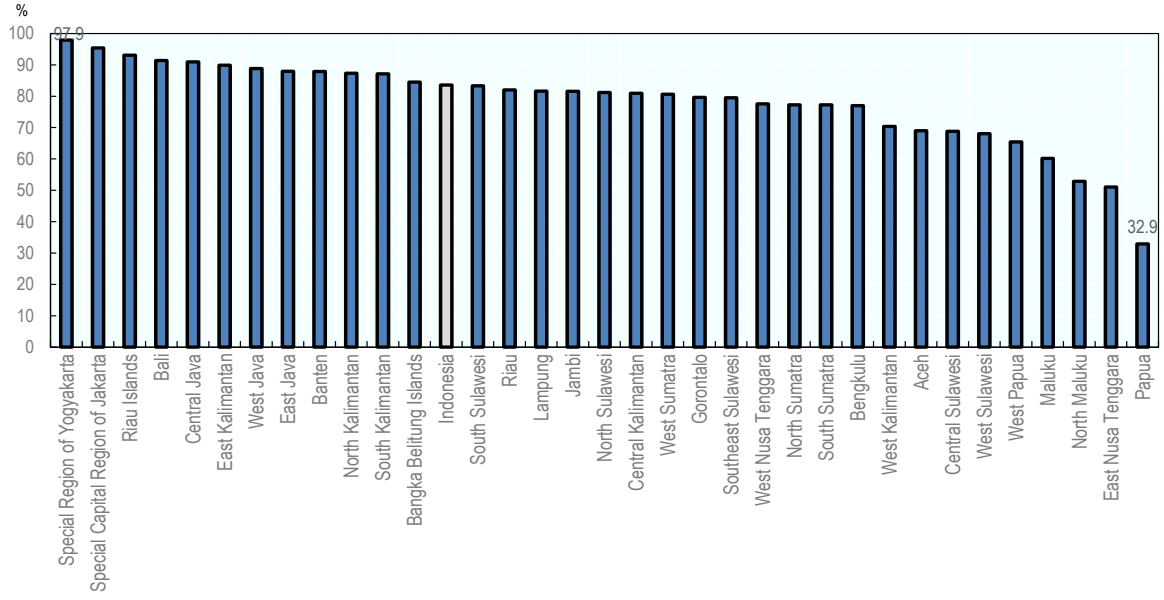
As the Government of Indonesia has established that work and study should take place from home as of mid-March 2020, in response to the ongoing COVID-19 crisis, provinces are differently equipped to undertake remote learning. Indonesia's internet penetration amounted to about 47.7% in 2019, and it is almost half that of Malaysia. Access to digital technology is uneven across provinces, with internet penetration strongly correlated with income per capita and poorer regions having lower rates. Large

population centres such as Jakarta and Yogyakarta on the other hand have a penetration rate above 45% (McKinsey&Company, 2016[27]).

In addition, students in rural and remote provinces tend to be substantially less ICT-ready than their peers elsewhere in Indonesia. While in provinces such as the Special Region of Yogyakarta and the Special Capital Region of Jakarta the almost totality of 15-24 year-olds posses basic ICT skills, less than one in three do so in Papua (see Figure 3.7). The combination of lower internet penetration and ICT-readiness of youth in some areas might suggest that some provinces will struggle more than others to ensure the continuity of schooling through remote and distance learning platforms.

Figure 3.7. Youth in eastern provinces often lack ICT skills

Share of 15-24 year-olds with ICT skills by province, 2019



Source: Statistics Indonesia, Proportion of Adolescents And Adults Aged 15-24 Years With The Information and Computer Technology Skills (ICT) by Province, 2015-2019.

3.3. Recent trends in vocational education and training at the local level in Indonesia

Vocational Education and Training (VET) can provide students and workers across Indonesian provinces with the skills needed in local labour markets, fostering inclusive growth and reducing disparities both within and across provinces. Both several ministries and local governments play a role in the development and delivery of vocational education and training in Indonesia. Table 3.2 provides an overview of the VET system in the country.

Vocational education in Indonesia can take place at different levels, and consists of both formal and non-formal tracks. Indonesian students aged 16-18 have the opportunity to take on upper-secondary formal vocational education, while non-formal vocational trainings mainly target jobseekers without formal vocational education, workers whose jobs have become obsolete or workers who may want to advance in their career (World Bank, 2019[22]). Upper-secondary vocational education is mainly provided by vocational high schools (*Sekolah Menengah Kejuruan*, SMKs), which are overseen by the Ministry of Education and Culture, and provide vocational education in several areas, including information and communication

technology, engineering, business and management, agri-tourism, arts and crafts. Vocational education is also provided by Islamic vocational schools (MAKs). Formal vocational education is also offered by several tertiary education institutions, including academies, polytechnic universities and schools of higher learning (Bai and Paryono, 2019[28]). On the other hand, non-formal vocational education and training is mainly provided by work training centres (*Balai Latihan Kerja*, BLKs), supervised by the Ministry of Manpower. The ministry also oversees productivity training centres (PCTs), offering trainings to support productivity improvements within SMEs. Non-formal vocational education is provided by private institutions as well. Private work training providers (*Lembaga Pelatihan Kerja Swasta*, LPKS) and private courses and training centres (*Lembaga Kursus dan Pelatihan*, LKP) provide trainings, and they are regulated by the Ministry of Manpower and the Ministry of Education and Culture respectively (Malik, Jasmina and Ahmad, 2019[29]). Around 16 different line ministries, along with local governments, also have direct implementation control or oversight of many of these training institutions, with limited co-ordination among themselves (World Bank, 2019[22]).

Table 3.2. The VET governance is particularly complex in Indonesia

Type	Level	Provider
Education	Upper secondary (SMK)	Ministry of Education and Culture/Provinces Ministry of Industry Other ministries
	Tertiary (Polytechnic, Academy, School of Higher Learning)	Ministry of Research and Technology Ministry of Industry Ministry of Health Ministry of Transportation Ministry of Tourism Other ministries
Training	BLK	Ministry of Manpower and local governments
	Other private training centres	Private providers

Source: Malik, A., T. Jasmina and T. Ahmad (2019[29]), *Chapeau Paper: Indonesia Technical and Vocational Education and Training*.

3.3.1. Vocational high school (SMKs)

Upon completion of junior secondary education, students can choose whether to enrol in upper secondary vocational (SMK and MAK) or general high schools (SMAs). Both programmes last three years, but for the SMK there is also the possibility to undertake a four year programme (SMK plus). SMA/SMK/MAK graduates receive a national certificate of secondary education upon successful completion of a final exam. SMKs provide the choice among different majors, of which the most popular are technology and industry and business management, while SMAs offer majors in natural science, social science and languages. Vocational and general high school only have in common the teaching of English and Indonesian languages. Upper secondary education requires students to pay an annual fee, which changes based on whether the school is public or private. SMAs are generally more expensive than SMKs. Data from the Ministry of Education and Culture shows that there were around 14 000 SMKs in 2018, almost 75% of which were private (Malik, Jasmina and Ahmad, 2019[29]).

A stigma towards vocational schools is present in Indonesia, as SMKs are often perceived as “second class” institutions, mainly targeting poorer students who cannot afford higher general high school fees. SMA and SMK students’ characteristics differ - SMA students tend to have better results in national examinations (e.g. EBTANAS) and a higher socio-economic status. The higher applicant to entrant ratio of SMAs suggests that there is a general preference for high school compared to vocational education. Students to college educated parents tend to attend SMKs, while rural students are less likely to attend public general education (World Bank, 2010[30]). Research shows that students with high test scores are more likely to attend public general high schools, while children to highly-educated parents tend to choose

private general high schools. Private vocational schools are seen as the last resort, appealing to students with low-test scores and the least educated parents (Newhouse and Suryadarma, 2011[31]). The upper secondary education system in Indonesia appears to be compartmentalised, with SMA and SMK emerging as two parallel education paths where students have difficulties in moving from one to the other. While SMA students can continue their studies with tertiary education, for SMK students it is often hard to enter university. SMAs also provide better employment prospects, with less than 8% of SMA graduates who were unemployed in 2017, as compared to more than 11% for SMK graduates. SMK students therefore find themselves in the position of not being able to enter university, as they have not attended high schools, while also having more difficulty in finding a job as compared to their SMA peers.

The comparison between SMK and SMA shows that, although the former have expanded over the last decade, graduates from the latter still achieve better education and labour market results. The number of students enrolled in SMK and SMA is quite similar, but difference emerge when looking for example at indicators of participation, retention and unemployment. The Government of Indonesia has recently stepped up efforts to expand vocational education and increase its effectiveness in providing students with the skills needed in the labour market and place them into jobs (see Box 3.3).

Box 3.3. Boosting vocational education in Indonesia: recent government strategies

In September 2016, the President of Indonesia issued a "Presidential Instruction" aimed to improve the quality and competitiveness of the Indonesian workforce, called "SMK Revitalisation". The strategy was adopted to equip the Indonesian workforce with the skills needed for an evolving labour market, where technological progress heavily affects business processes as well as skills requirements, fostering the acquisition of soft and transferrable skills. These include thinking skills, work-related skills, instrumental skills (e.g. data collection) and relational skills (e.g. integrity, discipline, responsibility).

Main objectives of the strategy include among others:

- Revitalising vocational schools supporting the development of national priorities (e.g. food security, energy, business and tourism, maritime sector), with a focus on the Eastern provinces of Papua and West Papua;
- Advancing the development of an SMK model which is based on strong industry-linkages;
- Development of labour market skills needs assessment and adjustment of SMK curricula accordingly;
- Improving the quality and infrastructure of SMKs;
- Elements of the initiative include the need to better harmonise SMK curricula with competencies needed in the labour market and enhancing co-operation between public institutions involved in the development of VET and the business sector.

Source: Ministry of Education and Culture (2016[32]), *Presidential Instruction Number 9 Year 2016 on Revitalizing TVET Schools (SMK) in the framework of Improving the Quality and Competitiveness of Indonesian Human Resources (Instruksi Presiden Nomor 9 Tahun 2016 Tentang Revitalisasi SMK dalam rangka Peningkatan Kualitasdan Daya Saing Sumber Daya Manusia Indonesia)*, https://www.kemdikbud.go.id/main/blog/2016/09/presiden-jokowi-keluarkan-inpres-tentang-revitalisasi-smk (accessed on 13 June 2019)

3.3.2. Participation in vocational high schools has been increasing in Indonesia

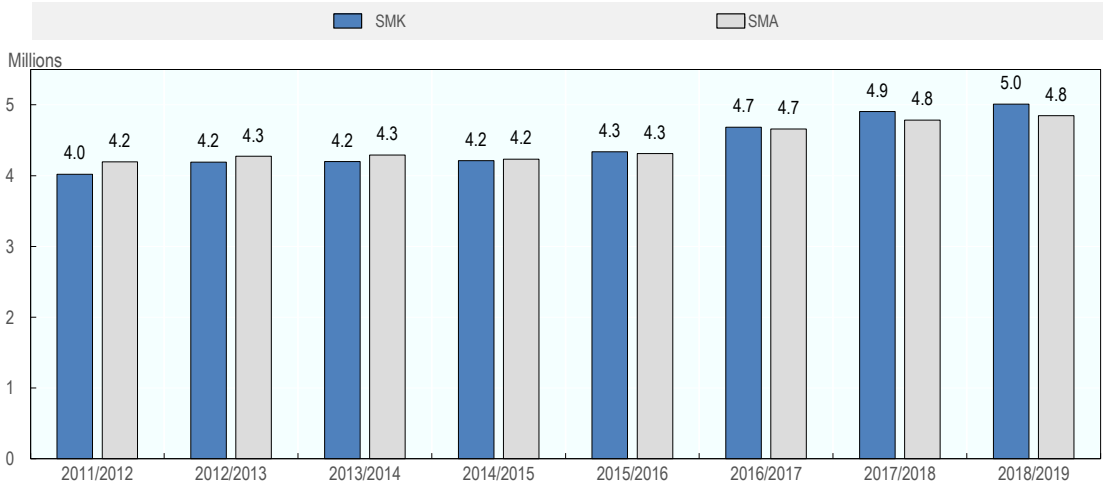
Enrolment in vocational schools has seen a constant increase over the last decade, taking over general education in enrolment numbers (see Figure 3.8). In the academic year 2018-2019, the total number of SMK students amounted to more than 5 million, up from 4 million in 2011-2012. The share of upper secondary education students enrolled in vocational education has therefore increased from 49% to 61%

between the academic years 2011/2012 and 2018/2019. Also the number of SMA students has increased over the same period. Furthermore, while there were more SMA than SMK students in 2011-2012, the opposite is true for the academic year 2018-2019, where SMK students outnumber SMA students by around 200 000. The objective of the government is to increase the ratio of SMK to SMA students to 70% by 2025.

The increase in the number of SMK students has been substantial in Riau Islands, South Kalimantan, West Java, Central Kalimantan, East Nusa Tenggara and Central Sulawesi, standing at around 50% over the 2011-2012 to 2018-2019 period. On the other hand, a few provinces have seen the number of vocational students decrease over the same period. This is the case of the Special Capital Region of Jakarta (-5%), North Sumatra (-5%) and West Papua (-6%) (see Figure 3.9). The number of new entrants in the academic year 2018-2019 amounted to 1.77 million. New students mainly enrol in private SMKs as compared to public ones, which had 985 000 and 783 000 new entrants respectively in 2018-2019.

Figure 3.8. The number of SMK students has overtaken the number of SMA students over the last decade

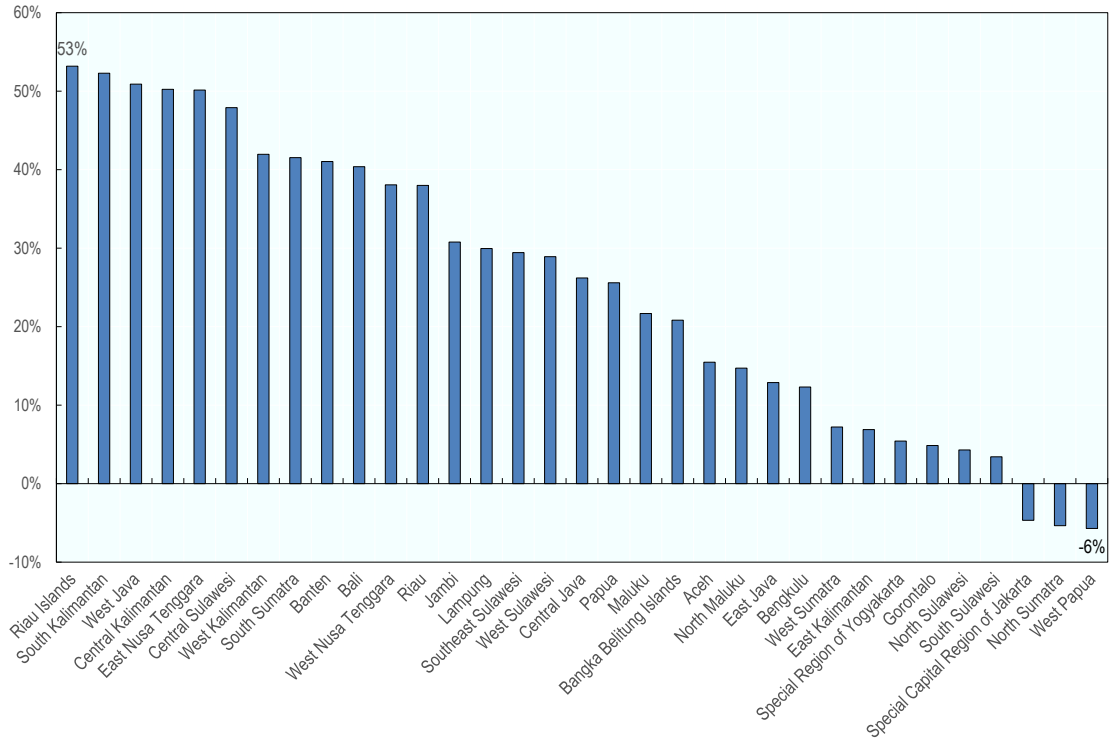
Millions of students in each academic year



Source: Ministry of Education and Culture; Statistics Indonesia (2018[33]), *Statistik Indonesia: Statistical Yearbook of Indonesia 2018*, https://www.bps.go.id/publication/2018/07/03/5a963c1ea9b0fed6497d0845/statistik-indonesia-2018.html (accessed on 12 June 2019).

Figure 3.9. Changes in vocational education enrolment have been uneven across provinces

Change in number of SMK students between the academic years 2011-2012 and 2018-2019



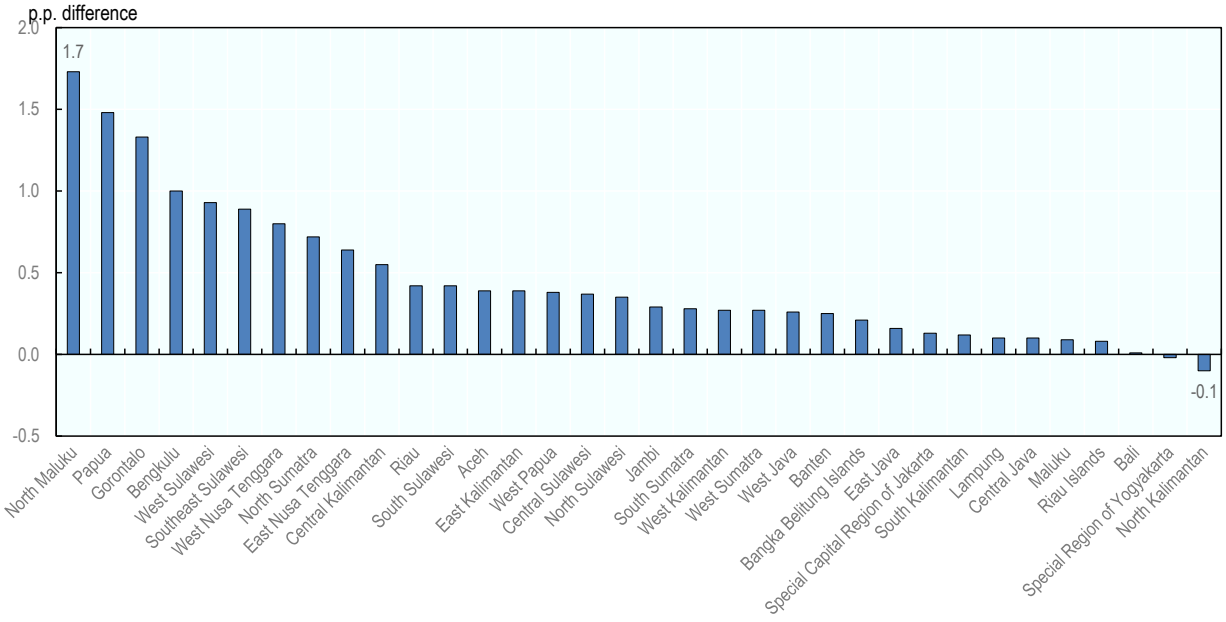
Note: Data for North Kalimantan not available.
Source: Ministry of Education and Culture; Statistics Indonesia (2018[33]), *Statistik Indonesia: Statistical Yearbook of Indonesia 2018*, https://www.bps.go.id/publication/2018/07/03/5a963c1ea9b0fed6497d0845/statistik-indonesia-2018.html (accessed on 12 June 2019).

The number of repeaters, defined as students repeating more than once the same grade, is rather low. Only 19 000 out of 5 million SMK students are repeaters, corresponding to a repetition rate of 0.29%. Student drop-outs stand at 25 357, or 0.52%, between 2017-2018 and 2018-2019, down from 72 744 between 2015-2016 and 2016-2017. The number of graduates in 2018-2019 amounted to 1.5 million, up from 1.3 in 2016-2017 (Ministry of Education and Culture, 2019[34]). However, repetition rates vary across provinces, with rural and remote provinces in the east, such as Papua and West Papua, where rates are nine and seven times the national average respectively. Similarly, drop-out rates in remote provinces, such as North Maluku (2.97%), Papua (2.31%) and Gorontalo (2.07%), are much higher as compared to central provinces such as Bali (0.06%), the Special Region of Yogyakarta (0.07%) and the Special Capital Region of Jakarta (0.16%). In addition, students' performance seems to vary from public to private schools, with the latter accounting for 60% and 68.8% of total repeaters and drop-outs (Ministry of Education and Culture, 2019[34]).

Overall, repetition rates of SMK students are only slightly higher than for SMA students across Indonesia. On the other hand, the difference in drop-out rates between SMK and SMA is more pronounced, as drop-outs average 1.57% and 0.33% in SMK and SMA respectively. Drop-out rates are higher for SMK than SMA students in almost all provinces (Ministry of Education and Culture, 2019[34]) (Ministry of Education and Culture, 2019[35]) (see Figure 3.10).

Figure 3.10. Drop-out rates are higher for SMK students in almost all provinces

Percentage points difference between SMK and SMA students drop-outs, 2018-2019 academic year



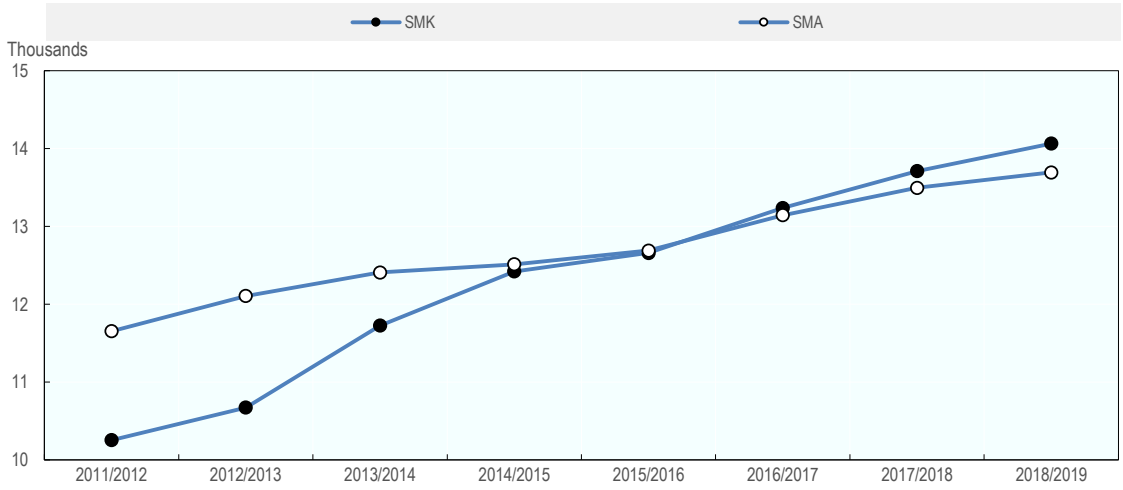
Source: Ministry of Education and Culture (2019[34]), *STATISTIK SMK*, http://publikasi.data.kemdikbud.go.id/uploadDir/isi_B8C0D956-74F4-41D9-8E45-5AF346DF8098_.pdf (accessed on 5 February 2020); Ministry of Education and Culture (2019[35]), *STATISTIK SMA 18/19*, http://publikasi.data.kemdikbud.go.id/uploadDir/isi_0EC67925-00D9-4518-BC47-1DEDD3C5DE36_.pdf (accessed on 5 February 2020).

3.3.3. The government has invested in increasing the number of schools to boost the overall supply of skills

While there were 10 256 vocational schools in Indonesia in 2011/2012, their number has gradually increased over the recent years. As of the academic year 2016/2017, there were more vocational than general high schools in Indonesia (see Figure 3.11). Vocational schools can be private or public organisations, with the former overwhelmingly outnumbering the latter (75% to 25%). Every year, 1.5 million students graduate from these schools. The provincial government grants a permit to eligible schools, allowing them to provide vocational courses. The development of new vocational schools has continued over the past years, with more than 1 000 new vocational schools established since 2018.

Figure 3.11. As of 2016-2017 there are more SMK schools than SMA in Indonesia

Thousand schools



Source: Ministry of Education and Culture (2019[34]), *STATISTIK SMK*, http://publikasi.data.kemdikbud.go.id/uploadDir/isi_B8C0D956-74F4-41D9-8E45-5AF346DF8098_.pdf (accessed on 5 February 2020); Ministry of Education and Culture (2019[35]) *STATISTIK SMA 18/19*, http://publikasi.data.kemdikbud.go.id/uploadDir/isi_0EC67925-00D9-4518-BC47-1DEDD3C5DE36_.pdf (accessed on 5 February 2020).

3.3.4. Work training centres (BLKs)

Non-formal vocational training in Indonesia is mainly provided by work training centres (BLKs), under the responsibility of the Ministry of Manpower. There are also private work training providers (LPKS) and private courses and training centres (LKPs). The latter are regulated by the Ministry of Education and Culture.

There are 305 BLKs in Indonesia, of which 17 are directly operated by the Ministry of Manpower, while the remaining part is operated by local governments. In addition to public BLKs, there are more than 8 900 private training providers, including LPKS as well as 245 private BLKs specialising in preparatory training for workers to go and work overseas. Finally, there are more than 19 000 LKPs, providing ad-hoc courses and trainings (Malik, Jasmina and Ahmad, 2019[29]). Training centres mainly target jobseekers without formal vocational education, workers whose jobs have become obsolete or workers who may want to advance in their career. Originally developed to serve the manufacturing industry in the 1970s and 1980s, targeting poor people with low educational attainment, BLKs today have the objective of providing relevant trainings to students and jobseekers to develop skills and competences needed in the labour market. Examples of subjects taught by BLKs include garment and apparel, automotive-related trainings and ICT, as well as welding and electronics.

Although it has increased over recent years, the popularity of BLKs across Indonesia is rather limited, considering the size of the population that could benefit from such trainings. In 2018, around 150 000 people were trained in training centres managed from the Ministry of Manpower, up from around 90 000 in 2017. The government targeted to reach around 280 000 trainees in 2019. Although efforts have been made to improve the context for BLKs, training centres often lack facilities and have outdated equipment, compromising the relevance of training provided (World Bank, 2010[30]). The number of BLK certified graduates is also reportedly reduced by the limited number of assessors and staff able to train trainers. In addition, monitoring of training outcomes does not take place in a systematic way. Efforts have been made to develop competency standards and link them to the Indonesian National Qualification Framework, but practical challenges remain. Challenges linked to accreditation and quality assurance of training institutions

are often pointed out as major challenges hampering the effectiveness of trainings across provinces. Quality assurance is often identified as an issue especially for private sector-provided trainings (Malik, Jasmina and Ahmad, 2019[29]).

