

2 The integration of migrants in regional labour markets

This chapter analyses the labour market integration of migrants across regions in OECD countries. First, it provides an overview of labour market outcomes of migrants across regions and their change over time. Second, it analyses how migrants fare in the labour market compared to the native-born population. Third, it looks at different relevant factors that play a role in explaining different labour market outcomes between native-born and migrant workers, namely the distinction between European Union (EU) and non-EU migrants as well as gender gaps. Finally, it sheds light on the skills migrants can bring to regional economies by analysing the educational attainment of migrants, comparing it between EU migrants, non-EU migrants and the native-born population.

In Brief

The labour market integration of migrants has been improving across OECD regions but significant policy challenges remain

- Labour market outcomes of migrants have improved in recent years. Since 2015, the employment rate of migrants increased by 4.3 percentage points in OECD countries, with a third of OECD regions reporting rising employment rates of migrants of more than 5 percentage points. However, the COVID-19 pandemic risks reverting such progress among migrants.
- Despite recent improvements, migrants' employment rate still falls below that of the native-born population in the labour market, especially in European regions. As of 2019, migrants remain around 4 percentage points less likely to be employed but almost 5 percentage points more likely to be unemployed than native-born individuals in OECD countries. However, in capital regions and regions with a relatively larger service economy, such differences in labour market outcomes tend to be smaller.
- Differences between non-EU and EU migrants in Europe, especially in high-income regions in Northern Europe, as well as gender gaps and educational attainment help explain worse employment outcomes of migrants across OECD regions. In most regions, male migrants and native-born individuals have similar employment rates. However, significantly lower employment of female migrants, driven by relatively low labour market participation in many regions, cause a gap between overall employment rates of migrant and native-born workers in OECD regions, in particular outside of capitals and more urban regions.
- In European OECD countries, non-EU migrants significantly lag behind EU migrants in labour market outcomes. The average employment rate of non-EU migrants is more than 10 percentage points lower than that of EU migrants, while their unemployment rate is almost 6 percentage points higher. However, the gap between EU and non-EU migrants has narrowed in almost two-thirds of regions since 2015, driven by faster employment growth among non-EU migrants.
- Migrants can contribute valuable skills to regional economies. In the OECD, the share of migrants (40%) that has completed tertiary education surpassed the share of native-born residents (35%) in 2019. However, migrants' educational attainment differs widely within OECD countries, with differences of more than 10 percentage points between regions in many OECD countries.
- Increasingly, specific regions concentrate both highly skilled native-born and migrant workers. The more educated a region's native-born population is, the more educated its migrant population tends to be, with this geographic concentration of high-skilled migrant and native-born workers having become stronger over time.

Introduction

The majority of migrants in OECD countries will likely stay in their host country in the medium run. Therefore, their integration in the labour market is of fundamental importance as it not only offers the economic means for a good quality of life but also facilitates social and cultural integration in migrants'

place of residence. However, the successful integration of migrants into labour markets remains a significant challenge with a strong geographic component.

Overall, migrants remain less likely to be employed than native-born individuals across OECD regions. At the same time, their gap relative to the native-born population in terms of labour market outcomes varies widely across regions within countries. This chapter examines the current regional labour market integration of migrants and its recent evolution. Furthermore, it offers insights into the challenges different types of migrants face. Additionally, it analyses to what extent gender gaps pose an obstacle to migrants' economic integration in OECD regions.¹ Finally, it provides new data on the educational attainment of different types of migrants, comparing it to the native-born population, which provides an overview of the skills migrants can bring to regional economies.

This chapter builds on and extends recent OECD efforts to compare labour market integration outcomes at the subnational level (Diaz Ramirez et al., 2018^[1]). It significantly expands the empirical scope of regional data for TL2 OECD regions on migrants' presence and labour market outcomes (Box 1.2). While previous efforts were restricted to one point in time (2015) for migrants' labour market outcomes across regions, this chapter is based on new comprehensive data collection efforts. Drawing on various labour force surveys as well as other sources, most derived indicators cover annual regional observations for the period of 2010-19. Table 2.1 provides an overview of the time coverage of the main categories of indicators examined in this chapter.

Box 2.1. Data: Definition and sources

Data sources

This chapter uses various labour force surveys to assess the educational attainment and the labour market integration of migrants across regions in OECD countries. The main data sources are the European Community Labour Force Survey (EU-LFS) for the European OECD countries, the American Community Survey for the United States (US), the Canadian Labour Force Survey for Canada, the National Survey of Occupation and Labour for Mexico, the Survey of Education and Work (SEW) for Australia, the Israel Monthly Labour Force Survey for Israel, the Encuesta Nacional de Empleo (ENE) for Chile, the Gran Encuesta Integrada de Hogares (GEIH) for Colombia, and the Resident Registered Population Status Census, the Immigrant Status and Employment Survey as well as the Survey of the Economically Active Population for Korea.

Sample

The sample of all analyses in this chapter is restricted to residents in the 15 to 64 age group. The analysis uses the common approach of defining migrants as those individuals born in a foreign country, regardless of those individuals' arrival in their resident country. For European countries, migrants are further split into two groups based on their country of birth: those born in another European Union (EU) member country than the one where they currently work and reside (i.e. EU migrants) and those born in a country outside of the EU (i.e. non-EU migrants). Finally, anyone who was born in their country of residence is considered native-born.

Definitions

Labour market outcomes:

- Employment, unemployment, and participation rates

Educational attainment:

- Low education: International Standard Classification of Education (ISCED) 0/2.
- Medium education: ISCED 3/4.
- High education: ISCED 5/6.

Table 2.1. Time coverage of indicators

Availability of yearly regional data by country and group of indicators

	Educational attainment	Labour market outcomes	EU/non-EU distinction
European countries*	2004-19	1999-2019	2006-19*
Australia	2011-12	2011-20	..
Canada	2017-19	2006-20	..
Chile	2010-20	2010-20	..
Colombia	2013-20	2013-20	..
Israel	2012-19	2012-19	..
Korea	..	2012-20	..
Mexico	2005-19	2005-19	..
United States	2000-19	2000-19	..

Note: .. : not available

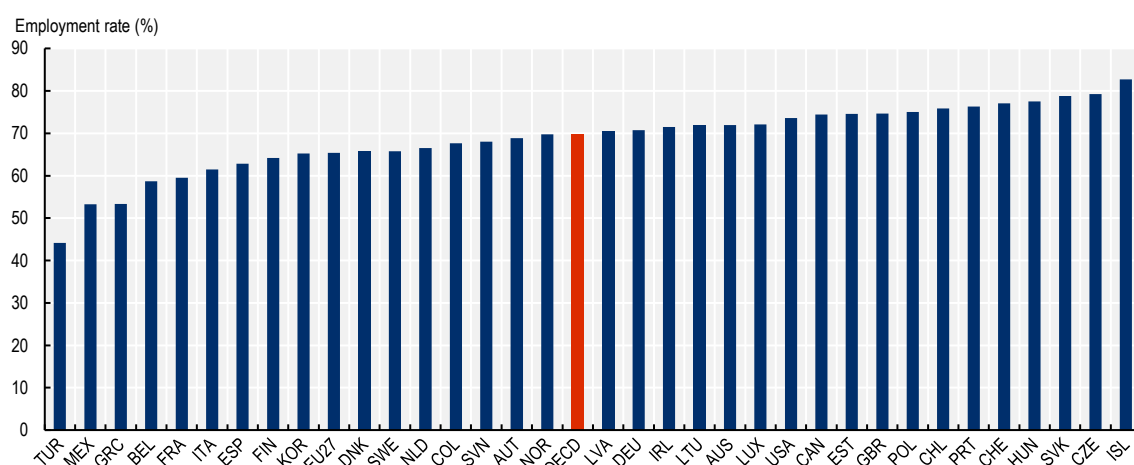
* European countries include all EU OECD countries plus Iceland, Norway, Switzerland, Turkey and the UK. Separate data on EU and non-EU migrants are available in Germany from 2017 onwards, from 2012 onwards in Lithuania, from 2012 onwards in Ireland and Turkey, and from 2007 onwards in Denmark.

Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

What are migrants' labour market outcomes in the OECD?

On average, the employment rate of migrants reached almost 70% in OECD countries in 2019. In EU27 countries, it was slightly lower, standing at 65% (Figure 2.1). However, in various OECD countries, migrants recorded significantly higher employment rates. For example, in Iceland, migrants' employment rate was almost 83% in 2019 and it surpassed 75% in Chile, the Czech Republic, Hungary, Poland, Portugal, the Slovak Republic and Switzerland,. In contrast, only 44% of migrants in Turkey were employed in 2019. Similarly, only slightly more than half of the migrant population was in active employment in Greece (53%) and Mexico (53%).

Across OECD regions, differences in labour market outcomes of migrants are striking. The employment rate of migrants ranges from 23% in Southeastern Anatolia, East in Turkey to 88% in Åland, Finland (Figures 2.3 and 2.4). In general, those OECD countries with a low national employment rate of migrants also document the largest variation in migrants' employment rate. For instance, regional differences in the share of employed migrants are between 33 to 36 percentage points in Mexico and Turkey. However, Germany and Hungary, both countries where migrants' national employment rates of 71% and 77% exceed the OECD (70%) and EU27 (65%) averages, also report regional gaps of more than 20 percentage points or more. Ireland, Korea and Switzerland are among the countries with little geographic variation in migrant employment rates, with regional differences amounting to 6-8 percentage points.

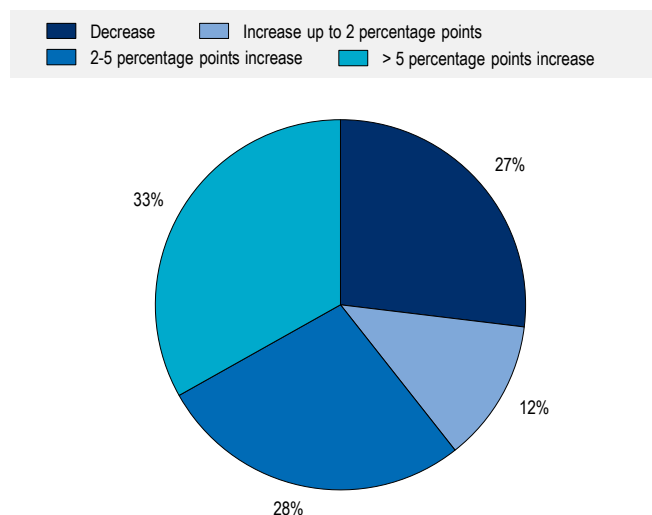
Figure 2.1. Employment rate of migrants, 2019

Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

In the vast majority of OECD regions, the labour market integration of migrants has made considerable progress since 2015. On average, the employment rate of migrants increased by 4.3 percentage points in OECD countries and 3.4 percentage points in EU27 countries. Among regions with available data, the employment rate among migrants has developed positively, with almost three-quarters of regions recording an increase (Figure 2.2). In around a third of regions, this increase was highly significant, exceeding 5 percentage points between 2015 and 2019. A further 28% of regions saw employment among their foreign-born population rise by between 2 and 5 percentage points. However, the positive trend in migrants' employment was not ubiquitous, as around 27% of regions actually reported a decline in the employment rate of migrants. A similar pattern holds for unemployment, which has fallen by almost 5 percentage points among migrants across the OECD.

