



# How do young people's educational attainment and labour-market outcomes differ across regions?

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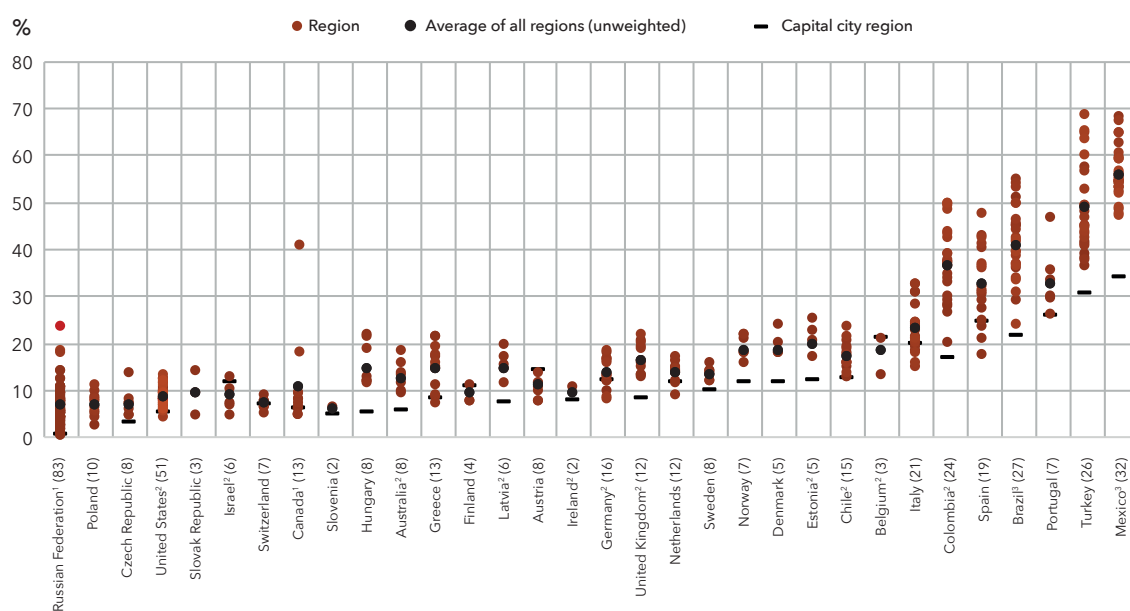
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- Despite increasing educational attainment across OECD and partner countries in recent decades there are still some regions with high concentrations of young adults who do not have upper secondary education.
- The share of 18-24 year-olds who are neither employed nor in education or training (NEET) shows substantial regional variation within countries, and tends to be higher in less wealthy regions.
- Across OECD countries with subnational data, there are only 10 regions where young adults without an upper secondary education have employment rates of over 80%. In contrast, there are 237 regions where employment rates are over 80% for those with a tertiary education.

Upper secondary education is often considered to be the minimum level of education required in today's world to successfully navigate the labour market and society. Many countries have made substantial progress in recent years in increasing the educational attainment of their populations. In 2017, the share of 25-34 year-olds without upper secondary education was 15% on average across OECD countries, compared to 20% a decade earlier (OECD, 2018<sup>[1]</sup>). Yet, despite this progress, there are regions within OECD countries where a sizeable share of young adults did not achieve an upper secondary education (Figure 1).

**Figure 1 / Percentage of 25-34 year-olds with below upper secondary education in subnational entities (2018)**



**Note:** Each dot represents a region. The value in parenthesis represents the number of regions with available data.

1: Data refer to 2016.

2: Data refer to 2017.

3: Data refer to 2015

Countries are ranked in ascending order based on the region with the minimum value.

