

# **1 The importance of vocational education and training in the Thai education system and labour market**

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This chapter provides an overview of the main features, performance and recent trends of the Thai education system and labour market. It pays particular attention to the role of vocational education and training (VET) in the Thai education system and the way it is organised. This chapter sets the scene for the rest of the report by bringing some of the main challenges and opportunities in the areas of education and employment to light.

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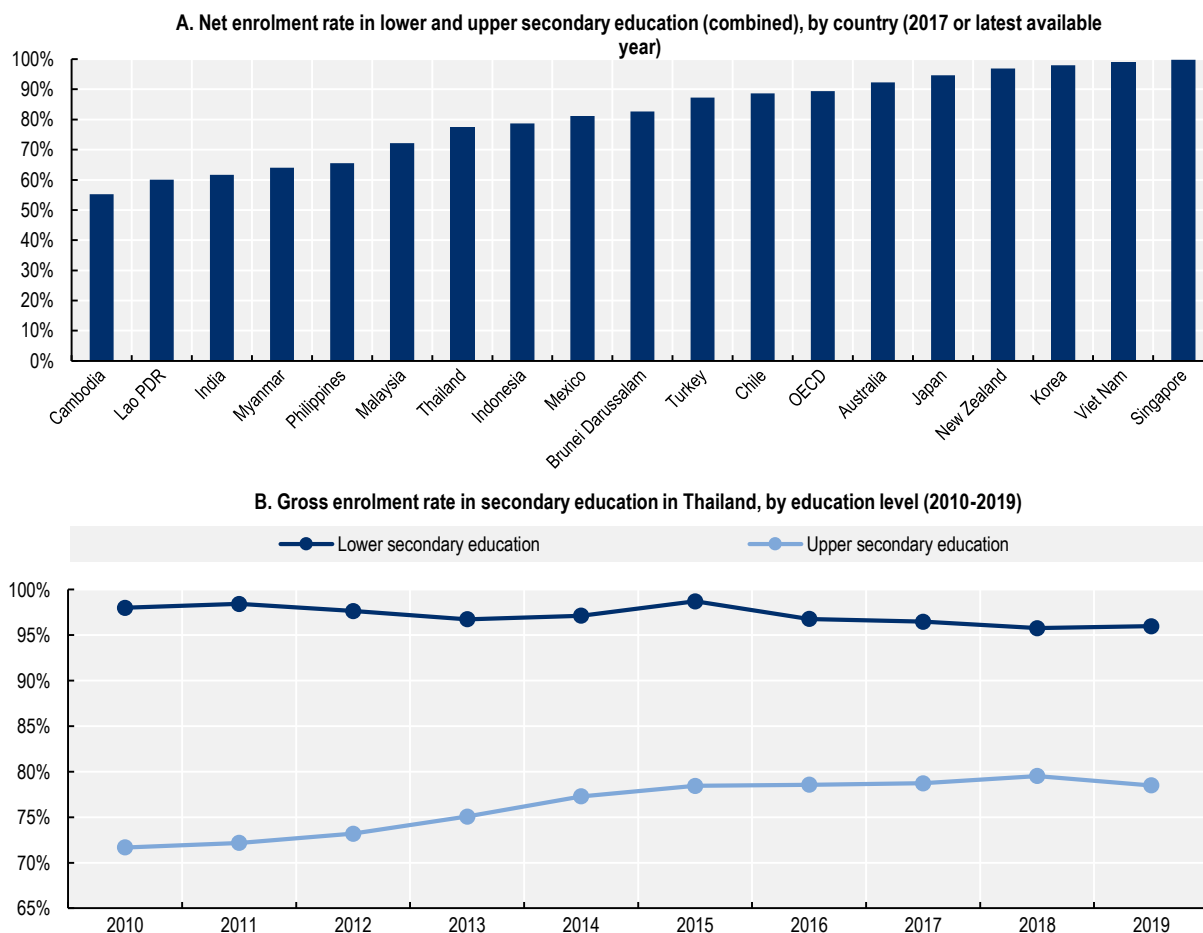
## The position and role of VET in the Thai education system

### ***The educational attainment of the Thai working population is on the rise***

Thailand has recently shown important progress in facilitating access to secondary education for all children. Enrolment in the basic education system begins at the age of six, and all students are required to complete the compulsory nine years up to lower-secondary level (see Box 1.1 for more information on the Thai education system). According to UNESCO, by 2019 the net enrolment rate in primary education in Thailand was close to 95% (UNESCO Institute for Statistics, 2021<sup>[1]</sup>). In secondary education, the net enrolment rate was 77% (in 2015, see Figure 1.1, Panel A). In comparative terms, Thailand's net enrolment rate is close to other higher middle-income countries and higher than many of its neighbouring countries. For instance, net enrolment rates for secondary education in Myanmar, Lao People's Democratic Republic (Lao PDR) and India are around 60%, whereas Indonesia and Malaysia show similar levels to Thailand. In recent years, access to upper secondary education increased considerably in Thailand from a gross enrolment ratio of 72% in 2010 to 78% in 2019 (Figure 1.1, Panel B). A significant effort has been put into integrating both girls and boys into the formal education system, and they now have very similar enrolment rates in secondary education.

Thanks to the progress made in increasing enrolment rates in primary and secondary education, Thailand today has a much more educated adult population than in previous decades. In 2018, according to the Thai Labour Force Survey, 39% of adults had attained upper secondary education or more (see Figure 1.2). When compared to previous generations, young adults today enjoy higher levels of education, including tertiary education and vocational diplomas. The share of adults with at least upper secondary educational attainment goes up to 47% for adults aged 35 to 44 and to 58% for adults aged 25 to 34. As discussed later, individuals achieving upper secondary education, and particularly VET qualifications, have access to a more diverse set of job opportunities and comparatively better wages than adults who have not completed upper secondary education.

**Figure 1.1. Student enrolment rates in secondary education have increased substantially**

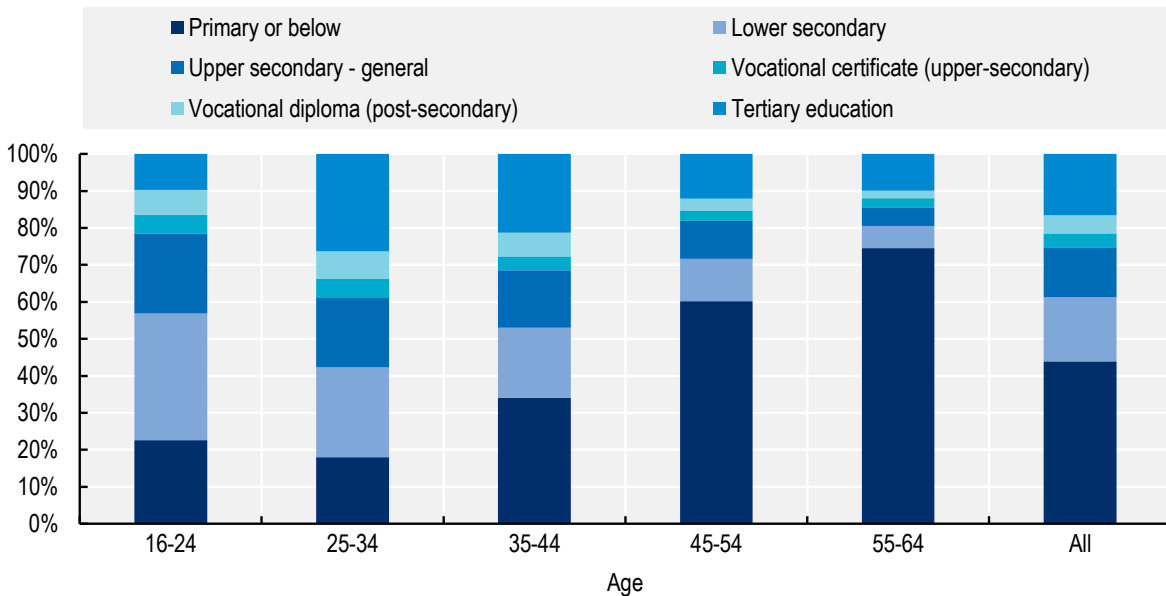


Note: The Net Enrolment Rate (Panel A) aims to measure the actual school participation of official school age population for a given level of education. It corresponds to the number of students of the official age group for a given level of education who are enrolled in any level of education, expressed as a percentage of the corresponding population. The Gross Enrolment Ratio (Panel B) aims to show the general level of participation in a given level of education. It indicates the capacity of the education system to enrol students of a particular age group. It corresponds to the number of students enrolled in a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education (UNESCO-UIS, 2021<sup>[2]</sup>).

Source: UNESCO Institute for Statistics (2021<sup>[1]</sup>), National Monitoring Database, [http://data.uis.unesco.org/Index.aspx?DataSetCode=NATMON\\_DS](http://data.uis.unesco.org/Index.aspx?DataSetCode=NATMON_DS) (Panel A); Office of Permanent Secretary for the Ministry of Education (2021<sup>[3]</sup>), Education Statistics, [http://www.mis.moe.go.th/index.php?option=com\\_content&view=category&id=173&Itemid=114](http://www.mis.moe.go.th/index.php?option=com_content&view=category&id=173&Itemid=114) (Panel B).

**Figure 1.2. The educational attainment of Thai adults is rising steadily**

Educational attainment of adults who are not studying, by age (2018)



Note: "All" refers to adults aged 16 to 64. "Upper secondary general" also includes upper secondary programmes that are neither general nor vocational diploma programmes (representing a negligible share of educational attainment). "Tertiary" also includes short-cycle general programmes (representing a negligible share of educational attainment).

Source: Authors' calculations using 2018 Thai Labour Force Survey data, National Statistics Office (2021<sup>[4]</sup>), Thai Labour Force Survey, <http://www.nso.go.th/sites/2014en/Pages/Statistical%20Themes/Population-Society/Labour/Labour-Force.aspx>.

### Box 1.1. The Thai education system

#### The Thai initial education system

The formal Thai education system consists of 12 years of basic education: six years of primary schooling, followed by three years of lower secondary, and then three years of upper secondary. Enrolment in the basic education system begins at the age of six, and all students are required to complete the compulsory nine years up to the end of the lower-secondary level (International Labour Organization, 2016<sup>[5]</sup>).

VET starts at upper secondary level; students who complete lower secondary education can choose to enter the vocational stream, or stay on and complete the general education stream. A vocational certificate is provided upon completion of the three-year programme. Regardless of choice, graduates from both the general and vocational streams are considered equally qualified to sit for national university entrance examinations after completing upper secondary education (International Labour Organization, 2016<sup>[5]</sup>).

### The organisation of VET in the Thai education system

According to the 2008 Vocational Education Act, three types of vocational education and training are provided, namely formal technical and vocational education and training; non-formal technical and vocational education and training; and dual vocational training programmes.

As for formal technical and vocational education and training, it is conducted in educational institutions at three levels:

- Upper secondary, leading to the lower certificate of vocational education (ISCED level 3)
- Postsecondary, leading to a diploma or associate's degree in vocational education (ISCED level 5)
- Higher education level, leading to a bachelor degree of technology (ISCED level 6).

Dual training programmes, that alternate education in school and training at work, are offered at both upper secondary and postsecondary levels.