Figure 2.2. Change in the migrant employment rate across OECD regions, 2015-19

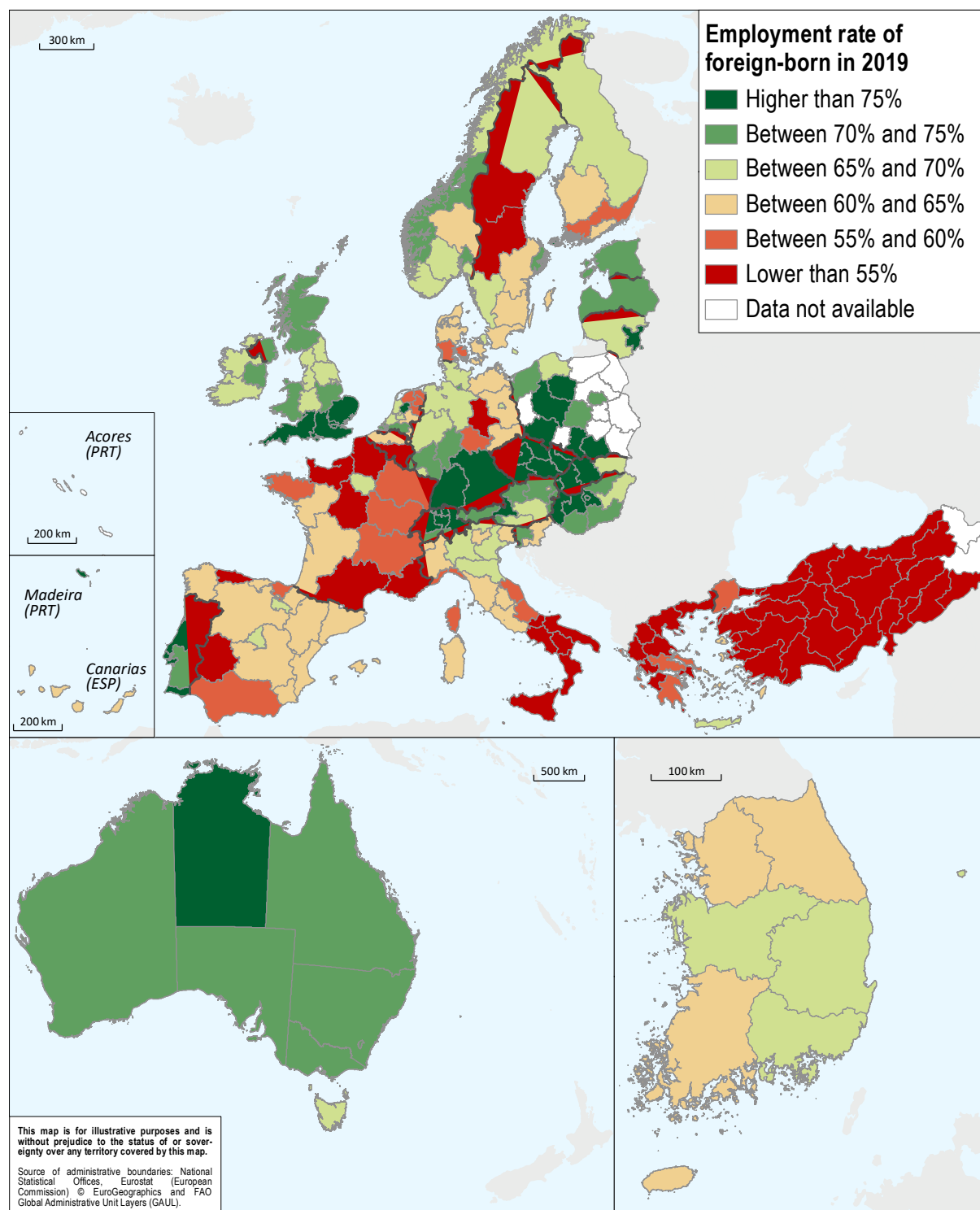
Distribution of the change in the employment rate of foreign-born across regions



Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

Figure 2.3. Employment rate of foreign-born, 2019

Employment rate of foreign-born across TL2 regions, 2019 or latest available year

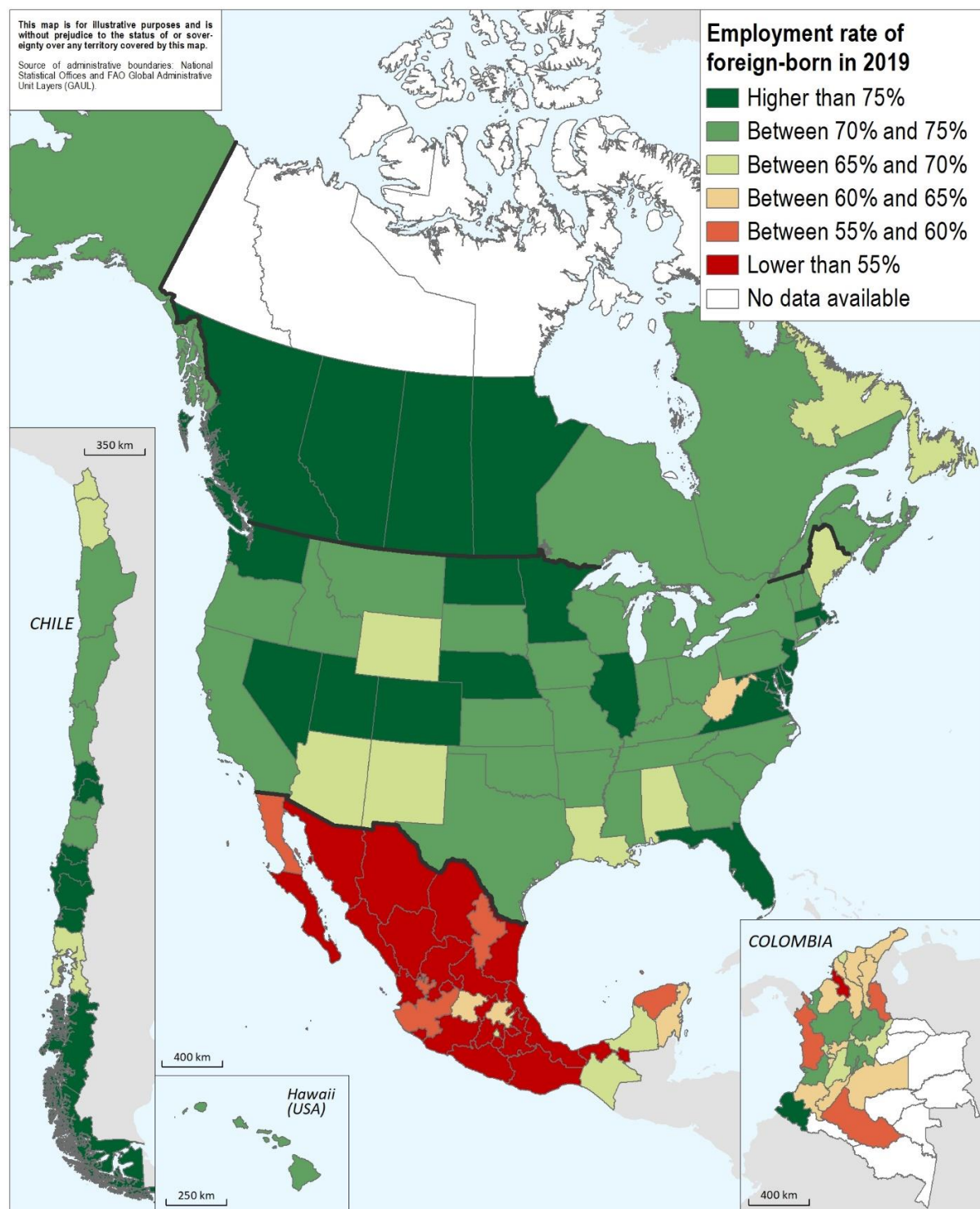


Note: The sample consists of foreign-born individuals aged 15 to 64.

Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

Figure 2.4. Employment rate of foreign-born, 2019

Employment rate of foreign-born across TL2 regions, 2019 or latest available year



Note: The sample consists of foreign-born individuals aged 15 to 64.

Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

Migrants' contribution to the host region's labour market is not limited to their roles as employees. They also help foster entrepreneurship, as migrants are more likely to be self-employed or entrepreneurs (Box 2.2). Additionally, migration can help local firms mitigate pressing skills shortages (Box 2.3).

Box 2.2. Effect of migration on entrepreneurship and foreign direct investment (FDI)

Across OECD countries, migrants are more likely to be self-employed or entrepreneurs than the native-born population (Fairlie et al., 2012^[2]). For instance, 25% of the new firms in the US were founded by first-generation migrants (Kerr and Kerr, 2020^[3]). Firms founded by migrants are more likely to export (Wang and Liu, 2015^[4]) yet are often smaller in size (Kerr and Kerr, 2020^[3]). Due to the high entrepreneurial activity of migrants, some countries (e.g. Australia, the United Kingdom [UK], or the US) introduced visas for investors and entrepreneurs.

Migrants are more likely to choose self-employment compared to native-born residents for a few reasons. First, migrants have a higher willingness to take risks (Kihlstrom and Laffont, 1979^[5]). Second, they may prefer self-employment due to difficulties in entering the labour market due to discrimination. Finally, migrants chose self-employment to benefit from the individual talent, motivation or co-national networks (Kerr and Mandorff, 2015^[6]).

Migrants also increase FDI linkages between their host country and country of birth by reducing the transaction and information costs. In fact, migrants and refugees help establish new linkages or increase the volume of FDIs between both countries (Mayda et al., 2019^[7]). Evidence from various OECD countries suggests that high-skilled or second-generation migrants play a crucial role in fostering FDI flows compared to new arrivals (Kugler and Rapoport, 2007^[8]; Flisi and Murat, 2011^[9]).

Source: Fairlie, R. et al. (2012^[2]), "Indian entrepreneurial success in the United States, Canada, and the United Kingdom", Emerald Group Publishing Limited; Flisi, S. and M. Murat (2011^[9]), "The hub continent. Immigrant networks, emigrant diasporas and FDI", *The Journal of Socio-Economics*, Vol. 40/6, pp. 796-805; Kerr, S. and W. Kerr (2020^[3]), "Immigrant entrepreneurship in America: Evidence from the survey of business owners 2007 & 2012", *Research Policy*, Vol. 49/3, p. 103918; Kerr, W. and M. Mandorff (2015^[6]), "Social networks, ethnicity, and entrepreneurship", No. w21597, National Bureau of Economic Research; Kihlstrom, R. and J. Laffont (1979^[5]), "A general equilibrium entrepreneurial theory of firm formation based on risk aversion", *Journal of Political Economy*, Vol. 87/4, pp. 719-748; Kugler, M. and H. Rapoport (2007^[8]), "International labor and capital flows: Complements or substitutes?", *Economics Letters*, Vol. 94/2, pp. 155-162; Mayda, A. et al. (2019^[7]), "Refugees and foreign direct investment: Quasi-experimental evidence from U.S. resettlements"; Wang, Q. and C. Liu (2015^[4]), "Transnational activities of immigrant-owned firms and their performances in the USA", *Small Business Economics*, Vol. 44/2, pp. 345-359.