**Source:** OECD (2019<sup>[2]</sup>), OECD Regional Statistics (database), <http://dx.doi.org/10.1787/region-data-en>.

In just under 10% of regions with available data (39 out of 473 regions), at least half of all 25-34 year-olds have not completed upper secondary education. These regions are all located in Brazil, Mexico and Turkey. In addition, the regions where more than 30% of young adults do not have upper secondary education are found in Brazil (all regions except the Distrito Federal, Roraima and São Paulo), Canada (Nunavut), Colombia (17 out of 24 regions), Italy (Apulia, Campania, Sardinia and Sicily), Mexico (all regions), Portugal, (Algarve, Azores and Madeira), Spain (12 out of 19 regions) and Turkey (all regions).

A number of other countries also have at least one outlier region with a much larger share of young adults with below upper secondary education than the rest of the country. For example, in the majority of regions

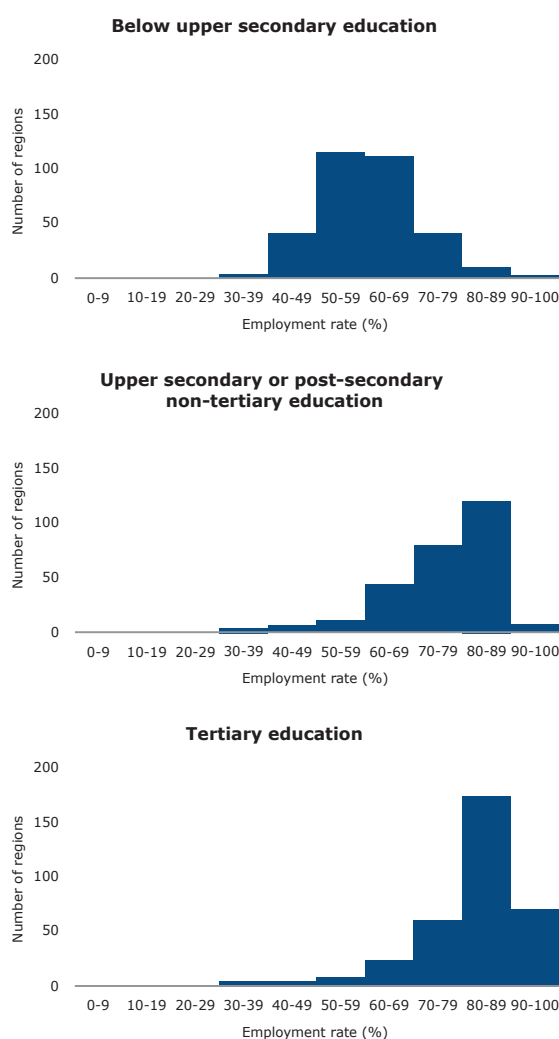
in Canada less than 10% of 25-34 year-olds do not have upper secondary education, but in the Northwest Territories the share reaches 18% and in Nunavut it reaches 41%.

Such examples show the need to better understand the contextual factors in the outlier regions as there may be significant geographical and demographic differences between one region and another. In Canada, for example, comparisons between Ontario, which has the largest population and many urban centres, and Nunavut, which is sparsely populated and has many remote communities, have to be made with these differences in mind. The overall size of the regions within a country can also have an effect on subnational variations. For example, in countries with a number of large polarised regions, internal variations within regions can cancel each other out and make differences between regions appear smaller.

## The labour-market impact of educational attainment varies across regions

Country-level analyses show that across OECD and partner countries the likelihood of finding employment rises with higher levels of educational attainment. This is also true when considering employment rates across regions. In most regions, employment rates are between 50% and 59% for young adults without an upper secondary education, while in the vast majority of regions they are between 80% and 89% for those with a tertiary education (Figure 2).

**Figure 2 / Number of regions by educational attainment and employment rates for 25-34 year-olds (2018)**



**Note:** Employment rates refer to 2017 for regions in Australia, Colombia, Ireland and the United States, and 2016 for regions in Canada and the Russian Federation.

**Source:** OECD (2019), OECD Regional Statistics (database), <http://dx.doi.org/10.1787/region-data-en>.

On average across all regions, employment rates for young adults with tertiary education are 6 percentage points higher than employment rates for those with upper secondary or post-secondary non-tertiary education only.