3.3.5. Indonesian National Work Competency Standards (INWCS)

Vocational training in Indonesia is developed based on the Indonesian National Work Competency Standards (INWCS). The INWCS have been established to describe the competency standards that underpin a range of occupations. They apply to companies within the same sector across Indonesia. Standards are reviewed periodically to determine their validity towards new developments and changes in job requirements. Reviews take place at different times for each profession and depend on the speed of change in job requirements in each field. For example, the review of Information and Communication Technology (ICT) standards takes place more often than the Metal and Machinery sector. INWCS are the reference for the development of competency-based programmes as well as for the professional competency certification system. INWCS are jointly developed with stakeholders in each sector.

In the development of INWCS, particular attention is devoted to standard requirements for professions characterised by risks linked to occupational safety and health (OSH), such as in the health sector, engineering and chemistry. Priority is also directed towards professional fields where disputes may arise, such as advocacy and accounting, as well as to professions linked to the preservation of national heritage, such as crafts, arts and culture. INWCS were initially formulated on the basis of the Regional Model Competency Standard (RMCS) format, which was introduced through the International Labour Organization (ILO) Asian and Pacific Skill Development Programme (APSDEP) in 1998. The ILO formulated the INWCS to answer the following questions: What is a worker expected to do based on his/her job duties? How should a worker's performance be measured? How should achievement and failure to perform be measured?

The development and harmonisation of the INWCS has not been budgeted by sector yet, and some training programmes are still to be established. In addition to INWCS, Indonesian law also foresees Special Standards and International Standards. Special Standards are competency standards that only apply in the institution that sets them and/or to other institutions having direct links with it. This is the case of ASTRA and Microsoft Standards for example. Special Standards can become INWCS and therefore apply to all firms within a sector through the INWCS drafting process regulated by the Ministry. On the other hand, the International Standard is a competency standard set by international organisations/associations. International Standards apply internationally in many countries. This is the case of ISO standards and IMO standards, for example. International standards can be adopted as INWCS through a process regulated by the Ministry.

3.3.6. Indonesian National Qualification Framework (INQF)

The Indonesian National Qualification Framework (INQF) provides standards for graduates as well as education and training institutions to assess learning outcomes. It aims to equalise outcomes resulting from formal, non-formal and training education, as well as self-learning and learning acquired through on-the-job experience. Following the example of the European Qualification Framework (EQF), it also recognises and translates international workforce and students qualifications into the Indonesian qualification system. The INQF includes nine qualification levels (see Table 3.3). The incorporation of INWCS into the INQF is important to ensure harmonisation between education and employment outcomes. It is also important to facilitate the mutual recognition of qualifications with other countries.

Table 3.3. INQF learning outcomes characteristics

NQF level	Learning outcomes characteristics
1	Able to perform simple, limited, and routine tasks by using appointed tools, procedure and processes, under the guidance, supervision, and responsibility of his superiors; Having factual knowledge; Responsible for own work and not responsible for work of others.
2	Able to perform a specific task, using tools, and information, and operating procedures commonly done, and show measurable quality performance, under the direct supervision of superiors; Having a basic operational knowledge and factual knowledge of specific work areas, so that they can choose the solution that is available of problems that commonly arise; Responsible for own work and can be given responsibility to guide others.
3	Able to carry out a series of specific tasks, by translating information and using tools, based on selection of working procedures, and able to demonstrate measurable quality and quantity performance, which is partly a result of their own work under indirect supervision; Having complete operational knowledge, general principles and concepts related to the fact in certain areas of expertise, so that able to solve many common problems with appropriate methods; Able to cooperate and communicate within the scope of work; Responsible for own work and can be given responsibility for the work of others.
4	Able to complete broad scoop of tasks and specific case by analysing the limited information, select the appropriate method from given options, and be able to demonstrate measurable quality and quantity performance; Mastering some basic principles of specific areas of expertise and able to align with the factual issues in the field of work; Able to cooperate and communicate, prepare a written report within a limited scope, and have the initiative; Responsible for own work and can be given responsibility for the quantity and quality of work of others.
5	Able to complete broad scoop of tasks, choose the appropriate methods from a variety of options by analysing data and be able to demonstrate measurable quality and quantity performance; Mastering general theoretical concepts in certain area of knowledge, and able to formulate procedural problem solving; Able to manage work group and prepare a written report comprehensively; Responsible for own work and can be given responsibility for the quantity and quality of work of group.
6	Able to apply own expertise and utilize science, technology and art in the field of expertise to solve the problem and to adapt to the situation faced; Mastering general theoretical concepts in certain area of knowledge and special part of theoretical concepts in the field of knowledge in depth, and able to formulate procedural problem solving; Able to take appropriate decisions based on information and data analysis, and able to provide guidance in selecting a variety of alternative solutions individually and in group; Responsible for own work and can be given responsibility for the achievement of organizational work.
7	Able to plan and manage resources under their responsibility, and comprehensively evaluate their work by utilising science and technology to produce the steps the organization's strategic development; Able to solve technologic, scientific and/or artistic problems in the scientific field through a monodisciplinary approach; Able to conduct research and take strategic decisions with accountability and full responsibility for all aspects that are under the responsibility of their expertise.
8	Able to develop the knowledge, technology, and / or art in their field of scientific or professional expertise through research, to create innovative and qualified product; Able to solve technologic, scientific and/or artistic problems in their field of science through inter-or multidisciplinary approach; Able to manage research and development that benefit to society and science, and also able to get national and international recognition.
9	Able to develop the new knowledge, technology, and / or art in their field of scientific or professional expertise through research, to create creative, original and qualified product; Able to solve technologic, scientific and/or artistic problems in their field of science through inter-, multi-, and transdisciplinary approach; Able to manage, lead, and develop research and development useful to science and mankind welfare, and also be able to get national and international recognition.

Source: Masehat (2016), Updates on Indonesia Qualification Framework (IQF), Development. Regional Skills Technical Working Group Meeting, Bangkok, Thailand, 3 May 2016.

3.3.7. Competency-based Training (CBT)

There are three types of Competency-based Training (CBT) programmes in Indonesia:

- Qualification programmes. These programmes contain a number of competency units that correspond to a certain level of qualification, according to the INQF. Qualification programmes are mainly undertaken by low skilled workers aiming to upgrade their skills.
- Occupational programmes. They contain competency units that relate to particular occupations or positions. The content of such units corresponds to the job description of a specific occupation. Such programmes can be general or specific, in case they only apply to certain companies and organisations. Occupational programmes are mostly undertaken in the context of job placement and career development.
- Competency Cluster programmes. These programmes contain a mix of qualification and occupational competency units. These programmes are mostly done in the context of upgrading skills or meeting special needs.

CBT programmes can take place in both public and private BLKs. An accreditation process grants formal recognition to BLKs, enabling them to carry out CBT. Accreditation is voluntary and carried out by an independent Training Institute Accreditation (TIA) established by a Ministerial Regulation. Trainees who have successfully completed a CBT programme are entitled to receive a Training Certificate from BLKs as proof that they have successfully completed the training.

3.3.8. Competency certification

Competency certification is carried out through standardised tests following INWCS, international or special standards. The purpose is to provide recognition of competencies and skills to ensure quality. Certificates can be obtained by participants and/or graduates of job training programmes or workers who have acquired significant on-the-job experience. The following principles guide the competency certification process:

- *Measurability,* providing clear benchmarks for competency certification. Therefore, competency certification can only be done for certain fields, types, and professional qualifications that have been set according to the applicable regulations;
- *Objectivity,* ensuring that competency certification is carried out without bias. For this reason, it must be avoided as far as possible, the possibility of a conflict of interest in the implementation of competency certification;
- *Traceability,* ensuring that the entire certification process from the beginning to the end must be clearly defined and can be easily, quickly and accurately be traced for surveillance and audit purposes. For this reason, competency certification must refer to certain rules or guidelines and the process must be well-documented;
- *Accountability,* with the issuer of certifications who are responsible to the public both technically, administratively and juridically for the issuance of certifications.

Based on these principles, several institutions are involved in the competency certification process, including:

- The National Agency For Professional Certification (NAPC), that works as the "Authority Body";
- Professional Certification Institutions (PCI) that have obtained licenses from the NAPC, as executing institutions for competency certification (Executing Agency);
- Competency Test Sites (CTS) that have been verified by PCI, as the place for conducting competency tests / assessments;

- Competency assessors who have competency assessor certificates from NAPC, as competency test / assessment implementers.

Competency certification can take place with any of the above-mentioned CBTs. Depending on the needs and characteristics of the sector concerned, certification can be carried out through three different schemes:

- First Party Certification Scheme (PCI-1), which is granted by an organisation or company to its own employees, on the basis of special standards and/or INWCS;
- Second Party Certification Scheme (PCI-2**)**, i.e. a competency certification carried out by an organisation or company towards employees of another company that is the supplier or agent of the organisation or company in question. It is usually done to guarantee the quality of supply of goods or services. This certification can use special standards and/or INWCS;
- Third Party Certification Scheme (PCI-3), carried out by a Professional Certification Institution (PCI) which has obtained from NAPC the licence to issue national quality certifications. This certification uses INWCS or international standards.

Clarity of the process and certainty of the value of the certification are needed to ensure that competency certification further develops in Indonesia. Competency certification constitutes an important advantage for holders in the labour market, as it represents a fast track to access new jobs, advance in the career and obtain better remuneration in Indonesia. The Mutual Reconciliation Agreement ensures that competencies are recognised in other countries as well. Competency certification represents an important guarantee of work competences. Therefore, the implementation of competency certification must be subject to the rules of an internationally valid quality assurance system.

3.3.9. Apprenticeship training in Indonesia

Apprenticeship is a vocational education pathway that, combining both workplace and classroom-based learning, can play an important role in tackling informality in emerging economies and placing people to good jobs (OECD/ILO, 2017[36]) (see Box 3.4). Quality apprenticeships resulting from robust social dialogue and public-private partnerships can support young people to transition from education to employment, tackling the work-inexperience trap (International Labour Organization, 2012[37]). Apprenticeships take place in most sectors in Indonesia, across different enterprise sizes.

The vast majority of apprenticeships are informal agreements between employers and apprentices, although the number of formal apprenticeship agreements following the Ministry of Manpower's regulation has steadily increased (ILO and APINDO, 2015[38]). Statistics on apprentices can also be limited, as apprenticeships are very widespread in micro and small, usually informal, enterprises (Smith and Kemmis, 2013[39]). While there is no clear information on the scope and objectives of informal apprenticeships, a 2011 ILO internal paper reported that 11 out of 13 MSMEs were training a total of 22 apprentices (ILO and APINDO, 2015[38]). Between 2007 and 2013, it is reported that a total of only 100 000 apprenticeships were registered according to the Ministry of Manpower regulation (Skjaerlund and Van Der Loop, 2015[40]). A common definition of apprenticeship does not exist in Indonesia, and the term used (*pemagangan*) could be applied to apprenticeships, internships and traineeships. The Ministry of Manpower defines apprenticeships as "A part of a training program that is conducted based on the combination of mentorship at training institutions and guidance by senior employees (in the workplace) in the process of production of goods or services at companies with the goal to master a certain set of skills" (APINDO, 2015[41]).

Box 3.4. What do we mean by apprenticeships?

The International Labour Organization (ILO) defines apprenticeships as a form of "systematic long-term training for a recognised occupation that takes place substantially within an undertaking or under an independent craftsman and should be governed by a written contract… and be subject to established standards". Given growing interest in apprenticeship programmes and broader work-based learning as a success factor in school-to-work transitions, it is worth noting that the term "apprenticeship" is increasingly used to describe a range of programmes that might be alternatively referred to as "traineeships", "internships", "learnerships" and "work placements", depending on the country context.

As noted by the G20, "apprenticeships are a combination of on-the-job training and school-based education. In the G20 countries, there is not a single standardised model of apprenticeships, but rather multiple and varied approaches to offer young people a combination of training and work experience" (G20, 2012[42]). The common feature of all programmes is a focus on work-based training, but they may differ in terms of their specific legal nature and requirements. Apprenticeships in modern industrialised economies typically combine work-based training with off-the-job training through a standardised written contract that is regulated by government actors. These programmes usually result in a formal certification or qualification. The nature of apprenticeships necessarily differ based on the institutional and structural features of the local, regional, national and supra-national vocational education and training system. Throughout this report, we will refer to apprenticeships that occur both during and following compulsory secondary education. The case studies depict employment programmes that are regulated by law and based on an oral or written apprenticeship contract, where apprentices were provided with compensatory payment and standard social protection coverage.

Source: OECD/ILO (2017[36]) *Engaging Employers in Apprenticeship Opportunities: Making It Happen Locally,* OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264266681-en.

Apprenticeships have taken a more prominent role in Indonesia. In 2016, a National Apprenticeship Program Movement was launched, aiming to tackle skills mismatch and improve school-to-work transitions by promoting apprenticeships. The Ministry of Manpower is in charge of developing policies to regulate apprenticeship at the national level. Provincial/city-level governments raise awareness of apprenticeships across companies in their area of competence and provide training and supervision to companies implementing apprenticeships. The Employers' association of Indonesia (APINDO), which brings together labour unions, companies and professionals, shares information among its members, promotes good practices and participates in tripartite dialogues and co-operates with the Ministry of Manpower and the Apprenticeship Forum. Other stakeholders involved in the development of apprenticeships include trade unions, vocational training institutions and professional certification bodies. The Government has established a funding scheme to encourage companies to implement apprenticeship programmes, aimed to cover the basic needs to implement apprenticeship programmes. To apply for the subsidy, companies have to contact the local government division in charge of employment by submitting the companies' apprenticeship programmes or becoming members of Apprenticeship network co-ordination forums (FKJP) that are available in several provinces and regencies/cities (APINDO, 2015[41]).

3.4. Main challenges in fostering local skills development opportunities in Indonesia

3.4.1. The governance of the vocational education and training system is complex and managed by a number of ministries and local governments

The decentralised governance structure in Indonesia has placed substantial responsibilities for vocational education in the hands of local governments. However, the central government retains an important role given that the ministries of Manpower and Education and Culture are directly involved in the development of education and training curricula as well as qualification standards. This results in a complex multi-governance structure, where roles and responsibilities for vocational education and training are sometimes not clearly defined or overlapping. In addition, vertical and horizontal co-ordination, between different levels of government and different ministries is often challenging, as a systematic co-ordination mechanism for vocational education and training is not in place.

A challenge for Indonesia is to transform the current skills training system, characterised by various skills training providers operating according to their own systems, into a national skills development system (World Bank, 2011[43]). The absence of a clear distinction between vocational programmes and the weak co-operation between SMKs and BLKs results in an overall VET system that is not coherently harmonised. Recent efforts have been made to foster co-ordination and improve the quality of vocational education and training initiatives in Indonesia. The Skills Development Centres (SDCs), piloted in several cities and provinces in Indonesia, bring together different actors involved in the development and provision of vocational education and training, as well as jobseekers and the business community, to improve co-ordination and develop better programmes (see Box 3.5).

Box 3.5. Improving inter-ministerial co-ordination to achieve better skills outcomes: the Skills Development Centres (SDCs)

The Ministry of National Development Planning (BAPPENAS), in collaboration with the Ministry of Manpower, the Ministry of Industry and the Ministry of Education and Culture, has set-up pilot Skills Development Centres (SDCs), bringing together industry representatives, policy makers, academia, vocational schools and training centres to map local labour market needs, available trainings and vacancies. The objective of such centres is to enhance co-ordination among different actors to tackle labour market issues, facilitating matching between labour demand and supply, enhance productivity and lower the share of jobseekers. SDCs are forums for communication, co-ordination and synchronisation of programmes and activities to improve workforce skills, improving workforce quality across provinces. The SDC model was developed by Bappenas in response to the President Joko Widodo's policy to revitalise vocational education and training.

SDCs have been piloted in three cities (Surakarta, Denpasar and Makassar) and four provinces (North Sumatra, Banten, East Java and East Kalimantan). Several SDC meetings took place in 2017 and 2018 to discuss and map vocational schools and training centres, gather the feedback from industries, develop a database of jobseekers and identify competency standards to be used in trainings. Each SDC met around 10-15 times in 2017 and 2018, but only three and seven times in East Kalimantan and North Sumatera.

The number of vocational schools and training centres participating in SDCs varies substantially from one province to the other. For example, in the city of Surakarta, in Central Java, the SDC gathers 15 schools and training centres and almost 50 companies are being engaged, of which 7 from the textile industry, 11 from the tourism and hospitality sector, 10 operating in trade and finance, 5 from the furniture sector, 4 from the food and beverage industry and 2 operating in the automotive sector.

Source: Information provided by the Ministry of National Development Planning (BAPPENAS).

Local governments play a relevant role in education policy in Indonesia. Primary and secondary education falls under the responsibility of the city-level government, while provincial governments are responsible for upper secondary education. Public universities are managed by the central government. The responsibility for managing SMKs was moved from cities to provinces in 2017. However, the central government is directly involved in the development and delivery of vocational education. The Ministry of Education and Culture transfers more than 60% of its budget to local governments, both at the provincial and city level. For provinces, the transfer is operational for SMAs, SMKs, teacher allowances and salaries as well as physical infrastructure. Cities autonomously decide how to allocate their overall education budget. The central governments devolves the budget based on indicators such as number of students and schools per province. Local governments directly manage the large majority of training centres in Indonesia. Several ministries and institutions are involved in the development and delivery of vocational training programmes. The Ministry of Manpower plays a leading role, by directly managing 17 BLKs and 2 productivity training centres (PTCs), while several other ministries manage training centres in their respective area of competence. In addition to public VET, thousands of private institutions spread across the country offer trainings.

Within the Ministry of Manpower, VET is managed by the Directorate General of Training and Productivity (DGTP), which is in charge of overall formulation and implementation of policies aiming to increase labour competitiveness and productivity in Indonesia. The Directorate directly implements policies in the field of job training and is responsible for monitoring the quality of training institutions across the country. It also develops norms, standards and regulations, and provides technical guidance as well as monitoring and

evaluation on competency standardisation. The DGTP consists of one Secretariat, supported by five Directorates. Vocational training is carried out within the National Job Training System, whose stated objective is the creation of a competent, professional and productive workforce. Every worker can take part in job trainings based on their initial skills level, and acquire new competencies. The main components of the National Job Training System are the INWCS and the INQF, the CBT programmes, and the Professional Competence Certification.

3.4.2. The employment outcomes of vocational students have remained uneven

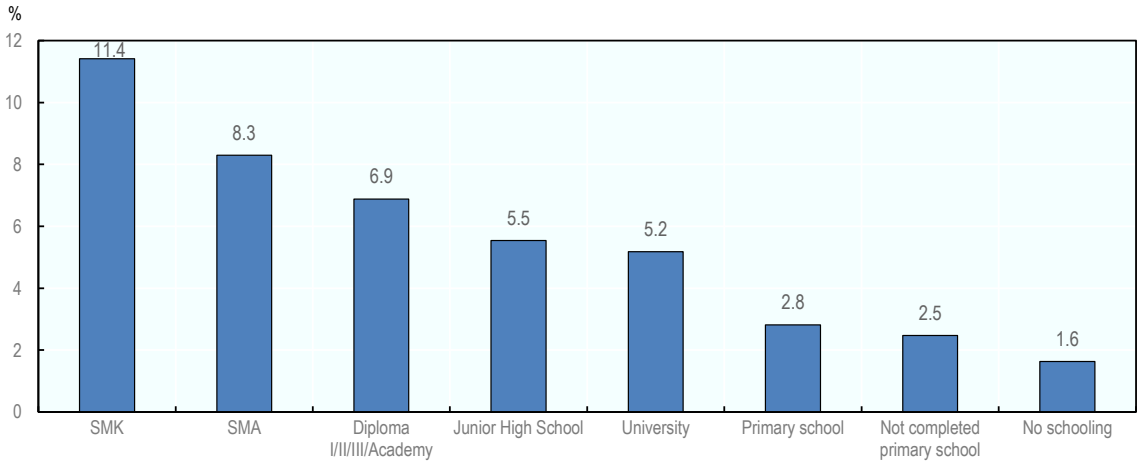
Despite the increased government investment in vocational education, the employment outcomes for vocational students is worse than for people attaining other levels of education (see Figure 3.12). Data from Statistics Indonesia show that SMK graduates have higher unemployment rates than SMA graduates, with 11.4% and 8.3% of the economically active population with such degrees being unemployed in 2017 (Statistics Indonesia, 2018[33]). The figure for SMK graduates also worsened over the last decade, as in 2012 SMK graduates accounted for 10% of total unemployment, slightly higher than 9.7% for SMA graduates.

A challenge for monitoring the trends and impact of vocational training centres across provinces in Indonesia is that some of them do not report data on the number of trainees and their employment outcomes. According to the data provided by the Ministry of Manpower, there was a total of 149 087 trainees in public BLKs in 2018, up from 91 425 in 2016. The largest number of trainees are based in Central and West Java. The number of people who find a job after receiving a training in a BLK averages 20% at the national level, slightly lower than in 2017, when it amounted to 26%. Vocational training centres in the province of North Maluku have the highest share of trainees who get a job after training, amounting to 95% in 2018, while only 3% of trainees got a job in Maluku and Central Kalimantan in the same year (see Figure 3.13). Data on several provinces, including East Java, DKI Jakarta, Bali, Papua and West Papua, are not available.

In addition, Indonesian youth also struggle with chronic levels of underemployment, as captured by the number of people working fewer hours than desired. Underemployment is pervasive among 15-19 and 20-24 year olds (Gunawan, 2018[44]). Around 7% of middle-high school graduates are underemployed, lower than those who never attended school or attended primary education, but higher than those attaining higher education (see Figure 3.14). Underemployment risks trapping young people in low-paid, informal jobs which fail to fully utilise their skills, and can result in significant social and economic costs.

Figure 3.12. SMK graduates have the worst employment prospects in Indonesia

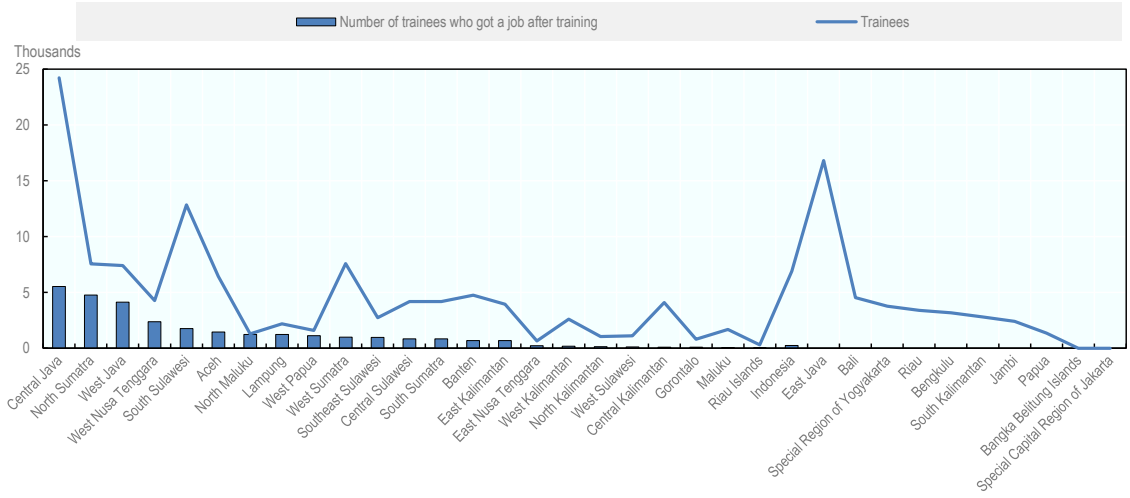
Unemployment by educational attainment, percentage of active population, 2017



Source: Statistics Indonesia (2018[33]), *Statistik Indonesia: Statistical Yearbook of Indonesia 2018*, https://www.bps.go.id/publication/2018/07/03/5a963c1ea9b0fed6497d0845/statistik-indonesia-2018.html (accessed on 12 June 2019).

Figure 3.13. The number of BLK trainees and their employment outcomes vary across provinces

2018



Note: Placement data not available for East Java, Special Capital Region of Jakarta, Bengkulu, Special Region of Yogyakarta, Bali, Jambi, Riau, North Sulawesi and Papua.
Source: Data provided by the Ministry of Manpower.

Figure 3.14. Indonesian middle-high school graduates are not exempt from underemployment

Source: Gunawan, A. (2018[44]), *KEB Hana Bank Economic Outlook 2019: "Riding the Wave of Uncertain Global Normalization"*, https://www.kebhana.co.id/resources/front/files/outlook_presentation_2018_en.pdf (accessed on 5 February 2020).

3.4.3. Apprenticeships are viewed as a negative training pathway

A challenge hampering apprenticeships from leading to the development of a skilled and job-ready workforce in Indonesia is the fact that they tend to be still perceived as "cheap labour" rather than an investment in future workforce productivity. Apprenticeships usually last between one and three months, and apprentices are paid around 75% of the minimum wage salary. The provision of apprenticeships in Indonesia varies across provinces. The Ministry of Manpower collects data from each province on the number of official apprenticeship agreements, although reporting from the provinces might not always be accurate (ILO and APINDO, 2015[38]).

The Special Capital Region of Jakarta is the province with the largest number of apprenticeship agreements signed, amounting to 5 253 in 2013, followed by West and East Java with 2 826 and 2 168 respectively. In more rural and remote provinces, the number of apprenticeship provided is very low, for example only 19 and 46 in Maluku and Gorontalo in 2013. In the Province of East Java, APINDO started targeted programmes involving 880 apprentices in 2018, as a result of the collaboration between the Ministry of Manpower and the Province, consisting of a month of training following by five months on the job. Training programmes are jointly developed by local SMKs as well as local industry associations to define standards and competences needed (see Box 3.6).

Box 3.6. Promoting apprenticeship training in East Java

The Employers' Association of Indonesia (APINDO) is an employers' organisation under the Indonesian Chamber of Commerce (KADIN), overseeing employment and industrial relations issues (Beson, Zhu and Gospel, 2017[45]). APINDO is the only organisation authorised by the Chamber of Commerce to do capacity building around human resource development. It is composed of individual enterprises and associations, which can be regular or extraordinary members. APINDO also provides inputs to the provincial government concerning human resource planning.