Box 2.3. Looking for the "Best and Brightest": Hiring difficulties and high-skilled foreign workers

In the US, research on whether skilled migrant workers could replace native-born workers is mixed. Firms recruiting young and skilled migrant workers also recruit additional young native-born workers in all skills groups (Kerr, Kerr and Lincoln, 2015^[10]). However, firms that receive additional work permits for migrant workers through the official lottery do not recruit additional domestic workers (Doran, Gelber and Isen, 2014^[11]).

Raux (2021^[12]) focuses on the relationship between firms' hiring difficulties and their recruitment decisions between native-born and migrant workers. Comparing recruitment decisions made by a given employer for similar positions, he finds that US employers are more likely to seek migrant workers when

finding domestic workers takes more time. In particular, employers are 28% more likely to initiate a work permit demand when the job posting duration is 40 days long. The likelihood is even higher for occupations related to engineering and computer sciences. The study shows that employers rely on skilled migrant workers to fill their vacancies when faced with labour force shortages.

Source: Doran, K., A. Gelber and A. Isen (2014^[11]), "The effects of high-skilled immigration policy on firms: Evidence from visa lotteries", *NBER Working Paper*, No. 2066; Kerr, S., W. Kerr and W. Lincoln (2015^[10]), "Skilled immigration and the employment structures of U.S. firms", *Journal of Labor Economics*, Vol. 33/3, pp. 147-186; Raux, M. (2021^[12]), "Looking for the 'Best and Brightest': Hiring difficulties and high-skilled foreign workers".

How do migrants fare in comparison to the native-born population?

Despite increasing employment and falling unemployment, migrants still lag behind the native-born population in the labour market in most OECD countries and regions. As of 2019, migrants remain around 4 percentage points less likely to be employed but almost 5 percentage points more likely to be unemployed than native-born individuals in OECD countries. However, a closer look at OECD regions reveals a more nuanced picture (Figures 2.5 and 2.6).

Migrants' relative labour market integration differs between EU countries and non-European OECD countries. In the OECD overall, migrants have, in fact, on average higher employment rates than native-born and have narrowed the gap with the native-born population in terms of unemployment. In 2019, migrants' unemployment rate was only 1 percentage point above that of native-born workers, down from more than 2 percentage points in 2015. In Europe, migrants still lag behind the native-born population in terms of employment (66% to 69% in the EU27 in 2019) but that gap has fallen by almost 1 percentage point between 2015 and 2019.

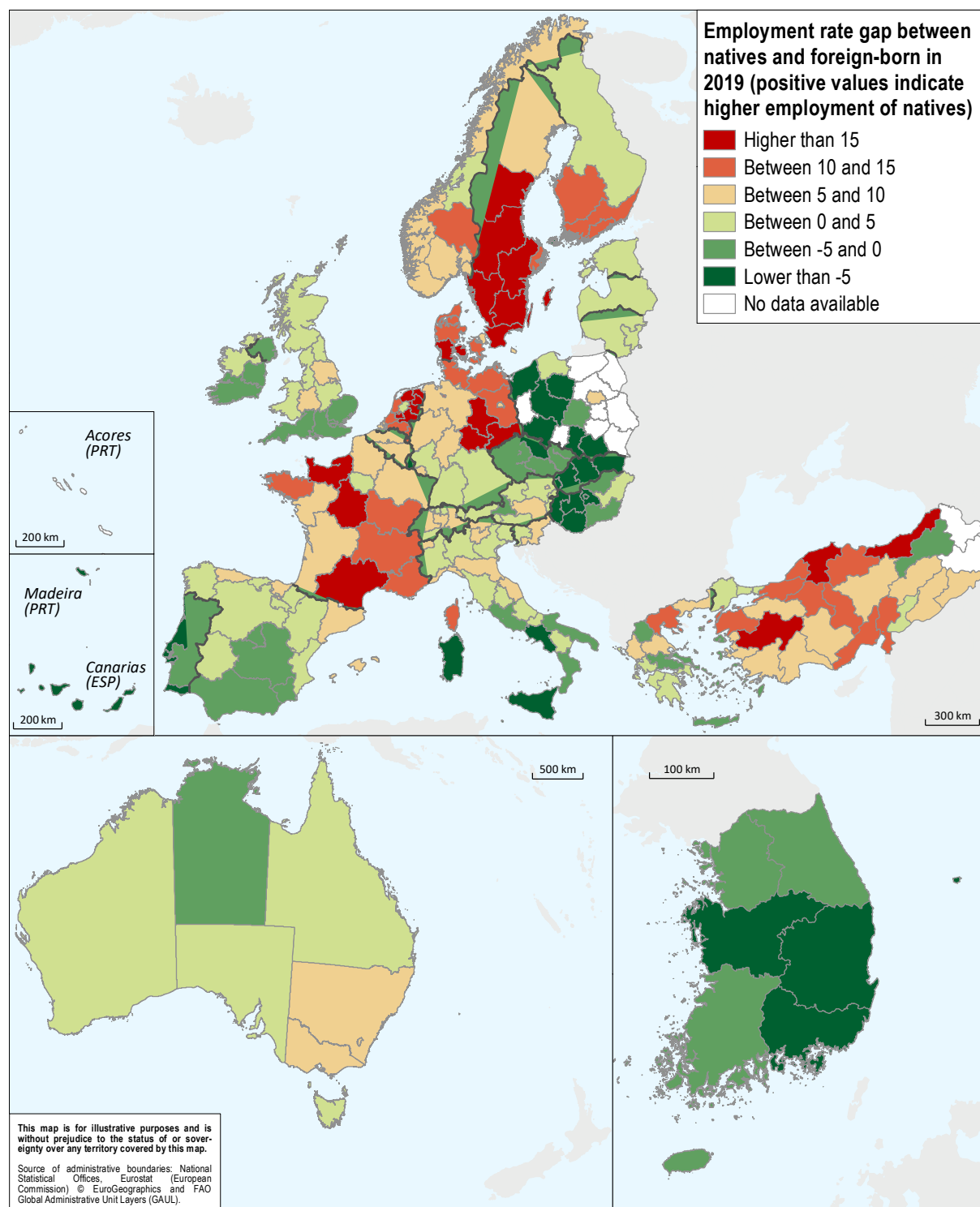
Labour market differences between native- and foreign-born not only differ between countries but also vary widely across regions within countries. For example, the native-migrant employment rate gap exceeds 15 percentage points in various regions in eastern Germany but is almost non-existent in southern Germany (Figures 2.5 and 2.6). In the UK, the gap reaches 5 to 10 percentage points in the West Midlands and Yorkshire and Humber while the south of the country reveals the opposite picture, with migrants recording higher employment rates than native-born individuals. In most southern states in the US, the employment rate of migrants surpasses that of native-born by more than 5 percentage points while it falls short of that of the native-born population in several states in the Midwest.

Educational attainment is a key determinant of workers' employability. Thus, differences in educational attainment between foreign-born and native-born could drive worse employment outcomes of migrants (see section on educational attainment and use of migrants' skills for more details). In most OECD regions, however, employment rates are significantly lower for migrants than native-born individuals across all levels of educational attainment.

Migrants are more likely to be in employment in regions with relatively tight labour markets and places with relatively larger migrant communities. Taking into account country-specific characteristics, in regions with higher employment among the native-born population, i.e. regions with a tight labour market, migrants also recorded significantly higher employment rates in 2019 (Figure 2.7, left panel). Furthermore, regional labour market outcomes of migrants also appear to be correlated with the size of the regional migrant communities. In regions with a large migrant population relative to the rest of the country, migrants fare better, i.e. have a higher employment rate (Figure 2.7, right panel), which might capture network effects that facilitate migrants' job search. However, both factors are not correlated with a narrowing of the labour market gap between native-born and migrant workers across OECD regions.

Figure 2.5. Regional employment rate gap of foreign-born, 2019

Difference in employment rate between native- and foreign-born, TL2 regions, 2019 or latest available year

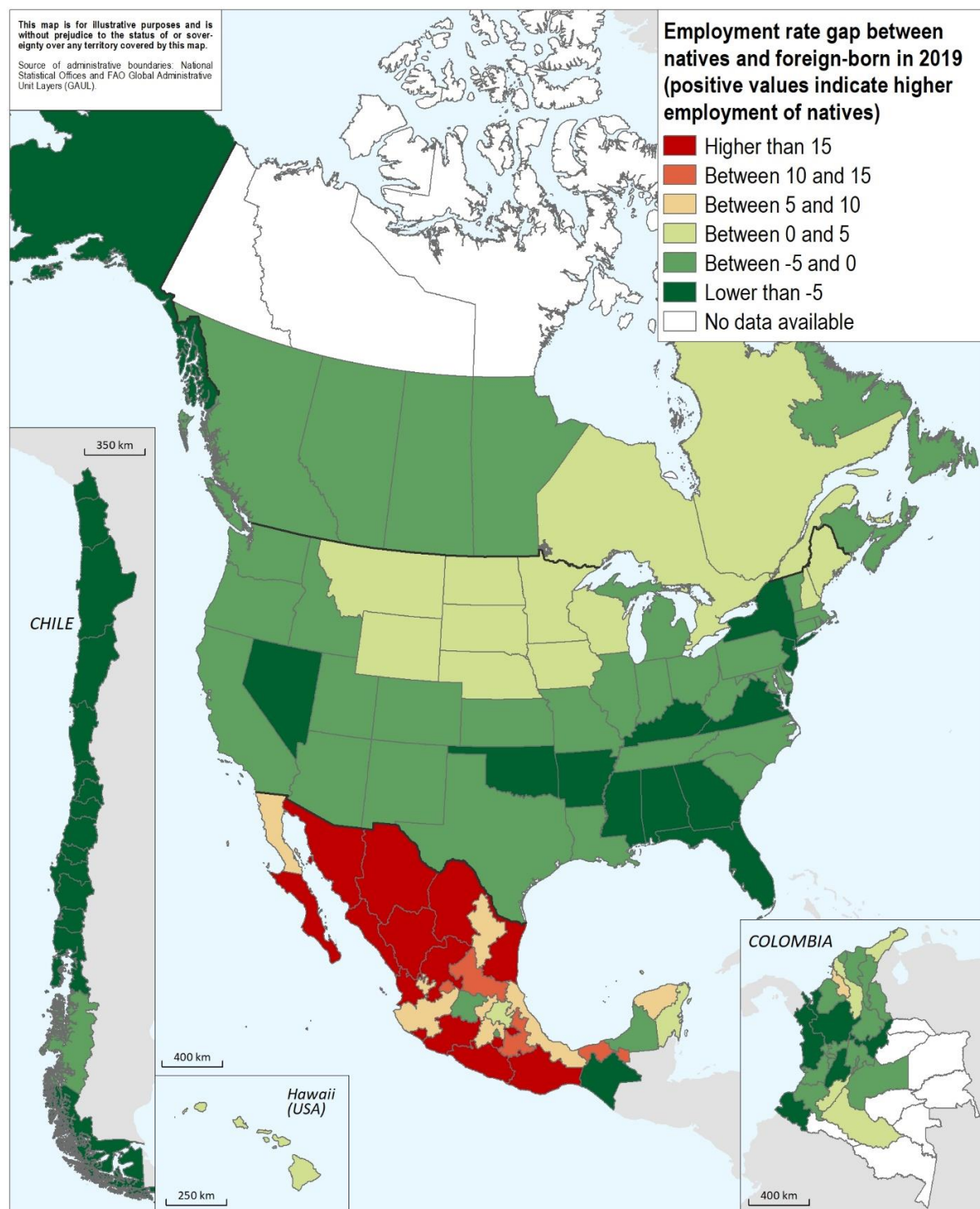


Note: The maps show the difference in the employment rate between native- and foreign-born individuals in each TL2 region in 2019 or in the latest available year.

Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

Figure 2.6. Regional employment rate gap of foreign-born, 2019

Difference in employment rate between native- and foreign-born, TL2 regions, 2019 or latest available year

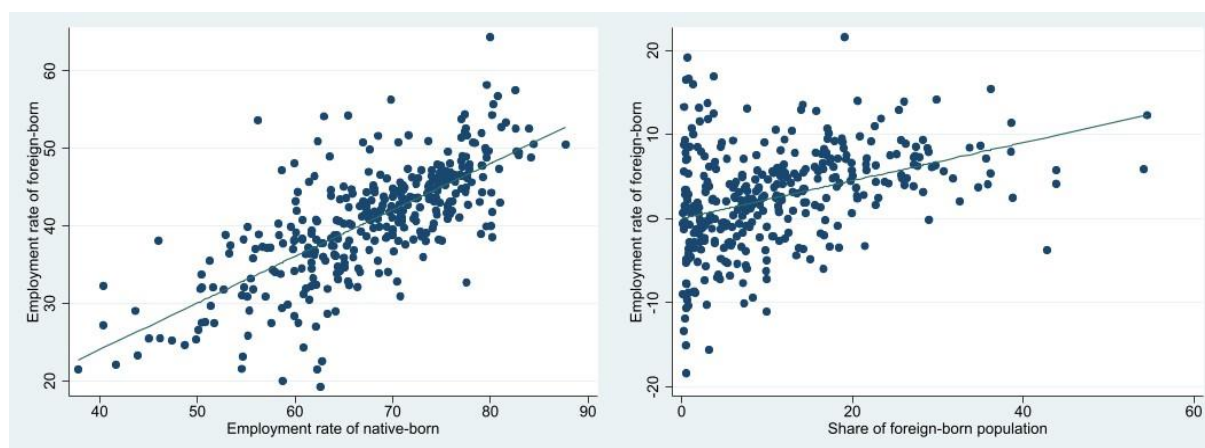


Note: The maps show the difference in the employment rate between native- and foreign-born individuals in each TL2 region in 2019 or in the latest available year.

Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

Figure 2.7. Employment rate of migrants: Labour market tightness and network effects, 2019

Correlation of the regional employment rate of migrants with the native-born employment rate (left) and the share of migrants (right)



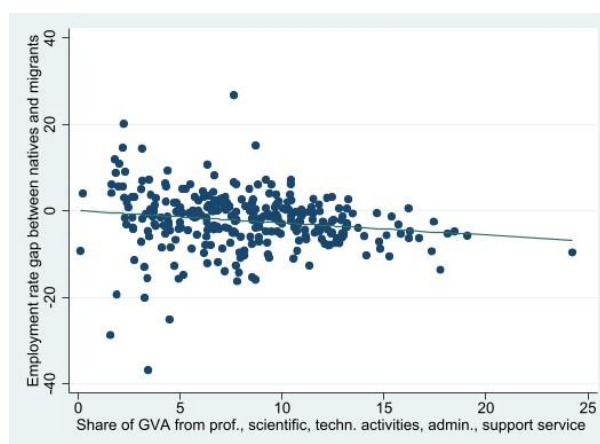
Note: Figures display residual component plots that take into account country fixed effects.

Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

Across OECD member countries, the structure of the regional economy appears to matter for the gap between native-born and migrant workers in labour market outcomes. Within OECD countries, regions with a stronger focus on the service sector show, on average, significantly lower differences in the employment rate between native-born and migrants (Figure 2.8). This relationship is robust to taking into account whether a region has an overall strong labour market, i.e. high levels of employment among the native-born population. The findings might indicate that it is easier for migrants to find a job in the service economy, which includes many entry or low-paying jobs, than in other sectors of the economy. Additionally, the regional employment gap also narrowed significantly between 2010 and 2018 in regions with a greater share of gross value added (GVA) coming from services (Annex Figure 2.A.1).

Figure 2.8. Employment rate gap and professional services, 2017

Regional differences in the employment rate between the native-born population and migrants and share of regional GVA from professional services



Note: Figures display residual component plots that take into account country fixed effects.

Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

Understanding the factors that inhibit migrants from fully participating economically in their host region has become even more important in the light of the COVID-19 pandemic. The economic consequences of the pandemic appear to hit migrants particularly hard (see Chapter 2) as migrants in most regions are concentrated in specific sectors of the economy, some of which such as hospitality or retail have struggled the most over the past year (OECD, 2020^[13]). The rest of the chapter examines three factors that might help explain the native-migrant labour market gap across OECD regions. Specifically, it analyses the discrepancy between different types of migrants. Furthermore, it examines the role of gender differences, i.e. the difficulty of migrant women to enter or stay in the labour market. Finally, it sheds light on differences in educational attainment and skills between migrants and the native-born population.

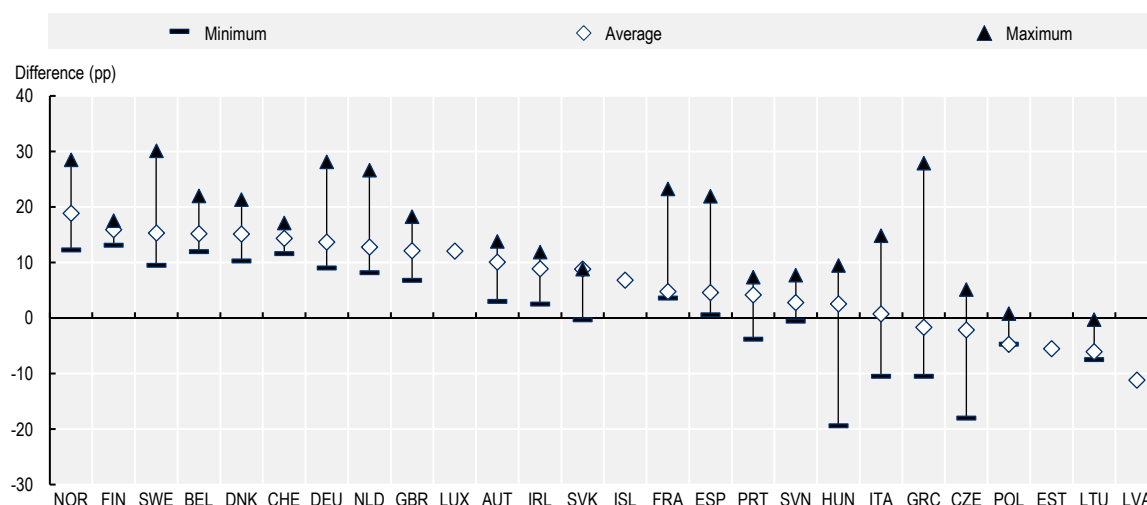
Regional labour market differences between EU and non-EU migrants

In European OECD countries, migrants' labour market outcomes follow a sharp divide between different migrant groups. While those born in another EU or European Free Trade Association (EFTA) country record high levels of employment and low levels of unemployment, in many countries and regions even outperforming the native-born population, migrants born elsewhere lag. This section examines the labour market differences between EU and non-EU migrants and analyses their geographic dimension across European regions.²

EU migrants tend to be significantly better integrated into their host countries' labour market than non-EU migrants. In European OECD countries, the average rate of EU migrants was 10.5 percentage points higher than that of non-EU migrants. Similarly, the unemployment rate of EU migrants was on average 5.9 percentage points lower than that of non-EU migrants. These patterns are apparent in almost all countries with available data (Figure 2.9). For example, in all but six, mostly East European countries with small EU-born migrant communities, non-EU migrants recorded lower employment rates than their EU peers. Furthermore, in 15 of 26 countries, EU migrants had a higher employment rate than non-EU migrants in all of the regions of the respective country. In capital regions, the average employment gap between EU and non-EU migrants tends to be lower than in the rest of the country, averaging below 8 percentage points in 2019.

Figure 2.9. Employment rate gap between EU and non-EU migrants

Percentage point (pp) differences in employment rates between EU and non-EU migrants across European regions



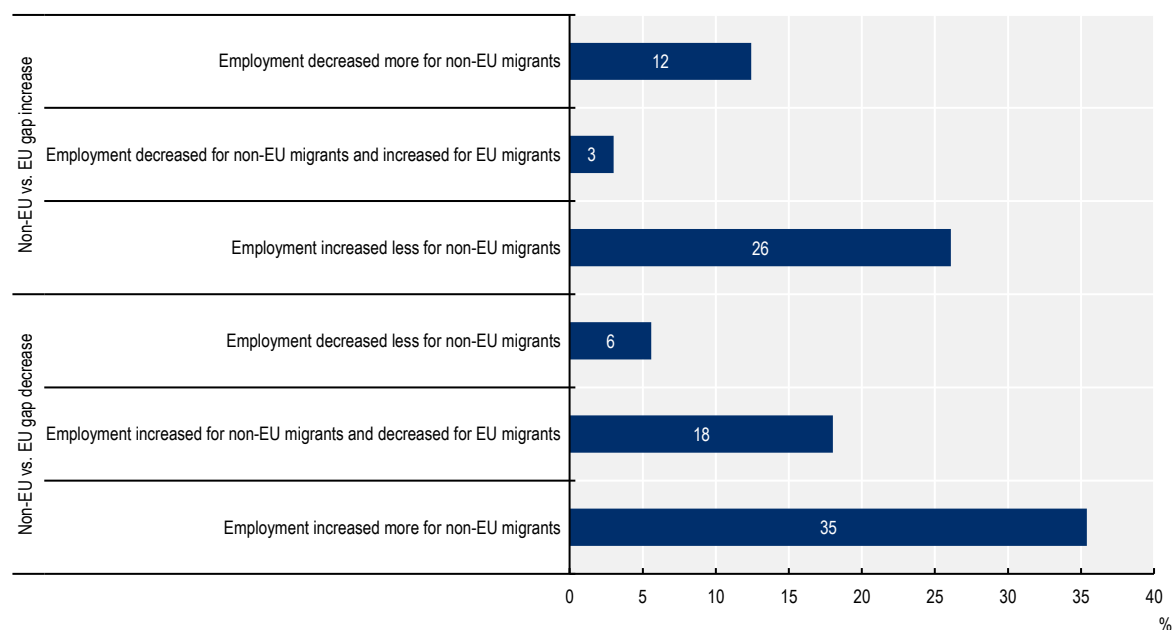
Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

The labour market gap between EU and non-EU migrants appears to be narrowing, both nationally as well as regionally. Between 2015 and 2019, the difference in the employment rate of EU and non-EU migrants decreased by around 1.555 percentage points in both OECD countries with available data and the EU27 overall. Nonetheless, the gap remains large, with the employment rate of EU migrants still exceeding that of non-EU migrants by more than 10 percentage points in 2019. In countries such as Austria, the Czech Republic, France, Germany or the Baltic countries, the vast majority of regions recorded a reduction of labour market gaps, with the employment rate of non-EU migrants converging to that of EU migrants (Figure 2.11). In other countries, however, the picture has been more mixed. For example, in Spain, several southern regions including Andalusia and Murcia recorded a significant widening of the employment rate differences between EU and non-EU migrants, driven by a fall in the employment rate of those born outside the EU, while more industrial regions in the north of the country recorded a large drop in the gap.