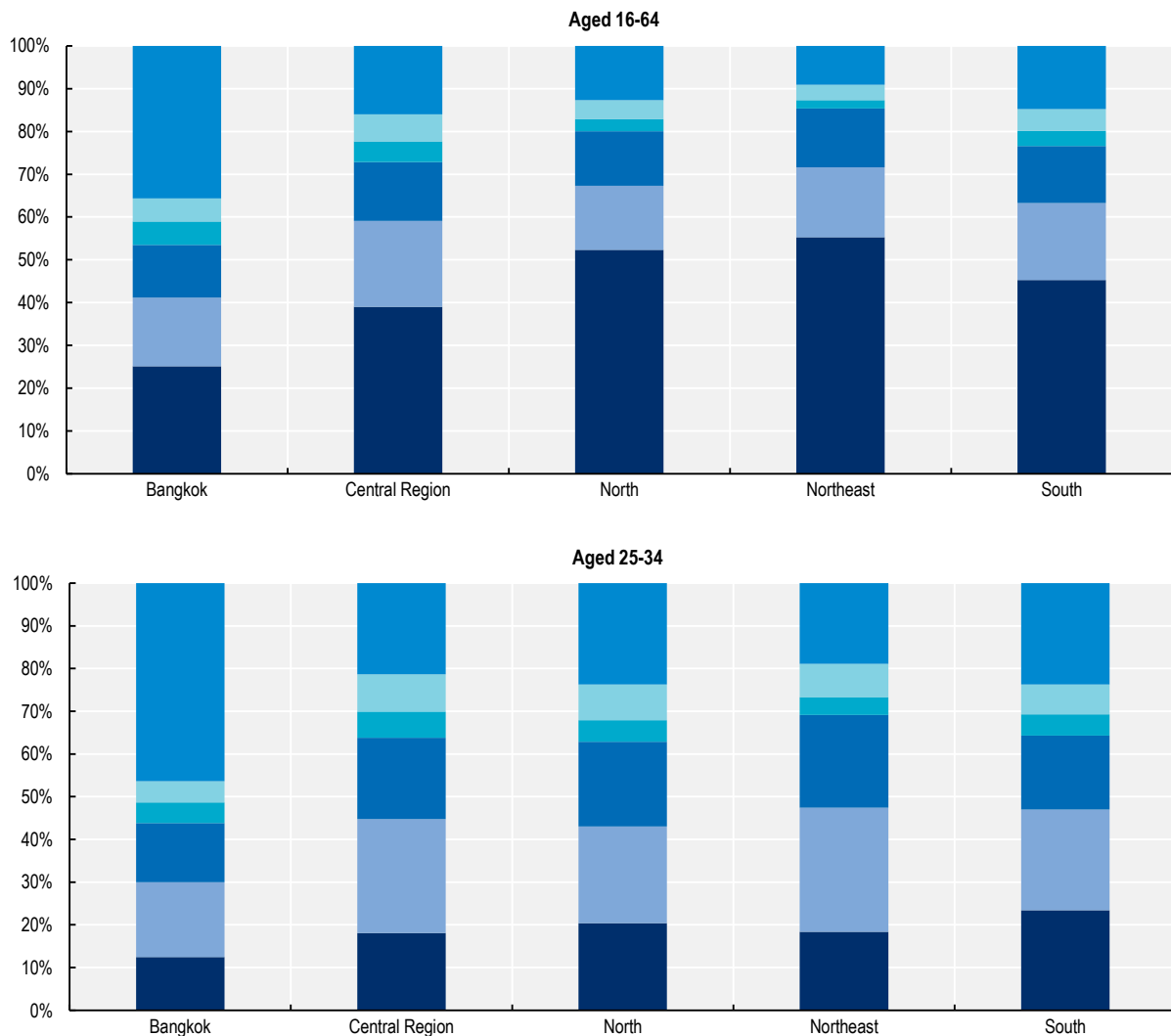
The focus of this report is on formal and dual vocational programmes at the upper secondary and post-secondary level. However, the formal bachelor of technology programmes are included when relevant. Non-formal programmes are outside the scope of this report, but -as highlighted later in the chapter (Box 1.3)- these types of programmes are fairly common in Thailand.

Source: Office of the Education Council (2017<sup>[6]</sup>), Education in Thailand, [https://www.bic.moe.go.th/images/stories/pdf/EDUCATION\\_IN\\_THAILAND\\_2017.pdf](https://www.bic.moe.go.th/images/stories/pdf/EDUCATION_IN_THAILAND_2017.pdf); International Labour Organization (2016<sup>[5]</sup>), Compilation of assessment studies on technical vocational education and training (TVET): Lao People's Democratic Republic, Mongolia, the Philippines, Thailand and Viet Nam, [https://www.ilo.org/asia/publications/WCMS\\_458131/lang-en/index.htm](https://www.ilo.org/asia/publications/WCMS_458131/lang-en/index.htm).

Educational attainment differs between regions in Thailand, see Figure 1.3. In Bangkok, for example, in 2018, around 35% of adults had achieved tertiary education, while this was less than 15% in the North and Northeast regions. The proportion of adults having only achieved primary education or below was close to 55% in both the North and Northeast regions. Moreover, the proportion of adults who hold a VET certificate or diploma is relatively low in all regions, ranging between 6% in the Northeast and 11% in the Central region. Educational attainment is on the rise in all regions, with young adults being much less likely to have at most primary educational attainment and a larger share of young adults having a tertiary qualification. However, regional differences remain substantial also in the young age group, especially between Bangkok and the rest of the country. Regional disparities are analysed in depth in Chapter 2.

**Figure 1.3. Educational attainment differs between regions in Thailand**

Educational attainment of adults aged 16 to 64 who are not studying, by age (2018)



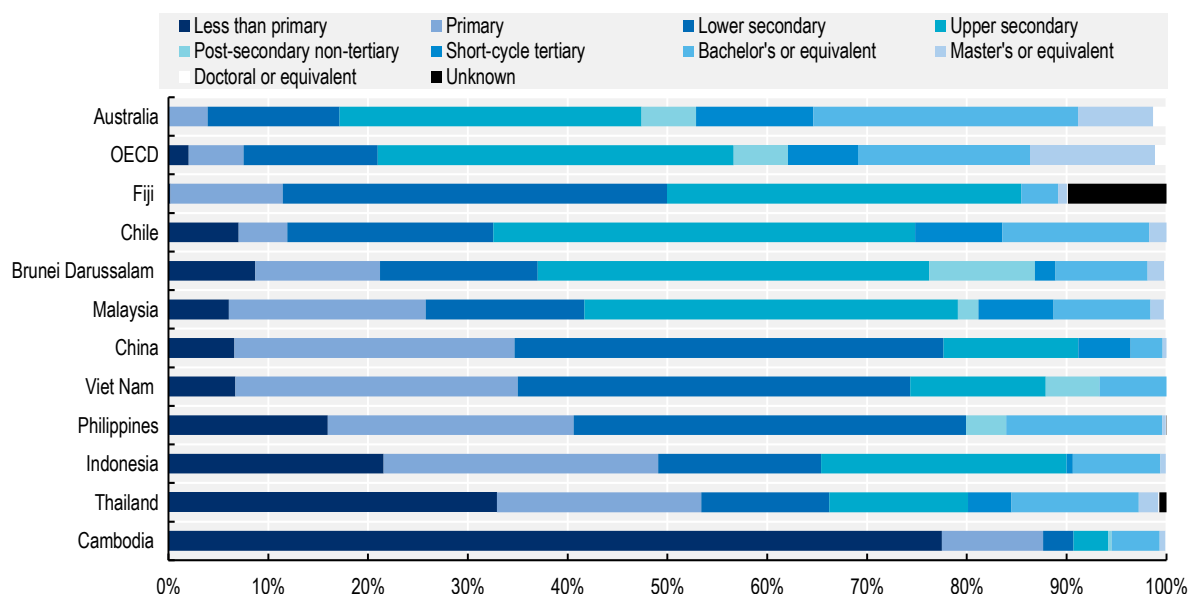
Note: "Upper secondary general" also includes upper secondary programmes that are neither general nor vocational diploma programmes (representing a negligible share of educational attainment). "Tertiary" also includes short-cycle general programmes (representing a negligible share of educational attainment).

Source: Authors' calculations using 2018 Thai Labour Force Survey data, National Statistics Office (2021<sup>[4]</sup>), Thai Labour Force Survey, <http://www.nso.go.th/sites/2014en/Pages/Statistical%20Themes/Population-Society/Labour/Labour-Force.aspx>.

From an international perspective, and despite recent improvements, educational attainment in Thailand is still low when compared to certain other countries in the region and the OECD average (see Figure 1.4). In 2018, the proportion of adults aged 25 or more, having attained primary education or less, was just over 50% in Thailand, which is higher than in neighbouring countries such as Brunei Darussalam (21%), Malaysia (26%) and Viet Nam (35%), but similar as in Indonesia (49%) and lower than in Cambodia (87%). The proportion of Thai adults with postsecondary education was 19% in 2018, similar to what is observed in Brunei Darussalam (24%), Chile (22%), Malaysia (21%) and Philippines (20%), but much lower than in most OECD countries like Australia (53%) or the OECD average (45%).

**Figure 1.4. Compared to other countries, the educational attainment of the Thai adult population remains low**

Share of population by educational attainment, population 25 years and older (2018, or latest available year)



Note: Information for Australia, Chile and the OECD average corresponds to *OECD Education at a Glance* data for population aged 25-64 (2019 or latest available year). Information from the remaining countries corresponds to UNESCO Institute for Statistics data for population 25 and older (2018 or latest available year).

Source: UNESCO Institute for Statistics (2021<sup>[1]</sup>), National Monitoring Database, [http://data.uis.unesco.org/Index.aspx?DataSetCode=NATMON\\_DS](http://data.uis.unesco.org/Index.aspx?DataSetCode=NATMON_DS); OECD (2020<sup>[7]</sup>), *Education at a Glance 2020: OECD Indicators*, <https://dx.doi.org/10.1787/69096873-en>.