The employment rates for tertiary-educated 25-34 year-olds are generally low in Italy. Calabria has the lowest rate of all OECD regions with data (36%), but employment rates are also below 50% in the regions of Basilicata, Campania and Sicily. In contrast, regions such as Bolzano Bozen, Lombardy and Veneto have succeeded in providing employment for most of this segment of the population, with employment rates above 80%.

In contrast, the employment rates of tertiary-educated 25-34 year-olds in the Netherlands are high in all regions. Groningen has the lowest rates, at 86%, followed by Limburg with 89%; in all other regions the employment rates are 90% or more. This shows that despite significant regional variations in some countries, the strength of the economy at the national level should also be taken into consideration when comparing regions across national boundaries.

### NEET rates vary across regions

Regional variations in the share of young people who are neither employed nor in education or training (NEET) can be related to the local economy and the associated capacity within regions to provide a range of job opportunities for young people. Differences in NEET rates across regions may also be affected by how easy it is for people to move between regions for education or work. Many of the regions with higher levels of gross domestic product (GDP) per capita, also have lower NEET rates (Figure 3).

Figure 3 / GDP per capita (2017) and NEET rates (2018) across regions



**Note:** Each dot represents a region. GDP per capita is expressed in USD in purchasing-power parity (PPP). Three regions with a GDP per capita over USD 130 000 are not displayed. Data on NEET refer to 2018 or the most recent available data and data on GDP per capita refer to 2017 or the most recent available data.

**Source:** OECD (2019), OECD Regional Statistics (database), <http://dx.doi.org/10.1787/region-data-en>.

As economies across the OECD recovered from the global financial crisis, regional disparities were reduced in many countries (OECD, 2018<sub>[2]</sub>). Nonetheless, young people can still face vastly different experiences when making the transition from education to the labour market, depending on their geographical location. Across regions with available data, the NEET rate for 18-24 year-olds can range from as low as 2.1% in Hokuriku (Japan) and Minnesota (United States) to as high as 48.1% in Eastern Anatolia – East (Turkey) (Figure 4).

Some countries experience substantial regional disparities. The largest occurs in the Russian Federation, which has 83 regions with data, and where the NEET rate in Ingushetia (45.5%) is almost 12 times the NEET rate in the