Since 1996, the East Java branch of APINDO has been active in promoting the development of apprentices among its members. It reported almost 900 apprentices across sectors in the province in 2018. The apprenticeship programme lasts six months, of which a month dedicated to trainings and five months on-the jobs. To set-up the training offer, APINDO works with local SMKs, and defines standards and competences needed with its members.

Despite relevant efforts to motivate members and bring together stakeholders to establish apprenticeships, a challenge for APINDO is its limited budget and membership, resulting in limited capacity to develop apprenticeships. Case study interviews with the Head of the APINDO East Java office led to the identification of the high cost for businesses as a constraint preventing them from investing in apprenticeships, as well as the lack of a culture of apprenticeships among businesses.

Source: Beson, Zhu and Gospel (2017[45]), *Employers' Associations in Asia : Employer Collective Action.*, Taylor and Francis, https://books.google.fr/books?id=YjwIDwAAQBAJ&printsec=frontcover#v=onepage&q&f=false (accessed on 17 May 2019); Case study interviews.

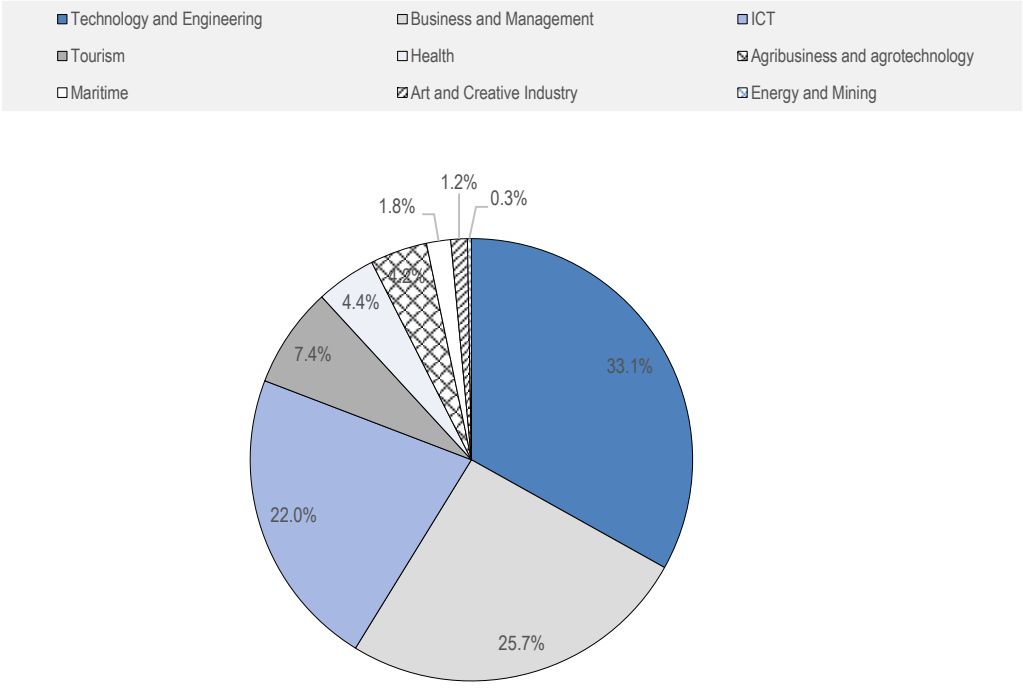
3.4.4. Local VET curricula is often not aligned with employers skills needs

Local VET institutions often remain supply-side oriented (International Labour Office, 2015[46]). While initiatives have been launched over the years to increase the involvement of employers and industry organisations in the design, development and delivery of training, their actual involvement remains limited, resulting in programmes that do not provide students with the skills needed in the labour market.

Vocational education curricula are designed and developed by the Ministry of Education and Culture in consultation with the Ministry of Manpower and the Ministry of Industry. About 144 different specialisations exist within the vocational high school system, across 9 general fields of study which include technology, energy, tourism, social care, agriculture, maritime studies, creative industries and business management. Provincial governments can then adapt the national curriculum to the specific local characteristics. The specific focus of each school is generally determined based on the demands of local students. In 2018, the large majority of SMK students were enrolled in technology and engineering (1.6 million), business and management (1.3 million) and information and communication technology (1.1 million), accounting for 33.1%, 25.7% and 22% of the total SMK student population respectively (Bakrun, 2018[47]) (see Figure 3.15).

Figure 3.15.Most SMK students enrol in technology, business and ICT

Share of SMK students by field of study, 2018



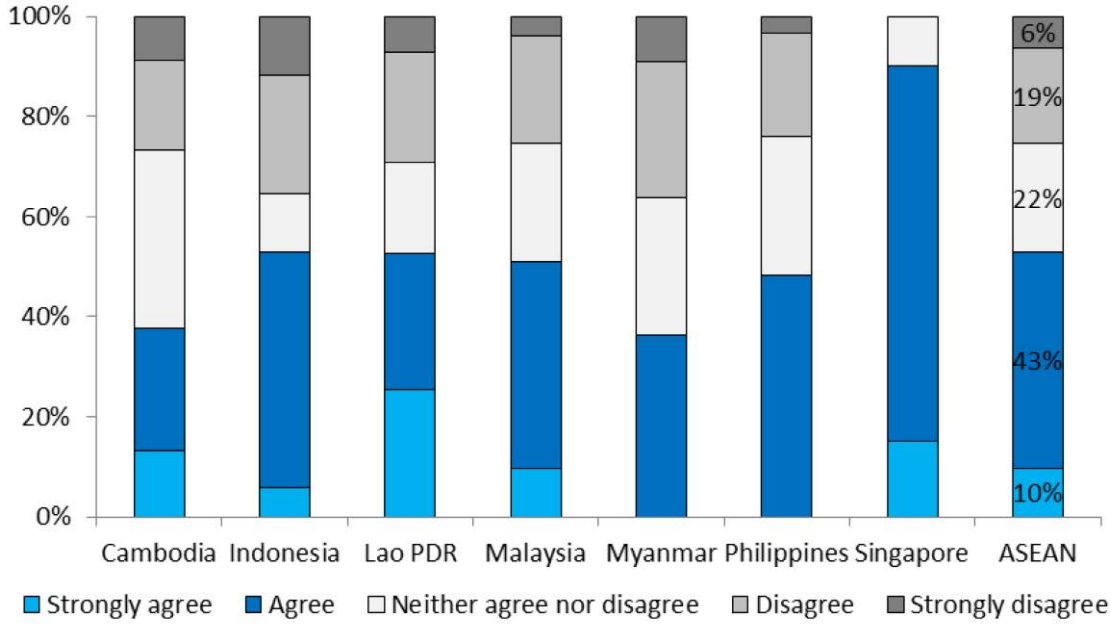
Source: Bakrun, M. (2018[47]), *Vocational Secondary Schools in Indonesia*, https://seminar2018.seamolec.org/assets/uploads/Paralel%204b/3-Bakrun%20Dahlan%20-%20Ministry%20of%20Education%20and%20Culture%20Republic%20of%20Indonesia%20as%20of%2018%20Sept.pdf (accessed on 13 June 2019).

Furthermore, employer skills survey analysis shows that employers report large gaps in workforce skills. Looking at the ASEAN region overall, only around half (53%) of employers across the region agreed or strongly agreed with the statement that, "vocational education and training adequately matches their needs" (see Figure 3.16). Variation across countries in terms of employers' agreement with the statement partly reflects wealth differences. For example, 90% of employers in Singapore agreed or strongly agreed with the statement, compared to just over one-third in Myanmar and Cambodia. In Indonesia, about 50% of firms agree or strongly agree with the statement that the TVET system meets their needs. About 10% firms reported that they strongly disagree that the TVET system meeting their needs, a higher proportion relative to the results from other ASEAN countries in the survey.

The poor quality and relevance of trainings has been identified as one of the main challenges hampering the potential of SMKs in Indonesia (OECD/ADB, 2015[48]). Employer surveys conducted by the World Bank in 2010 reported that SMK curricula were not based on industry needs and not keeping pace with industry needs, while facilities are often outdated (World Bank, 2010[49]). The private sector is rarely involved in the development of curricula, with collaboration taking place on an ad-hoc basis and left to the initiative of local school leadership. In addition, neither students nor businesses have a clear perspective on the skills that will be needed in the labour market once students graduate. Therefore, this results in uninformed vocational education decisions by students, and a lack of clarity for businesses concerning the characteristics of the workforce they will actually need. This can partly explain that more than 60% of the total SMK student population is enrolled in technology and engineering, business and management and ICT courses, while only a small share of students chooses to take courses in sectors such as tourism,

agribusiness and marine studies. Pilot programmes have been introduced in several provinces in Indonesia to ensure that vocational education provides the skills students need in the local labour market, and to better match people to jobs (see Box 3.7).

Figure 3.16. Few ASEAN employers agree that TVET matches their skills needs



Source: International Labour Organization (2014[19]), *Survey of ASEAN employers on skills and competitiveness*, https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-bangkok/documents/publication/wcms_249982.pdf (accessed on 5 February 2020).

Box 3.7. Fostering business-education partnerships at the local level: the Link and Match programme

The Link and Match programme was developed to foster co-operation between vocational schools and industries, with the objective of providing students with the skills needed in the labour market. The programme was founded in 1989, and refined over the years.

The programme integrates educational programmes in schools and skills development in the workplace, therefore supporting the development of a Dual Education System in Indonesia. Internships and industrial work practice programmes, which include activities such as curriculum validation, guest teachers from industries and competency tests, are examples of activities that take place as part of the Link and Match programme.

As of 2018, 1 537 SMKs had been linked to 568 industries in the provinces of East Java, Central Java, West Java, Aceh, North Sumatra, West Sumatra, Riau, Riau Islands, Jakarta and Banten.

Source: The Jakarta Post (2018[50]), *Government continues to expand "link and match" program: Minister*, https://www.thejakartapost.com/news/2018/03/05/government-continues-to-expand-link-and-match-program-minister.html (accessed on 13 June 2019); Ministry of Education and Culture (2016[32]), *Presidential Instruction Number 9 Year 2016 on Revitalizing TVET Schools (SMK) in the framework of Improving the Quality and Competitiveness of Indonesian Human Resources (Instruksi Presiden Nomor 9 Tahun 2016 Tentang Revitalisasi SMK dalam rangka Peningkatan Kualitasdan Daya Saing Sumber Daya Manusia Indonesia)*, https://www.kemdikbud.go.id/main/blog/2016/09/presiden-jokowi-keluarkan-inpres-tentang-revitalisasi-smk (accessed on 13 June 2019).

3.4.5. The quality of professional staff and teachers with local VET schools is under-developed

The number of vocational education teachers has doubled in Indonesia over the last decade. In 2011-2012, there was a total of 164 074 teachers, while in 2018-2019 the number of teachers in vocational schools amounted to 300 081. General high-schools have a slightly higher number of teachers, amounting to 310 906 in the 2018/2019 academic year. SMA teachers have better qualifications than their SMK peers, with 98% of them having a graduate degree or higher, as compared to 73.4% of SMK teachers. The majority of SMK teachers are employed in private vocational schools, while the opposite is true for SMA teachers (Ministry of Education and Culture, 2019[35]) (Ministry of Education and Culture, 2019[34]).

The recruitment process imposes the same requirements for both SMA and SMK teachers in order to be able to teach. This often results in better qualified teachers preferring to teach in high schools rather than vocational schools, due to higher salaries and reputation. On the other hand, industry and private sector representatives with no Bachelor's Degree but extensive job experience are rarely involved in teaching in vocational schools. For vocational schools to improve their effectiveness, it will be crucial to ensure a good balance between teachers with an academic background and practitioners (Di Gropello, Kruse and Tandon, 2011[51]). Vocational teachers often lack teaching and work experience and their education is not as relevant as the workplace would require (OECD/ADB, 2015[48]). There are three categories of teachers in Indonesia: normative, teaching religion and history, adaptive, focusing on mathematics and science, and productive teachers, who have competency certificates for teaching vocational subjects. Only 22% of vocational teachers in Indonesia are qualified as productive teachers, while the majority of vocational teachers are normative and adaptive (Komariah et al., 2018[52]). Graduates from academic degrees are often recruited upon graduation to teach in SMKs. As they lack both in teaching and industry experience, and therefore resulting in teaching lacking pedagogical, didactical and occupational competences (Kadir, Nirwansyah and Ayasha Bachrul, 2016[53]). Programmes are being implemented across Indonesia to ensure that vocational teachers get the practical experience and skills needed to be able to teach effectively (see Box 3.8).

In addition, teachers in rural and remote provinces are often less qualified and absent from school. The supply of quality teaching and the lack of appropriate infrastructure are among the main factors contributing to regional disparities in education. Indonesia's poorer and remote areas are characterised by higher teacher absenteeism, which is linked to higher student absence, drop-outs and lower learning outcomes. The challenge of providing access to education in remote areas compounds the issue of young people's participation in schooling, particularly in communities characterised by low educational aspirations (OECD/ADB, 2015[48]). While the availability of teachers does not seem to represent an issue across Indonesia, as teacher recruitment continues to outpace student enrolment at all levels, the right incentives might not be in place to ensure quality teaching across provinces. The central government sets the number of teachers per province based on the number of students and schools, but recruitment and salaries are set by local governments, who are fully compensated by central governments transfers. This might create an incentive for local governments to increase the number of teachers regardless of their qualifications and competences (OECD, 2016[54]). Underdeveloped infrastructure hampers school participation in provinces characterised by lower population density. The shortage of school facilities in remote areas, such as the eastern provinces, makes the distance to school rather high for many communities.

Box 3.8. Training the trainers: the example of the WISATA Teacher Internship Programme (WITIP)

The Swiss Foundation for Technical Cooperation (SWISSCONTACT), a Swiss non-profit-organisation, has launched a teacher internship programme to equip vocational teachers in the tourism sector with practical experience and understanding of tourism-related jobs, which they can better transmit to students. The tourism sector in Indonesia is characterised by labour shortages: compared to 707 600 vacancy needs, tourism SMK graduates amounted to only 82 171 in 2016. The WISATA Teacher Internship Programme (WITIP) was launched with the goal of updating teaching materials, aligning teaching methods with industry's standards and building closer linkages with the tourism industry.

In 2015, the programme involved 14 teachers, 7 partner schools and 8 corporate partners from the tourism sector, while in 2016 it expanded to involve 23 teachers, 9 partner schools and 5 model schools and 10 corporate partners, and received government support. The programme allows participating teachers to spend one month in Bali. During the week, teachers undertake internships in one of the corporate partners in the tourism sector. Saturdays are instead devoted to discussion and sharing of experiences, capacity building trainings and outdoor trainings. Once finished the internship programme, teachers are evaluated by industry partners, and the results of the programme shared in schools.

Teachers who participate in the programme change every year to ensure most of them can participate. As a result of the programme, teachers are able to develop teaching materials using the experience gained during the internship.

In 2018, there were a total of 22 industries supporting the programme, consisting of ten well-known 4-5 star hotels in Bali and three in Makassar, as well as a national airline in Bali, and seven tour operators in Bali and one in Makassar. The WITIP programme generated a positive impact on the relationship between teachers, SMKs and industries. Some hotels in Bali participating in the programme contributed room and restaurant amenities to several SMKs to improve their in-house training.

Source: SWISSCONTACT (2018[55]), *WISATA: Tourism Development for Selected Destinations in Indonesia - Final Report 2018*, https://www.swisscontact.org/fileadmin/user_upload/COUNTRIES/Indonesia/Documents/Publications/Wisata/2018_WISATA_Final_Report_Revised_09_2018_wc_opt.pdf (accessed on 19 June 2019); SWISSCONTACT (2016[56]), *WISATA II Progress Report 2016*, https://www.swisscontact.org/fileadmin/user_upload/COUNTRIES/Indonesia/Documents/Publications/Progress_Report_2016.pdf (accessed on 19 June 2019)

3.4.6. School infrastructure can hamper the delivery of quality training programmes

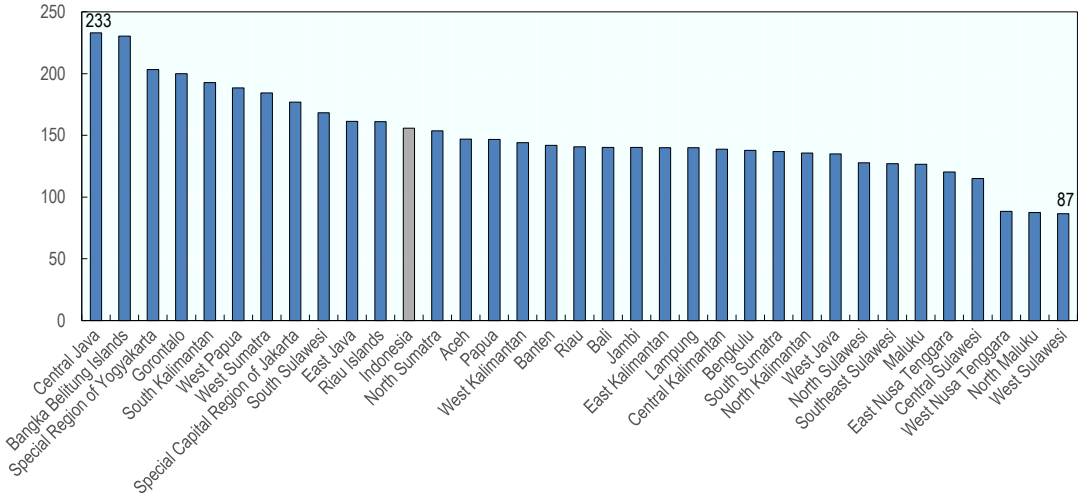
The government has prioritised the expansion of SMK schools over recent years (see Box 3.9). However, lacking education and training infrastructure represents an issue, with several institutions facing challenges in acquiring and maintaining appropriate infrastructure, as well as teacher quality, which varies substantially across schools (Asian Development Bank, 2018[1]). In interviews with a sample of more than 100 BLK managers, the lack of equipment was listed as the main challenge to the expansion and improvement of their institution, closely followed by the lack of qualified instructors, as well as the lack of space and accommodation (World Bank, 2011[43]). Substantial differences also exist in the quality of VET school infrastructure across urban and rural areas, with the latter often characterised by little equipment and poor access to water and basic services. Although the number of vocational schools has increased in all Indonesian provinces over the last decade, schools are not always equipped with the infrastructure needed to deliver effective vocational education, nor with the basic services. SMKs are often characterised by underdeveloped equipment and infrastructure, which hampers their effectiveness in delivering

appropriate programmes. Technical laboratories (including sciences, biology, physics, chemistry, computer and language laboratories) are important for the delivery of effective vocational education. Each vocational school can have several laboratories. Data from the Ministry of Education and Culture shows that the ratio of laboratories to schools varies substantially across provinces, ranging from 86.6 in West Sulawesi to 232.9 in Central Java (see Figure 3.17). Private SMKs are typically better equipped than public ones.

In addition, the availability of basic services, such as water and medical equipment, is not even across schools in Indonesian provinces. For example, only 60% of schools in East Nusa Tenggara have sufficient water, as compared to the Special Capital Region of Jakarta, where the near totality of schools does. Similarly, eastern provinces often lack the basic medical equipment to tackle potential medical issues arising during class. In West Nusa Tenggara, for example, the percentage of medical schoolrooms to schools amounts to 9.3%, while it is as high as 68.8% in the Special Region of Yogyakarta. This suggests that vocational schools in rural and remote provinces, especially in the east of the country, might not be equipped not only with the equipment needed for teaching practical subjects but might also be lacking access to basic services.

Figure 3.17. The availability of school laboratories varies substantially across provinces in Indonesia

Ratio of school laboratories to SMK schools across Indonesian provinces, academic year 2018/2019



Source: Statistics Indonesia, Percentage of laboratories to SMK schools, 2018.

Box 3.9. Boosting vocational school infrastructure in Indonesia

The Indonesian government has made considerable efforts over the last decades to increase enrolment rates in vocational education, with the objective of improving the share of the workforce that is ready to work. As part of such efforts, in 2006 the Ministry of Education and Culture (then called "Ministry of National Education") launched a programme to expand the number of vocational schools. The policy's objective was to achieve 50:50 vocational to general student ratio by 2010 and a 70:30 ratio by 2015.

The Ministry also argued that the benefits of having more vocational graduates would also derive from the fact that vocational students typically had lower unemployment rates. To achieve these targets, the ministry suspended the construction of new SMA schools, while giving instructions to build new SMK schools and converting some SMA into SMK.

Source: Newhouse, D. and D. Suryadarma (2011[31]), "The Value of Vocational Education: High School Type and Labor Market Outcomes in Indonesia", *The World Bank Economic Review*, Vol. 25/2, pp. 296-322, http://dx.doi.org/10.1093/wber/lhr010.

BLKs often lack facilities and have outdated equipment, compromising the relevance of training provided (World Bank, 2010[30]). Originally developed to serve the manufacturing industry in the 1970s and 1980s, targeting poor people with low educational attainment, vocational training centres have today the objective of providing relevant trainings to students and jobseekers to develop skills and competences needed in the labour market. The scope of training centres across Indonesia is limited, with the number of trainees that remains relatively low. In addition, monitoring of training outcomes does not take in a systematic way. An important step forward has been taken by developing competency standards and linking them to the INQF. Different training programmes reflect different competences. However, practical challenges remain.

In addition, the understanding and attention of local governments towards human resource training is not uniform across Indonesia. Some provinces are characterised by limited training budgets and underdeveloped training facilities and infrastructure. Finally, communities across Indonesian provinces traditionally have a varying degree of interest in education and training programmes, therefore limiting the potential of VET in some provinces. There might be efficiencies to be achieved by rationalising some VET schools within each province to help reach economies of scale in the effective delivery of programmes. The ratio of students to schools is substantially higher for public than private SMK schools. In the former, there are on average 611 students by school, as compared to 269 for the latter (Ministry of Education and Culture, 2019[34]). In addition, classes in public SMKs tend to be more crowded than their private equivalent, amounting to 29 and 26 students per class respectively. Although the number of vocational schools has increased in all Indonesian provinces over the last decade, schools are not always equipped with the infrastructure needed to deliver effective vocational education, nor with the basic services.

3.5. What can Indonesia learn from other countries?

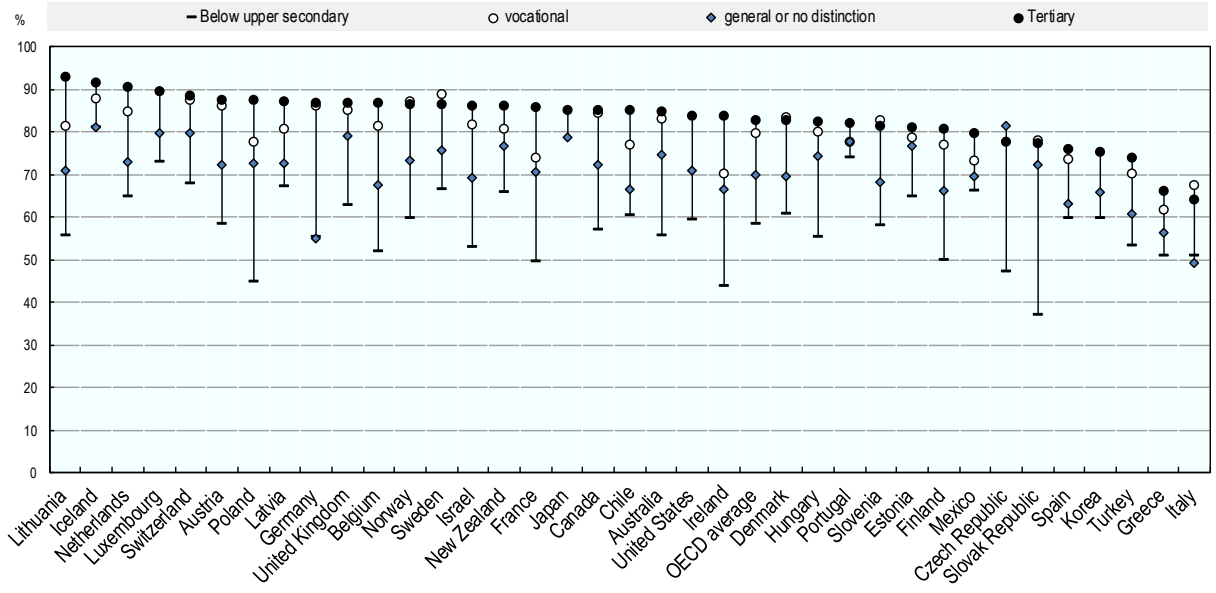
Strong vocational education programmes at the local level can play a significant role in helping national economies to adjust to changes in the labour market, advances in technology and challenges associated with globalisation. Both occupation-specific and general skills are needed to ensure that workers are able to shift towards skill-intensive, capital driven production across the region. Many developed and developing countries are looking at ways of strengthening their vocational education and training systems as a way of smoothing the transition from school to work and better linking young people to the labour market. Across the OECD, the employment rates of 25-34 year-olds attaining vocational education are 80%, just below the average for tertiary education (82%), but well above below upper-secondary education and general

and no distinction (see Figure 3.18). This evidence points to the positive labour market outcomes of having a well-developed VET system at both the national and local level.

ASEAN countries have begun to prioritise VET development and harmonisation in preparation for the labour mobility opportunities posed by the recent introduction of the ASEAN Economic Community. The Southeast Asian Ministers for Education Organisation has brought together national education ministries to collaborate on high-level discussions about VET in the region. Similarly, the development of the ASEAN Qualifications Reference Framework has enabled improved co-operation and the mutual recognition of VET qualifications across the Southeast Asian region. Indonesia could look at the following international examples to inform future policies and programme aimed at strengthening the VET system.

Figure 3.18. Vocational education is an effective tool for people to get jobs

Employment rates of 25 to 34 year olds by educational attainment and programme orientation, 2016



Note: Countries are ranked in descending order of the employment rate of tertiary-educated 25-34 year-olds. The label upper secondary or post-secondary non-tertiary (general or no distinction) refers to "general" for countries with a value for "vocational" and to "no distinction" for the others. See source section for more information and Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).
Source: OECD / ILO (2017), Education at a Glance Database.