### ***Thai upper secondary students perform poorly in reading, maths and science from an international perspective***

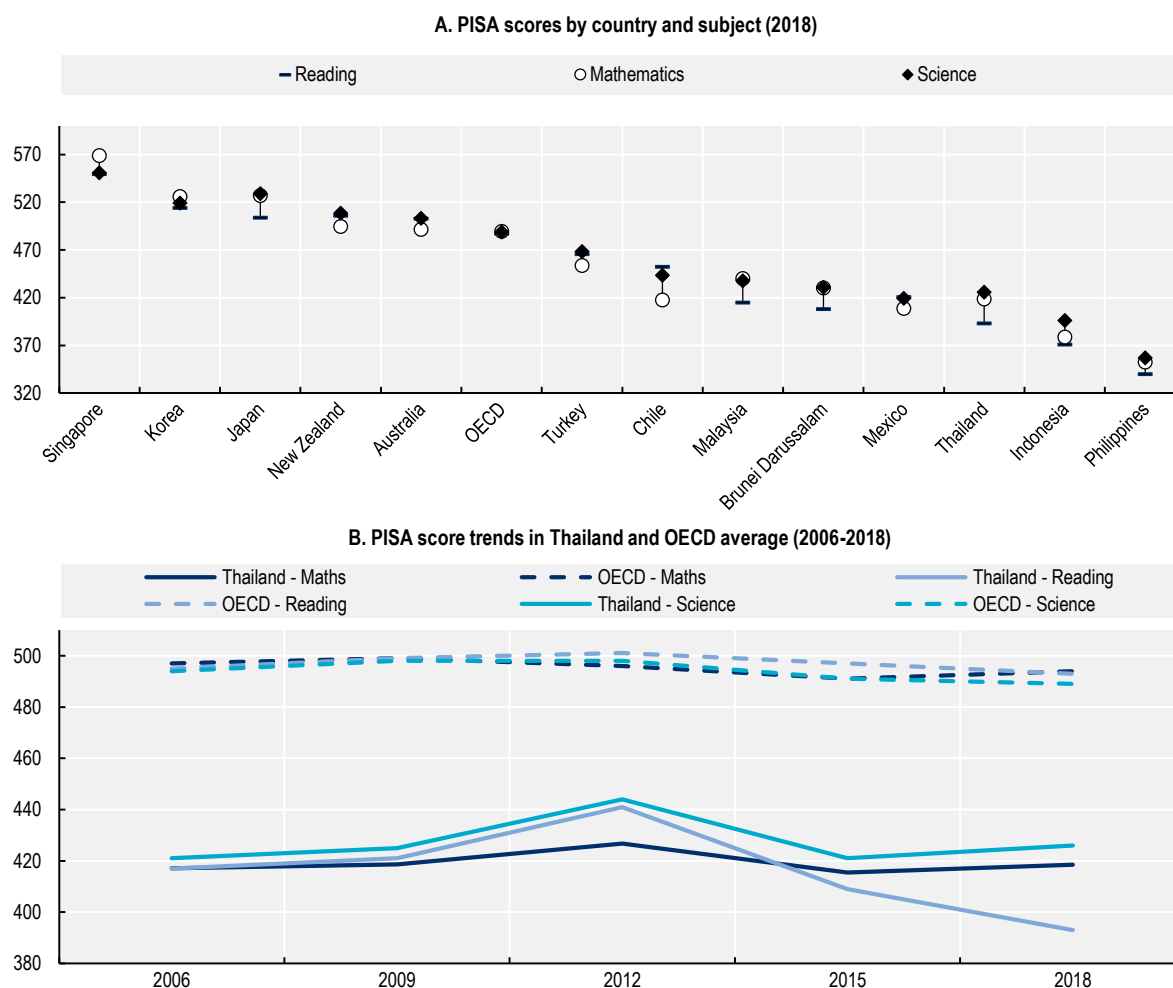
While Thailand has made steady progress in increasing enrolment in secondary education, the Thai education system today faces important challenges to improve the educational performance of students. According to the Programme for International Student Assessment (PISA), more than 59% of 15-year-old Thai students reach only level 1 or below in its reading test,<sup>1</sup> while 53% of them only reach this level in the maths test<sup>2</sup> (OECD, 2019<sup>[8]</sup>). This is much higher than the average across OECD countries, where these shares reach 22% and 24%, respectively. This situation is worrisome given the importance of foundational skills as key, for secondary Thai students, to enter further education or the labour market.

In PISA 2018, Thai students were outperformed by student from most OECD countries in all three subjects (see Figure 1.5, Panel A). For instance, in science, the difference in performance between Thai students and the OECD average was minus 63 points (-0.6 standard deviations). When compared to countries in the region, there were notable differences with Singapore (-125 pts), Japan (-103 pts) and Korea (-93 pts) and smaller differences with Malaysia (-12 pts) and Brunei Darussalam (-5 pts). By contrast, Thailand showed better results than both Indonesia (+30 pts) and the Philippines (+60 pts). Overall Thailand can be regarded as a low performing country in this assessment (OECD, 2019<sup>[8]</sup>).

When looking at recent PISA trends in Thailand (see Figure 1.5, Panel B), performance in the subject of reading has worsened importantly in recent years, with a drop of 50 points in a six-year period (2012-2018).

At the same time, performance both in maths and science has remained fairly stagnant. The negative trend in reading performance does not seem to be influenced by an increased proportion of the Thai population entering secondary studies. According to the PISA 2018 report, the proportion of 15-year-old eligible students in the PISA sample was 72% in Thailand (88% for OECD countries), and this figure has remained fairly constant over the period 2006-2018 (OECD, 2019<sup>[8]</sup>).

**Figure 1.5. Thailand's 15-year-old students have low PISA scores compared to students in OECD countries**



Source: OECD (2019<sup>[8]</sup>), *PISA 2018 Results (Volume I): What Students Know and Can Do*, <https://dx.doi.org/10.1787/5f07c754-en>.

### ***A third of upper secondary students are in VET programmes***

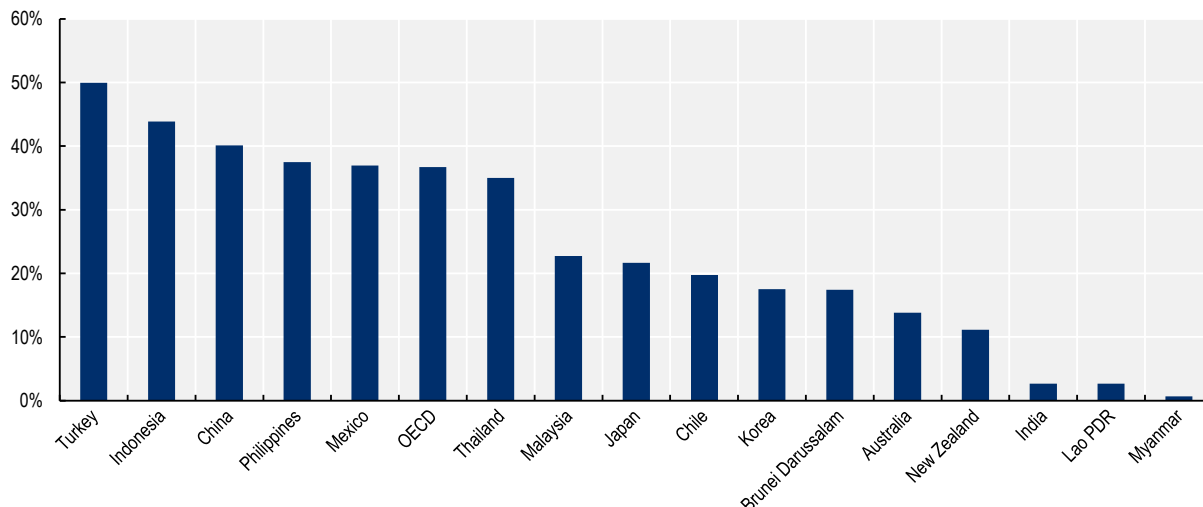
As described in Box 1.1, the main VET programmes in Thailand are vocational certificate programmes (at the upper secondary level) and vocational diploma programmes (at the postsecondary level). More details on the governance of the VET system are provided in Box 1.2. At the end of lower secondary education, around 35% of students who stay in education choose the vocational education track, enrolling in upper secondary VET certificate programmes (Figure 1.6). This is similar to what is observed in several countries in the region, such as the Philippines, Indonesia or China, but substantially higher than in countries like India, Lao PDR and Myanmar where the share is negligible. The share of upper secondary students in VET is slightly lower in Thailand than on average across OECD countries, where it reaches 37%. However,



participation levels in VET at the upper secondary level go up to 70% in countries like the Czech Republic, Finland and Slovenia (OECD, 2020<sup>[7]</sup>). Germany and Switzerland, who are often considered as the leading VET countries in the OECD, have VET participation rates of 46% and 64%, respectively.

**Figure 1.6. The share of upper secondary students in VET programmes in Thailand is lower than the OECD average, but higher than in many countries in the region**

Share of all students in upper secondary education enrolled in vocational programmes (%) (2018)



Note: Information for Thailand corresponds to national estimates provided by the Office of the Vocational Education Commission (OVEC). Information for OECD countries was gathered from the *OECD Education at a Glance* database. Figures for all the remaining countries are from the UNESCO Institute for Statistics database. When using the latter database also for Thailand, the share would fall from 35% to 21%. The reason for this difference is that the UNESCO data for Thailand also include programmes for adults in upper secondary education, for which enrolment predominantly happens in general programmes. Figures for OECD countries and the OECD average correspond to the share of the population aged 15 to 19 years old enrolled in upper secondary education attending VET programmes.

Source: Office of Permanent Secretary for Ministry of Education (2020<sup>[9]</sup>), 2018 Education Statistics, [http://www.mis.moe.go.th/index.php?option=com\\_content&view=article&id=655:%E0%B8%9B%E0%B8%A3%E0%B8%B0%E0%B8%88%E0%B8%B3%E0%B8%9B%E0%B8%B5-2561&catid=173&Itemid=114](http://www.mis.moe.go.th/index.php?option=com_content&view=article&id=655:%E0%B8%9B%E0%B8%A3%E0%B8%B0%E0%B8%88%E0%B8%B3%E0%B8%9B%E0%B8%B5-2561&catid=173&Itemid=114); UNESCO Institute for Statistics (2021<sup>[11]</sup>), National Monitoring Database, [http://data.uis.unesco.org/Index.aspx?DataSetCode=NATMON\\_DS](http://data.uis.unesco.org/Index.aspx?DataSetCode=NATMON_DS); OECD (2020<sup>[7]</sup>), *Education at a Glance 2020: OECD Indicators*, <https://dx.doi.org/10.1787/69096873-en>.

### Box 1.2. Governance of the VET system in Thailand

The 2008 Vocational Education Act aimed to help the Thai vocational and technical education to overcome its difficulties and boost up the Thai economic base (Burapharat and Chupradit, 2009<sup>[10]</sup>). This act defined the types of institutions in charge of providing VET, the type of qualifications that would be offered in those institutions, and the organism in charge of overseeing the provision of VET.