While the overall labour market gap has narrowed between non-EU migrants and EU migrants, the picture is mixed in European regions. In a positive way, the majority of regions (59%) recorded a convergence in the labour market outcomes of EU and non-EU migrants between 2015 and 2019. This catch-up was primarily driven by faster employment growth among non-EU migrants (Figure 2.10) and to a lesser degree by regional employment growth of non-EU migrants occurring at the same time as falls in employment among EU migrants. Conversely, in most of the regions where the EU vs. non-EU gap increased in 2015-19, the employment rate of both EU and non-EU migrants increased but even faster for EU migrants.

Figure 2.10. Distribution of regions by changing employment gap between non-EU and EU migrants, 2015-19

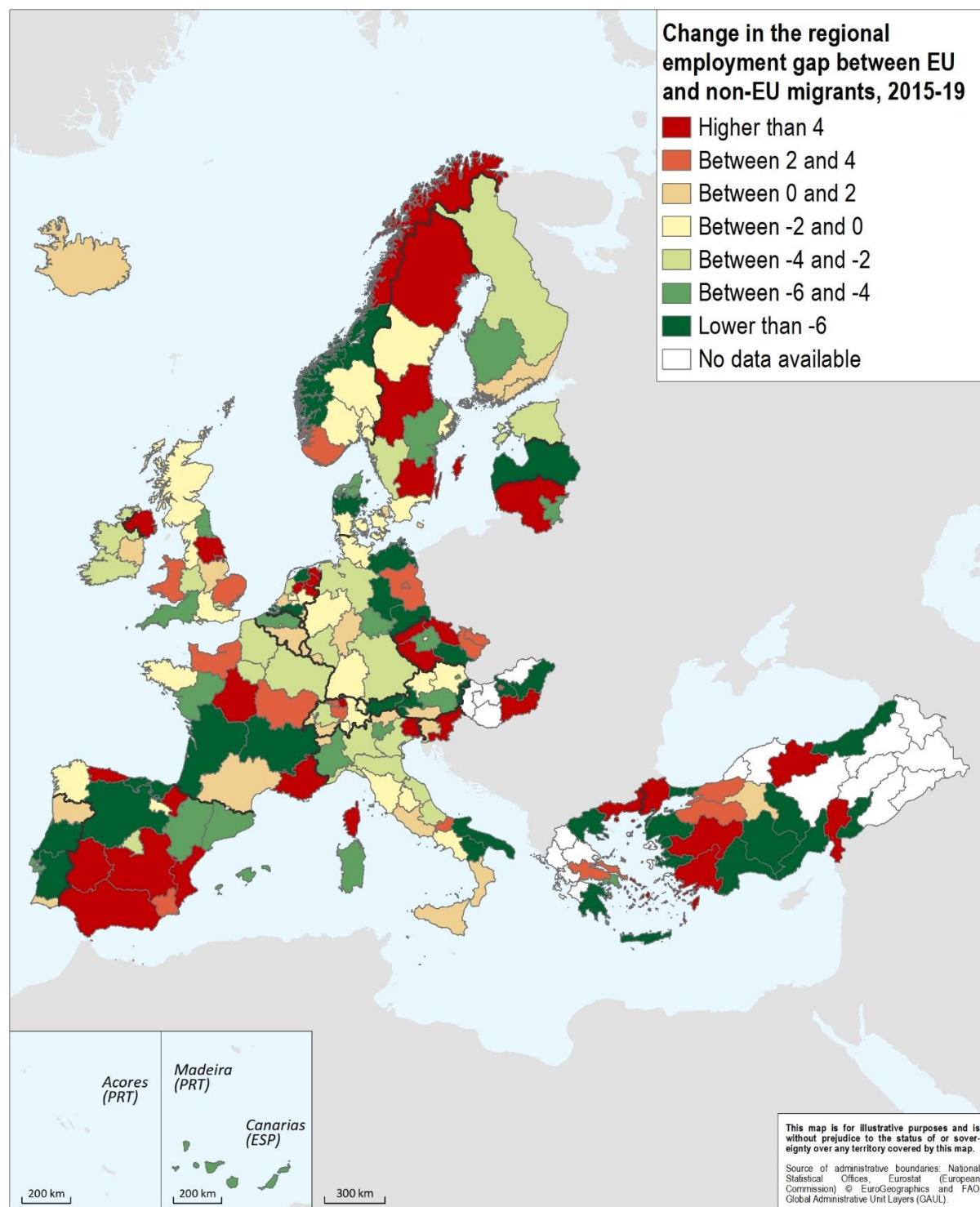
Share of regions by change in the difference in employment rates of non-EU and EU migrants



Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

Figure 2.11. Change in the regional employment gap between EU and non-EU migrants, 2015-19

Change in the difference in the employment rate between EU and non-EU migrants



Note: The map shows the change in the difference in the employment rate between EU- and non-EU migrants in each TL2 region between 2015 and 2019. For Germany, changes are for 2017-19 due to missing earlier data. Red colours mark a widening of the gap, green denotes a narrowing.

Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

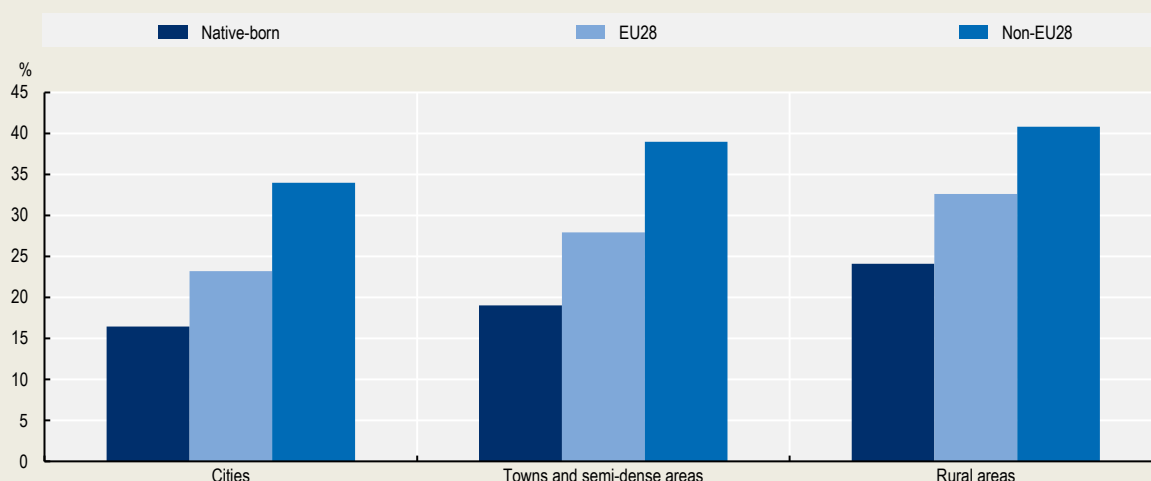
Worse labour market outcomes of non-EU migrants compared to those born in an EU country could have various reasons. Non-EU migrants appear to lag in education, meaning they have lower access to many jobs that require specific skills or qualifications (see the section below on educational attainment). Furthermore, non-EU migrants are more likely to face cultural or language barriers, which make a smooth integration into their host regions' economies more difficult. They might also encounter discrimination, an obstacle that is likely to be lower for EU migrants, especially given their higher educational attainment (OECD/EU, 2018^[14]). Finally, EU migrants encounter fewer problems in terms of recognition of their foreign qualifications and education than non-EU migrants, allowing them to find employment with less difficulty (see Box 2.4). Instead, for non-EU migrants, such challenges may not only make their job search more difficult but also raises the probability of being overqualified for a job, i.e. having an education or qualification that exceeds the regular requirements of one's job (OECD, 2019^[15]).

Box 2.4. Overqualification from a spatial perspective

Working in an occupation that does not match the individual qualification automatically leads to efficiency losses. Workers with educational attainment above the requirements of their occupation do not exploit their full potential. As a consequence, structural overqualification artificially restricts the economic growth potential and income and career opportunities of the workers affected by overqualification. The impact of high overqualification shares is even more severe in regions expiring skill shortages. Therefore, a regional perspective is essential to capture underlying patterns, given that economic activity and density often converge (Combes and Gobillon, 2015^[16]). Moreover, the distinction between migrants and native-born residents enables a more profound analysis of underlying reasons.

Figure 2.12. Overqualification shares by the degree of urbanisation and country of origin, 2017-19

Share of high-skilled workers employed in medium- and low-skilled jobs



Note: The overqualification share is calculated as the share of tertiary-educated workers (ISCED Levels 5-8) employed in low- or medium-skilled jobs (International Standard Classification of Occupations [ISCO] Levels 4-9). The sample includes the employed working-age population (15-64 years old). Employees of the public service, international organisations and armed forces (ISCO Level 0) are excluded. This definition follows previous OECD calculations (OECD/EU, 2018^[14]). The analysis builds on a pooled sample of observations of the years 2017-19.

Source: OECD calculations based on Eurostat data (accessed in October 2021).

Figure 2.12 provides evidence on overqualification rates among the native-born and migrant population across the degree of urbanisation. It documents two patterns. First, the share of overqualification increases in less dense areas. Second, migrants (especially from outside the EU28) are more likely to work in jobs not matching their real educational qualifications. The general relation between overqualification and density is potentially driven by a higher share and demand for high-skilled jobs in urban areas. Higher labour demand enables better matching as applicants do not have to settle for jobs that are not adequate to their educational level. Differences in the overqualification shares of native-born and foreigners might result from the process of recognising foreign professional qualifications, which is often time-consuming. This might also explain the difference between EU28 and non-EU28 migrants as the recognition process is potentially less complex for EU28 migrants. Additionally, discrimination in the labour market could drive migrants into low-skilled jobs, despite their qualifications.