3.5.1. Policy co-ordination and integration can improve the responsiveness of VET programmes

Across many ASEAN countries, the competences for vocational education and training are often spread across multiple departments and ministries, resulting in a lack of policy co-ordination. This is the case in Indonesia, where the responsibility for vocational education is split across different ministries and between levels of government. The Ministry of Education and Culture oversees vocational education, which is then managed by provinces at the local level. The Ministry of Manpower manages vocational training centres both at the central level and through its local offices. In addition, cities can autonomously use their budget to undertake specific vocational education activities. This study has pointed out how different levels of government and ministries prioritise different agendas that are not always aligned. International evidence points to the importance of having strong coordination across ministries and levels of government, resulting in more coherent vision for vocational education and training. OECD countries with well-developed VET systems, such as Australia, Germany, and Norway, tend to feature a high degree of collaboration between

stakeholders in the system. This includes employers, young people, training providers, policy makers and civil society. Indonesia may wish to look at the example of the Technical Education and Skills Development Authority (TESDA) in the Philippines (see Box 3.10).

Box 3.10. International example of fostering inter-agency co-ordination on skills from the Philippines

In the mid-1990s, the Philippines established the Filipino Technical Education and Skills Development Authority (TESDA) to lead and co-ordinate the work on TVET. Responsibilities of TESDA include TVET regulation, management and promotion, as well as accreditation of TVET assessors.

TESDA is composed of one Secretariat, responsible for the development and implementation of TVET policy and headed by a Director General, and a Board, bringing together employers and industry representatives and vocational institutions, which is chaired by a representative from the Department of Labour and Employment. The Board co-ordinates the TVET system in the Philippines. Government agencies involved in the TVET system are all represented on the Board, leading to streamlined and effective inter-agency communications.

Source: Kadir, S., Nirwansyah and B. Ayasha Bachrul (2016[53]), "Technical and Vocational Education and Training in Indonesia: Challenges and Opportunities for the Future", *Series on Information Technology, Public Policy and Society*, Lee Kuan Yew School of Public Policy - Microsoft Case Studies, https://lkyspp.nus.edu.sg/docs/default-source/case-studies/lkysppms_case_study__technical_and_vocational_education_and_training_in_indonesia.pdf?sfvrsn=e5c5960b_2 (accessed on 13 June 2019).

3.5.2. Employer engagement is critical to ensure training responsiveness

An important component of a robust VET system is the active engagement and involvement of employers in the design of training activities. Demand-driven VET systems are able to respond to changing labour markets with agility and flexibility, meeting local skills demand and supply needs. Engaging employers requires local leadership, particularly from community and government actors. Involving local actors from the third sector is particularly important in the ASEAN region with a large informal sector, where traditional engagement mechanisms are unlikely to reach the private sector. International evidence points to the benefits of stimulating employer-led networks that can actively define training requirements and deliver programmes in the workplace. Employers can play a role to advise other firms about how skills training can help improve their productivity. As SMEs often face unique barriers to workplace training opportunities, it is important to look at how policies can be customised to meet their needs. Skillnet in Ireland (see Box 3.11) has been particularly successful in creating employer-led networks (especially among SMEs) to encourage more participation in training opportunities.

Employers are often best placed to identify current, emerging and changing skills needs in the world of work, and they are therefore best placed to identify gaps in the provision of vocational education and training. These include for example poorly designed curricula, out-dated infrastructure and technology as well as poorly-focused competences. In Indonesia, employers are not systematically engaged in the design, development and delivery of VET. Engagement takes place on an ad-hoc basis and it is often left to the autonomous initiative of school leadership or active local practitioners. Germany is often viewed as having a well-develop VET system within the OECD. A relevant aspect of the German model is the active organisation and engagement of the social partners at both the federal and local level (see Box 3.12)

Box 3.11. Fostering employer-led training among SMEs: Skillnet in Ireland

Skillnet is a national agency dedicated to the promotion and facilitation of workforce learning in Ireland. They support over 15 000 companies nationwide and provide a wide range of valuable learning experiences to over 50 000 trainees. Skillnet allocates funding to Learning Networks, which are groups of companies within the same industry sector or region with similar training needs, so they can receive subsidised training.

Skillnet encourages firms to lead the process for training to ensure that programmes delivered are highly relevant to industry needs. Training and upskilling significantly enhances the career mobility of the workforce. Training is open to management and employees of companies who become members of a Skillnet Network.

Source: OECD (2014[57]), *Employment and Skills Strategies in Ireland*, OECD Reviews on Local Job Creation, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264207912-en; Skillnet Ireland (n.d.[58]), *About Us - Workplace Learning | Skillnet Ireland*, https://www.skillnetireland.ie/about/ (accessed on 17 January 2020).

Box 3.12. Engaging employers in VET: How does Germany do it?

The German Dual VET System is characterised by a close co-operation between companies and publicly funded vocational schools. Dual training last between two and three and a half years, and trainees typically spend part of each week at school and the remaining part at a company. The German training system is characterised by a close collaboration among stakeholders, including employers, workers and the government, for the design and development of training regulations and curricula. Several bodies exist at the national and local level to gather stakeholders' feedback and guidance on the dual VET system. For example, employers can express their skills needs through a national business body for VET, national employer organisations, national industry and craft trades organisations as well as chambers of commerce. Workers' concerns about the quality and value of TVET are instead represented by the national labour union confederation, as well as sectoral labour unions and work councils at the plant level.

Employers and workers shape the different elements of the dual VET system in Germany, through formal mechanisms. For example, the National committee at the Federal Institute for Vocational Education and Training (BIBB) gathers employer organisations, unions, as well as federal and local governments, all equally represented, to steer the VET system, co-ordinating Dual VET and articulating join VET stakeholder positions. The committee advises the government of VET and issues recommendations in addition to statements on VET regulations and policies. Similarly, federal state boards for VET are established to advise regional governments on VET and co-ordinate vocational education and training in both companies and schools. VET boards ensure the implementation of recommendations from federal state boards and promulgate local regulations for the implementation of Dual VET

By engaging stakeholders in the design, development and implementation of TVET regulations, the German Dual VET system allows to tailor vocational education and training to the local needs. Involving all stakeholders not only leads to improvements in the overall quality of VET, but it also generates confidence in both employers and jobseekers on the quality of the system, promoting further

engagement and investment. Institutionalising the co-operation among stakeholders can therefore ultimately foster increased quality of the VET system.

Source: BIBB (2016[59]), *The engine of Dual VET: Cooperation between stakeholders from business, government and society*, https://scivet.de/wp-content/uploads/2017/09/GOVET_Cooperation-between-stakeholders-from-business-government-and-society.pdf (accessed on 24 May 2019); BMBF (n.d.[60]), *The German Vocational Training System*, https://www.bmbf.de/en/the-german-vocational-training-system-2129.html (accessed on 24 May 2019).

3.5.3. Developing skills assessment and anticipation systems

Skills assessment and anticipation systems are tools to generate information about the current and future skills demand of the labour market and the available skill supply, which can help reduce skill mismatch and shortage (OECD, 2016[61]). Skills assessment and anticipation systems can take the form of occupational projections, specific skills assessment or other exercises. Skills assessment and anticipation exercises exist in all OECD and European countries, but substantial differences exist on the approach taken in the definition of skills, the time span, the frequency, the methods used and the national/regional/sectoral scope (OECD, 2016[61]). In most countries, exercises measure skill needs in terms of qualification levels, types or fields of study. However, a challenge of this approach is that educational credentials do not necessarily correspond to skills needed for a job and there are large differences among individuals with the same credentials in terms of their ability to perform a job (Quintini, 2011[62]). Occupational forecasts are also a common approach to skills assessment and anticipation, as they proxy skill needs based by the growth of specific sectors. As an example of an interesting approach to skills assessment and anticipation system, since 2016 in Malaysia, the Critical Skills Monitoring Committee, comprising the Institute for Labour Market Information and Analysis and TalentCorp (an agency under the Ministry of Human Resources) publishes annually a list of critical occupations. Criteria for being included in the list are that the occupations are skilled, in high demand and of strategic importance to economic development. To identify the occupational shortages, the committee combines a top-down quantitative analysis with bottom-up qualitative evidence from stakeholders. While methods for undertaking skills assessment and anticipation exercises vary across countries, a holistic approach, integrating quantitative and qualitative sources of information, is considered a good practice.

Box 3.13. Good practices in developing skills assessment and anticipation systems from Europe

Many European countries use skill assessments or skill audits at the national and/or, as in Sweden, regional level. They can provide a comprehensive analysis of current skill needs and possible implications of past trends for the future. Many countries use quantitative skills forecasts. These are usually based on economic models that make assumptions about the many factors influencing the labour market to estimate future developments across sectors, occupations and skills. Qualitative foresights of long-term skill trends to identify implications for future policy-making are less frequently used. Methods and data sources vary from expert reports to Delphi techniques; all require high-quality inputs from, and engagement of, experts and stakeholders. Other skills anticipation approaches include employer and employee surveys and tracer studies of VET or higher education graduates.

Source: CEDEFOP (2017[63]), *Skills Anticipation: Looking to the Future*, https://www.cedefop.europa.eu/files/9124_en.pdf.

3.5.4. Young people require work-based training opportunities to build their employability skills

Less than one-half of all young people aged 15-24 participate in the labour market in Indonesia, therefore it is critical to target skills training programmes to better connect them to jobs. Young people face specific barriers to participation in apprenticeship and work-based training, requiring customised support and counselling. International evidence points to the benefits of targeting young people living in disadvantaged communities to provide them with work experience opportunities that can lead to a quality job (OECD/ILO, 2017[36]). Pre-apprenticeship programmes can be used to provide basic skills training and smooth their passage into the vocational education and training system. Indonesia could look to programmes examples from the Philippines and Viet Nam, where various strategies are being taken to facilitate smoother school to work transitions (see Box 3.14).

Box 3.14. Facilitating school to work transitions: lessons from the Philippines and Viet Nam

In the Philippines, the JobStart Programme is open to participants aged 18 to 24 years old, high school graduates, unemployed, those neither studying nor undergoing training at the time of registration and those with less than one year or no work experience. The Programme includes full employment facilitation services such as registration, client assessment, life skills training with one-on-one career coaching, technical training, job matching, and referrals to employers either for further technical training, internship, or for decent employment. An employer employs JobStart trainees up to a maximum of 20% of its total workforce, for a period not longer than three months or 600 hours, with a commitment to pay at least 75% of the applicable daily minimum wage.

In Viet Nam, REACH, a local non-governmental organisation, trains young people – especially those from low-income households – for jobs in ICT and service industries, the two industries with increasing skills demand. The programme is designed in line with the following aims: 1) To target disadvantaged youth, REACH collaborates with local organizations and community leaders to find out where youth frequently gather and visit those places; 2) To ensure that training curricula are responsive to employers' needs and calibrated to market demand, REACH partners with more than 1,000 companies to identify the skills in demand. 3) To minimize dropout, REACH provides counselling and support alongside skills training. 4) To provide ongoing support as well as to construct an alumni network for future cohorts, REACH maintains contact with former graduates and trainees. In 2016, 80% of REACH graduates found a job within 6 months of completing the programme.

Source: OECD (2018[2]), "The role of technical and vocational education and training (TVET) in fostering inclusive growth at the local level in Southeast Asia", *OECD Local Economic and Employment Development (LEED) Papers*, No. 2018/01, OECD Publishing, Paris, https://dx.doi.org/10.1787/5afe6416-en; OECD/ADB (2017[64]), *Employment and Skills Strategies in the Philippines*, OECD Reviews on Local Job Creation, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264273436-en.

3.5.5. Apprenticeships can be used as a training pathway to foster training in the informal economy

A lack of engagement from SMEs in formal VET offerings does not necessarily imply that skills development does not occur. Informal apprenticeship arrangements are the largest providers of skills in the mostly informal labour markets of many emerging countries (OECD, 2018[2]). These arrangements typically take the form of an oral apprenticeship agreement between a 'master craftsperson' and a young learner to transmit the skills of a trade. These arrangements are often precarious, uncertified and can easily mask exploitation from the master craftsperson. However, despite their shortcomings, a benefit of informal

skills development mechanisms is that they are necessarily characterised by engagement with employers (Eichhorst et al, 2012[65])

In Indonesia, the regulated apprenticeship system is only a small part of the non-formal VET system managed by the Ministry of Manpower. A large unregulated apprenticeship system exists, operating without being regulated or monitored (Skjaerlund and Van Der Loop, 2015[40]). Although informal apprenticeships have the strength of providing skills relevant to local labour markets, they also have weaknesses, such as long working hours, unsafe working conditions, low or no allowances or wages, little social protection and strong gender imbalances (International Labour Organization, 2012[37]).

Investing in informal apprenticeships is also a cost-effective way to invest in a country's skills base and enhance employability of youth. In Bangladesh, where the informal economy plays a prominent role in employment opportunities, several initiatives have been taken over the last decade to revamp the informal apprenticeship system, introducing a well-structured model following a standard methodology and process (OECD/ILO, 2017[36]) (see Box 3.15)

Box 3.15. The Skills Training for Advancing Resources (STAR) programme in Bangladesh

In Bangladesh, the informal economy employs millions of workers, mostly young people, who gain skills through informal employment relationships between a skilled worker and one or more apprentices working under their supervision. As the formal apprenticeship system hardly plays any role, the large demand for skills is met through well-developed informal apprenticeship programmes.

The Skills Training for Advancing Resource (STAR) programme was developed in an effort to improve informal apprenticeship in Bangladesh. It was supported by the Government of Bangladesh, the European Union (EU), the ILO and UNICEF, and managed and implemented by BRAC, a not-for-profit organisation working on poverty reduction and empowerment of the poor. The STAR model consists of a "dual system" of training delivery, featuring theoretical and on-the-job training. Theoretical training takes place one day per week, while the rest of the week is devoted to on-the-job training, provided by a master crafts person, for a total of six consecutive months. A Competency Skills Log Book is used to record trainings, providing standardised curricula and uniform system of measurement. The programme specifically targets disadvantaged and marginalised groups that are traditionally under-represented in apprenticeships: 50% of participants are women and 8% are people with disabilities. Master crafts persons are also trained in occupational health and safety, competency instruction and standards on the quality and nature of the employment for apprentices.

The initiative was successful in incorporating formal elements into the informal apprenticeship model, ensuring basic minimum standards for training quality for apprentices and providing them with transferrable certifications, therefore promoting skills development for youth and often disadvantaged people.

Source: OECD/ILO (2017[36]), *Engaging Employers in Apprenticeship Opportunities: Making It Happen Locally,* OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264266681-en.

Conclusion

Skills outcomes vary substantially across provinces in Indonesia and, despite increasing policy attention, the provision of quality vocational education and training is often challenging. Going forward, effective vocational education and training will be important to address skills gaps and shortages at the local level. It could help address differences in skills outcomes across provinces, preparing people for local opportunities, and boosting inclusive growth. The focus on improving skills outcomes at the local level in Indonesia should be complemented by efforts to create job opportunities and match people into quality jobs. Promoting stronger employment outcomes at the local level is the focus of the next chapter.

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4 Promoting stronger local employment outcomes in Indonesia

Indonesia's unemployment rate is higher than most ASEAN countries with substantial differences across places and segments of the population. Young people are four times more likely to be unemployed than adult men and women. Informal employment is still widespread, especially in rural and remote provinces. The Indonesian government has established local labour market offices with the goal of getting people into jobs. While every worker will likely be affected by the ongoing COVID-19 crisis, youth, women and informal workers risk seeing a substantial deterioration in their labour market conditions. In addition, sectors such as hotels and restaurants, transport, construction and food processing have been particularly affected. Banten, Bali, Jakarta ad West Java have been the provinces most severely affected by COVID-19 in Indonesia. This chapter outlines recent local labour market trends in Indonesia with a focus on employment disparities across provinces.

In Brief

Unemployment and job quality are challenges in Indonesia with significant variation across people and places

- The services sector drives employment growth in Indonesia, having created almost 15 million jobs over the last decade, and employing half of the Indonesian workforce. However, agriculture remains the single largest employer. Unemployment in Indonesia is higher than most ASEAN countries, and specific segments of the population (youth, women) suffer from disadvantage.
- Unemployment rates and the sectoral composition of employment vary substantially across provinces in Indonesia. Banten and West Java have unemployment rates higher than 8%, while Bali's unemployment stands at around 1%. Youth unemployment mirrors trends in overall unemployment. The provinces of Banten and West Java experience the highest youth unemployment rates, with almost one in two youth in the province being unemployed. In most provinces in the east of the country, informality is pervasive and the majority of people are employed in agriculture.
- The ongoing COVID-19 pandemic crisis poses further employment challenges for Indonesian workers. In particular, informal workers, which represent a large share of total employed in Indonesia, risk being significantly affected. The crisis also raises concerns for other vulnerable segments of the population, such as youth and women. In addition, local labour markets relying on sectors heavily impacted by the crisis, such as hotels and restaurants, transport, construction and food processing, risk facing substantial disruption.
- Effective labour market services can facilitate school-to-work transition for youth and inclusive growth across provinces in Indonesia. Services are managed at the national and local level in Indonesian provinces and include online job matching, face-to-face consultation and job fairs. The government has recently introduced a pre-employment card, *kartu* prakerja, aiming to facilitate youth employment, and has expanded its scope in light of COVID-19, to support workers affected by layoffs and recent graduates.
- The scope of labour market services remains rather limited across Indonesia. Increasing the capacity and coverage, while stepping up efforts to engage jobseekers and employers and using digital technology for service delivery, would help boost the services' effectiveness. Collecting broader labour market information would also be needed to monitor results.

Introduction

As the Indonesian economy continues its path of structural transformation, presenting new employment opportunities, labour market services can be an effective tool to connect people to good jobs and foster inclusive growth at the local level. Structural transformation has led to notable changes in employment patterns in Indonesia, with increases in services employment, regular wage jobs and decreasing informality. However, disparities in employment outcomes persist across segments of the population and provinces, and informality remains high. The ongoing COVID-19 pandemic crisis represents a major challenge for local labour markets in Indonesia, with vulnerable workers, such as youth and informal workers, as well as workers in some sectors, such as tourism and industry, who risk being particularly affected.

Section 4.1 of this chapter outlines employment trends in Indonesia and section 4.2 delves into the variations in employment performance across provinces. Section 4.3 presents the scope and functioning of labour market services at the local level in Indonesia. Section 4.4 outlines main challenges in the provision of labour market services, and section 4.5 presents international good practice examples that could guide the reform of labour market services in Indonesia.

4.1. Employment trends in Indonesia

Despite employment growth driven by services, employment outcomes are uneven across provinces in Indonesia. Young people face a challenging labour market context in Indonesia. Agriculture remains a critical source of employment, and informality continues to have an impact on local economic and employment opportunities, especially in rural provinces. At the same time, technological developments represent an opportunity to boost productivity at the local level, but they also present challenges of potential job disruption.

The different labour market outcomes at the local level across Indonesia require local strategies to boost quality jobs. Policies enhancing local flexibility need to be complemented by measures to protect workers, foster inclusiveness and allow workers and firms to make the most of ongoing changes, in order to promote good and sustainable outcomes (OECD, 2018[1]). Effective local labour market services can be critical to match people to jobs and reduce disparities across provinces and segments of the population.

The recent COVID-19 pandemic crisis outbreak poses new and unexpected labour market challenges to workers and jobseekers across Indonesia, which will require both national and local policy action. The COVID-19 pandemic risks hitting particularly hard young people and women, who have poorer quality jobs, as well as informal workers, who do not have access to social safety nets. Some local economies face more challenges than others, as they rely heavily on sectors that are witnessing a halt due to the virus outbreak, such as tourism and industry. Estimates from the Asian Development Bank (ADB) show that Banten, Bali and Jakarta are the provinces most heavily affected by COVID-19.

4.1.1. Services drive employment growth, but agriculture remains the largest employment share

Services have become a central source of employment in Indonesia, creating 14.2 million jobs over the last decade, while industry growth has also gained momentum (Allen, 2016[2]). Services employ almost half of the Indonesian workforce in 2019. Industry, including mining and quarrying, manufacturing, construction and public utilities (electricity, gas and water) employed 23.5% of the labour force in 2019, or 29.7 million jobs. Manufacturing is traditionally considered as a catalyst of growth for developing countries, driving industrialisation and generating productive jobs. Since the late 1960s, structural transformation has led to shifts in production and employment patterns in Indonesia, contributing to a dramatic increase in economic activity, temporarily slowed down by the 1997 Asian stock market crash (see Box 4.1). Although in absolute terms more people are employed in industry as a whole, growth in this sector, has slowed down in Indonesia over the last decades. Before 1997, manufacturing played a dominant role in the Indonesian economy, with growth in manufacturing value added averaging around 10% annually and contributing to strong economic growth. On the other hand, between 2011-19 manufacturing growth has averaged 4.6%, and GDP growth slowed to 3.8% in 2019 (Asian Development Bank, 2020[3]).

Although declining, agriculture still represents the largest employer in the country. Agricultural employment has fallen in the past decades, amounting to 27.3% in 2019. The agricultural sector has declined from 39.1 million jobs in 2011 to 38.1 million jobs in 2019 (Statistics Indonesia, 2020[4]). However, the National Labour Force Survey conducted in August 2019 shows that agriculture, plantation, forestry, hunting and fisheries remains the single sector employing the largest share of workers (27.3%), followed by trade, manufacturing and construction (see Figure 4.2). Moving from agriculture to industry and services has gone hand in hand with a shift of the population from rural to urban areas, as well as informal-formal labour migration. The large share of the population has left informal employment in rural areas to enter formal jobs in industry and services (Dartanto et al., 2017[5]).

Box 4.1. The Indonesian economy has experienced structural transformation over the last decades

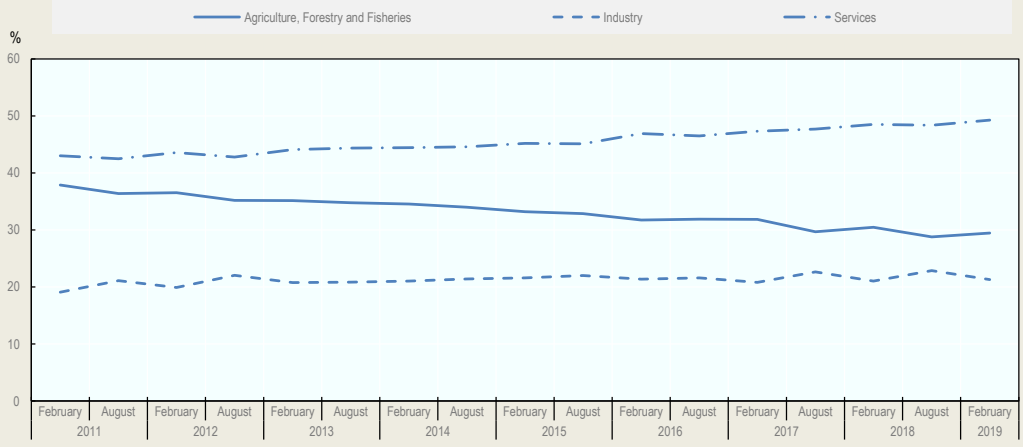
In the late 1960s, the Indonesian GDP was equivalent to that of many low-income African countries at the time and ranked very low in the Asian context. The Indonesian economy was characterised by a small industrial sector, large oil production and a large agriculture sector, accounting for more than 50% of total GDP (Axelsson and Palacio, 2017[6]). A gradual process of industrialisation began in the late 1960s and accelerated in the 1980s as falling oil prices drove the Indonesian government to diversify the economy away from oil towards manufactured exports (Goeltom, 2008[7]).

The period 1968-1984 saw the expansion of the industrial sector and services, which accounted for just below 40% of GDP each in 1984, while the agricultural value added was halved. Similarly to other developing countries, industrialisation was led through state initiatives and import substitution policies, that contributed to the diversification of the Indonesian industrial sector. From 1984 to 1996, Indonesia rose as a manufacturing powerhouse, before being hard hit by the Asian financial crisis in 1997. In the following decade, Indonesia recovered slowly, with GDP per capita levels returning to pre-crisis level only in 2005 (Axelsson and Palacio, 2017[6]).

Structural transformation in Indonesia has been closely accompanied by changing employment patterns, with a substantial decrease in agriculture and an increase in industry and services employment. The agriculture and services sectors have showed opposite trends over the decades, with a decrease in both sectoral GDP and employment for agriculture, and an increase for the services sector. The services sector has continued driving employment growth over recent years (see Figure 4.1). With the priorities of the Joko Widodo administration on investment and industrialisation, employment in industry has recently picked up (Statistics Indonesia, 2020[4]).

Figure 4.1. Services have continued driving employment growth over recent years

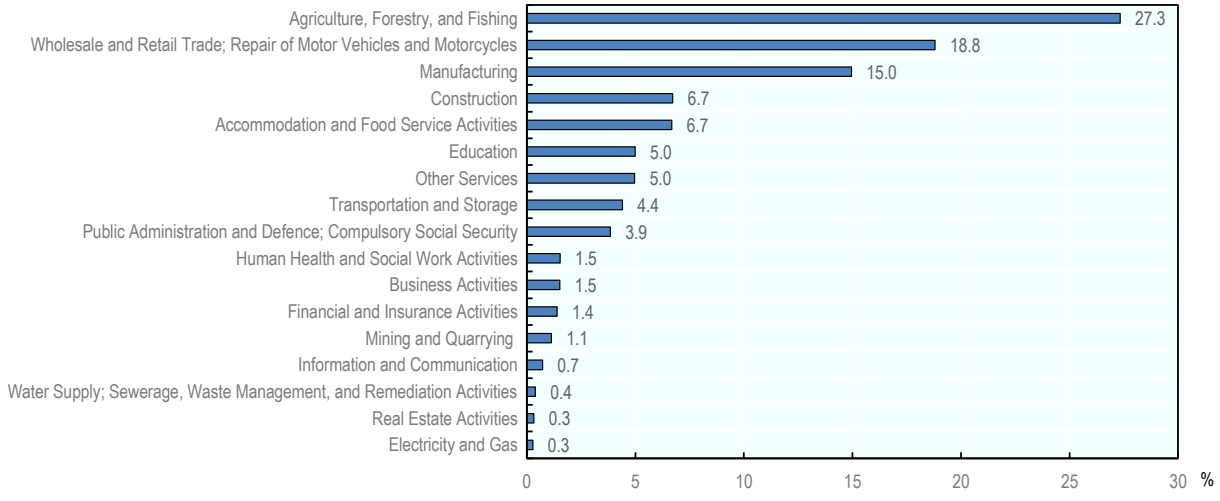
Agriculture, Forestry and Fisheries, Industry and Services employment (percentage of total employment), 2011-2019



Note: Industry includes mining and quarrying, manufacturing, construction and utilities.
Source: Statistics Indonesia.
Source: Axelsson, T. and A. Palacio (2017[6]), "Transforming Indonesia: Structural change in a regional perspective 1968-2010", *Lund Papers in Economic History* 164, http://lup.lub.lu.se/search/ws/files/33046844/LUP_164.pdf (accessed on 22 May 2019); Dartanto, T. et al. (2017[5]), "Two Decades of Structural Transformation and Dynamics of Income Equality in Indonesia", *ADBI Working Paper Series*, No. 783, Asian Development Bank Institute, Tokyo, https://www.adb.org/publications/two-decades-structural-transformation-and-dynamics-income-equality-indonesia (accessed on 31 May 2019); Goeltom, M. (2008[7]), *Essays in macroeconomic policy : the Indonesian experience*, Gramedia Pustaka Utama, https://dx.doi.org/10.1353/ase.0.0017 (accessed on 22 May 2019).