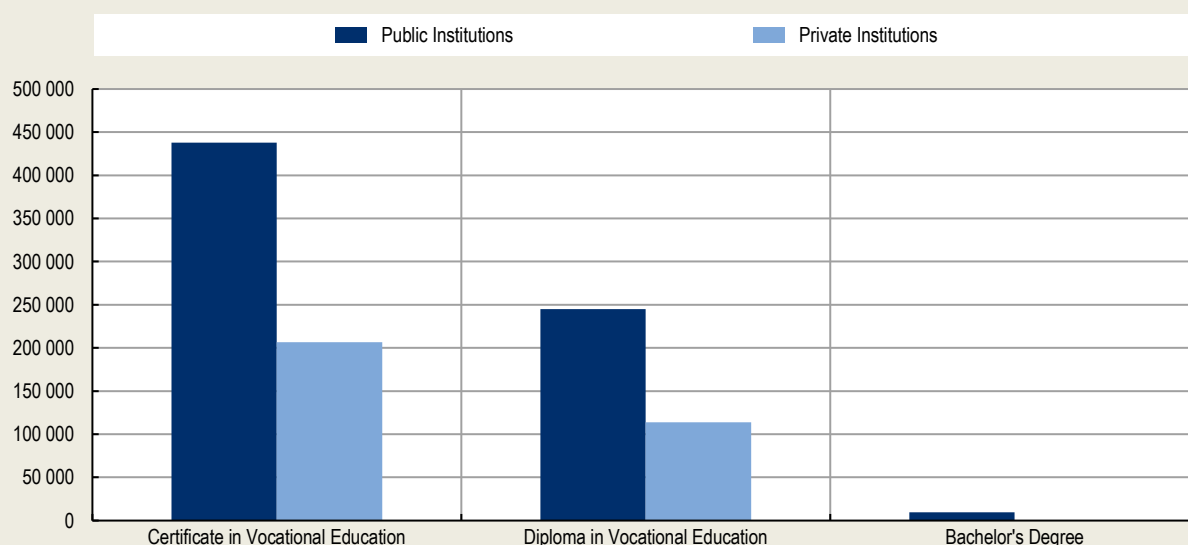
In Thailand, VET institutions are governed by the Office of the Vocational Education Commission (OVEC), which is under the Ministry of Education. OVEC is the main agency responsible for the administration of the VET system. Among its responsibilities are the following: i) Providing recommendations for developing VET related policies, developmental plans and standards and curriculum; ii) Co-ordinating the improvement of VET programmes and professional standards; iii) Developing VET teachers and personnel; and iv) Co-ordinating the actions of government and the private sector in the development of the VET system. The OVEC also plays an important role in financing the VET system, by defining the criteria and allocation of the budget and other necessary resources (UNESCO-UNEVOC, 2015<sup>[11]</sup>).

While the OVEC is the main body in charge of VET, there are some VET programmes that fall under the responsibility of other ministries (Office of the Non-Formal and Informal Education, 2008<sup>[12]</sup>). For instance, some short programmes in community colleges and tertiary vocational programmes are organised by universities, such as the Rajamangala University of Technology or Rajabhat University. These institutions are under the supervision of the Office of the Permanent Secretary of Higher Education, Science, Research and Innovation. Another example are Colleges of Dramatic Arts which are under the responsibility of the Ministry of Culture.

Today a wide variety of both public and private providers make up the Thai VET sector. A large proportion of VET institutions are private providers, many of which are linked to the business and industrial sectors. In 2019, there were 913 institutions registered, from which 53% were private. 37% of VET students were enrolled in programmes with private providers in 2019 (Figure 1.7). VET institutions are organised in multi-campus colleges. Each institution has its own administration and is managed by a council composed of enterprise representatives and other stakeholders (UNESCO-UNEVOC, 2015<sup>[11]</sup>).

**Figure 1.7. A large proportion of students in VET programmes attend private institutions**

Number of students in vocational education by institution type (2019)



Source: Office of the Vocational Education Commission (2019<sup>[13]</sup>), Public-Private Institution Information, <http://techno.vec.go.th/ประชาสัมพันธ์/รายละเอียดข่าว/tabid/766/ArticleId/24086/language/th-TH/24086.aspx>; UNESCO-UNEVOC (2015<sup>[11]</sup>), World TVET Database Thailand, [https://unevoc.unesco.org/wtdb/worldtvetdatabase\\_tha\\_en.pdf](https://unevoc.unesco.org/wtdb/worldtvetdatabase_tha_en.pdf); Burapharat and Chupradit (2009<sup>[10]</sup>), *Vocational and cooperative education in Thailand: A Presentation*; Research Institute on Contemporary Southeast Asia; Office of the Non-Formal and Informal Education (2008<sup>[12]</sup>), *The Development and State of the Art of Adult Learning and Education. National Report of Thailand*, [https://uil.unesco.org/fileadmin/multimedia/uil/confintea/pdf/National\\_Reports/Asia%20-%20Pacific/Thailand.pdf](https://uil.unesco.org/fileadmin/multimedia/uil/confintea/pdf/National_Reports/Asia%20-%20Pacific/Thailand.pdf).

Despite the fast-growing participation rate in secondary education in Thailand, the number of enrolments in upper secondary programmes has fallen in real terms, both in general and in VET programmes. In the period 2010-2019, the number of enrolments in vocational upper secondary programmes fell by 13%, as compared to a reduction of 7% in general programmes (Figure 1.8). This decline is partially due to an ageing population - see OECD (2020<sup>[14]</sup>) - and for VET also because of a lack of interest in the vocational track by prospective students (see Chapter 2). As the decline in student numbers in VET was stronger

than in general programmes, the importance of VET in upper secondary education has been going down, from 36% in 2010 to a low of 32% in 2014, rising again to 35% in 2019.

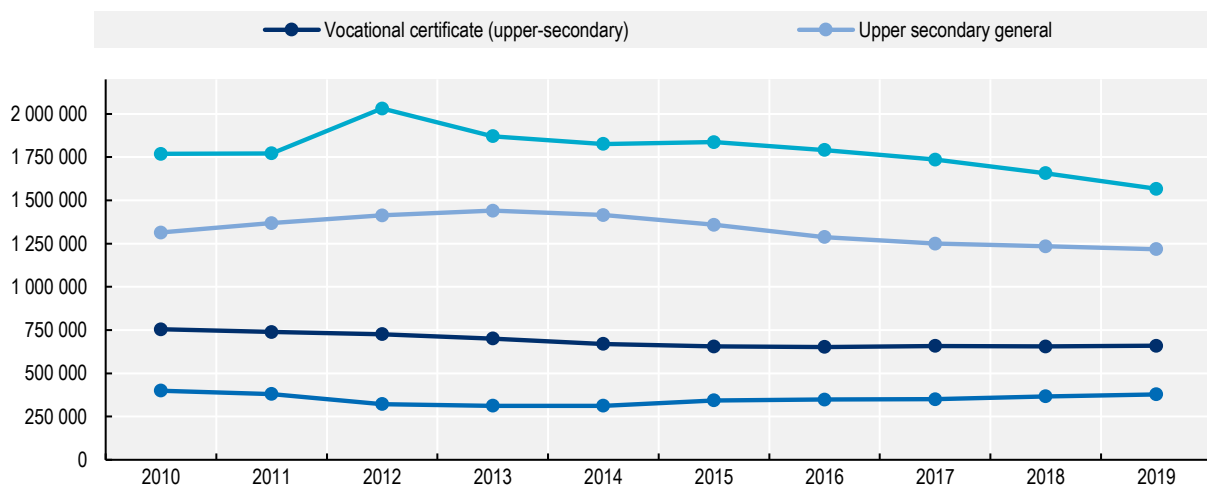
In post-secondary education, the situation is somewhat different (see Figure 1.8). The number of students in vocational diploma programmes fell by 5% in a 10-year period (2010-2019). This fall is less than for tertiary education, where the number of students fell by 11% in the same period, with an important drop from 2017 onwards. This means that the share of VET in postsecondary education has been on the rise (from 14% in 2012 to 19% in 2019<sup>3</sup>). The proportion of VET students being enrolled at the postsecondary level (VET diploma) is larger in Thailand than on average across OECD countries (OECD, 2020<sup>[7]</sup>).

Thailand has set ambitious goals in terms of student participation in VET (see Chapter 2), but the current figures and trends in enrolments suggest that there is still a relatively long way to go to reach these targets. As discussed in the following chapters, there are several reasons for the low number of students in VET programmes in Thailand, ranging from financial barriers, to a perceived low status of VET programmes, alongside questions about the quality of VET provision.

In addition to the formal VET system, Thailand also provides non-formal VET programmes, which enrol roughly 2.2 million students per year (see Box 1.3). While these types of programmes are outside the scope of this report, they are clearly an important part of the overall skills system in Thailand. These programmes are often shorter and more flexible than formal programmes, and can therefore be particularly attractive for adults. It is therefore important to recognise skills acquired through non-formal training towards a formal VET qualification when possible (see Chapter 2). While the recommendation in chapters 2 and 3 are focused on formal VET, many of them will also apply to non-formal programmes.

**Figure 1.8. Student numbers are on the decline in Thailand**

Number of students in upper secondary education and postsecondary education enrolled in general and vocational programmes (2010-2019)



Source: Office of Permanent Secretary for Ministry of Education (2020<sup>[15]</sup>), Education Statistics (2010-2019), [http://www.mis.moe.go.th/index.php?option=com\\_content&view=category&id=173&Itemid=114](http://www.mis.moe.go.th/index.php?option=com_content&view=category&id=173&Itemid=114).

### Box 1.3. Non-formal VET provision

Non-formal training plays an important role in Thailand's education system. Non-formal programmes, along with other continuing education activities, intend to provide support to the great numbers of disadvantaged individuals who lack the opportunity of participating in formal schooling. Over the period 2010-2019, around 2.2 million students each year have been enrolled in VET non-formal training programmes (see Figure 1.9).

Several types of institutions provide this type of training. In 2006 there were 964 centres for the promotion of non-formal education, 8 697 community learning centres, and 4 280 private institutions conducting non-formal education (Office of the Non-Formal and Informal Education, 2008<sup>[12]</sup>).

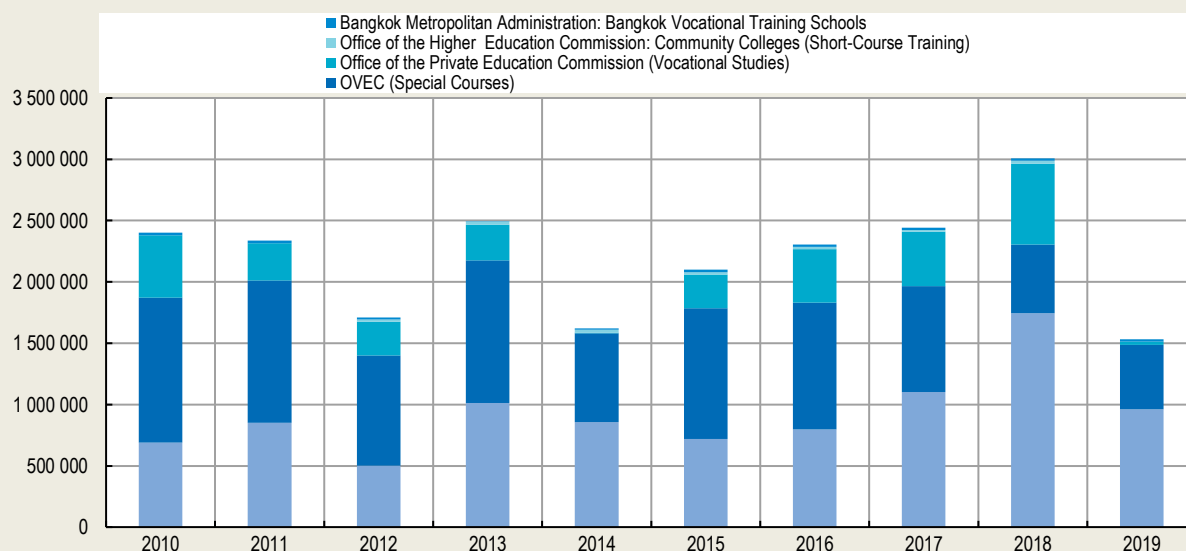
Today most non-formal VET programmes are under the responsibility of the Office of Non-Formal and Informal Education (ONIE), which is under the Ministry of Education. Also, a large proportion of programmes are under OVEC and the Office of the Private Education Commission (OPEC). The ONIE is responsible for: (1) giving recommendations concerning VET related policies, plans and strategies; (2) promoting collaboration between stakeholders; and (3) monitoring and evaluating non-formal VET programmes (UNESCO-UNEVOC, 2015<sup>[11]</sup>).