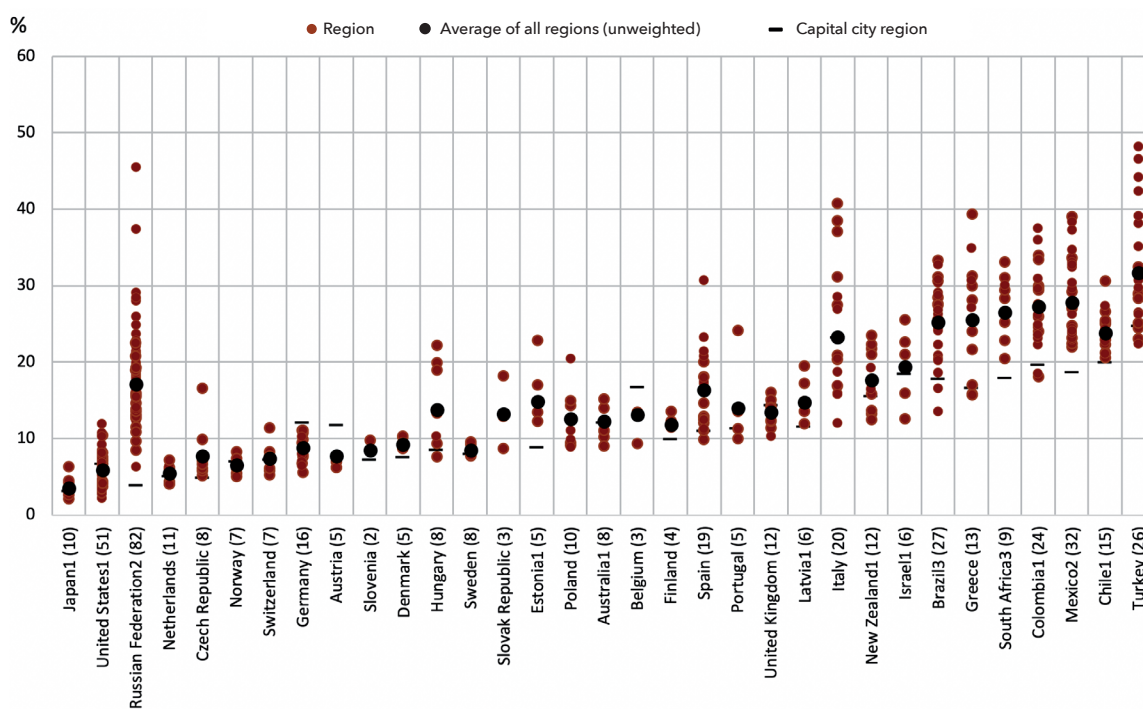


City of Moscow (3.8%). In the United States, which has 51 regions with data, the region with the highest NEET rate (Mississippi, at 11.9%) is 5 times greater than the region with the lowest rate (Minnesota, at 2.1%).

As with educational attainment, countries can also have outlier regions where NEET rates are substantially higher than in the rest of the country. In Portugal, the Azores has the highest NEET rate (24.1%), which is more than 10 percentage points above the next-highest regional rate (Alentejo). This example suggests that outliers may occur in remote regions or regions separated from the mainland.

Other countries maintain both a relatively low NEET rate in general and more equality across regions. For example, in the Netherlands, Norway, Slovenia and Sweden, NEET rates are below 10% in all regions, and the ratio between the highest and lowest regional rates is less than two. Creating equality across regions requires a range of policy responses, including place-based policies and well-targeted public investment that takes account of specific regional needs, characteristics, competitive advantages and potential for innovation and job creation (OECD, 2014<sup>[3]</sup>). This can be particularly challenging for large countries with many ethnic, geographical, climatic or economic variations across regions.

**Figure 4 / Share of 18-24 year-old NEETs (2018)**



**Note:** Each dot represents a region. The value in parenthesis represents the number of regions with available data.

1: Data refer to 2017.

2: Data refer to 2015.

3: Data refer to 2013.

Countries are ranked in ascending order based on the region with the minimum value.

**Source:** OECD (2019), OECD Regional Statistics (database), <http://dx.doi.org/10.1787/region-data-en>.

## The bottom line

Different regions often display large differences in educational attainment and employment outcomes, highlighting the importance of monitoring regional as well as national indicators and the need for government to develop tailored policy responses to ensure the benefits of education reach the whole country.

### OECD subnational data collection

The data used in this EDIF are based on the data collection of indicators on education at the subnational level carried out by the Centre for Entrepreneurship, SMEs, Regions and Cities (CFE), in co-ordination with the Directorate for Education and Skills (EDU). The data are collected through the network composed by the delegates of the Working Party on Territorial Indicators (WPTI), and the delegates of the Working Party on Indicators of Educational Systems (INES). Only data at the Territorial Level 2 (TL2) are included in this analysis, except for Estonia and Latvia (TL3). All data collected on subnational regions are available in the OECD Regional Statistics Database (OECD, 2019<sup>[4]</sup>). The data for this publication were most recently updated on 30 June 2019.

### REFERENCES :

- [4] OECD (2019), *OECD Regional Statistics (database)*, <http://dx.doi.org/10.1787/region-data-en>.
- [1] OECD (2018), *Education at a Glance 2018: OECD Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/eag-2018-en>.
- [2] OECD (2018), *OECD Regions and Cities at a Glance 2018*, OECD Publishing, Paris, [https://dx.doi.org/10.1787/reg\\_cit\\_glance-2018-en](https://dx.doi.org/10.1787/reg_cit_glance-2018-en).
- [3] OECD (2014), *Recommendation of the Council on Effective Public Investment Across Levels of Government*, <http://www.oecd.org/regional/regional-policy/Principles-Public-Investment.pdf>.

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