Figure 4.2. Agriculture remains the single largest employer in Indonesia

Employment by sector, percentage of total employment, August 2019

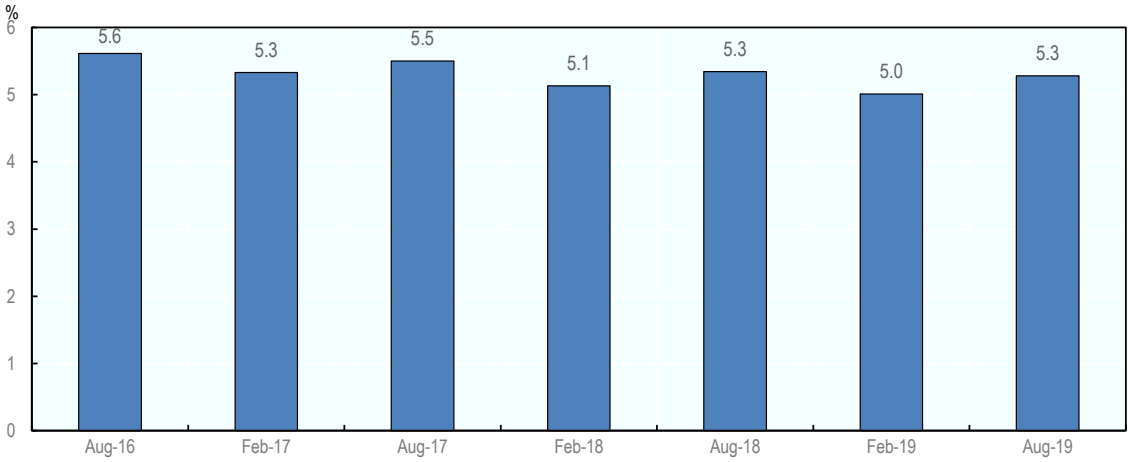


Source: Statistics Indonesia (2019[8]), *Labor Force Situation in Indonesia August 2019*, https://www.bps.go.id/publication/2019/11/29/96138ece33ccc220007acbdd/keadaan-angkatan-kerja-di-indonesia-agustus-2019.html (accessed on 27 August 2020).

After peaking at about 8% in 2008, unemployment has decreased in Indonesia, amounting to 5.3% in 2019, and it has fluctuated above 5% over recent years (see Figure 4.3). Unemployment is higher in Indonesia than all other ASEAN countries except for Brunei Darussalam. However, unemployment figures should be treated with caution, given that the majority of jobs being created either entail short-term contracting or are in the informal economy. The informal sector in Indonesia still employs more than 50% of workers, and it is likely that a high level of informality will persist given the trend of growth of the gig economy and e-commerce in the country (World Bank, 2019[9]). Furthermore, Indonesia does not provide unemployment benefits for the working age population. As such, many workers tend to shift between short-term work opportunities and then exit the labour force (Allen, 2016[2]).

The ongoing COVID-19 pandemic will however lead to a worsening of labour market conditions in Indonesia, likely generating a significant spike in unemployment. Data released by the Ministry of Manpower in mid-April 2020 shows that as many as 2.8 million people lost their jobs. More than half were furloughed and placed on paid or unpaid leave (The Jakarta Post, 2020[10]). The number of laid-off workers has amounted to more than 150 000 in the city of Jakarta until the beginning of April 2020 (The Jakarta Post, 2020[11]). As of mid-June 2020, the Indonesian Chamber of Commerce (Kadin) stated that around 6.4 million Indonesians had lost their jobs due to the impact of the coronavirus pandemic and new rounds of layoffs were likely to hit by August (Reuters, 2020[12]).

Figure 4.3. Unemployment has fluctuated above 5% in Indonesia over recent years



Source: Statistics Indonesia (2019[8]), *Labor Force Situation in Indonesia August 2019*, https://www.bps.go.id/publication/2019/11/29/96138ece33ccc220007acbdd/keadaan-angkatan-kerja-di-indonesia-agustus-2019.html (accessed on 27 August 2020).

4.1.2. Labour productivity growth remains subdued

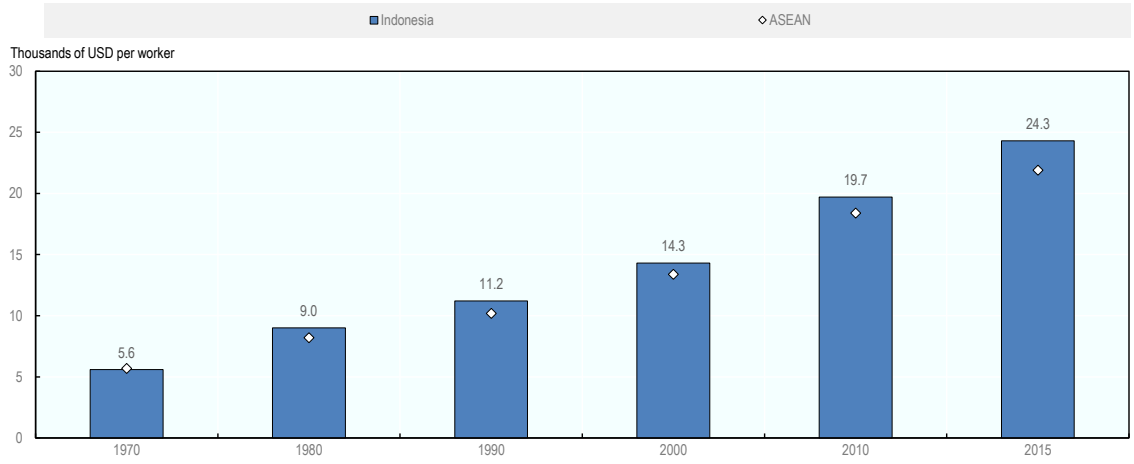
The shift from agriculture to industry and services has ushered productivity gains across and within sectors in Indonesia. It has led to job creation in non-farm sectors, therefore reducing agriculture-dependency, and providing opportunities for new labour entrants (International Labour Organization, 2017[13]). Productivity is widely acknowledged as the main driver for economies to move to higher income levels and lift living standards.

Labour productivity, defined as GDP per worker at constant prices and in Purchasing Power Parity (PPP), amounted to USD 24 300 in Indonesia in 2015, and it had been increasing over the previous decades (see Figure 4.4). Productivity in Indonesia is higher than the ASEAN average, but it remains lower than in Singapore (USD 127 800), Malaysia (USD 55 700) and Thailand (USD 26 500) (Asian Productivity Organization (APO), 2017[14]). Productivity growth has fluctuated over the past two decades and has been lower than for some ASEAN countries (see Figure 4.5). Productivity growth in Indonesia averaged 3.7% between 2000-05, 2.8% between 2005-10 and 4.2% between 2010-15, compared to 3.4%, 2.9% and 3.5% on average across ASEAN over the same periods. Productivity in Indonesia lags behind OECD and G20 emerging economies averages. Labour productivity growth has been faster in Indonesia than on average in the OECD, which is to be expected in an emerging market economy. The lower labour productivity level in Indonesia explains almost all of the gap in GDP per capita compared to OECD countries, highlighting the importance of reforms to encourage investment and raise total factor productivity (OECD, 2018[15]).

Previous OECD work based on data from the Ministry of Co-operatives and SMEs showed that over the 2006-2013 period, productivity growth, measured as annual growth in GDP per worker at constant prices, was modest across all business sizes. Average annual growth rates amounted to 1.1% for micro-enterprises, 0.3% for small enterprises, 0.6% for medium enterprises and 1.0% for large enterprises. As annual GDP growth averaged between 4.5% and 6.3% over the same period, that trend suggests that growth was mainly driven by factors other than gains in firm-level productivity, such as consumption, government spending and increased labour force utilisation (OECD, 2018[16]). The government of Indonesia has developed plans to boost productivity in the country, acknowledging its role as an engine of inclusive growth (Box 4.2).

Figure 4.4. Labour productivity has increased in Indonesia over the past decades

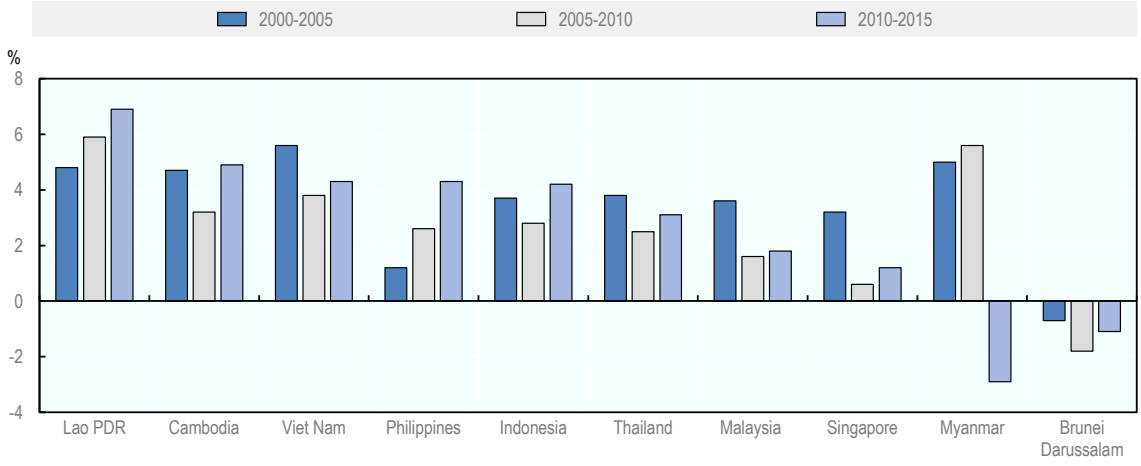
GDP at constant basic prices per worker, 2011 PPP, reference year 2015



Source: Asian Productivity Organization (APO), 2017.

Figure 4.5. Labour productivity growth, 2000-2015

Average annual growth rate of GDP at constant basic prices per worker, 2011 PPP



Note: Countries ranked in descending order of 2010-2015 productivity growth values.
Source: Asian Productivity Organization (APO), 2017.

Box 4.2. Boosting productivity in Indonesia: National Development priorities

Indonesia faces the coexistence of old and new development challenges: while challenges to sustain high economic growth remain, the government has put increased focus on making growth more inclusive and improving productivity. There is a growing international consensus that better jobs and greater productivity are the fundamental factors needed for sustaining rapid and more inclusive growth. It is widely recognised that improved productivity is essential to maintaining Indonesia's competitiveness (Asian Development Bank, 2018[17]). The current government has recently unveiled the top priorities for economic development going forward, with the objective of escaping the country's middle-income status and becoming one of the world's top 5 largest economies by 2045.

As part of the National Development Plan, the government has identified five priorities: infrastructure, human capital, simplification of regulations, modernisation of the civil service and economic transformation. The government aims to tackle high logistics costs and poor infrastructure by prioritising infrastructure projects to enhance connectivity across the country. Employment measures foresee specific assistance for competency-based trainings and improved social security programmes, while simplifying regulations and cutting red tape. Boosting manufacturing growth is also placed at the heart of the government's priorities, by developing a "Making Indonesia 4.0" roadmap, aimed at reforming the manufacturing sector.

Source: Pangestu, M. (2020[18]), *Major Economic Challenges Faced by Indonesia; Indonesia:*, Asian Development Bank (2018[17]), *Indonesia*, Asian Development Bank, Manila, Philippines, http://dx.doi.org/10.22617/tcs189213-2.

4.1.3. Automation will alter the labour market going forward in Indonesia

The world of work is changing as technology continues to pervade many workplaces. Across the OECD, it has been estimated that 14% of jobs will be vulnerable to job destruction, while 32% will see significant change in their overall task composition (OECD, 2019[19]). Digitalisation, automation and technological progress are fundamentally altering the way people live and work. While technological upgrading has historically been a driver of growth and economic development, in the current wave new technological developments are taking place at a much faster pace.

As tepid productivity growth and slowing expansion in the labour force and manufacturing industries are identified as key constraints to Indonesia's growth potential, technology has a role to play in boosting future growth. Both advanced and developing economies are embracing emerging technologies to promote sustainable growth. Adopting new technologies can allow industry to become more productive by enabling more efficient resource use, new product development, and entry into new markets. Indonesia is no exception in this regard, and the Government of Indonesia recognises the role of technology and innovation in achieving economic growth targets and higher incomes (Asian Development Bank, 2020[20]).

While the future of work creates opportunities for Indonesia to boost productivity and job quality, the high concentration of jobs in labour intensive manufacturing and services could put Indonesian workers at risk of technological disruption in the future (see Box 4.3). However, it should also be stressed that several barriers could limit technology adoption. This is the case for example of the high cost of technology relative to labour, which is often larger in emerging economies than in OECD countries.

Box 4.3. The future of work creates opportunities and challenges for emerging economies

Automation and digitalisation have the potential to create new opportunities for industrial development in emerging economies, as they are increasingly integrated into international markets and production systems. However, they also pose new risks of job loss as well as exacerbating regional disparities. Benefits from the future of work could be large for emerging economies such as Indonesia. As they are not locked into existing technology, automation could help them leapfrog the traditional development path and converge with developed economies. A range of emerging technologies is expected to drive change in industries and services, and create new opportunities for businesses and improve people's lives. Examples of these technologies include photonics, advanced materials, biotechnology, nanotechnology, and digital information and communication technologies (ICT) such as machine learning and artificial intelligence (Asian Development Bank, 2020[20]). At the same time, Information and Communication Technology (ICT) penetration, together with the emergence of platform jobs, can create opportunities to boost local employment. Technologies also have the potential to reduce information asymmetries, fostering financial inclusion, while also offering flexible working arrangements, which could increase labour force participation of under-represented groups (Alonso Soto, 2020[21]).

However, the future of work also poses threats to job disruption and increased inequalities in Indonesia as in other emerging economies. First, labour forces are rapidly growing in relation to the overall population in many emerging economies, raising concerns that too few jobs will be created to employ everyone. Second, several occupations involving routine tasks facing the greatest threat from automation and machines are pervasive in emerging economy's labour markets. An ILO study of Association of Southeast Asian Nations (ASEAN) countries for example shows that more than 60% of salaried jobs in electronics, automotive, textiles and clothing face a risk of automation in the region. In Indonesia the risk of automation is lower than in Viet Nam and the Philippines (70% and 57% respectively) but higher than in Thailand (44%). The study suggests that in a couple of decades more than one job in two could be automated in the Philippines, Cambodia, Indonesia, Thailand and Viet Nam. It should however be noted that a task-based approach in calculating the risk of automation would likely lead to lower shares of jobs at risk of automation. Developments in robotics and 3D printing are also making it easier for developed economies to relocate production closer to domestic market, representing a further potential source of disruption for emerging economies (International Labour Organization, 2017[13]). Finally, the right policies need to be put into practice to ensure emerging economies such as Indonesia benefit from the future of work, including investment in ICT infrastructure, awareness-raising and supporting technology adoption by SMEs, promoting research and development as well as supporting skills development (Asian Development Bank, 2020[20]).

In addition, the geographical concentration of jobs at high risk of automation implies that the impact of the future of work will be different across places within the same country, with the risk of exacerbating inequalities across provinces in Indonesia. Some places are able to take advantage of new technologies and greater integration into global markets, thereby attracting firms and workers, while other areas struggle to grow. OECD analysis shows that regions facing a high risk of automation tend to have lower productivity levels, partially explained by the fact that they make less use of advanced machines. These regions also often have lower employment and tertiary education levels. The risk of automation is also higher in local economies where rural areas and employment in the tradable sector prevail. The tradable sector is considered as fundamental for emerging economies to access global demand outside of their own economy, driving economic growth. However, the tradable sector includes many economic sectors facing a high risk of automation, such as agriculture and manufacturing. This is mainly due to the fact that the potential for higher productivity growth in the tradable sector comes from greater opportunities for automation.

Source: Asian Development Bank (2020[20]), *Innovate Indonesia:*, Asian Development Bank, Manila, Philippines, http://dx.doi.org/10.22617/sgp200085-2; Alonso Soto, D. (2020[21]), "Technology and the future of work in emerging economies: What is different", *OECD Social, Employment and Migration Working Papers*, No. 236, OECD Publishing, Paris, https://dx.doi.org/10.1787/55354f8f-en; OECD (2018[22]), *Job Creation and Local Economic Development 2018: Preparing for the Future of Work*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264305342-en; International Labour Organization (2017[13]), *Indonesia Jobs Outlook 2017: Harnessing technology for growth and job creation International Labour Organization*, International Labour Organization, https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-jakarta/documents/publication/wcms_613628.pdf (accessed on 13 March 2019); Chang, J., G. Rynhart and P. Huynh (2016[23]), "ASEAN in Transformation: How Technology is Changing Jobs and Enterprises", *ILO Working Papers*, No. 994909343402676, International Labour Organization, https://ilo.userservices.exlibrisgroup.com/view/delivery/41ILO_INST/12435499100026 76 (accessed on 13 March 2019).

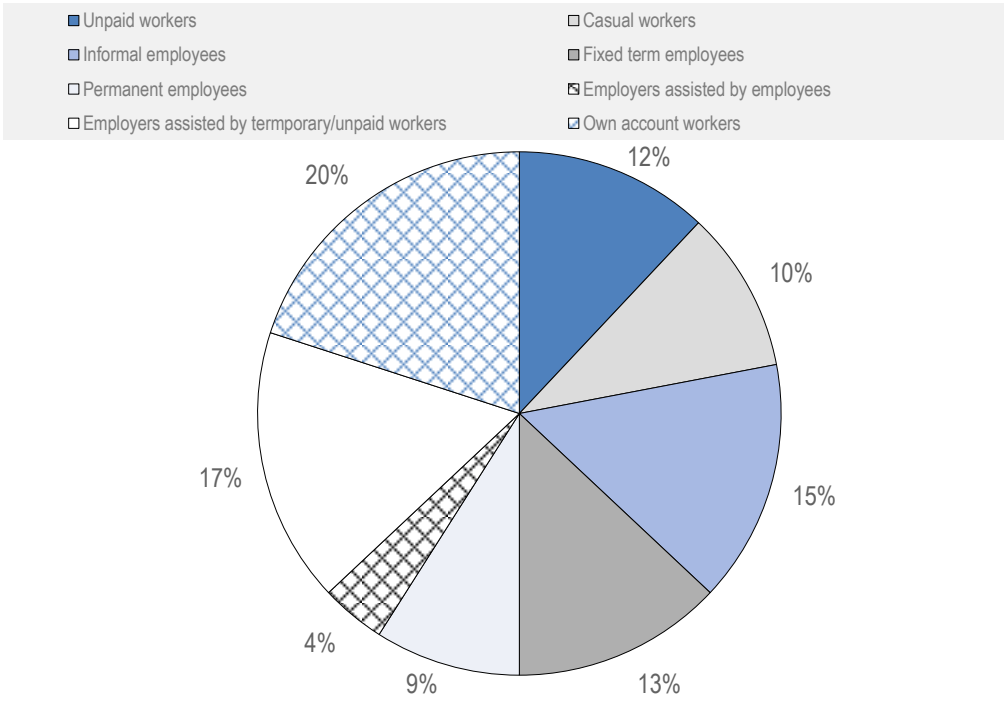
4.1.4. Informal employment is declining but remains significant within the labour market

In recent years, regular wage employment has expanded in Indonesia. While there were 26.8 million workers employed as regular employees in 2006, this had almost doubled to 51.7 million by 2019. As a result, the share of regular employees in total employment rose to 40.8% in 2019. Structural transformation has been one of the factors driving the increase in regular wage employment, as wage employment expands as manufacturing and services grow and agriculture employment declines. Of the 24.9 million new regular wage jobs created between 2006 and 2019, most were in the industrial and services sectors. However, the majority of workers are employed on short-term contracts and/or earning an income that is below the minimum wage (Allen, 2016[2]).

While formal employment has substantially increased, informality represents a persistent phenomenon in Indonesia. Labour Force Survey data show that the majority of employees in Indonesia are own account workers (20%) and employers assisted by temporary/unpaid workers (17%) (see Figure 4.6). Informal employment accounted for 43.8% of non-agriculture employment and 87.5% of agriculture employment in 2019. Research shows that informal firms in Indonesia tend to pay lower wages and have low productivity (Rothenberg et al., 2016[24]). Informality is an issue especially in rural areas, where agriculture is the main source of employment. About 70% of the workforce in rural areas works informally, compared to 45% in urban areas. Data also shows that the rural employed population works substantially less than normal working hours, as compared to the urban population. The combined trends of high youth unemployment, low female labour force participation and high rates of people working less than normal working hours suggest that labour underutilisation represents a significant challenge for Indonesia (Allen, 2016[2]).

Throughout Indonesia there were 26.7 million enterprises, of which 12.6 million enterprises were in retail trade, followed by 4.4 million in manufacturing and 4.5 million in accommodation and food services. Micro and small enterprises (MSMEs) dominate the number of establishments, accounting for 98.3% of all establishments and providing employment to 53.6 million non-agricultural workers (76.3%). Meanwhile, medium and large firms accounted for 447 400 enterprises, and employed 23.7% of non-agricultural workers. Most establishments (92.1%) employed only less than five workers, while firms with a hundred or more workers accounted for only 0.2% of enterprises. Moreover, many enterprises have low earnings, with 90% of establishments reporting annual revenue of IDR 300 million (USD 20 000) or less. The majority of enterprises in Indonesia are not legal entities, with 93.2% of firms reporting to be informal or unincorporated. Establishment with legal entity in form of public or limited incorporated, CV, firm, pension fund, foundation, or foreign representative accounted only for less than 3% of firms. Micro, small, and medium sized firms account for approximately 60% of GDP.

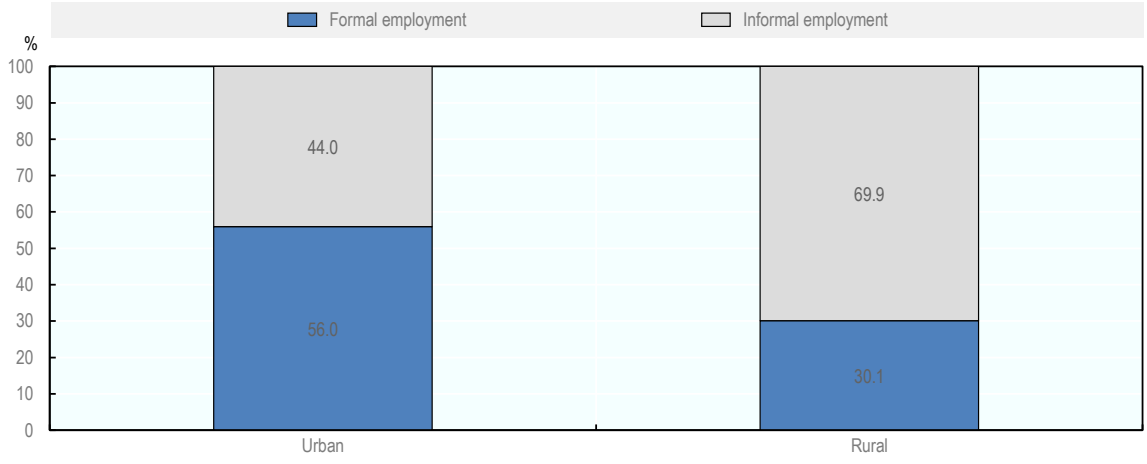
Figure 4.6. Most employees in Indonesia do not have a written employment contract



Source: Calculations based on National Labour Force Survey (SAKERNAS), August 2019.

Figure 4.7. Informality prevails in rural areas in Indonesia

Percentage of urban and rural employment, 2019



Source: Statistics Indonesia.

Table 4.1. Number of enterprises by industry and formality

Sector	Public Limited / Corporation	Limited Liability / Partnership	Firm	Pension fund	Foundation	Special license	Subsidiary	Un-incorporated	Total
Mining & Quarrying	1 825	519	12	44	5	3 229	21	167 027	172 682
Manufacturing	32 290	25 449	573	2 098	645	131 829	588	4 222 817	4 416 289
Construction	33 660	47 198	39	59	26	52	91	177 157	258 282
Other Industry	5 286	1 260	19	720	92	5 645	161	115 580	128 763
Retail trade	100 054	47 942	2 088	12 312	3 073	450 277	2 434	11 714 481	12 332 661
Transportation & Storage	30 722	9 462	215	1 351	272	37 888	640	1 253 735	1 334 285
Accommodation & Food	15 160	5 860	316	2 126	1 798	83 747	431	4 356 784	4 466 222
Information & Communication	8 018	1 944	48	382	187	15 487	205	619 427	645 698
Financial & Insurance	49 245	1 138	57	49 630	761	15 094	446	34 033	150 404
Other Services	42 827	20 531	1 396	2 253	186 619	328 791	1 783	2 221 514	2 805 714
Total	319 087	161 303	4 763	70 976	193 478	1 072 039	6 800	24 882 555	26 711 000

Source: Statistics Indonesia.

Although regular wage employment has overall increased and informal employment decreased, job quality, as measured for example by job pay and contract length, could improve in Indonesia. Research shows that over time the share of regular employees receiving wages that pay the minimum wage or higher has remained constant, while the share of workers earning less than the minimum wage has increased. This trend suggests that increases in the minimum wage have outstripped productivity growth and that the growth in job quality has been limited. In addition, a large share of workers in Indonesia are employed with short-term contracts. Such contracts constitute a disincentive for employers to invest in workforce skills development, resulting in lower quality jobs for workers (Allen, 2016[2]). Despite having decreased over the last decade, vulnerable employment, including own workers and unpaid family workers, still accounts for almost half of total employment. Furthermore, while vulnerable employment in Indonesia compares favourably to some ASEAN countries, such as Viet Nam, Lao PDR, and Cambodia, Indonesia still lags behind the Philippines, Malaysia, Singapore and Brunei Darussalam (see Figure 4.8).