In Thailand, non-formal education activities fall into five domains: literacy promotion, continuing education, life-skills development, vocational development and vocational training. Non-formal and adult programmes are provided in a number of ways. For instance, occupational development programmes, which aim to develop students' vocational and occupation skills, emphasise the importance of the development of life skills to overcome unemployment and meet community needs. These type of programmes are organised in: (1) short occupation training programmes for life skill development; (2) skills training for job employment; (3) group learning for students of the same occupation or trade; and (4) occupational development through the application of technology such as Information and Communications Technology. Other types of non-formal vocational programmes include: (1) short training programmes; (2) group vocational courses; (3) vocational certificate programmes equivalent to lower secondary school; and (4) non-formal occupational certificate programmes (UNESCO-UNEVOC, 2015<sup>[11]</sup>).

In 2002, the National Education for All Plan of Action for Thailand set a number of VET-related goals; one of them was to expand the provision of programmes and education services, including non-formal VET, to promote learning and life skills development (UNESCO-UNEVOC, 2015<sup>[11]</sup>). Later on, in 2008, the Government of Thailand through the Ministry of Education pushed forward enforcing the Non-Formal and Informal Education Promotion Act (Office of the Non-Formal and Informal Education, 2008<sup>[12]</sup>). This act had similar general objectives. Among other goals, it promoted the decentralisation of roles to enable all educational organisations and networks to participate in conducting educational programmes and activities. It also contemplated the support of training organisations by providing, among others, learning resources and educational technology, and financial support for the development of non-formal education.

**Figure 1.9. Non-formal VET is popular in Thailand**

Number of students in the non-formal VET system by jurisdiction (2010-2019)

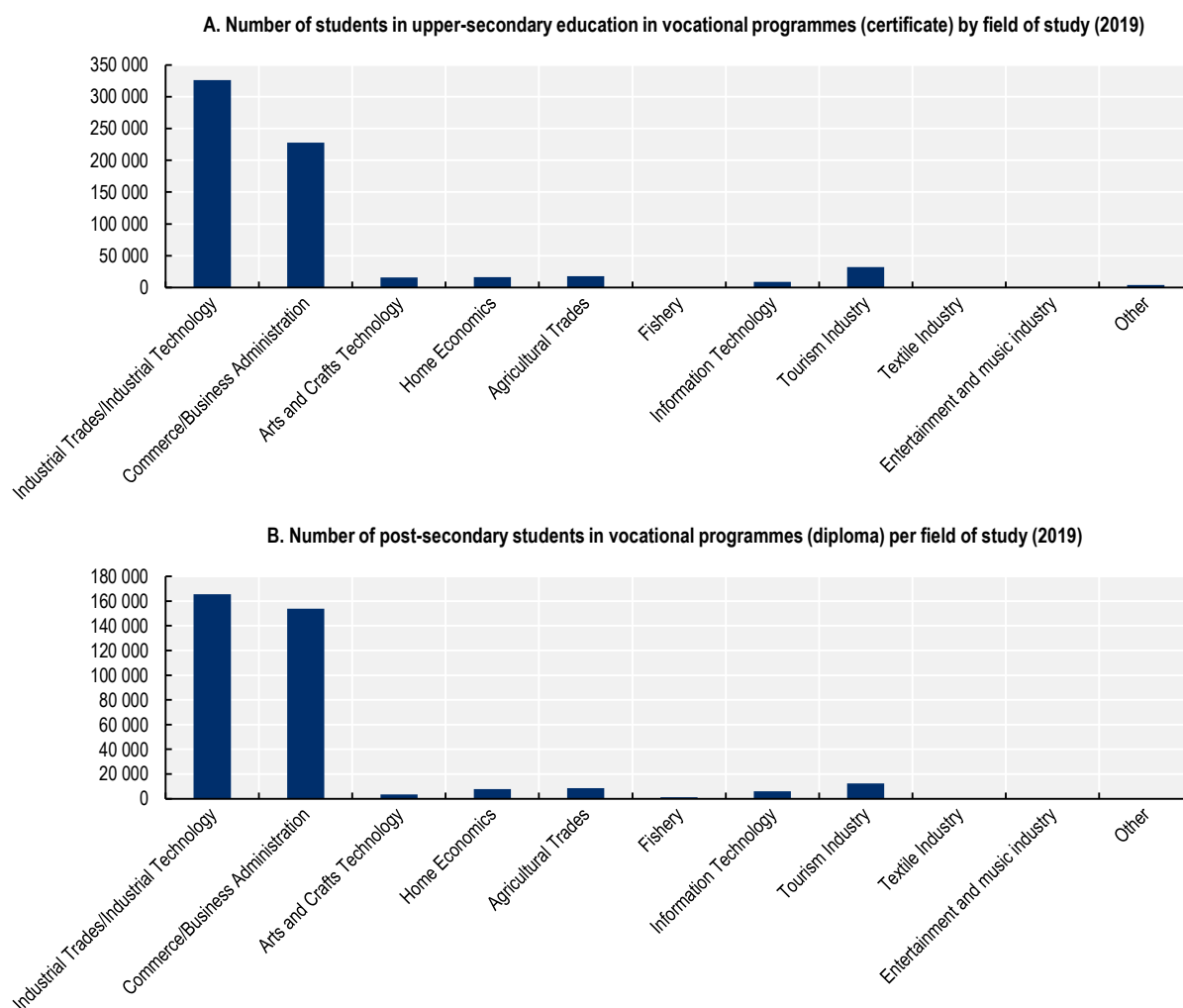


Source: Office of Permanent Secretary for Ministry of Education (2020<sup>[15]</sup>) Education Statistics (2010-2019), [http://www.mis.moe.go.th/index.php?option=com\\_content&view=category&id=173&Itemid=114](http://www.mis.moe.go.th/index.php?option=com_content&view=category&id=173&Itemid=114); UNESCO-UNEVOC (2015<sup>[11]</sup>), World TVET Database Thailand, [https://unevoc.unesco.org/wtdb/worldtvtdatabase\\_tha\\_en.pdf](https://unevoc.unesco.org/wtdb/worldtvtdatabase_tha_en.pdf); Office of the Non-Formal and Informal Education (2008<sup>[12]</sup>), The Development and State of the Art of Adult Learning and Education. National Report of Thailand, [https://uil.unesco.org/fileadmin/multimedia/uil/confintea/pdf/National\\_Reports/Asia%20-%20Pacific/Thailand.pdf](https://uil.unesco.org/fileadmin/multimedia/uil/confintea/pdf/National_Reports/Asia%20-%20Pacific/Thailand.pdf).

### ***The current scope of vocational education in Thailand is relatively narrow***

The lion's share of students enrolled in VET, both in the secondary and postsecondary levels, are concentrated in two fields-of-study. In 2019, the number of VET students in upper secondary education was 660 000, 50% of whom were enrolled in industry related programmes, and 35% in business administration and commerce programmes (see Figure 1.10, Panel A). Other fields-of-study have much lower enrolments, in spite of some of these fields being in demand in the labour market (see Chapter 3). For instance, despite today's crucial importance of technology in all areas of the economy, in 2019 the information technology field only made up to 1% of all enrolments in upper secondary VET. Students in agricultural programmes represented only 3% of enrolments, and students in tourism programmes 5%. For postsecondary education, participation rates according to field-of-study are very similar to those in upper secondary: 46% of students were in industry-related programmes, 43% in business administration and commerce; 2% in agricultural trades, 4% in tourism and 2% in information technology (see Figure 1.10, Panel B).

Figure 1.10. Enrolments in VET are concentrated in two fields-of-study



Notes: Panel A corresponds to the number of students in vocational diploma programmes for that year. Panel B corresponds to the number of students in vocational certificate programmes that year. Students in upper secondary vocational programmes under the supervision of the Office of Basic Education Commission are included as “Other”.

Source: Office of Permanent Secretary for Ministry of Education (2020<sup>[15]</sup>), Education Statistics, [www.mis.moe.go.th/index.php?option=com\\_content&view=article&id=657:ประวัติ-2562&catid=173&Itemid=114](http://www.mis.moe.go.th/index.php?option=com_content&view=article&id=657:ประวัติ-2562&catid=173&Itemid=114).

### ***VET is more popular among male students, and the choice of VET programmes is strongly influenced by gender***

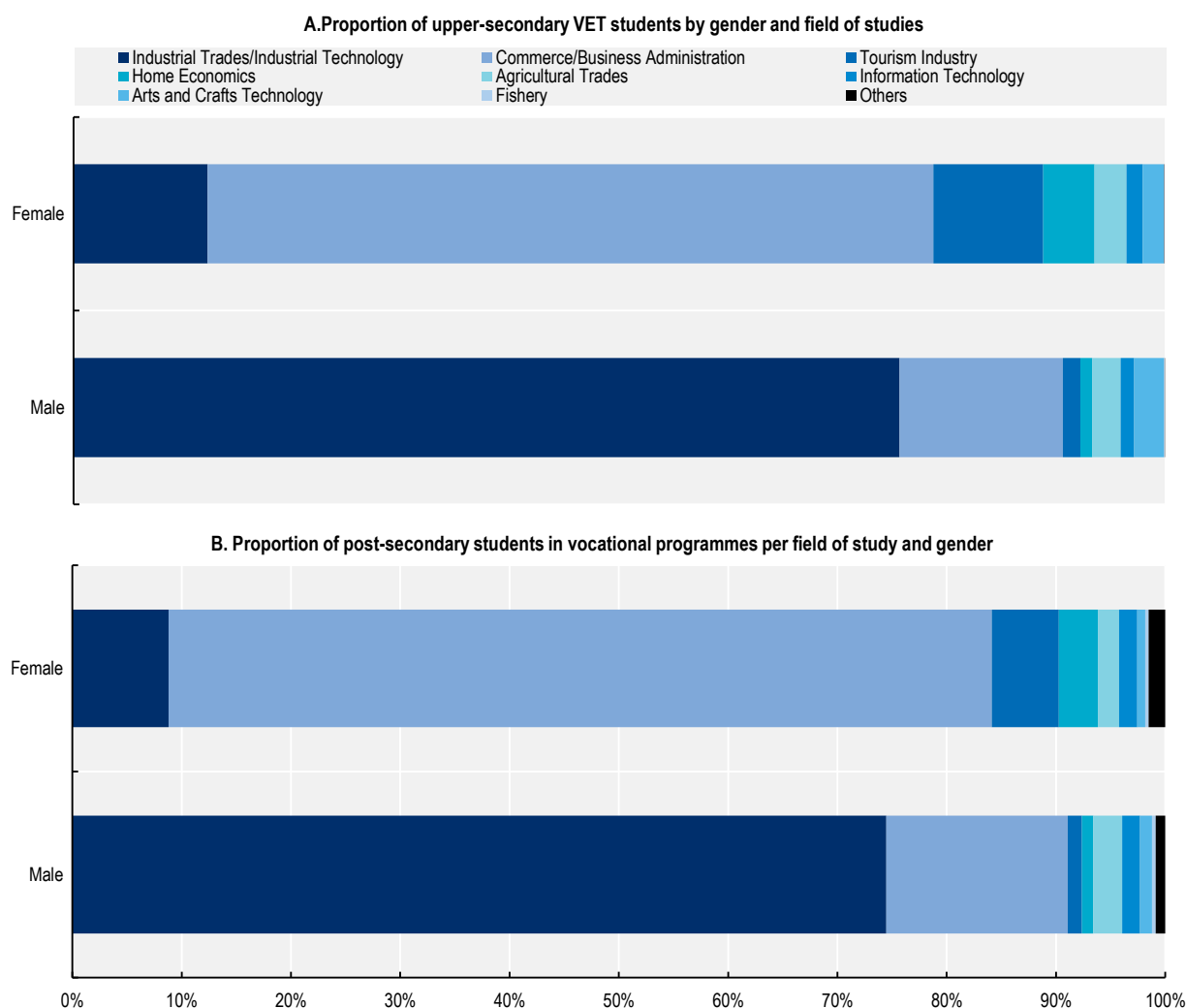
Male students are much more likely to choose to undertake VET studies. In 2019, out of 660 000 VET students in upper secondary programmes (vocational certificate), 60% were male. This as opposed to 40% in general programmes. In postsecondary education, male students represented 56% of VET students (vocational diploma). While female students are more likely to continue studies after they finish school, they are much more concentrated in tertiary programmes than male students, making up for 57% of students in tertiary studies (OECD, 2020<sup>[14]</sup>).