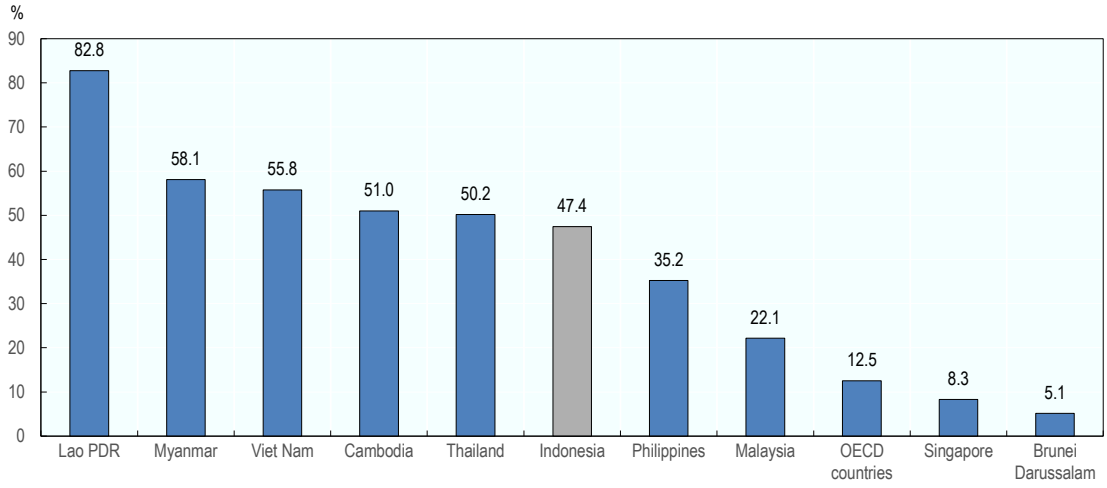
Labour market rigidities have hampered the development of the formal sector in Indonesia. The level of the minimum wage appears relatively high by international standards, and severance payments are among the highest in the world, but failing to protect workers as compliance is below 10%. Generous severance conditions are among the main reasons why firms tend to employ workers on a temporary basis. Under the Indonesian Labour Law 13 of 2003, which regulates termination conditions for employees, employers are restricted from discharging employees without case, and must provide discharged workers with a combination of severance pay, long service pay, compensation rights pay and separation pay. Many firms choose to hire employees on short-term contracts to avoid provisions on severance pay, which are high in comparison to other countries in ASEAN. The current government plans to pass a comprehensive reform in Indonesia (so called *Omnibus Law*), which will also touch upon labour market regulation (see Box 4.4).

Informal and vulnerable workers risk being hit harder than others by the COVID-19 crisis. The impact on income-generating activities can be especially harsh for unprotected workers and the most vulnerable groups in the informal economy. Informal workers lack the basic protection that formal jobs can provide. They are also disadvantaged in access to health-care services as many do not qualify for government support because they are not registered as residents in the districts where they reside. They also have no income replacement if they stop working in case of sickness. Informal workers in urban areas also tend to work in sectors carrying a high risk of virus infection and directly impacted by lockdown measures, such

as street vendors, food servers and construction workers among others (International Labour Organization, 2020[25]).

Figure 4.8. Though lower than in other countries, vulnerable employment accounts for half of total employment in Indonesia

Percentage of total employment by country, 2018



Note: Vulnerable employment is defined as family workers and own-account workers as a percentage of total employment.
Source: International Labour Organization (ILO), ILOSTAT database.

Box 4.4. The 2020 *Omnibus Law* aims to simplify regulation and ease job creation

The Indonesian government plans to pass a reform, called Omnibus Law, encompassing several policy areas in Indonesia, aiming to simplify legislation, making it easier for foreign investors to invest in the country, with the goal of boosting economic growth.

The idea behind the law is that there are too many and contradictory rules, creating uncertainty for investors. As an example, during 2015-18, more than 6 300 ministerial regulations were issued, representing 86% of central government laws and regulations. No single entity is accountable for ensuring laws and regulations service government policy priorities, and subnational government regulations often contradict higher level central government regulations.

The Omnibus Law aims to simplify 82 laws and 1 194 articles through a single comprehensive law which will change various regulations. There are currently two drafts of the Omnibus Law devoted to job creation and tax reforms. The omnibus law on job creation seeks to reform Indonesia's labour legislation, make it easier for companies to secure permits, and relax foreign ownership rules, local content requirements and land procurement. The bill also proposes to change the minimum wage system by linking wages to regional economic performance rather than national. As part of the bill, the

government also plans to introduce an unemployment insurance programme under which people who lose their jobs will be eligible for cash payments and other benefits. The Indonesian Government plans to submit the two Omnibus Law drafts to the parliament in 2020. In a recent statement, the President of Indonesia, Joko Widodo, mentioned that the debate on the labour section of the job creation bill would be delayed, but it would go ahead on other aspects.

Sources: *Bloomberg* (2020[26]), *Indonesia Set to Overhaul 79 Laws in a Push for Jobs and Foreign Investment*, https://www.bloomberg.com/news/articles/2020-01-20/indonesia-set-to-recast-almost-80-laws-in-jobs-investment-push (accessed on 4 February 2020); Pangestu, M. (2020[18]), *Major Economic Challenges Faced by Indonesia*; Reuters (2020[27]), *Indonesian unions cancel rally as president delays labour rules debate*, https://in.reuters.com/article/indonesia-economy/indonesian-unions-cancel-rally-as-president-delays-labour-rules-debate-idINKCN22617Y (accessed on 18 September 2020).

4.1.5. Substantial differences exist in labour market outcomes between men and women

Looking at labour force participation rates can provide a broader picture of the Indonesian labour market by factoring in the proportion of the working-age population that is employed or actively looking for work. The overall labour force participation in Indonesia has fluctuated over the last decade, and sits today at 67.5%, slightly higher than ten years ago (66.5% in 2008), but below the average across ASEAN countries of 69.1%. In addition, only one in two working-age women participated in the labour force in 2019, which is substantially lower than many other ASEAN country. While male labour force participation is among the highest across ASEAN, women labour force participation is among the lowest in the region (see Figure 4.9). Taking care of the household emerges as the main reason for working-age women being unemployed and not looking for a job in Indonesia. On the other hand, the majority of working-age men not working are unemployed because they are going to school (see Figure 4.10).

The participation of women in the labour force has not increased over the last 20 years. For instance, it also stood at 50% in 1998. Marriage, childcare responsibilities, and low educational attainment are frequently pointed out as factors contributing to lower female labour force participation (Australia Indonesia Partnership for Economic Governance, 2017[28]). Indonesia's flat overall female labour force participation rate over the last two decades might also reflect two opposing forces: growth in participation at the top of the education/income distribution, where women access more lucrative jobs, offset by reductions in participation at the bottom of the income distribution, where women who previously had to work in unappealing jobs pulled out of the labour market as their households became more affluent (Schaner and Das, 2016[29]). Both patterns can partly reflect welfare gains, as highly educated women access higher-paid jobs, while women in poorer households become less likely to rely on informal and low paid jobs. However, projections show that Indonesia is unlikely to reach its Group of Twenty (G20) target of decreasing the gender gap in participation by 25% between 2014 and 2025.

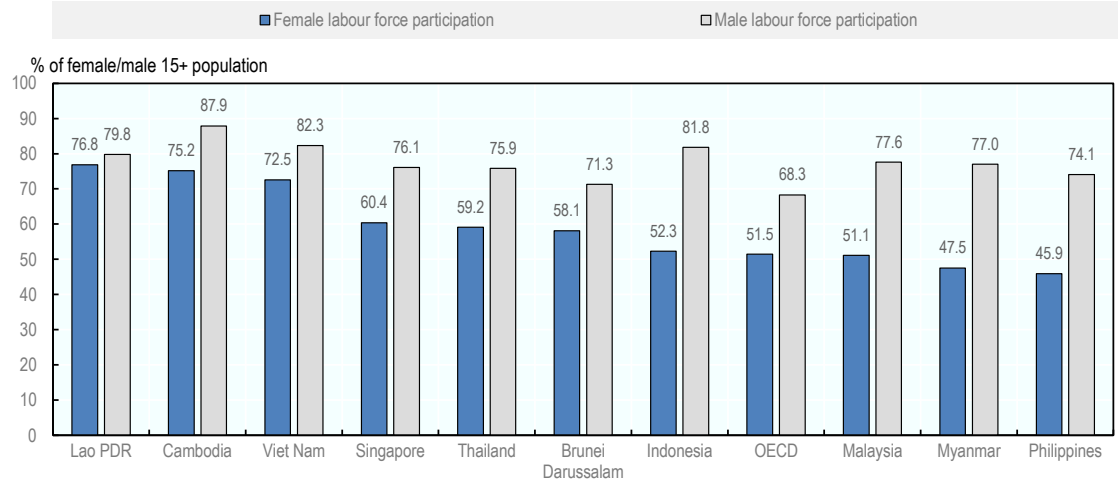
Women also tend to earn substantially less than men, with this gender pay gap more pronounced in urban than rural areas. By some estimates, the gender pay gap amounts to around 20% in Indonesia, compared to less than 15% in the OECD (OECD, 2016[30]). The pay gap is often dependent on age, hours worked, educational attainment, work and industry type as well as geographical location. Research shows that the gender wage gap is widest in finance and real estate, followed by public administration, with public sectors such as public administration, education and health and public services characterised by wider gaps than other sectors (Taniguchi and Tuwo, 2014[31]). Gender pay gaps persist across different education levels in Indonesia, but they are smallest among the better educated. Data shows that women without education earn half as compared to men, while women who graduated from senior secondary education earn on average 79%. Women working in the informal sector are found to have even higher wage gaps (Australia Indonesia Partnership for Economic Governance, 2017[28]).

The outbreak of the COVID-19 pandemic risks exacerbating women's position in the labour market. Women in Indonesia are more likely to be in low-paid jobs when in full-time contracts, and they are less

likely to be employed in managerial positions. There are also more women working part-time and being self-employed than men in Indonesia (OECD/ILO, 2019[32]). In addition, children out of school, intensified care needs of older persons and ill family members, and overwhelmed health services, will pose further labour market challenges for women, as the United Nations (UN) estimates that, before the pandemic, women were doing three times as much unpaid care and domestic work as men (United Nations, 2020[33]). The combined effect of less stable jobs and increasing care responsibilities risk substantially worsening women's employment outcomes in Indonesia. Selected economic sectors, such as hotels, restaurants, and manufacturing, are expected to experience severe downturns as the impacts of COVID-19 take hold. As demand contracts and businesses see a sudden downturn in earnings, it is expected that employment losses will be more concentrated in industry and services. The share of women workers in sectors that are expected to be hardest hit is high. To illustrate, one in three women, compared with one in five men, work in the wholesale or retail trade and in accommodation and food services. Many of the jobs in these sectors also are informal, entailing little protection for workers and lack of provision of paid leave. In addition, occupations in these sectors, as well as manufacturing, are less amenable to work-from-home arrangements and exposed to downturns in business volumes. In absence of paid leave or unemployment benefits, household income and consumption power is likely to fall and result in many near poor and vulnerability households facing a heightened risk of falling into poverty. Female-headed households are of particular concern.

Figure 4.9. While male labour force participation is relatively high, female participation is among the lowest in the ASEAN region

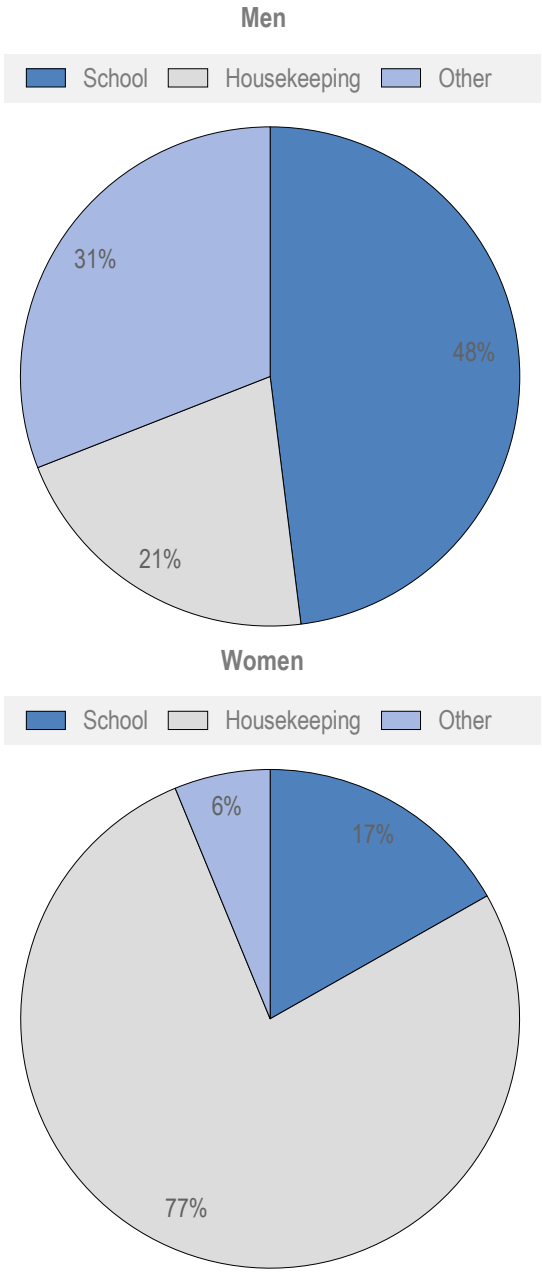
Share of female and male population aged 15+, 2019



Source: International Labour Organization (ILO), ILOSTAT database.

Figure 4.10. Working-age men who do not work are mainly going to school, while the large majority of women are taking care of the house

Percentage of unemployed population, August 2019



Source: Calculations based on National Labour Force Survey (SAKERNAS), August 2019.

4.1.6. Young people face challenging labour market conditions

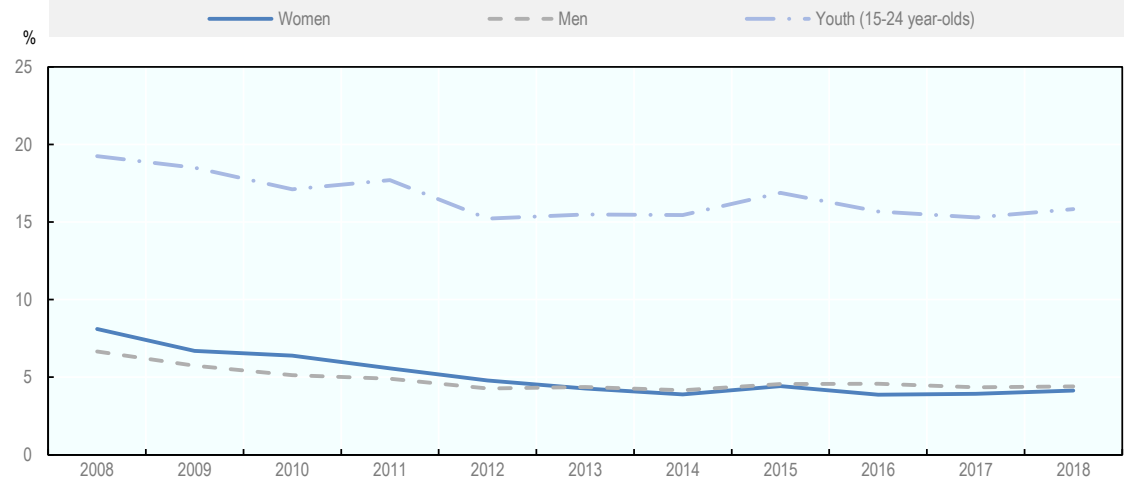
The demographic dividend, defined as the accelerated economic growth that may result from a decline in a country's mortality and fertility and the subsequent change in the age structure of the population, opens up large opportunities for Indonesia to maximise productivity by effectively using its working age population. However, to reap the full benefits of the dividend, appropriate policies should be put in place to improve labour market outcomes of young people (Kring and Breglia, 2015[34]). Indeed, around 40% of the Indonesian population was under age 24 in 2018. Youth unemployment is a common challenge in Southeast Asia, where youth are five times more likely to be unemployed than the rest of the population, suffering from poor quality jobs as well as informal and vulnerable employment (International Labour Organization, 2016[35]).

While male and female unemployment have experienced similar trends over the last decade, youth unemployment continues to be substantially higher, totalling 15.8% in 2018 (see Figure 4.11). The large majority of employed youth are within the trade, agriculture, manufacturing and public services sectors. High levels of youth unemployment suggest that the school to work transition is not always smooth, as few school leavers are employed before leaving school, and one in three unemployed youth aged 15-24 are still unemployed after 12 months (Allen, 2016[2]).

Taken as a whole, the employment prospects of young Indonesians have worsened over recent years. Few young people aged 15-19 participate in the labour force, as most are still in education. However, national statistics show that for 15-19 year-olds who participate in the labour force, the unemployment rate is particularly high and has worsened over the last years. In 2018, the unemployment rate for youth aged 15-19 amounted to 26.7%, up from 17.7% in 2015. Over the same period, the unemployment rate of 20-24 year-olds increased more moderately, from 12.9% to 16.7% (see Figure 4.12). This suggests that young people, especially those who just finished junior or senior secondary school, face substantial challenges in entering the labour market. In addition, a large share of young people are employed in informal jobs, pointing to youth facing high risks of vulnerable employment.

Figure 4.11. Young people face substantially higher unemployment rates than adult men and women

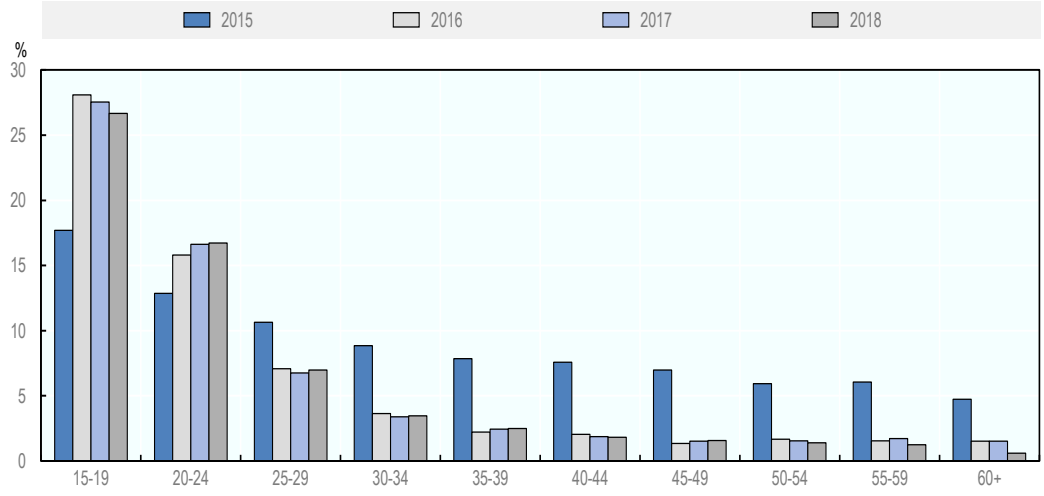
Unemployment rates: women, men and youth (Percentage of female, male and youth labour force respectively), 2008-2018



Source: International Labour Organization (ILO), ILOSTAT database.

Figure 4.12. 15-19 year-olds face more challenging labour market outcomes than the rest of the population in Indonesia

Unemployment rate by age group (percentage of labour force in each age group), 2015-2018



Source: Statistics Indonesia.

Finally, a substantial share of young people are neither in employment nor in education or training (NEET) in Indonesia. Indeed, 22.6% of youth aged 15-24 were NEET in Indonesia in 2019, and the proportion is higher among young women (28.7%). Those categorised as NEET tend to come from low-income families and face job entry barriers, perpetuating cycles of poverty and inequality. The share of NEET in Indonesia also compares negatively to most other ASEAN countries. For example, the share of youth NEET in 2019 amounted to 20.1% in Brunei Darussalam, 18.8% in the Philippines, 14.9% in Thailand, 14.6% in Viet Nam, and 4.3% in Singapore. On the other hand, the share of youth NEET was 42.1% in Lao PDR in 2017. The conditions of young people also tend to vary based on their gender, residence and location. Gender differences among young people are persistent. Women are less likely to participate in the labour force, partly due to family responsibilities, and suffer an ongoing wage gap, especially noted among low educated women (UNFPA, 2014[36]). Young men are more likely to be economically active than women, and labour market participation is lower in urban than rural areas, with active urban youth being at greater risk of unemployment (Kring and Breglia, 2015[34]). The share of youth not in employment, education or training is also relatively high in richer provinces such as East Kalimantan and Riau. The share of NEET seems to be lower than the Indonesian average in provinces that create most jobs in the country, such as the Special Capital Region of Jakarta and the Special Region of Yogyakarta, as well as in some rather rural and remote regions such as Papua and East Nusa Tenggara, where informality is high. The Indonesian cities of Makassar and Surabaya provide examples of strategies local governments are putting in place to tackle this pervasive issue (see Box 4.5).

The ongoing COVID-19 pandemic crisis risks exacerbating employment outcomes of young people in Indonesia. Young people, already facing higher unemployment rates are more vulnerable to falling labour demand, as witnessed during the global financial crisis. The high share of NEET also suggests that youth might face even more challenging conditions as a consequence of the ongoing pandemic crisis, as opportunities for employment, both formally and informally, are likely to shrink across Indonesia.

Box 4.5. Long strategies to tackle youth unemployment in Surabaya and Makassar

The cities of Surabaya and Makassar have recently taken several initiatives to tackle youth unemployment and economic inactivity and improve living conditions. For example, in Makassar, it was observed that the poor conditions of streets and alleyways were conducive to informality and poor conditions for vulnerable workers, including young people. As a consequence, a programme has been implemented to build and renovate streets. The programme has upgraded 5 800 new alleyways. The Mayor hopes that better living conditions in the city as well as improved infrastructure will foster youth entrepreneurship.

In Surabaya, the *Pejuang Muda Surabaya* ("young Surabaya fighter") programme aims to foster youth development by engaging young people in trainings with representatives from academia, the business community and the government. The programme specifically targets young people aged 20-39 not formally employed. It proposes trainings in crafts, the culinary sector and the fashion industry. After attending one of the workshops, young trainees conduct and internship with the objective of becoming professionals in the field or start their own company.

Source: Case study interviews.

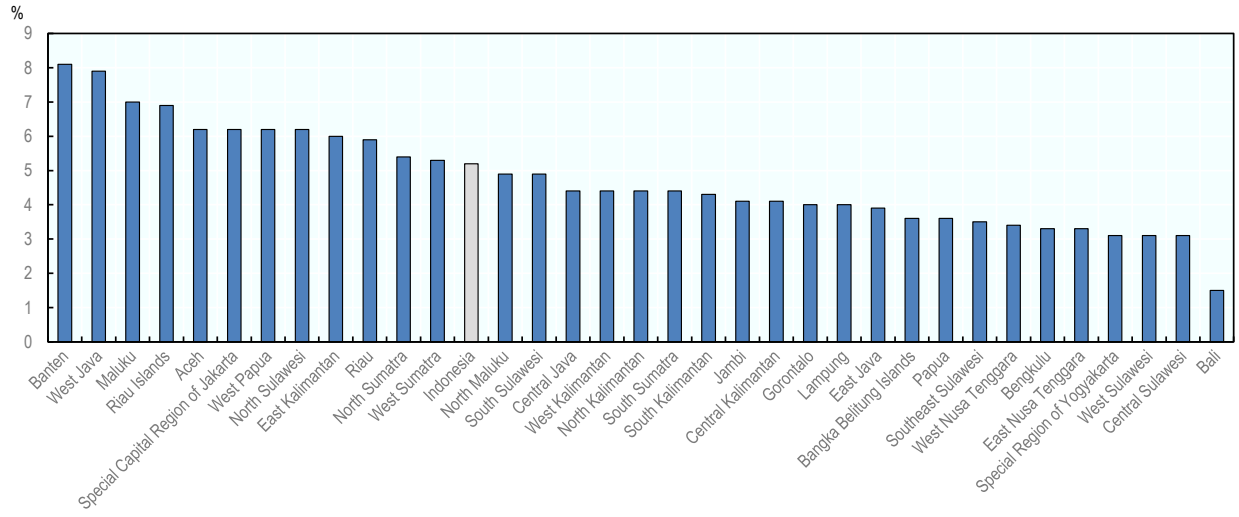
4.2. Understanding local labour market performance within Indonesia

4.2.1. Unemployment varies across provinces in Indonesia

Unemployment rates vary by 7 percentage points across Indonesian provinces (see Figure 4.13). Banten and West Java are the provinces with the highest unemployment rates, averaging above 8% over 2015-2019. Aceh and East Kalimantan also have higher unemployment rates than the Indonesian average. It is suggested that high unemployment rates in these provinces may be linked to the drop in commodity exports, while West Java and Banten are manufacturing hubs and therefore attract jobseekers from other provinces (International Labour Organization, 2016[37]). On the other hand, Bali has by far the lowest unemployment rate, amounting to 1.5% in August 2019. Employment in Bali is highly dependent on tourism, but it does not seem to suffer from seasonality. Tourism has been placed at the top of the Indonesian government's agenda, seen as a tool to foster growth not only in provinces already attracting international travellers but also in more rural and remote areas (see Chapter 2). Unemployment rates lower than the national average in Central Sulawesi, North Maluku and East Nusa Tenggara may reflect higher incidence of working poverty and informal employment (International Labour Organization, 2016[37]).

Figure 4.13. Unemployment varies by province in Indonesia

Unemployment rate, August 2019



Source: Statistics Indonesia.

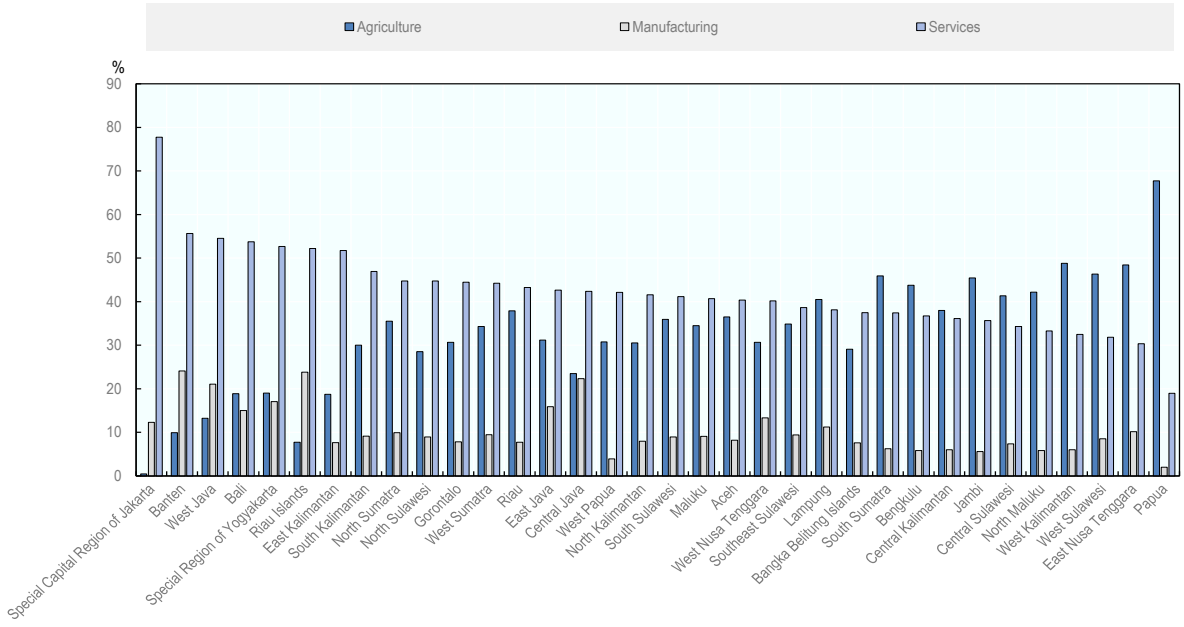
4.2.2. Agriculture is the main source of employment in the east of the country, while manufacturing and services prevail in western provinces

In most provinces in the east of the country, such as Papua and East Nusa Tenggara, the large majority of workers are employed in agriculture (see Figure 4.14). In Papua, the agricultural sector employed 1.2 million people in 2019, representing almost 70% of workers. About half of the working population is also employed in agriculture in West Kalimantan and East Nusa Tenggara (48.8% and 48.4%). Meanwhile, manufacturing, as well as services, prevail in western provinces. Manufacturing employs 24.1% of workers in Banten and 23.8% in Riau Islands. In Central Java and West Java, about 22.3% and 21.1% of workers are employed in manufacturing. Services employ about 80% of workers in the Special Capital Region of Jakarta. More than 50% of workers are employed in services in Banten, West Java, Bali, the Special Region of Yogyakarta, Riau Islands and East Kalimantan. On the other hand, services employment is lowest in Papua and East Nusa Tenggara. Workers in agriculture are traditionally less qualified than workers in industry and services. The large majority of agricultural workers attain below junior high school levels, while in trade, restaurants and accommodation services, most workers attain senior secondary school levels, including both vocational and general high school. In community and social services, the majority attain university education (see Figure 4.15).

In addition, working conditions in the agricultural sector tend to be worse than in other sectors. The net wage in agriculture, plantation, forestry, hunting and fisheries is the lowest across sectors in Indonesia, amounting to IDR 1.5 million (around USD 100) (see Figure 4.16). The spread of agricultural jobs across rural and remote provinces, especially in the east of the country, suggests that living conditions are critically more challenging in these provinces than the rest of the country. Data from the National Labour Force Survey also suggests that workers in rural and remote provinces would be willing to accept a job if they received an offer (Figure 4.17). This points to the lack of employment opportunities in these provinces and the willingness of the local workforce to improve their conditions. In West Papua and East Nusa Tenggara almost 35% of people would be willing to take on a job if they were offered one.

Figure 4.14. While agriculture prevails in Eastern provinces, services are the main source of employment in western provinces

Percentage of total provincial employment, August 2019

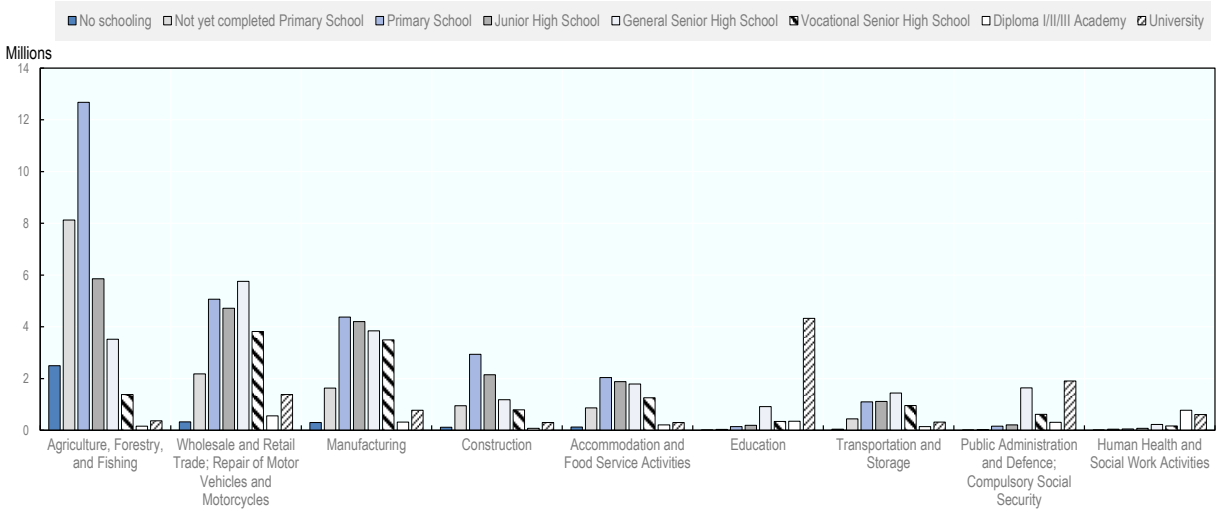


Note: Services include Water Supply; Sewerage, Waste Management, and Remediation Activities; Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles; Transportation and Storage; Accommodation and Food Service Activities; Information and Communication; Financial and Insurance Activities; Real Estate Activities; Business Activities; Compulsory Social Security; Education; Human Health and Social Work Activities; and Other Services Activities.

Source: Statistics Indonesia (2019[8]), *Labor Force Situation in Indonesia August 2019*, https://www.bps.go.id/publication/2019/11/29/96138ece33ccc220007acbdd/keadaan-angkatan-kerja-di-indonesia-agustus-2019.html (accessed on 27 August 2020).

Figure 4.15. Agriculture workers attain lower levels of education than workers in other sectors

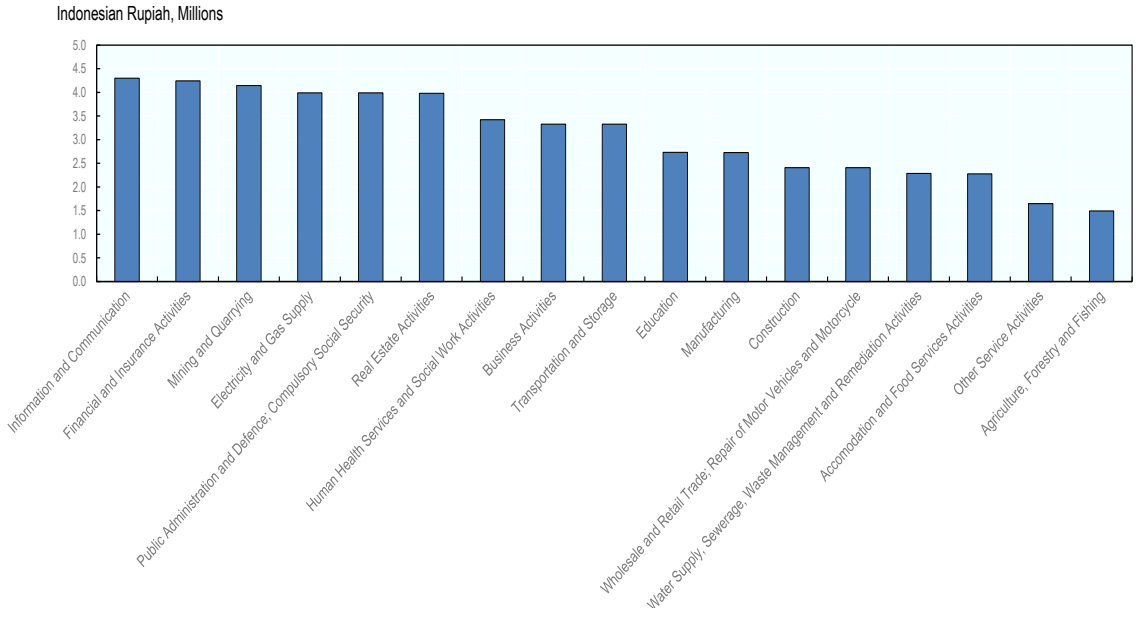
Millions of workers by educational attainment and selected sectors, August 2019



Source: OECD calculations based on National Labour Force Survey (SAKERNAS), August 2019.

Figure 4.16. Workers in agriculture earn significantly less than workers in other sectors

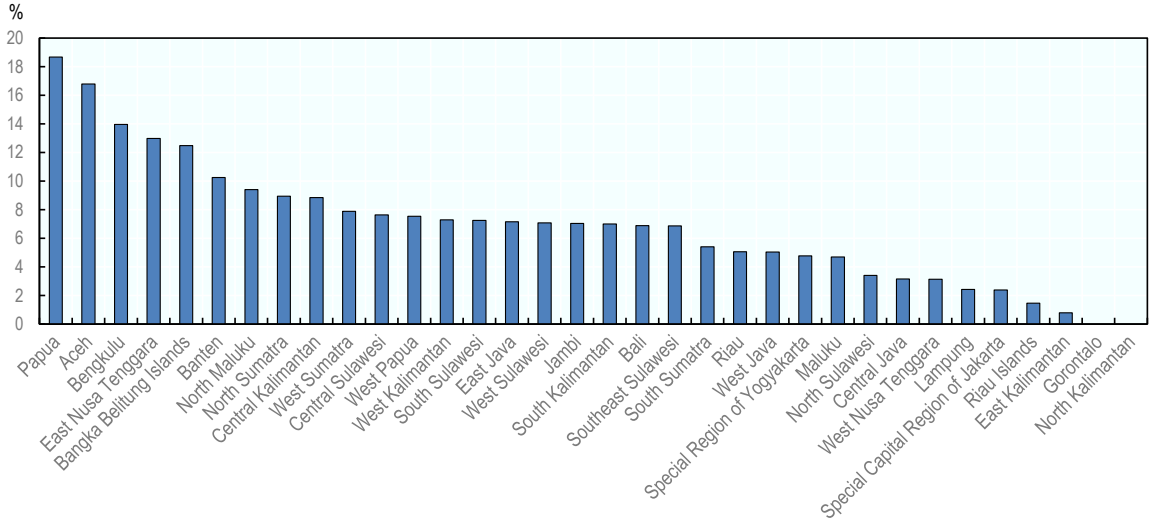
Average monthly net wage by sector, August 2019



Note: Workers include employees, casual workers in agriculture and casual workers in non-agriculture sectors.
Source: Statistics Indonesia (2019[38]), *Laborer Situation in Indonesia August 2019*, https://www.bps.go.id/publication/download.html?nrbvfeve=YzIxNjMwZWUzOWI5MDA0NDU5NjgwOTIz&xzmn=aHR0cHM6Ly93d3cuYnBzLmdvLmlkL3B1YmxpY2F0aW9uLzIwMTkvMTEvMjkvYzIxNjMwZWUzOWI5MDA0NDU5NjgwOTIzL2tlYWRhYW4tcGVrZXJqYS1kaS1pbmRvbmVzaWEtYWd1c3R1cy0yMDE5Lmh0bWw%3D&twoadfnoarfeauf=MjAyMC0wOC0yNyAyMTozMjo1MQ%3D%3D (accessed on 27 August 2020).

Figure 4.17. Many people in eastern provinces think there are no jobs available

Share of unemployed who think there are no jobs available, August 2019



Source: Statistics Indonesia (2019[38]), *Laborer Situation in Indonesia August 2019*, https://www.bps.go.id/publication/download.html?nrbvfeve=YzIxNjMwZWUzOWI5MDA0NDU5NjgwOTIz&xzmn=aHR0cHM6Ly93d3cuYnBzLmdvLmlkL3B1YmxpY2F0aW9uLzIwMTkvMTEvMjkvYzIxNjMwZWUzOWI5MDA0NDU5NjgwOTIzL2tlYWRhYW4tcGVrZXJqYS1kaS1pbmRvbmVzaWEtYWd1c3R1cy0yMDE5Lmh0bWw%3D&twoadfnoarfeauf=MjAyMC0wOC0yNyAyMTozMjo1MQ%3D%3D (accessed on 27 August 2020).

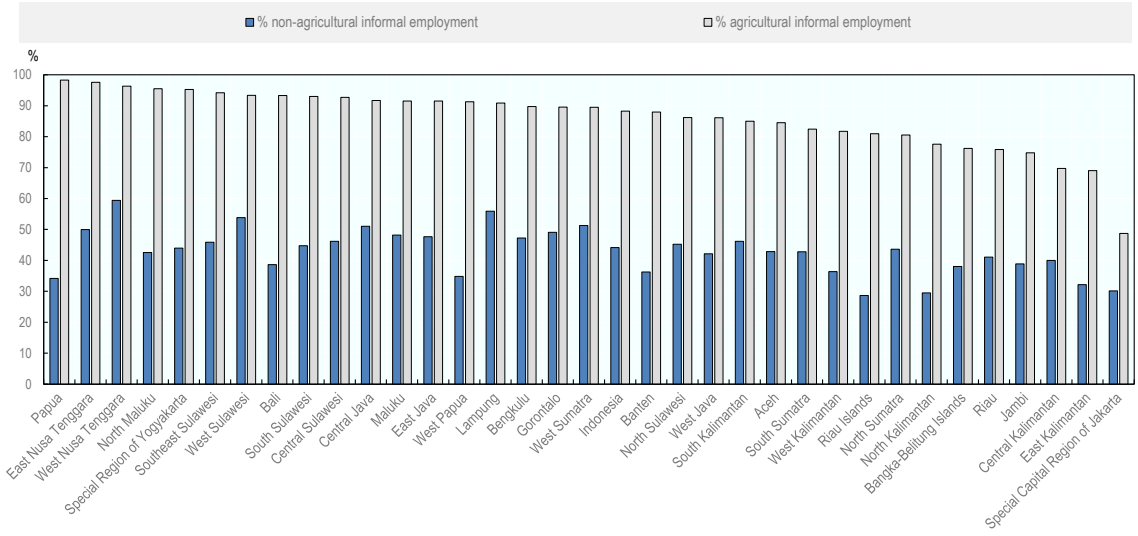
4.2.3. Informality is substantially higher in rural and remote provinces

In Indonesia, the informal economy constitutes a substantial part of the labour force. The "informal economy" includes all economic activities by workers that are not covered, or insufficiently covered, by formal employment arrangements, in law or in practice. The characteristics of informal employment typically include a lack of protection for non-payment of wages, retrenchment without notice or compensation, unsatisfactory occupational health and safety conditions and a lack of social benefits such as pensions, sick pay and health insurance (International Labour Organization, 2020[39]). Regular wage employment has expanded in Indonesia over recent years, while the reliance on workers typically associated with the informal economy, such as own account workers and unpaid workers, has declined (Allen, 2016[2]).

The share of workforce in regular wage employment varies across provinces and tends to be traditionally concentrated in industrial and urban areas on Java and special economic zones in Sumatra and Kalimantan (Allen, 2016[2]). In 2015, East Nusa Tenggara and West Nusa Tenggara were the provinces with the lowest share of regular wages employment. These provinces are instead characterised by high informality. Rural and remote provinces with a less developed industrial structure tend to have substantially higher levels of informality (see Figure 4.18). The Special Capital Region of Jakarta achieves almost 70% formal employment, while formal employment accounts for as little as 22.4% of jobs in Papua. The near totality of employment in agriculture in Papua, as well as in East and West Nusa Tenggara, is informal. However, informality in agriculture is generally high across provinces, with 28 out of 34 provinces characterised by informal employment in agriculture above 80%. The Special Capital Region of Jakarta is the only province where a majority of the workers employed in agriculture are in formal employment: only 48.7% of employment in agriculture is in informal. Similarly, informal employment in non-agricultural sectors can amount to almost 60% in West Nusa Tenggara, while it amounts to only 30.1% in the Special Capital Region of Jakarta.

Figure 4.18. Informality in both agriculture and non-agriculture employment is pervasive in rural provinces

Share of informal employment in agriculture and non-agriculture sector, 2018



Source: Statistics Indonesia.

4.3. Recent trends in labour market services at the local level in Indonesia

Local labour market services can play an important role in boosting the quantity and quality of jobs in Indonesia. This can be achieved through training subsidies, active labour market programmes or more indirectly, for example through the effective matching of people to job opportunities. Effective labour market services can support youth to access employment and inclusive growth across provinces. Services can leverage the resources of partners and stakeholders through strong integration and co-ordination, particularly at the local level, where they can better target services to specific labour market contexts (OECD, 2015[40]). Well-functioning governance mechanisms are needed to ensure that labour market services are connected to the organisations involved in job creation, economic development and productivity efforts.

4.3.1. Labour market services are managed at the national and local level

The overall management of labour market services in Indonesia is one of the main functions of the Ministry of Manpower. At the local level (i.e. municipalities and districts), labour market services are implemented by local and regional Manpower representative offices. Some other national level ministries as well as local governments have their own labour market information (LMI) systems in place to collect vacancy information on local job opportunities and autonomously undertake job placement initiatives.

Within the Ministry of Manpower, the Directorate General of Manpower Placement and Expansion of Employment Opportunities (DGMPEEO) is directly in charge of labour market services. DGMPEEO formulates and implements policies, develops norms, standards and regulations and provides guidance and evaluation in the following fields: labour market information and job guidance; job creation; placement and protection of domestic and foreign workers; development and expansion of employment opportunities; control over the employment of foreign workers. DGMPEEO is composed of one Secretariat, five Directorates, and a Centre for Labour Market Development and Expansion of Employment Opportunities. DGMPEEO provides job placement services and employment opportunities either directly or through the local Manpower offices across provinces in Indonesia. The objective of the Directorate is to generate integrated, inclusive, effective and satisfactory employment. The Directorate General has developed a list of policy priorities and strategies to achieve these in order to foster job creation in Indonesia (see Table 4.2).

Table 4.2. DGMPEEO policy objectives and actions

Policy Objectives	Policy actions
Improve workforce skills and increase labour force participation in productive sectors	• Creating jobs through public works. For such jobs, the wage rate is set in a way to disincentivise informality and incentivise participation for those who have not found a better paid employment in the formal sector. The work generated from such programmes needs to be used by regions to support the development of the local economy; • Developing micro credit for SMEs. Small businesses often encounter challenges in accessing finance, and the provision of micro credit programmes can provide the means needed to grow and sustain these small businesses; • Increasing labour-intensive activities to reduce unemployment among the less educated; • Encouraging underemployed workers to carry out productive business by utilising the potential of natural resources, human resources and appropriate technology.
Empower local communities, foster entrepreneurship and encourage the development of a community-based productive economy	• Improving the quantity and quality of economic facilities and infrastructure; • Expanding access to credit for economic actors, including easing access to bank and non-bank credit by strengthening co-operation with financial and non-financial institutions; • Improving the business climate through the provision of complete information about potential business sectors; • Fostering information and technology take-up of firms to increase the quantity and quality of products provided, increasing productivity of farmers, fishermen and small firms; • Building partnerships and networks with various governmental and non-governmental agencies and

	organisations, empowering local actors to assist local communities.
Facilitate the mobility of internal and external labour force and improve the functioning of the labour market	• Increasing the effectiveness and efficiency of the labour market and maintaining a balance between labour supply and demand; • Better integrating labour market information systems to respond to needs of companies, training providers, jobseekers and policy makers; • Increasing industry involvement in the design and implementation of employment services, as well as developing standard systems using feedback mechanisms from stakeholders; • Ensuring that job matching and counselling is carried out appropriately; • Undertaking outreach activities and co-operation with education and training institutions as well as employers; • Exerting supervision over the use of foreign workers through the criteria established in the framework of the ASEAN Economic Community (AEC) free market; • Increasing quality in job placement and expanding employment opportunities by improving information and transparency of employment opportunities, access to vocational training centres and placement within the framework of the AEC free market; • Expanding work opportunities for domestic workers by developing integrated domestic and foreign labour market information that can provide effective, efficient, secure, accurate, and reliable information within the framework of the AEC free market; • Increasing implementation of job placement programmes for vulnerable workers to enter the labour market.
Improve the conditions of migrant workers	• Extending co-operation agreements with other countries. For example, strengthening agreements with destination countries and co-operation frameworks in international forums. Domestic co-operation between the central and regional governments is also a priority to facilitate the transfer of staff across the country; • Improving the quality of governance in the implementation of job placement programmes; • Improving skills and employment outcomes of migrant workers by providing access to knowledge, education and expertise; • Expanding the access of financial services for workers, such as bank accounts, access to credit and remittances.

Source: Ministry of Manpower, Indonesia.

4.3.2. Labour market services in Indonesia include training subsidies, online job matching, face-to-face consultation and job fairs

Online job matching

The Ministry of Manpower has developed two online platforms to support job search and placement. The *Info Pasar Kerja* website allows for the online registration of individual jobseekers and business, and present a list of current job openings, while the *3 in 1 Kiosk* is provided within work training centres (BLK) and online, combining vocational training, skill certification and employment placement (see Box 4.6 for more information). Between January and April 2020, the *Info Pasar Kerja* website had around 350 000 people registered as active jobseekers and 25 000 job vacancies. Over the same time period, the website has contributed to around 5 000 placements. Users can create their own online profile and filter available job vacancies based on filters, such as position, level of education and region among others. The website also includes a section on job vacancy recommendations, which provides users with recommendations of jobs that fit their profiles. Jobseekers and business representatives can physically go to local BLKs and register in the *3 in 1 Kiosk*. The information provided is then uploaded on the platform, and the jobseeker is contacted once a job opening corresponding to their background appears. For the matching of demand and supply, data collection on job openings and business requirements is crucial. However, private sector engagement is often challenging and limited by the underdeveloped capacity of *3 in 1 Kiosks*.

Box 4.6. Matching people to jobs through the *3 in 1 Kiosk*

Recently launched by the Ministry of Manpower, the 3 in 1 programme aims to provide jobseekers with training, certification and placement services. It consists of a "kiosk", which is accessible both online and across vocational training centres, where companies can register and provide information about job openings and skills requirement, and jobseekers can insert their contact information and educational background. For both companies and jobseekers, registration is free of charge. The information from each kiosk is then gathered at the provincial level. The information from each province is then grouped into a single online platform, which is accessible across all provinces.

Job fairs are organised on a yearly basis to engage with companies and explain the characteristics and benefits of the programme, and invite them to register. Following registration, training programmes are developed based on the skills requirements and needs of the companies, and trainees are employed by the companies after training. The placement offered by the 3 in 1 kiosk is not an apprenticeship, but rather a real job, paid at the minimum wage.

Source: Case study interviews.

Face-to-face consultation

Local labour offices across provinces in Indonesia also provide face-to-face interaction and consultation to jobseekers and employers. An important challenge is to raise awareness among the population of the availability of such services. Especially in rural and remote provinces across the country, not only are local labour offices understaffed, but they can also be difficult to reach as a consequence of poor transport infrastructure. Due to these challenges, the local population might be unaware of the counselling services provided.

Job fairs

The Ministry of Manpower, as well as local governments, occasionally organise job fairs. These include nation-wide events as well as province and city-level fairs. In addition, universities across Indonesia have started to organise autonomous job fairs, aiming to place students in jobs. The increased number of job fairs organised by institutions such as universities, together with the increased competition from internet service providers, might be among the reason why the number of registered jobseekers with university degrees that use labour market services in Indonesia has been decreasing in recent years (Allen and Kim, 2015[41]).

4.4. Main challenges in promoting stronger employment outcomes at the local level in Indonesia

4.4.1. Labour market services often lack capacity and coverage

The Indonesian government has recently introduced a pre-employment card (*kartu prakerja*), aiming to provide vocational training assistance to young people, workers and those affected by job loss. Initially announced in 2019, the government has anticipated the disbursement in order to tackle job loss challenges linked to COVID-19. A budget of IDR 10 trillion was initially allocated to the programme, which, before the COVID-19 outbreak, was expected to be distributed to 2 million participants in 2020, with 1.5 million participants trained through digital skills programmes and the remaining 500 000 taking face to face

training. The government has announced a doubling of the budget in light of COVID-19, with the objective of reaching more than 5 million people.

Labour market services are open to the general population of jobseekers, while targeted programmes for disadvantaged segments of society, such as vulnerable groups, youth or women, are rare. Some youth-specific labour market services are provided by the Ministry of Youth and Sports Affairs, although not in a comprehensive and systematic way.

The capacity of employment offices could be further developed across Indonesia, with the number of total staff amounting to approximately 300 in 2015, to serve a population of around 7 million unemployed (Allen and Kim, 2015[41]). The caseload ratio, defined as the number of unemployed per employment service staff, amounts to almost 25 000 in Indonesia. On the other hand, there are on average 170 unemployed per employment service staff in Europe and 282 in the Asia-Pacific region (OECD/IDB/WAPES, 2016[42]). In rural and remote provinces, underdeveloped hard and soft infrastructure can make the provision of services even more challenging. Consequently, labour market services in Indonesia also fail to get people to work. The number of jobseekers registered within labour market services in Indonesia is very limited and varies substantially across provinces. While 144 217 jobseekers were registered in Central Java, only 28 people did so in North Sulawesi in 2018. Within the OECD, one proxy for looking at the capacity of employment services is the staff to jobseeker ratios. However, collecting a comparable standardised measure is difficult. Those services with decentralised structures may not be able to accurately report the number of staff serving jobseekers, and distinguishing between administrative and frontline staff is not always evident. Research from within the EU shows that caseloads vary from an average of 170-180 to over 500 clients annually (Manoudi et al, 2014[43]).