Female students are not only less likely to choose VET programmes, they also tend to choose some very specific fields-of-study, and these are different from the fields chosen by male students. In secondary education, two out of three female students in VET undertake business administration or commerce

programmes (66%), and only one in eight are in fields such as industrial trades or industrial technology (see Figure 1.11, Panel A). On the contrary, almost 75% of male students are enrolled in industry-related programmes, while only 15% of them undertake VET studies in business administration and commerce. When comparing fields-of-study by gender in upper secondary VET to those in postsecondary VET programmes, the choice patterns are very similar (see Figure 1.11, Panel B).

The fact that VET students in Thailand are predominantly men, and that male and female VET students enrol in very different fields-of-study, has to do with cultural aspects that seem to be very much embedded in the Thai education system, as the supply of VET courses is skewed to industrial fields which are often not attractive to female students. This issue is also linked with the topics of career guidance and career expectations, which are discussed as part of the section on gender inequalities in VET in Chapter 2. Differences in participation in VET and in field-of-study choice contribute to labour market differences, as adults with VET degrees have better labour market outcomes than those with general upper secondary degrees and certain fields-of-study in VET do significantly better than others in the labour market (see Chapter 3).

**Figure 1.11. Male VET students are concentrated in the industrial field and female students in the commerce and business administration fields**



Source: Office of Permanent Secretary for Ministry of Education (2020<sup>[15]</sup>) 2019 Education Statistics, [www.mis.moe.go.th/index.php?option=com\\_content&view=article&id=657:ประจำปี-2562&catid=173&Itemid=114](http://www.mis.moe.go.th/index.php?option=com_content&view=article&id=657:ประจำปี-2562&catid=173&Itemid=114).

## Key features of the Thai labour market

### ***Employment rates in Thailand are high***

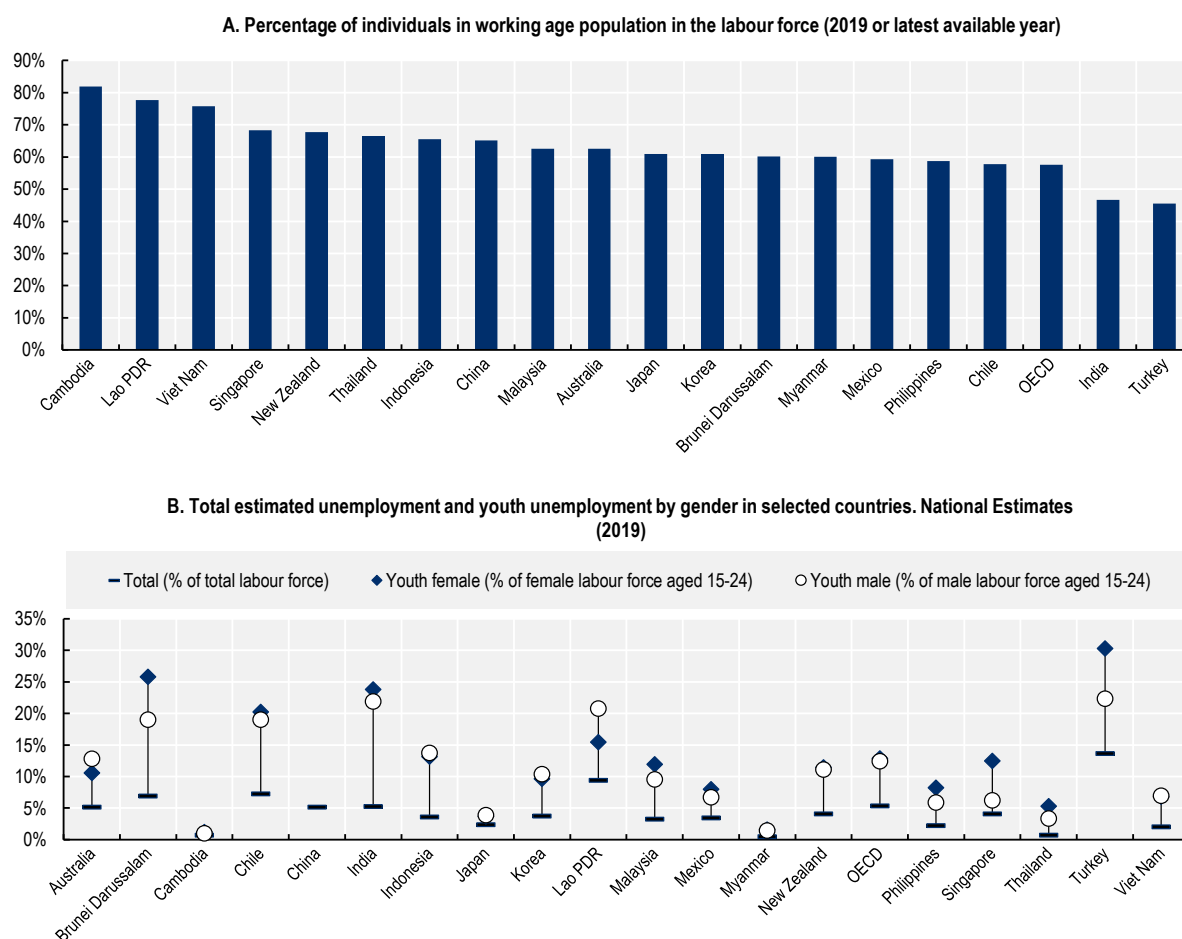
Employment rates in Thailand are higher than the OECD average, but lower than in some countries in the region. In 2019, the employment rate for the population of age 15 and over in Thailand was 66%, compared to 58% on average across OECD countries. Lower employment rate in OECD countries partially reflect that populations are older and stay longer in education. Employment rates were higher in Cambodia (82%), in Lao PDR (78%) and in Viet Nam (76%) (see Figure 1.12, Panel A). At the same time, in recent years, unemployment levels in Thailand have been very low, both for young and older workers. In the period 2010-2019, the unemployment rate never exceeded 1% in Thailand (ILO, 2021<sup>[16]</sup>). Moreover, youth unemployment in the same period was on average 3%. These unemployment rates are lower than what is observed in the majority of OECD countries, but also than in many other countries in the region, such as Brunei Darussalam, Indonesia, Malaysia, Lao PDR and the Philippines (see Figure 1.12, Panel B).

Unemployment in Thailand affects young women more than young men. In 2019, it was 5% for young females aged 15 to 24, compared to 3% for young males (see Figure 1.12, Panel B). In recent years, there has been a rise in female unemployment. Young women are also much more likely to be not in education, employment or training (NEET). In 2020, the NEET rate for young women was 19%, as opposed to 12% for men (ILO, 2021<sup>[16]</sup>), and young married women in Thailand are especially more likely to be NEET (41%) than young married men (6%) (OECD, 2020<sup>[14]</sup>).

The COVID-19 crisis has had a very important impact on the Thai economy, with rising unemployment. Thailand's GDP in 2020 shrank by 6%, and the economy is expected to only partially recover in 2021 (OECD, 2020<sup>[14]</sup>). In 2020, all economic sectors had been affected by the crisis, with the accommodation and food services sector and the transportation and storage sectors being the most badly hit, due to restrictions on travel and the substantial drop in the number of foreign tourists. As a result of the crisis, unemployment levels in Thailand increased substantially during 2020, from 1% in the last quarter of 2019 to almost 2% one year later (OECD, 2020<sup>[14]</sup>). Although in 2020 the number of employed workers shrank during the first two quarters, and then improved towards the end of the year, still many jobs had not been recovered. This was especially the case in the manufacturing and retail sectors. In July 2020 youth unemployment in Thailand reached 10 % and has slightly improved subsequently.



Figure 1.12. Thailand has a relatively high employment and low unemployment rate



Note: In Panel A, according to the ILO, employment comprises all persons of working age who during a specified brief period, such as one week or one day, were in paid employment or self-employed. The working-age population is the population above the legal working age. However, to favour international comparability, the working-age population is defined as all persons aged 15 and older. However, this may vary across countries based on national laws and practices. Some countries also use an upper age limit (OECD, 2020<sup>[14]</sup>).

Source: International Labour Organization (2019<sup>[17]</sup>), ILOSTAT database, <https://ilostat.ilo.org/data> (Panel A); World Bank (2020<sup>[18]</sup>), World Development Indicators, <https://databank.worldbank.org/source/world-development-indicators> (Panel B).