In an attempt to improve the effectiveness of the services provided, Indonesia has allowed the private sector to become a provider of labour market services, establishing the Lem*baga Penempatan Tenaga Kerja Swasta* (LPTKS), which can provide services upon approval from the Ministry of Manpower at the national level or the Governor at the provincial level. In 2011, there were 97 LPTKS. The location of the centres does not seem to be determined by the level of unemployment, formality of the labour market or the number of large enterprises, but rather by the number of sub-districts and population size and influenced by access to internet (Allen and Kim, 2015[41]). This suggests that the emergence of new centres might not take place in provinces and areas most in need. In addition, collaboration between public and private providers of labour market services is often challenging. Public and private services share little information with each other.

4.4.2. The effectiveness of job placement is limited because of a lack of engagement with jobseekers and employers and under-resourced public services

Few jobseekers find a job by registering in the online job placement platform managed by the Ministry of Manpower. In 2018, there was a total of 539 730 registered jobseekers on the *Info Pasar Kerja* website and 485 212 job vacancies posted on the website, but only 3% of registered jobseekers (about 17 600) found a job through the website. In addition, there is substantial variation in the availability of employment opportunities across provinces. For example, there were almost 200 000 vacancies registered in Bengkulu, while no vacancy was reported in North Kalimantan and North Sulawesi. Recruitment is also concentrated geographically, with 40% of registered jobseekers who found a job in Central Java in 2018. The information collected in some provinces is also incomplete, hampering the effectiveness of online job platforms. For example, in Bengkulu and the Special Capital Region of Jakarta, among other provinces, no data is reported on the number of jobseekers who found a job through the online platform.

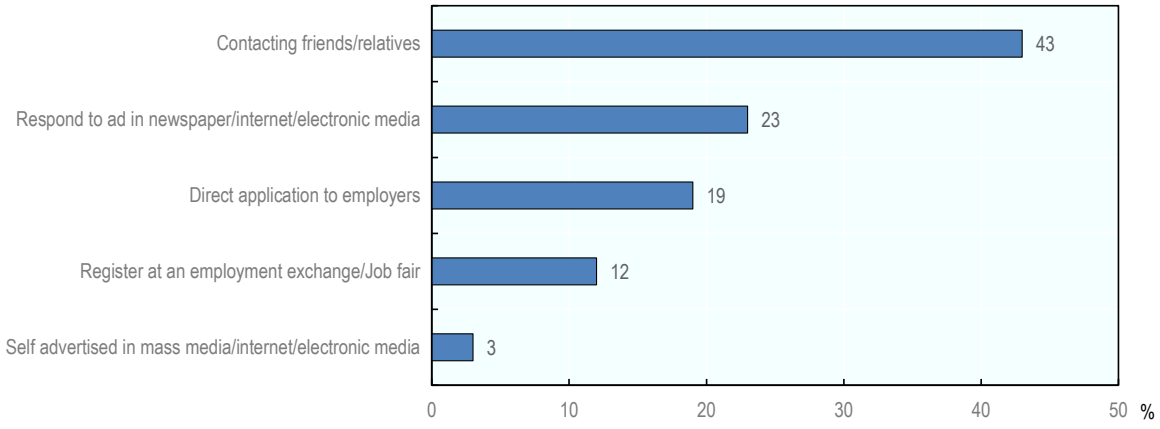
While job placement services can play a crucial role in the functioning of the labour market, they tend to be rather weak. The national budget provides local governments with allocations to support the functioning of these institutions; however, there is often insufficient budget to cover all districts. Private providers also operate labour market services, but reporting and co-ordination between the private sector and the

government is limited (Allen, 2016[2]). In addition, limited budget contributes to the use of outdated software for job placement, which hampers their effectiveness.

Most young people in Indonesia currently find a job through personal connections. Over 40% of young people aged 19-29 report contacting friends or relatives to find a job, making it the most common job search method. Most 19-29 year-olds still search for jobs through their social network and only one in five look for jobs using digital technology. Limited ICT access and skills, as well as poor basic education outcomes and cultural barriers might be among the factors causing poor use of digital technologies to look for jobs.

Figure 4.19. How do young people find a job in Indonesia?

Job search efforts, 19-29 year olds



Source: SAKERNAS February 2019.

4.4.3. More comprehensive local labour market information is required to inform planning and job placements

Labour market information data is instrumental in informing education and skills planning as well as workforce development programmes. Two core types of labour market information are collected in Indonesia: macro data, collected by Statistics Indonesia, and micro data collected by the Ministry of Manpower (Allen and Kim, 2015[41]). On one hand, Statistics Indonesia gathers data through labour surveys of households and provides information on the characteristics of those employed, such as sectoral employment, occupation, wages, working hours and status in employment. On the other hand, the Ministry of Manpower gathers administrative data on jobseekers, job vacancies and placements through public and private services as well as its online systems. Administrative data on labour demand (job vacancies) and labour supply (jobseekers) are crucial to monitor employment outcomes across the economy, providing signals for policy interventions. For example, they can provide information on matches or mismatches between the skills of jobseekers and those required by employers at the local level. They can also capture occupational growth by sector and segment of society, providing a detailed picture of local labour markets. The Indonesian labour market information system lacks a labour market signalling framework, which can provide detailed analysis on labour demand and supply fluctuations in different local labour markets (Allen and Kim, 2015[41]).

Although both the *3 in 1 Kiosks* and the *Info Pasar Kerja* provide useful tools to collect labour market information, jobseekers and job postings across the country, there is room to enhance the comprehensiveness of such data. In some rural and remote provinces, provincial labour office staff collect

information on jobseekers and businesses' employee needs, pointing to personnel shortages as a relevant constraint hampering the effectiveness of labour market services. The quality of data collected is also influenced by decentralisation and the mobility of civil servants, as the movement of staff at the district and province levels has seen trained staff being promoted and replaced with new staff that needs training (Allen and Kim, 2015[41]). In addition, information sharing between local employment offices and other institutions dealing with vocational education and training, including SMKs and BLKs, is limited. Information sharing would allow for a better targeting of vocational education and training programmes, which could result in the development of a "work-ready" workforce. Furthermore, companies are sometimes reluctant to share information with the government.

4.5. What can Indonesia learn from other countries?

As most countries in the ASEAN region, Indonesia does not have fully functional labour market services. Within OECD countries, the main functions of services often include job-brokerage; development of labour market information; administration of labour market adjustment programmes; and administration of unemployment benefits (OECD, 2015[40]). There are a number of common strategies, which could inform the future development of labour market services in Indonesia.

Human capital and talent management systems could be at the core of labour market services in Indonesia. Effective human capital management requires an understanding of how to drive skills and competencies development to nurture talent for meeting current and future needs. It includes an understanding of sectoral developments, critical occupations, existing and emerging skills and competency requirements, career pathways, information on training programmes and skills recognition. Effective human capital management can help facilitate the modernisation of education and training programmes and related policies, by enhancing the relevance of skills for a more competitive and employable workforce, while also assisting businesses in technology transformations.

In the face of the economic consequences of the ongoing COVID-19 pandemic crisis, improved local labour market services will be needed to get people back into work. The pandemic crisis is likely to heavily affect the economy and lead to workers lay-offs, with some sectors and segments of the population being hit particularly hard. Building the institutional capacity of government, engaging local employers and ensuring coverage reaches rural and remote areas can support recovery in the labour market in the aftermath of the crisis. The use of digital technologies and online delivery represents an opportunity for labour market services in Indonesia, which could become even more important given lockdown measures linked to COVID-19.

4.5.1. Building the institutional capacity at the local level

The considerable diversity in the institutional arrangements, service delivery structures and overall provision of services demonstrates that there is no one size fits all approach to delivering labour market services (OECD, 2015[40]). One cross-cutting issue for these services – especially in emerging economies – is overall capacity limitations (e.g. ensuring coverage of rural areas, and having adequate numbers of staff per office). Thus, basic institutional development may be the first step needed to strengthen services in some countries. In the Philippines, recent reforms have been introduced to "professionalise" the employment services function (see Box 4.7).

Box 4.7. Professionalising local employment services: lessons from the Philippines reforms to public employment services in the Philippines

A law introduced in 2015 mandates that Public Employment Service Offices (PESOs) should be established in all provinces, cities, and municipalities and operated and maintained by Local Government Units (LGUs) in the Philippines. Regional offices of the DOLE will provide co-ordination and technical supervision to the PESOs, while the central office of the DOLE will organise and facilitate the national public employment service network. In addition to these functions, every PESO must now undertake activities to transform the PESOs into a modern public employment service intermediary that provides multidimensional employment facilitation services. Under the new law, the PESO shall have the following functions (Republic Act No. 10691):

- Encourage employers to submit a list of job vacancies in their respective establishments to the PESO on a regular basis in order to facilitate the exchange of labour market information between jobseekers and employers by providing employment information services to jobseekers, both for local and overseas employment, and recruitment assistance to employers;
- Develop and administer testing and evaluation instruments for effective job selection, training and counselling;
- Provide persons with entrepreneurship qualities with access to the various livelihood and self-employment programmes offered by both government and nongovernmental organisations at the provincial, city, municipal and barangay levels;
- Undertake employability enhancement training or seminars for jobseekers, as well as those who would like to change career or enhance their employability;
- Provide employment or occupational counselling, career guidance, mass motivation and values development activities;
- Conduct pre-employment counselling and orientation to prospective local and, most especially, overseas workers.

Source: OECD/ADB (2017[44]), *Employment and Skills Strategies in the Philippines*, OECD Reviews on Local Job Creation, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264273436-en.

4.5.2. Utilising multiple service delivery channels

The channels available for the provision of labour market services have changed dramatically over the past 25 years, from traditional face-to-face and mail channels and the introduction of electronic channels such as websites and e-mail, to the arrival of social media, mobile applications and services (IADB/WAPES/OECD, 2016[45]). Additionally, the use of new technologies for more back-office functions such as collecting labour market information is also taking on increasing importance. The internet has become an increasingly important channel for delivering services. Online technologies can be used for standardised procedures such as initial registration and posting job vacancies; personalised interactions between staff and clients; casework counselling functions; and skills training and development (OECD, 2015[40]). As an example, in France, the website *Bob Emploi* uses Artificial Intelligence (AI) to provide jobseekers with a diagnostic of their profile and of the target job market, and offers personalised counsel to improve the efficacy of job search. Online vacancy databases are the most used vacancy platforms as measured by the proportion of all vacancies in the economy notified to the employment services database. For instance, in Germany, around 50% of all vacancies are reported to the public employment service (Bundesagentur für Arbeit, 2015[46]). A recent initiative in Cambodia aims to improve the effectiveness of the already existing online job platform (see Box 4.8).

While online services can be a cost effective way of reaching a broader audience, their use should be monitored carefully. The success of web-based channels is predicated on the level and quality of internet access, and the degree of internet usage and skills of client groups (OECD, 2015[40]) (IADB/WAPES/OECD, 2016[45]). In some provinces and regions of Indonesia, face-to-face contact may continue to be the most effective way of delivering certain types of services.

Box 4.8. Improving the effectiveness of online job portals: example from Cambodia

Cambodia's National Employment Agency (NEA), established in 2009, provides basic employment services in the country. Operational as of 2010, NEA has been mandated with collecting and analysing labour market data and information. In addition to 13 NEA job centres and a mobile job centre, NEA also established a web portal to provide basic support for jobseekers and employers. This includes posting and managing of curricula and vacancies, search for jobs and applicants, customised information by occupations, industries and educational background, as well as initial matching. NEA has also introduced a mobile job search application, allowing jobseekers to search for information through their mobile phones.

Cambodia and Korea have recently undertaken a project (the Korea-Cambodia WorkNet) aiming to improve the functioning of Cambodia's public employment services. The project will consist of three phases. A first phase has been undertaken in 2018 with the objective of designing an IT service model and system architecture for the modernisation of Cambodia's PES. Surveys and analysis were conducted to develop an information strategic plan. The second year will entail the development of the employment service portal, the construction of IT infrastructure as well as the development of local IT technical capacities to operate the service. The third year aims to stabilise and maintain the functioning of the new portal.

The WorkNet project is expected to significantly improve the quality and effectiveness of Cambodia's public employment services. The new system will automatise a number of functions that were initially performed manually by PES staff, while also contributing to improving the quality of hard and soft IT infrastructure. It will also extend the access to services to external users and expand the range of services offered, such as video interviews.

Source: Ministry of Labour and Vocational Training, National Employment Agency and WAPES (2019[47]), *Development of WorkNet in Cambodia.*

4.5.3. Profiling jobseekers and adapting intensity of services

Profiling tools used during initial registration can help in the development of individualised action plans to tailor services appropriately. For example, in Australia, jobseekers are allocated to one of three streams with varying intensities of supports to them get back into work (OECD, 2014[48]). As highlighted above, new technologies can provide efficiencies in terms of expanding the scope and coverage of these services. They can also help in profiling jobseekers and better matching their skills to the needs of the labour market (see Box 4.9).

Some OECD countries have specialised offices or service delivery organisations that serve specific target groups. Labour market services in Indonesia often fail to reach out to those most in need. The pre-employment card recently introduced by the government, *Kartu prakerja,* represents an important tool to support youth, jobseekers and workers upgrade their skills and find jobs. The pre-employment card program offers 900 courses, including English for tour guides, accounting, information technology and business management, in partnership with local institutions. The card has gained even more prominence

in Indonesia in light of COVID-19 as it can provide help to furloughed workers navigate the labour market in times of crisis. Indonesia can also look at other countries who are implementing effective employment programmes for young people. Examples from Malta and Iceland highlight the importance of providing career guidance and counselling services, together with services that foster skills development and inform young people about job opportunities (see Box 4.10).

Box 4.9. Adopting profiling techniques to better match jobseekers to jobs: lessons from Flanders (Belgium)

Some public employment services, such as the *Vlaamse Dienst voor Arbeidsbemiddeling en Beroepsopleiding* (VDAB), Belgium's (Flanders), have adopted skills profiling in characterising jobseekers, to facilitate matches, assess jobseekers' risk of unemployment and better inform their needs. By undertaking a skills profiling, VDAB captures and describes a jobseeker's potential in terms of generic and soft skills, and requires employers to include more detailed information on skill requirements in their vacancies. Skills profiling can result in an increased exit rate from unemployment, a reduction in the number of long-term unemployed as well as in the average duration of unemployment and increased satisfaction for both jobseeker and employer.

VDAB has also pioneered the use of innovative techniques and data, such as machine learning algorithms, for profiling. The profiling model estimates a jobseeker's probability of being unemployed for more than 6 months utilising a random forest model, using several different variables. The underlying data includes information on jobseekers' socio-economic characteristics and labour market history. An additional innovation introduced by VDAB is the use of "click data", monitoring jobseekers' activity on VDAB's website, including clicking on job vacancies, which is used as a proxy for motivation and job search behaviour. The new statistical model is part of a strategy to reach and screen all new jobseekers within six weeks after registration at the PES.

Source: OECD (2018[49]), *Profiling tools for early identification of jobseekers who need extra support*, OECD, Paris, http://www.oecd.org/employment/connecting-people-with-good-jobs.htm (accessed on 20 May 2019); OECD (2016[50]), *Getting Skills Right: Assessing and Anticipating Changing Skill Needs*, Getting Skills Right, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264252073-en; European Training Foundation / European Centre for the Development of Vocational Training / and International Labour Office (2015[51]), *The role of employment service providers: guide to anticipating and matching skills and jobs*, European Training Foundation / European Centre for the Development of Vocational Training / International Labour Office, Luxembourg, http://dx.doi.org/10.2816/691999.

Box 4.10. Providing counselling and career guidance to young people: examples from Malta and Iceland

The Employment and Training Corporation (ETC) launched the Youth Employment Programme (YEP) in Malta in 2010. The programme was partly funded by the European Social Fund, and aims to promote the integration of youth aged 16-24 in the labour market. A website (www.youth.org.mt/) was developed as part of the programme. It includes a section dedicated to youth aged 16-24 who have just finished school, are following a course or looking for works, are registered as unemployed or are employed but want to improve their skills and job prospects. As part of the website, information is provided on guidance services, workshops and youth discussions, career guidance tools as well as vacancies. Youth can also chat online with one of the programme's team professionals to get targeted counselling.

In addition, Youth Days with targeted workshops and job fairs have been organised as part of the programme, as well as a TV show aimed at tackling topics related to youth and the labour market. Finally, YEP also provides targeted consultancy services to young people through a team of career guidance practitioners, psychologists, therapists and young workers.

In Iceland, the "Activating the young" programme was introduced in 2009 to provide several measures aimed at fostering youth employment. The goal of the initiative was to ensure that young people aged 16 – 24 are guaranteed a work resolution within three months from the start of unemployment, re-activating youth in education or work in co-operation with main actors in the education system, volunteer organisations and the labour market. Special attention was given to young people that had not continued studying after primary school. Main activities included private counselling, courses to increase self-esteem and provide psychological support, volunteer work, and the provision of courses in secondary schools as well as vocational courses. Individuals receive counselling upon registration at the Directory of Labour, and choose a set of three measures that interest them the most. The programme was developed to assist youth aged 16-24 and the results from the first year showed that four months after starting the programme almost half of the registered young people were not unemployed anymore. The programme also aimed to provide an incentive for young people to take on a job. Youth jobseekers who had been registered as unemployed for more than four weeks and decline to take part in the measures cannot claim benefits for the next two months, while a second refusal causes a loss of benefits for three months and a third revokes the benefit entitlement completely.

Source: European Commission (2017[52]), *Youth policies in Iceland: 2017*, https://eacea.ec.europa.eu/national-policies/en/youthwiki (accessed on 19 June 2019); European Commission (2011[53]), *European Employment Observatory Review: Youth Employment Measures*, European Commission, http://ec.europa.eu/social/BlobServlet?docId=12087&langId=en (accessed on 19 June 2019); YEP (n.d.[54]), *Youth Employment Programme web page*, https://www.youth.org.mt/? (accessed on 19 June 2019).

4.5.4. Building local employer engagement and buy-in

In order to develop services which are more responsive to the needs of local businesses and jobseekers, these could establish closer linkages with local stakeholders and find joint solutions on how to improve services. Moreover, more needs to be done to better engage employers in gathering vacancy information and job matching. Research in OECD countries identifies two general models for employer engagement: (i) organisational models in which the same employment service counsellors work with both employers and jobseekers, and (ii) organisational models in which employment services have dedicated employer relationship staff (OECD, 2015[40]). For example, in Australia, employment services providers often have a "reverse marketing" function that actively works with employers to identify job vacancies (Box 4.11). The latter can be further broken down based on whether employment services staff specialise in particular sectors or business sizes and whether there are account managers that deal with particularly large clients. For example, in France, the employment service has formal agreements with large company networks and industry sectors concerning recruitment support (OECD, 2015[55]). France also provides dedicated spaces for jobseekers and new businesses to come together, which creates opportunities for recruitment (see Box 4.12). Another approach is to engage with job vacancy platforms and other platform service providers.

Box 4.11. Actively marketing jobseekers to potential employers: lessons from Australia

The expression "reverse marketing" describes a marketer who helps consumers achieve their goals without trying to sell them anything. It makes the consumer come to a business, instead of vice versa. In the Australian employment services industry, reverse marketing refers to the practice of providers actively marketing jobseekers to potential employers where vacancies have not been advertised, and to refer and place jobseekers into those jobs. Reverse marketing provides a mechanism to stimulate demand for labour by anticipating employers' labour needs before they create a vacancy. It can play an important role in the employment services framework providing job-ready jobseekers with access to vacancies that may not otherwise exist.

Reverse marketers target specific employers with whom the jobseeker is likely to be able to find sustainable employment. This entails understanding the skills, attributes and desire of the jobseeker to work in a specific industry and matching these to local employers who are most likely to need additional labour, as well as having a strategy to "sell" the jobseeker to these employers. It is in the best interests of both providers and jobseekers that providers target their reverse marketing activities according to the needs of their local labour market and the skills and aspirations of the individual jobseekers on their caseload.

Source: OECD (2014[48]), *Employment and Skills Strategies in Australia*, OECD Reviews on Local Job Creation, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264207899-en.

Box 4.12. Improving the effectiveness of PES by engaging local stakeholders: the experience of the LAB in France

The LAB provides a dedicated physical space within French PES for employees and stakeholders, including businesses, jobseekers, students, companies, start-ups, recruiters, partners, experts, researchers and academics, to come together and develop new and innovative services for users. These services help make PES more effective by involving internal and external stakeholders, avoiding silo approaches, fostering collaboration and promoting agility by offering new services achieving concrete results. The LAB was initially developed internally by PES staff, but the decision to implement the project and set up the national LAB was taken in 2014 by the French Ministry of Labour. Subsequently, other regional offices were opened across regions in France, for a total of eight physical labs in 2019. Ten mobile pop-up LABs were also established, with trained French PES personnel providing services upon request.

Requests for support from the LAB are made from French PES staff, and every month, two to three projects are selected for support. The person who proposes the project is called "sponsor". The LAB offers two main services: "flash co-design", a collaborative and creative approach at different stages in the progress of a project; and project acceleration, supporting acceleration of a project through collaborative sessions. When a project is selected for support from the LAB, the team invites participants to a creative session at one of the LAB spaces in France, which usually lasts between one to four days, bringing together around 45 internal and external actors. Project acceleration usually involves more collaborative sessions within a period of eight to ten weeks. A maximum of 60 internal and external people participate in creative sessions, bringing their own ideas, expertise and experience to the table. Depending on the nature of the project and the problem-solving process, different internal

and external stakeholders participate in sessions. For example, if the project is related to an internal PES-related issue, it is more likely that the majority of participants will be French PES employees.

The sessions use interactive approaches to accelerate idea conception and exchanges among participants. During sessions, job titles are not revealed to minimise the effect of possible hierarchies on the discussion. The creative technique used consists of several phases: first, knowledge about the topic is communicated, secondly the subject is developed in an iterative manner, and finally, decisions are taken on solutions and their implementation. After each meeting day, meetings between the sponsor and the LAB team are held to discuss any session modification needed, and six to eight weeks after the creative session, a "cold feedback" is held to know if, in practice, the results of the creative sessions were useful for the sponsors. Creative sessions are overseen by the French PES, whose personnel has received training on facilitation.

Source: European Commission (2019[56]), *PES Practices database*, https://ec.europa.eu/social/main.jsp?catId=1206&langId=en (accessed on 21 May 2019).

4.5.5. Ensuring coverage reaches rural and remote areas

The capacity of labour market services in Indonesia is generally limited, but it is even more challenging in rural and remote provinces, which are characterised by lower population density levels, a business population made of micro-enterprises and sparsely distributed jobseekers over the territory. Leveraging digital solutions, as well as building capacity of the staff and ensuring that the mobility of staff that have already been trained does not hamper the effective provision of services, can help reach a broader audience, especially in scarcely populated regions. The importance of leveraging digital solutions to provide labour market services has become even more prominent in light of COVID-19, and many countries have adopted digital technologies to expand the provision of services (see Box 4.13). Innovative approaches can also be taken to bring services to more rural and remote regions.

Within the Russian Federation, Mexico, Argentina, and Turkey, a decentralised approach has been adopted where employment services focus on delivering services to jobseekers in large urban areas while using partnership arrangements with other stakeholders to deliver services in smaller remote communities and rural areas. These partners include local governments at the provincial, municipal and county levels, NGOs, and private agencies. In China, a network of public employment services supports rural migrant workers in securing decent jobs in cities. These centres follow a "Three in One" model, which consists of ensuring training, employment and labour rights for these clients.

Box 4.13. Leveraging digital technologies to provide labour market services

Since the beginning of the pandemic, Public Employment Services (PES) worldwide have worked to mitigate the impact on the labour market. Measures such as unemployment benefits, as well as other cash transfers and firm support schemes, have been instrumental in preserving jobs and skills, supporting employment and protecting vulnerable workers.

Countries that had digitalised their employment support services prior to the pandemic and those with a clear digital transformation strategy, have responded more effectively to the challenges posed by COVID-19. They have used remote service delivery to ensure their services continued during lockdowns. In addition, they have used digital technologies to provide online registration, automated job-matching, and guidance and webinars.

Digital channels have made support services accessible outside normal office hours, and to more people. They have also allowed for more transparent systems for matching vacancies and jobseekers. Examples of countries that have successfully upgraded their labour market services through digital technologies during the pandemic include:

- Spain: During the lockdown local employment offices relied heavily on the online jobs portal, a toll-free number for jobseekers, and the 'virtual office desk' that was activated to adapt services to the restrictions caused by COVID-19;
- China: The PES adopted remote interaction between counsellors and clients using an online chat system, "WeChat Official Accounts", which was introduced prior to the pandemic;
- India and Uruguay: PES encouraged the registration of jobseekers and the listing of vacancies using online job portals, which also provided access to training and online job fairs;
- The Netherlands: During the pandemic lockdown, the PES arranged video meetings and conducted webinars with clients;
- Morocco: The PES used mobile units, staffed by counsellors specifically trained to serve groups of the population not able to access the PES remotely, to reach clients in remote rural and urban areas.

Source: Modern Diplomacy (2020[57]), *Digital channels improve access to employment support*, https://moderndiplomacy.eu/2020/08/27/digital-channels-improve-access-to-employment-support/ (accessed on 2 September 2020).

Conclusion

Going forward, local labour market services will play a critical role in tackling disparities in employment outcomes across segments of the population and provinces in Indonesia. They can help to bring workers out of the informal economy and provide opportunities for young people to find a job. Indonesia could take further steps to tackle challenges linked to labour market services, such as lacking capacity and coverage, limited engagement with jobseekers and employers, and incomplete labour market information. While effective labour market services connect people to good jobs, these services should be complemented by efforts to improve skills outcomes and foster skills development opportunities, to ensure that workers and students develop the skills needed in local labour markets. Human capital and talent management information systems, including understanding of sector developments, critical occupations, emerging skills needs and requirements, information on training and skills recognition, could help facilitate the modernisation of education and training programmes and related policies.

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OECD Reviews on Local Job Creation

Employment and Skills Strategies in Indonesia

This report comes at a time when policy makers are challenged by the COVID-19 crisis that is generating a profound reflection on economic and social well-being. Before COVID-19 hit, Indonesia had experienced remarkable economic growth, making substantial progress in poverty reduction and gains in employment. However, there are large differences in outcomes across Indonesian provinces, which often reflect the quality of local infrastructure, services, education, and jobs. This joint Asian Development Bank (ADB) and Organisation for Economic Co-operation and Development (OECD) study sheds light on challenges and opportunities to promote employment and skills outcomes at the local level in Indonesia. The analysis presented in this OECD/ADB report shows the importance of strengthening local institutions managing and delivering employment and skills policies.

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