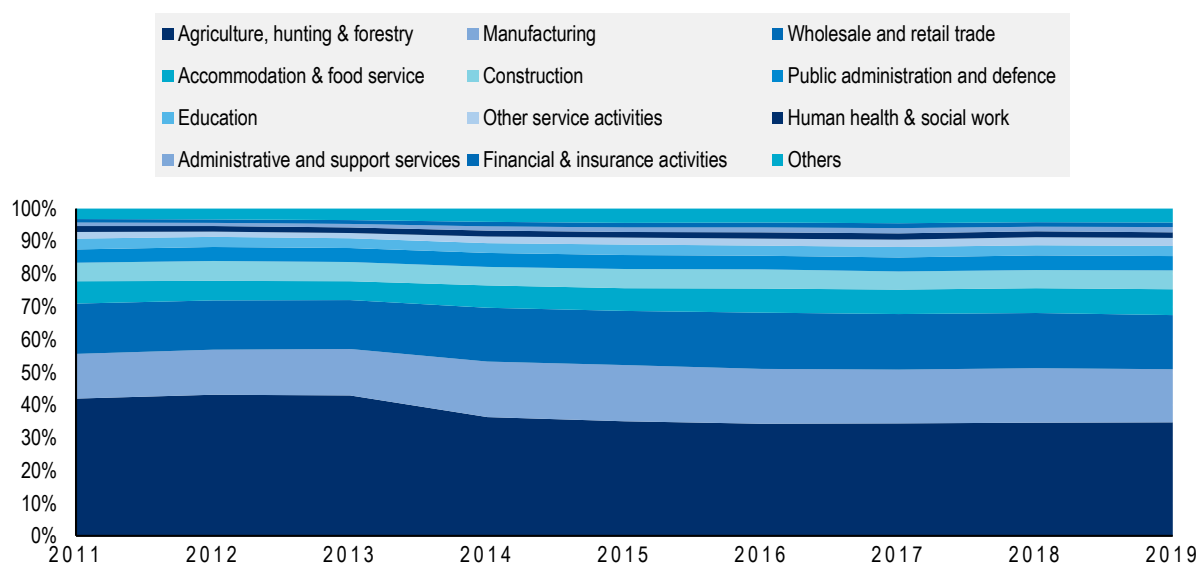
### ***The composition of employment has shifted***

The Thai economy has gone through structural changes over the last decade, as shown by significant changes in the relative importance of its main occupations and industries (see Figure 1.13). In part linked to the increasing openness of the Thai economy and its trading policies, international trade has kept growing at a high rate. By 2018, the export of goods and services represented 60% of Thailand's GDP, up from around 40% in 1998 (OECD, 2020<sup>[14]</sup>). This has contributed to a growing importance of economic sectors such as manufacturing, retail trade and the hospitality sector (Figure 1.13). Nonetheless, despite its continued decline in the past decades, a large share of the labour force continues to be employed in agriculture-related activities (34% in 2019). From an international perspective, the employment share of the agricultural sector is large in Thailand, especially when compared to OECD countries, but also to certain countries in the region, such as Malaysia (Figure 1.14). Agricultural employment is even more important in countries like Lao PDR, India, Viet Nam, Cambodia and Myanmar. Labour productivity is low in the Thai agricultural sector, and has not improved over the past decade. Productivity is higher in the

industrial sector – which has been at the centre of the country’s development goals-, and increased by more than 30% in the period 2008-2018 (Thailand Development Research Institute, 2019<sup>[19]</sup>).

**Figure 1.13. The relative importance of Thai economic sectors in the labour force is changing**

Proportion of employment by industry classification, 2011-2019

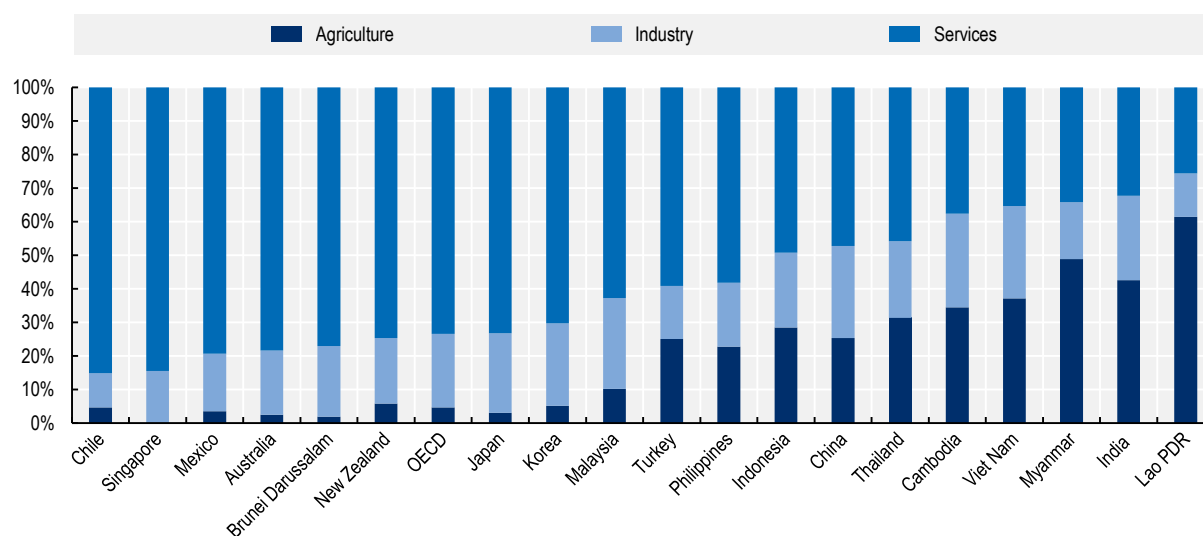


Note: Information corresponds to Quarter 3 in 2019. Industries are classified to 22 categories based on TSIC, revised by the National Statistical Office.

Source: National Statistical Office (2020<sup>[20]</sup>), The Informal Employment Survey, Ministry of Digital Economy and Society, <http://www.nso.go.th/sites/2014en/Pages/survey/Social/Labour/The-Informal-Employment-Survey.aspx>.

**Figure 1.14. Thailand has a relatively large agricultural sector**

Employment, by economic activity (2019)

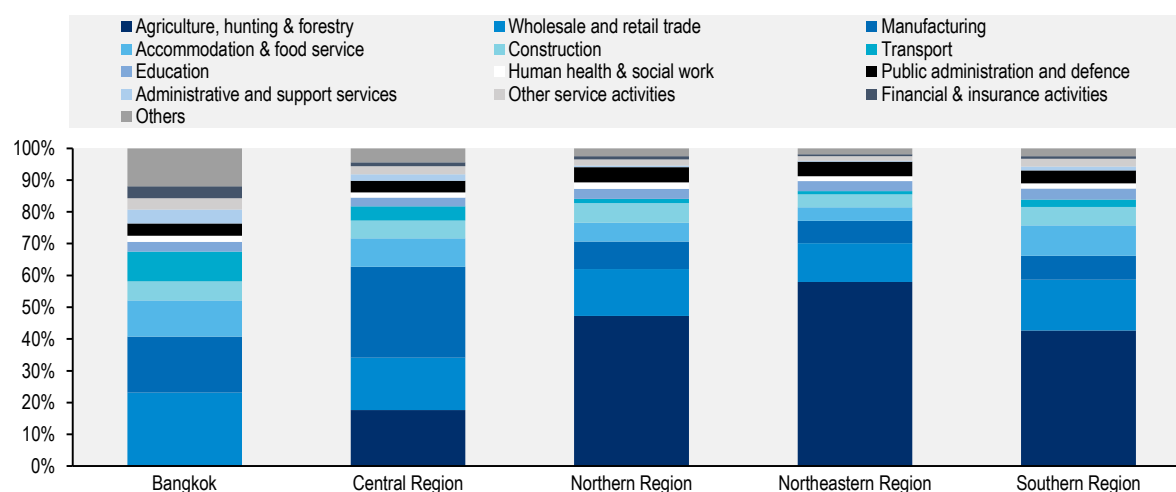


Source: International Labour Organization (2019<sup>[17]</sup>), ILOSTAT database, <https://ilostat.ilo.org/data>.

The sectoral composition of employment differs strongly between men and women, with larger shares of women than men in certain sectors requiring higher levels of education, such as financial and insurance activities, the education and health sectors. Female employment is also more concentrated in accommodation and food services. On the other hand, female workers are less present in the agricultural sector, the construction sector and the manufacturing sector. Regional differences are also large. The agriculture, forestry and fishery sector remains large in most Thai regions, and in the North East, for instance, more than 50% of workers are employed in this sector. The North and South Regions also have a large number of workers in this field (Figure 1.15). On the other hand, the retail trade and manufacturing sectors are quite important in Bangkok and the Central Region, accounting for 40% and 45% of total employment, respectively.

**Figure 1.15. Regional differences in sectoral composition are large**

Employment distribution by industry (by region, 2019)

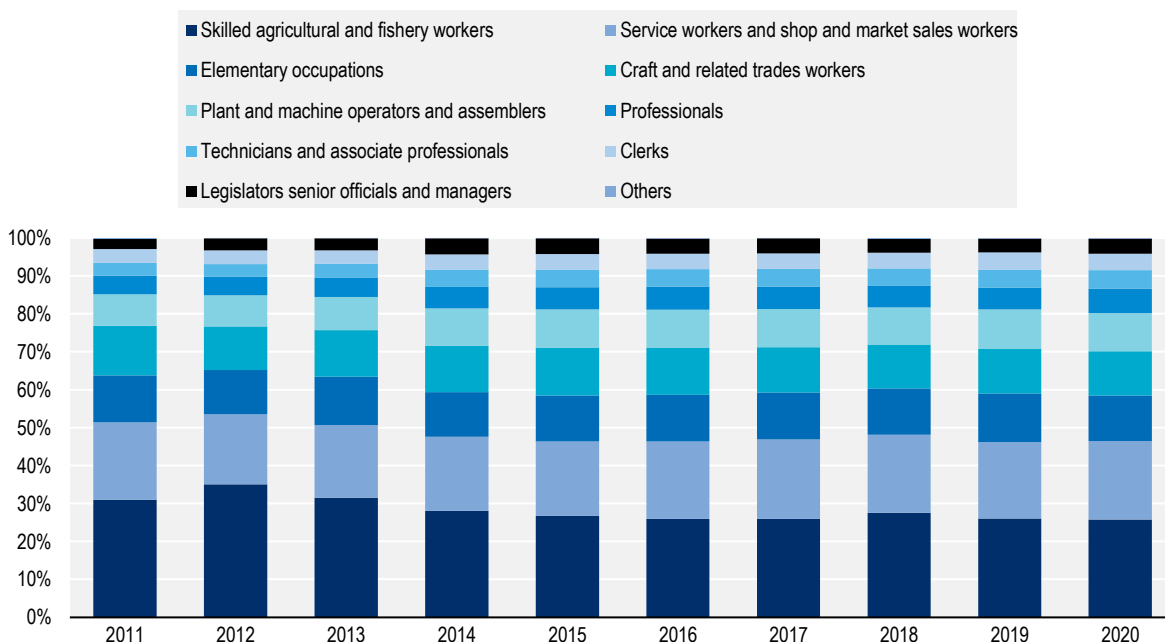


Source: Authors' calculations using 2019 Thai Labour Force Survey data, National Statistics Office (2021<sup>[4]</sup>), Thai Labour Force, Survey, <http://www.nso.go.th/sites/2014en/Pages/Statistical%20Themes/Population-Society/Labour/Labour-Force.aspx>.

Looking at trends in employment by occupational category confirms that the importance of agricultural jobs is on the decline (Figure 1.16). While 31% of the labour force was employed as agricultural or fishery workers in 2011, by 2020 that share dropped to 26%. In the period 2011-2020, the proportion of plant and machine operators increased by 2 percentage points (corresponding to a net increase of 21%). The proportion of professionals also rose importantly, from 5% to 6% (30% net increase). This is in line with a larger importance of the manufacturing, trade and services industry in the Thai economy. In a context of changing skill demand, it is important to monitor that the supply of skills evolves in the same direction. Chapter 3 zooms in on issues related to imbalances between skills demand and supply. Such imbalances are one of the factors that could hinder economic progress in Thailand, alongside a declining labour force, an aging population, weakening labour productivity in some economic sectors and declining rates of investment (OECD, 2020<sup>[14]</sup>).

**Figure 1.16. The relative importance of agriculture workers and elementary occupations is decreasing**

Share of employed persons, by occupation, 2011-2020



Note: All figures for Q1 of each year.

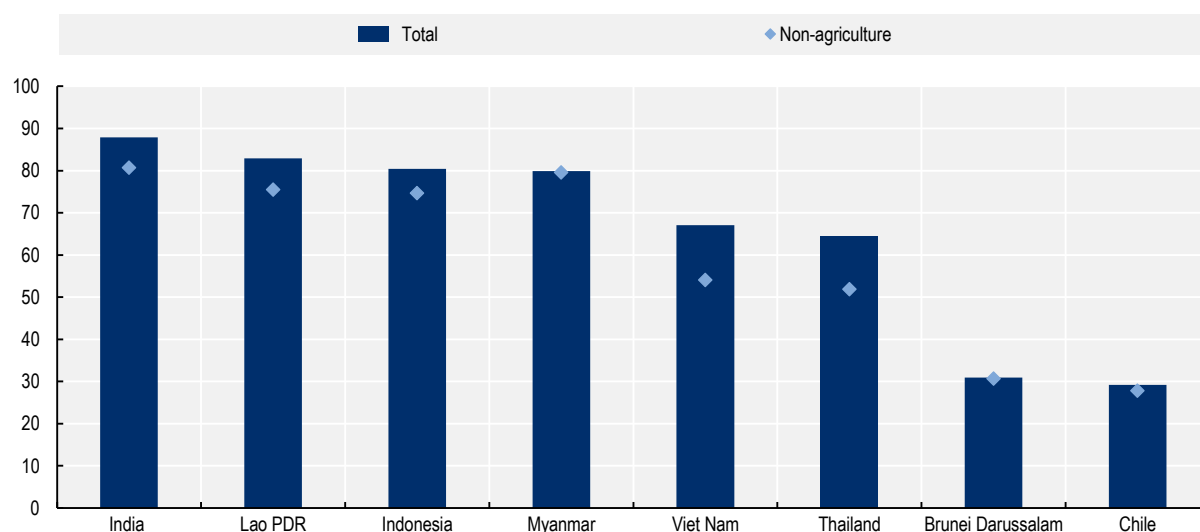
Source: Authors' calculations using Thai Labour Force Survey data (years 2011-2010), National Statistics Office (2021<sup>[4]</sup>), Thai Labour Force Survey, <http://www.nso.go.th/sites/2014en/Pages/Statistical%20Themes/Population-Society/Labour/Labour-Force.aspx>.

### ***Informality is widespread in the Thai labour market***

The informal economy is very important in Thailand. According to ILO data, 64% of jobs in the country were informal in 2019. This figure falls to 52% when not taking into account jobs in the agriculture sector. When compared to other countries in the region (Figure 1.17), Thailand has a similar share of informal workers than Viet Nam and smaller than in countries such as Indonesia, Myanmar, Lao PDR and India. In general, informal firms tend to be smaller and less productive; and informality is also associated with occupational health risks, low investment into workers' human capital (education and training) and reduced tax revenues, amongst others (OECD, 2020<sup>[14]</sup>). Hence, the Thai government has been making efforts to incorporate more workers and firms into the formal economy. For instance, in 2010, the social security system was extended to informal and self-employed workers by offering a partial subsidy to people who voluntarily sign up for the Social Security Fund (SSF) which covers sickness, invalidity and a pension package (Fleischer et al., 2018<sup>[21]</sup>). Thailand has reduced the number workers in informal jobs substantially over the last 10 years. According to the Thai Informal Employment Survey, job informality fell by more than 7 percentage points between 2010 and 2019. The share has stabilised in the last five years, and it is likely to worsen as a result of higher unemployment levels in Thailand due to the COVID-19 crisis (OECD, 2020<sup>[14]</sup>).

**Figure 1.17. Informality in Thailand is similar to other countries in the region**

Informal employment rate (2019 or latest available)



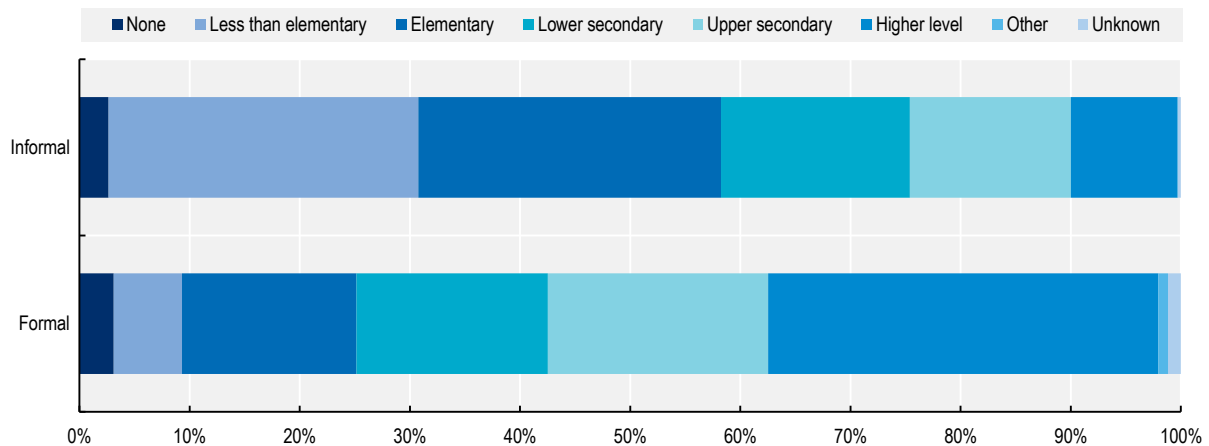
Note: The informal employment rate is the proportion of the employed population working in the informal sector. The informal sector are all workers in unincorporated enterprises that produce at least partly for the market and are not registered. It excludes households that produce exclusively for own final use, subsistence agriculture, construction of own dwellings, etc. Informal employment comprises persons who in their main job were: (a) own-account workers, employers or members of producers' cooperatives employed in their own informal sector enterprises; (b) own-account workers engaged in the production of goods exclusively for own final use by their household; (c) contributing family workers, irrespective of whether they work in formal or informal sector enterprises; or (d) employees holding informal jobs, whether employed by formal sector enterprises, informal sector enterprises, or as paid domestic workers by households (OECD, 2020<sup>[14]</sup>).

Source: International Labour Organization (2019<sup>[17]</sup>), ILOSTAT database, <https://ilostat ilo.org/data>.

In Thailand, informality is most prevalent in the agriculture sector, and among workers in occupations for which low levels of qualifications are required. According to the Informal Employment Survey, 75% of workers in informal jobs in Thailand had achieved less than upper secondary education (Figure 1.18). This compares to 43% of workers in the formal sector. However, also a relatively large proportion of tertiary educated individuals work in the informal economy, many of them in professional or managerial positions: 25% of workers with tertiary studies are in the informal economy, and 46% of individuals with upper secondary studies have informal jobs.

**Figure 1.18. Informality according to educational level**

Labour force distribution by education level and gender in the formal/informal sector (2019)



Note: The formal sector are all workers in incorporated enterprises. The informal sector are all workers in unincorporated enterprises that produce at least partly for the market and are not registered. It excludes households that produce exclusively for own final use, subsistence agriculture, construction of own dwellings, etc. Informal employment comprises persons who in their main job were: (a) own-account workers, employers or members of producers' cooperatives employed in their own informal sector enterprises; (b) own-account workers engaged in the production of goods exclusively for own final use by their household; (c) contributing family workers, irrespective of whether they work in formal or informal sector enterprises; or (d) employees holding informal jobs, whether employed by formal sector enterprises, informal sector enterprises, or as paid domestic workers by households (OECD, 2020<sup>[14]</sup>).

Source: National Statistical Office, Ministry of Digital Economy and Society (2020<sup>[22]</sup>), The Informal Employment Survey 2019, [http://www.nso.go.th/sites/2014en/Survey/social/labour/informalEmployment/2019/2562\\_Full\\_Report.pdf](http://www.nso.go.th/sites/2014en/Survey/social/labour/informalEmployment/2019/2562_Full_Report.pdf).

## Conclusion

Thailand has shown important advancements in the educational attainment of its young population over the last decade, and has managed to substantially increase access to upper secondary education. Among young adults (aged 25 to 34), a quarter hold a tertiary education degree and 7.5% a postsecondary vocational diploma. At the same time, the performance of 15-year-old students in international assessments of reading, maths and science remains comparatively low. A large proportion of the Thai adult population have very low levels of educational attainment, with in some regions more than half of adults having completed at most primary education.

A substantial proportion of students enter vocational education, with one-third of upper secondary students being enrolled in vocational programmes and one in five postsecondary students pursuing programmes to obtain vocational diplomas. Vocational education is focused predominantly on two fields of study, industry-related fields and business administration and commerce, enrolling around 85% of all VET students. Male students are more likely to enter VET programmes than female students, and are enrolled in very different fields of study. Other programmes that correspond to fields of growing demand in the labour market, such as IT and health care, attract very few VET students.

Thailand's labour market has undergone important changes, with a growing importance of the non-agricultural sectors as a result of increased levels of industrialisation and international trade. The employment shares of plant and machine operators, and professionals have been on the rise, while employment shares of agricultural and elementary jobs are falling. Nonetheless, these latter two occupation groups still account for a large share of employment, and more so in some regions than in others. Unemployment rates have been consistently low in Thailand, although the COVID-19 pandemic

led to substantial job losses –particularly in sectors impacted by travel restrictions. A very large proportion of jobs are in the informal sector of the economy.

VET can play a key role in further increasing access to education, while at the same time developing the skills needed in the Thai labour market. For this to work, VET needs to be an attractive option for a diverse group of students and deliver high-quality training that allows students have good employment outcomes and engage in further learning. In the following chapters these and other related issues are discussed in detail, along with examples of good practices and policy recommendations on how to improve VET provision in Thailand.

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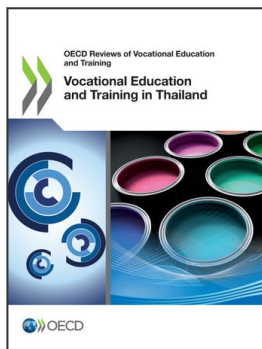


## Notes

<sup>1</sup> In PISA 2018 students achieving Level 1 (Level 1a) or below in the reading examination can at best understand the literal meaning of sentences or short passages. Readers at this level can also recognise the main theme or the author's purpose in a piece of text about a familiar topic, and make a simple connection between several adjacent pieces of information, or between the given information and their own prior knowledge. They can select a relevant page from a small set based on simple prompts, and locate one or more independent pieces of information within short texts. Level 1a readers can reflect on the overall purpose and on the relative importance of information (e.g. the main idea vs. non-essential detail) in simple texts containing explicit cues (OECD, 2019<sup>[8]</sup>).

<sup>2</sup> At Level 1 in the PISA 2018 maths examination, students can answer mathematics questions involving familiar contexts where all of the relevant information is present and the questions are clearly defined. They are able to identify information and carry out routine procedures according to direct instructions. They can only perform actions that are obvious and that follow immediately from the given stimuli (OECD, 2019<sup>[8]</sup>).

<sup>3</sup> To estimate the share of students in post-secondary VET, the number of students in post-secondary vocational programmes (VET diploma) and those students enrolled in tertiary education are used in the calculations. Students attending non-vocational diplomas or graduate degrees are not included.



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