Source: Combes, P. and L. Gobillon (2015^[16]), "The empirics of agglomeration economies", in *Handbook of Regional and Urban Economics*, Elsevier; OECD/EU (2018^[14]), *Settling In 2018: Indicators of Immigrant Integration*, <https://doi.org/10.1787/9789264307216-en>.

Gender differences

Migrant women face a double disadvantage in OECD regions. Persistent gender gaps are a key obstacle holding back migrants' labour market outcomes in OECD regions. While labour market outcomes of women tend to be below that of men, foreign-born women face a double challenge as immigrants and as women (OECD, 2020^[13]). In all OECD countries, women remain less likely to be in paid work than men (OECD, 2017^[17]). The development over the past few decades and in recent years give cause for optimism as gender gaps have continuously fallen (OECD, 2017^[17]). However, among migrants, gender gaps in the labour market remain stubbornly high.

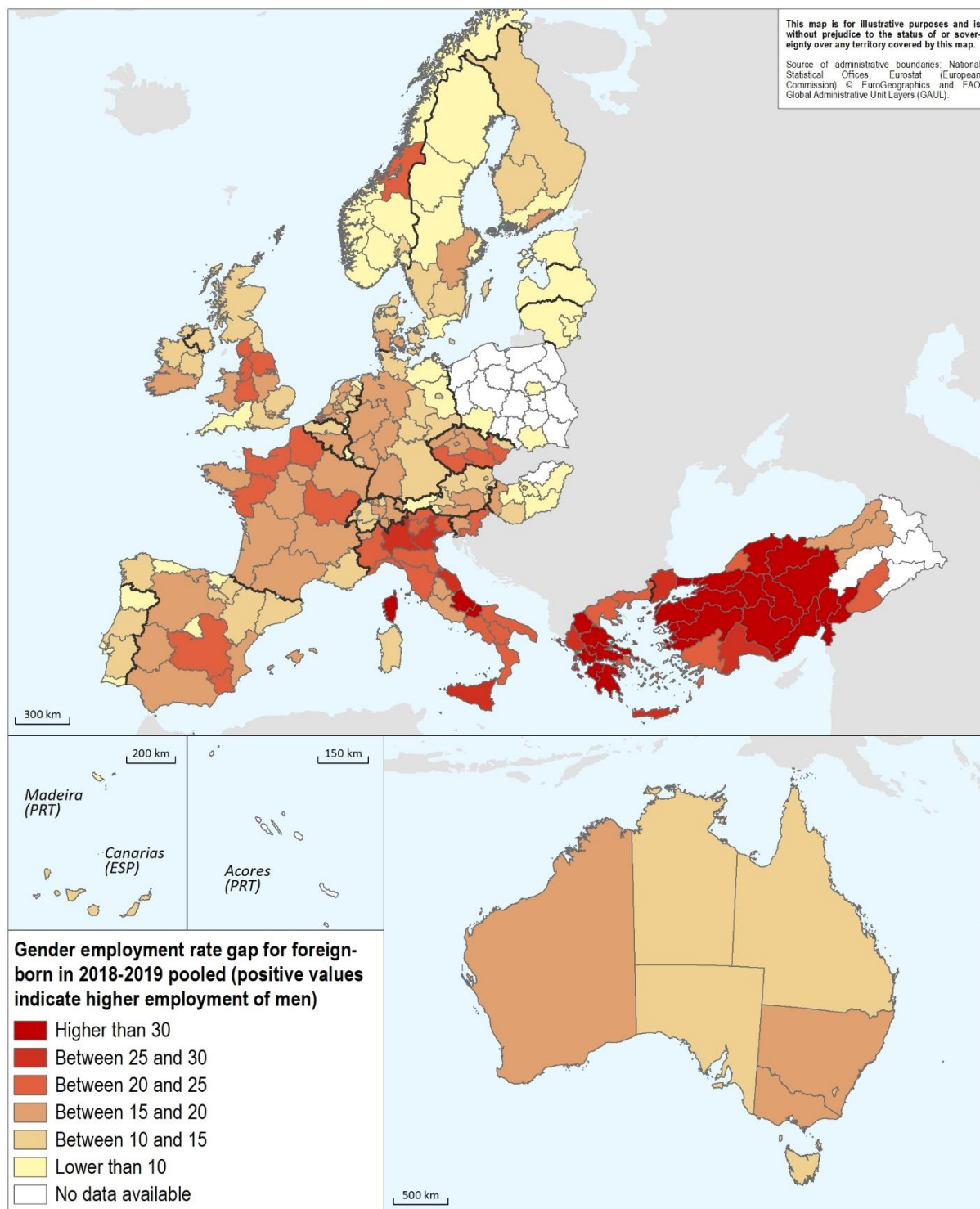
Among the foreign-born population, women have a significantly lower employment rate than men. In 2019, this gender gap amounted to 17 percentage points, with the male migrant employment rate reaching 74% while the female migrant employment rate was 57%. Even though gender gaps also exist among the native-born population, exceeding 9 percentage points in 2019, they are particularly pronounced among migrants, with the gender difference in the employment rate being 8 percentage points higher for migrants. While male migrants actually slightly exceed their native-born peers in terms of the employment rate (74.2% compared to 73.8%), female migrants lag behind female native-born individuals, which almost entirely explains the higher gender gap among migrants.

Across the OECD, the gender gap in the employment rate of migrants is not only very high but also varies widely across regions. In France, Germany and the US, the difference between the regions with the highest and lowest gender employment gap among migrants ranged from 10 percentage points (France and Germany) to 20 percentage points (US) in 2019 (Figures 2.13 and 2.14). Overall, regions in Southern Europe and Latin America encounter especially large differences between men and women in labour market outcomes. On average, regional disparities in the gender differences in employment rates are twice as large for migrants than native-born (OECD, 2018^[18]).

Low female labour force participation is one of the main drivers for worse employment outcomes among female migrants across OECD regions. Even when country-specific factors such as an overall low female labour participation are taken into account, regional differences in the extent to which female migrants actively engage in the labour market helps to explain why the gender gap in employment differs widely among migrants across OECD regions. OECD analysis, as well as evidence from previous work, indicates that female participation rates are particularly low among non-EU migrants, driving the regional differences in the employment gender gap (Grubanov-Boskovic, Tintori and Biagi, 2020^[19]).

Figure 2.13. Regional employment gender gap among foreign-born, 2018-19

Percentage point difference in employment rate between male and female foreign-born by TL2 regions, pooled years

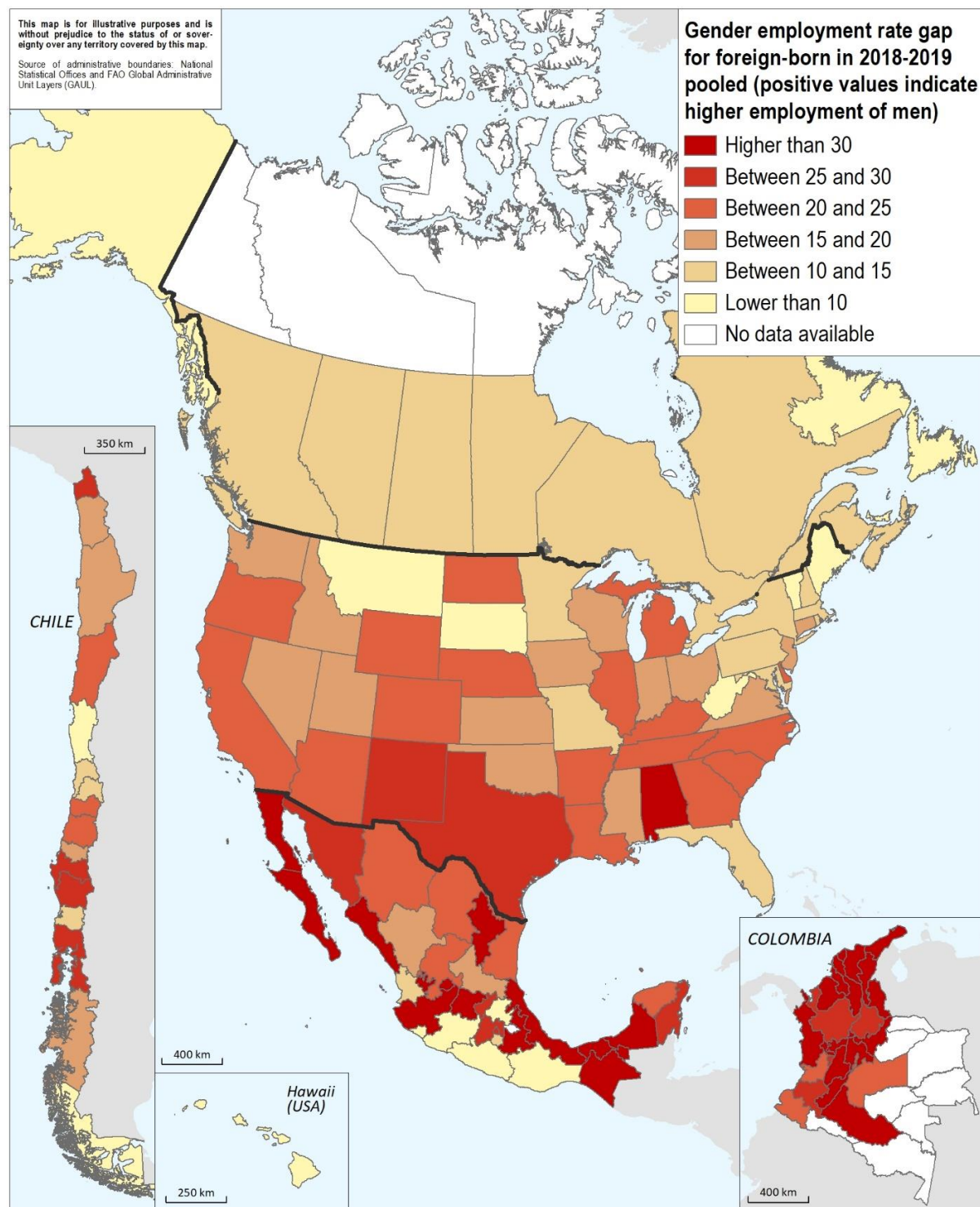


Note: The maps show the difference in the employment rate between male and female foreign-born individuals across TL2 regions for pooled years 2018 and 2019. Darker colours mark larger gender gaps.

Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

Figure 2.14. Regional employment gender gap among foreign-born, 2018-19

Percentage point difference in employment rate between male and female foreign-born by TL2 regions, pooled years



Note: The maps show the difference in the employment rate between male and female foreign-born individuals across TL2 regions for pooled years 2018 and 2019. Darker colours mark larger gender gaps.

Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

Even though female migrants are increasingly employed in OECD countries, the gender gap in labour market outcomes among migrants has not narrowed. To the opposite, driven by an even faster rise in the employment rate of male migrants, the average gender gap in the employment rate among migrants rose by 1.7 percentage points between 2015 and 2019. This stands in stark contrast to the trends for the native-born population, for whom women's increasing employment has led to a continuous fall of the gender gap in employment over the past decade.

A detailed look at OECD regions reveals that some places managed to lower labour market gender gaps among migrants while others saw a further widening. Whereas most regions in Australia and the US recorded a reduction in the difference in the employment rate of male and female migrants, most regions in other non-EU OECD countries experienced an increase in the gender gap (Figures 2.15 and 2.16). In Europe, progress in lowering migrants' gender gap has been mixed. While some regions experienced a reduction in the employment gender gap of migrants of more than 3 percentage points, other regions within the same country saw a further deterioration in male-female differences.

Box 2.5. Is immigration a viable solution against skill shortages?

Whether migration can help ease skill shortages in specific industries and bring benefits for the host countries is an essential part of the debate on migration. Evidence from the US suggests that policy changes favouring the immigration of STEM (Science, Technology, Engineering and Mathematics) workers have contributed to increasing productivity (Peri, Shih and Sparber, 2015^[20]).

In Europe, Signorelli (2020^[21]) looks at the French context and evaluates whether increasing migrant workers targeted to jobs suffering from skill shortages can boost firm growth. The study compares firms that operate in local employment zones more or less affected by the shortage of specifically skilled native-born labour and evaluates how their performance evolved after the French government facilitated the migration of skilled workers from outside of Europe.

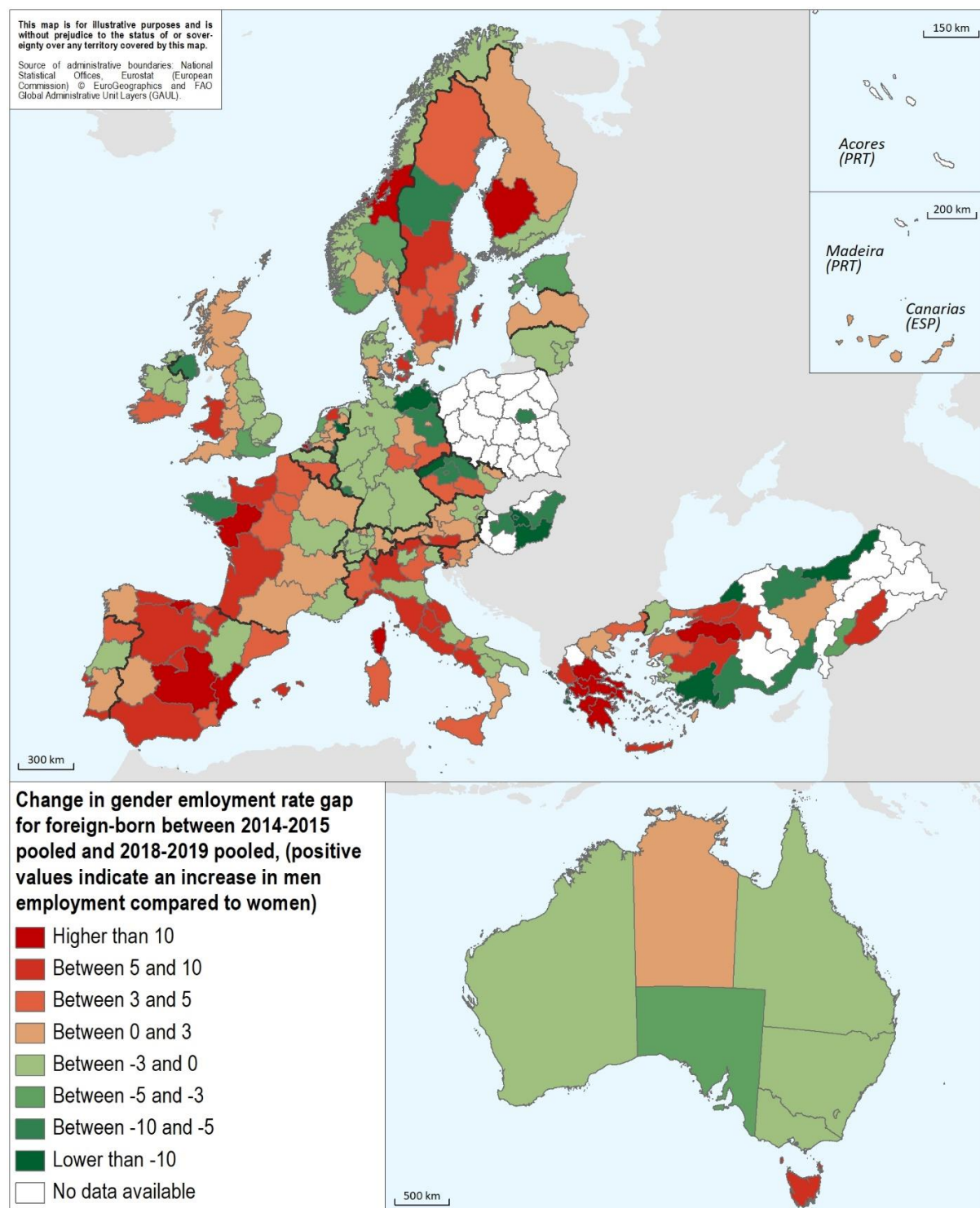
Businesses located in the employment zones that were the most constrained by the skill shortages targeted by the reform significantly benefitted from the increased access to migrant workers: they grew faster in terms of employment and revenues and increased their demand for native-born workers in managerial positions. While no effect was detected on average firm productivity, businesses located in slack labour markets experienced an increase in their productivity, sales and the number of employees.

These results suggest that the reform contributed to reducing the inequality in firms' access to skills which is an essential element in firms' performance. As such, policies encouraging high-skilled migration may be crucial to ensure firms that are located in less dynamic regions have access to skilled workers they need to remain competitive.

Source: Peri, G., K. Shih and C. Sparber (2015^[20]), "STEM workers, H-1B visas, and productivity in U.S. cities", *Journal of Labor Economics*, Vol. 33/S1, pp. S225-S255; Signorelli, S. (2020^[21]), "Too constrained to grow analysis of firms' response to the alleviation of skill shortages", *PSE Working Paper Series*, No. halshs-02961493.

Figure 2.15. Change in the regional gender employment gap of migrants, 2014/15-2018/19

Change in the difference in employment rate between male and female foreign-born, by TL2 regions, pooled years

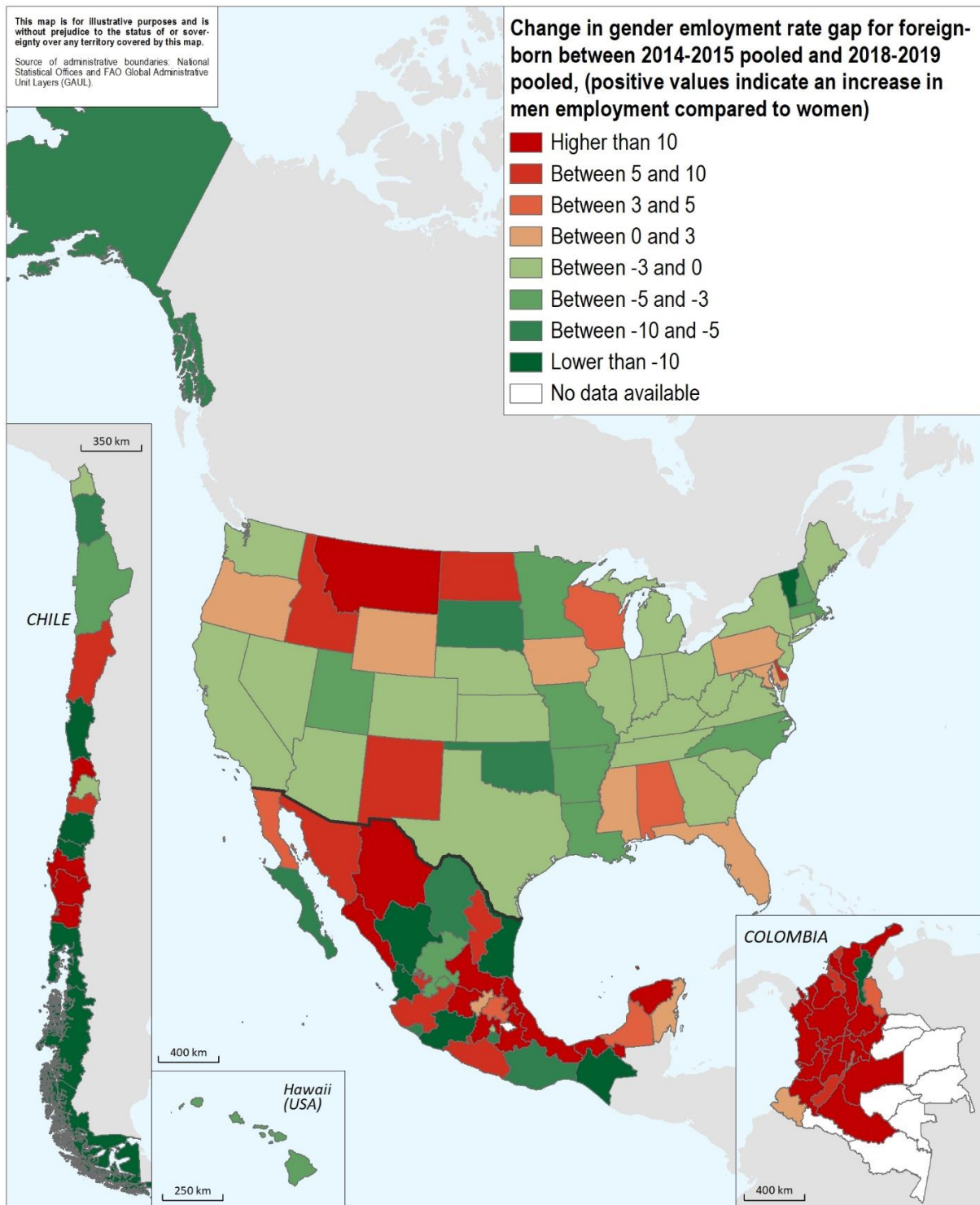


Note: The maps show the change in the difference in the employment rate between male and female foreign-born individuals across TL2 regions between pooled years 2014/15 and 2018/19. Red colours mark increases in the gender gaps, green denotes decreases.

Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

Figure 2.16. Change in the regional gender employment gap of migrants, 2014/15-2018/19

Change in the difference in employment rate between male and female foreign-born, by TL2 regions, pooled years



Note: The maps show the change in the difference in the employment rate between male and female foreign-born individuals across TL2 regions between pooled years 2014/15 and 2018/19. Red colours mark increases in the gender gaps, green denotes decreases.

Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

While various factors might inhibit migrant women's integration in regional labour markets in OECD countries, the consequences of having children appear to play a significant role. Across OECD member countries, the employment rate of migrant women who have a young child (0 to 5 years old) was 45.9% in European countries and 50.8% in the US (OECD, 2020^[13]). In Europe, this compares to an employment rate of native-born women with young children of 66.6%. Childcare responsibilities affect native-born and migrant women differently. As evidence for OECD countries points out, a higher share of foreign-born women than native-born women have care responsibilities (44% to 36%), potentially partly explicable by the fact that foreign-born women have more children and are less likely to use childcare services (OECD, 2020^[13]). Furthermore, childcare responsibilities have a different impact on native- and foreign-born women. While the former often take short career breaks, the latter are more likely not to enter the labour market in the first place. Consequently, policies that aim to reduce the gender gap in the labour market among migrants should facilitate access to childcare for migrant children (Liebig and Tronstad, 2018^[22]). In particular, regions where female migrants face large obstacles to entering the labour market could aim to boost their employment rates by offering targeted support that makes childcare responsibilities and economic activity more compatible.

Lower education is another factor that limits female migrants' integration into regional labour markets across the OECD. On average, the educational attainment of migrants is lower among women than among men (OECD/EU, 2018^[14]). Education, including linguistic, numerical and digital skills are a fundamental driver of success in the labour market. Employment gaps tend to be higher in regions where the gap in education between native-born and migrants is larger (Grubanove-Boskovic, Natale and Scipioni, 2017^[23]). The following section examines the skills migrant can bring to regional labour markets by assessing their educational attainment across OECD regions.

Box 2.6. Comparison of migrants' not in education, employment or training (NEET) rates by country and degree of urbanisation

A smooth transition between school and employment for young adults is vital to ensure integration into the labour market and labour force. For youths, the pathways into employment are diverse and difficult to compare. Therefore, the NEET share for 15-24 year-olds is a valuable measurement to evaluate how easily young adults enter the labour market. Moreover, NEET data provides information on the well-being and the share of the youth population in danger of falling behind due to early-career unemployment (OECD, 2021^[24]).

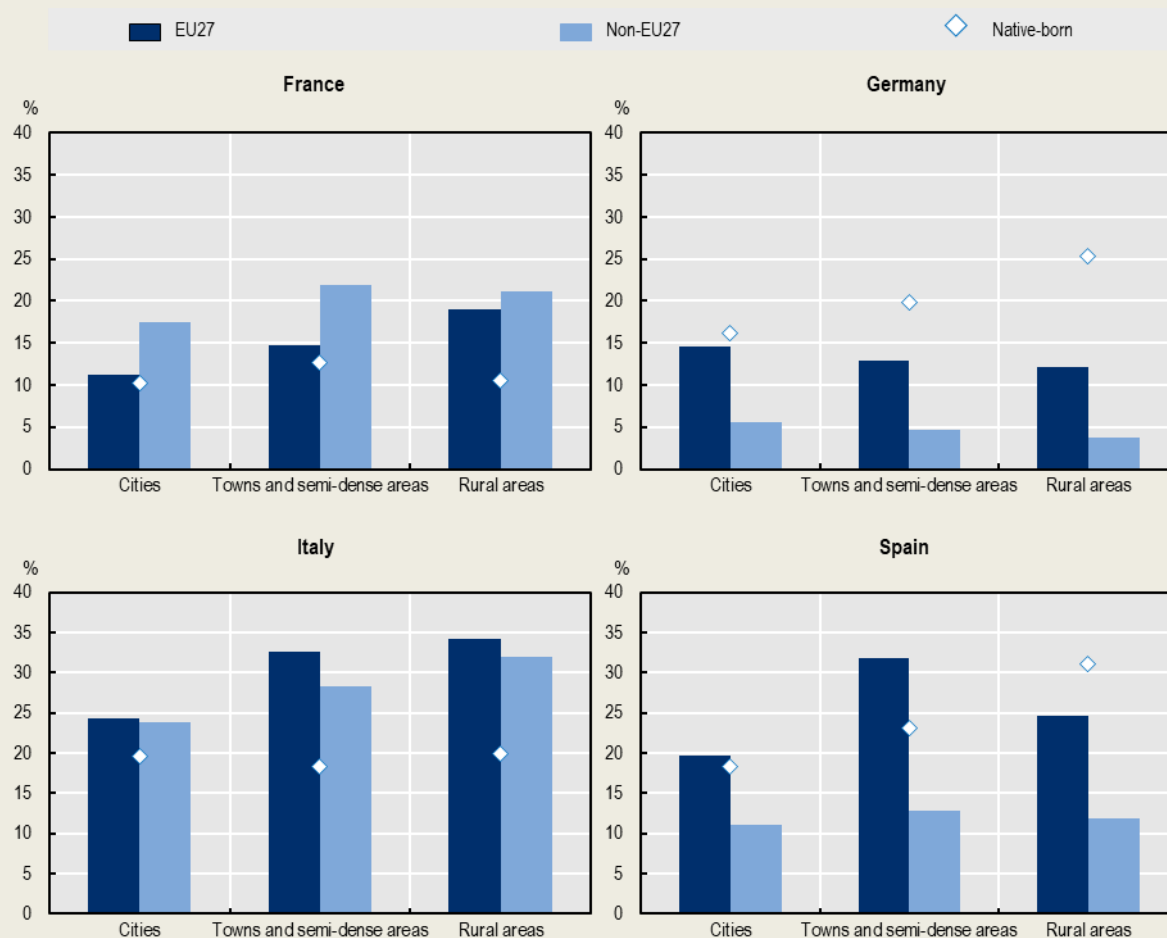
In this analysis, two more dimensions are incorporated. First, the data distinguishes the country's regions by the degree of urbanisation as national NEET shares might not detect structural differences within a country. Second, migrants from the remaining EU27 countries and from outside the EU are considered separately. A smooth transition from school to employment is essential for the personal economic situation in the long term (Oreopoulos, Von Wachter and Heisz, 2012^[25]). This especially applies to migrants as they often lack social networks and face additional obstacles such as discrimination in the job search (Bertrand and Mullainathan, 2004^[26]). Additionally, labour market integration significantly contributes to migrants' social integration (Fasani, Frattini and Minale, 2020^[27]).

Figure 2.17 shows that while the NEET share of native-born individuals is independent of the degree of urbanisation among all countries, the NEET share of migrants is higher in less dense regions. In France and Germany, the NEET rate for EU27 migrants is consistently smaller than for non-EU27 migrants across the degrees of urbanisation. Opposed to the other countries, the NEET shares for EU27 migrants and native-born workers in Germany are slightly smaller in less dense areas than in cities. In Italy and Spain, differences between EU27 and non-EU27 migrants vanish and are not structural. However, inconsistent values for migrants in the bottom two panels might also be driven by fewer observations.

Apart from the settlement preferences of migrants, better institutional guidance for graduating migrants might drive regional differences in the NEET share.

Figure 2.17. Youth NEET by degree of urbanisation and country of birth, 2017

NEET share for the age group 15-24 in the year 2017 for selected countries



Note: Countries chosen based on data availability.

Source (figure): OECD calculations based on Eurostat NEET rate data.

Source (box): Bertrand, M. and S. Mullainathan (2004^[26]), "Are Emily and Greg more employable than Lakisha and Jamal? A field experiment on labor market discrimination", *American Economic Review*, Vol. 94/4, pp. 991-1013; Fasani, F., T. Frattini and L. Minale (2020^[27]), "Lift the ban? Initial employment restrictions and refugee labour market outcomes", *Journal of the European Economic Association*; OECD (2021^[24]), *OECD Skills Outlook 2021: Learning for Life*, <https://doi.org/10.1787/0ae365b4-en>; Oreopoulos, P., T. Von Wachter and A. Heisz (2012^[25]), "The short-and long-term career effects of graduating in a recession", *American Economic Journal: Applied Economics*, Vol. 4/1, pp. 1-29.

Educational attainment and use of migrants' skills

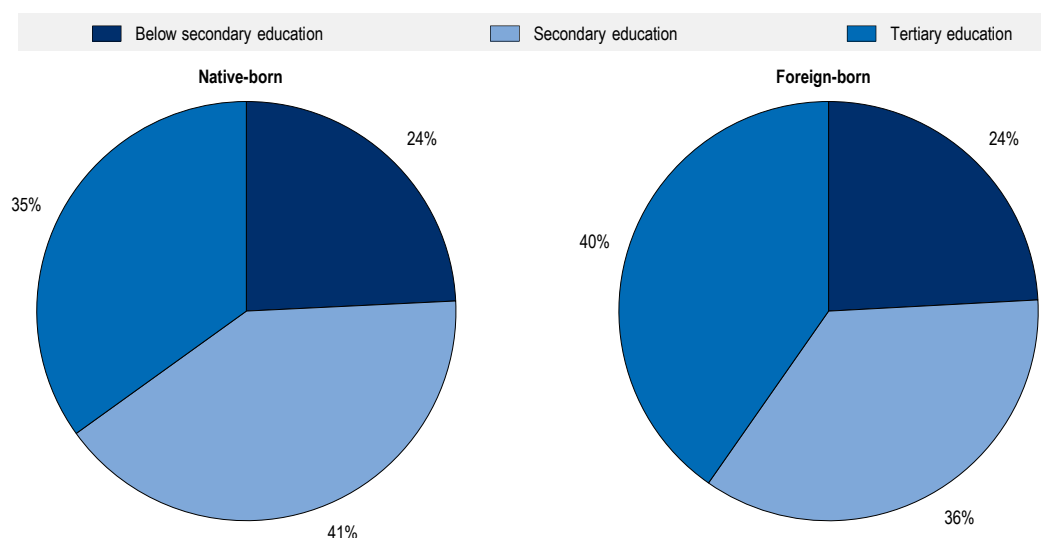
Human capital in the form of education and skills is a fundamental driver of economic development (Diebolt and Hippe, 2019^[28]). Regions that are able to attract high-skilled migrants can reap benefits in terms of economic and productivity growth. More generally, educational attainment is also a key factor in facilitating

access to jobs. Therefore, regional differences in the education of migrants not only matter for regional development but also help to explain why migrants struggle more in some regions with regard to their integration in the regional labour market.

In OECD countries, foreign-born individuals are on average more educated than native-born individuals. In 2019, the share of migrants with tertiary education reached 40% compared to 35% of the native-born population (Figure 2.18). Equal shares of migrants and native-born have below secondary education (24%) but the fact that more migrants are tertiary-educated is reflected in the higher share of native-born individuals with secondary education (41% compared to 36% among migrants). While these numbers point out the skills that migrants can contribute to the economy in the OECD, the picture differs substantially in various dimensions. First, there are noticeable differences across OECD countries. Second, even within countries, migrants' educational attainment can differ widely across regions (Figures 2.19 and 2.20). Third, educational attainment varies substantially between distinct groups of migrants. Fourth, even within countries, migrants' educational attainment can differ widely across regions.

Figure 2.18. Average educational attainment of migrants and native-born workers in OECD countries, 2019

Share of native-born and foreign-born population by level of education, OECD average

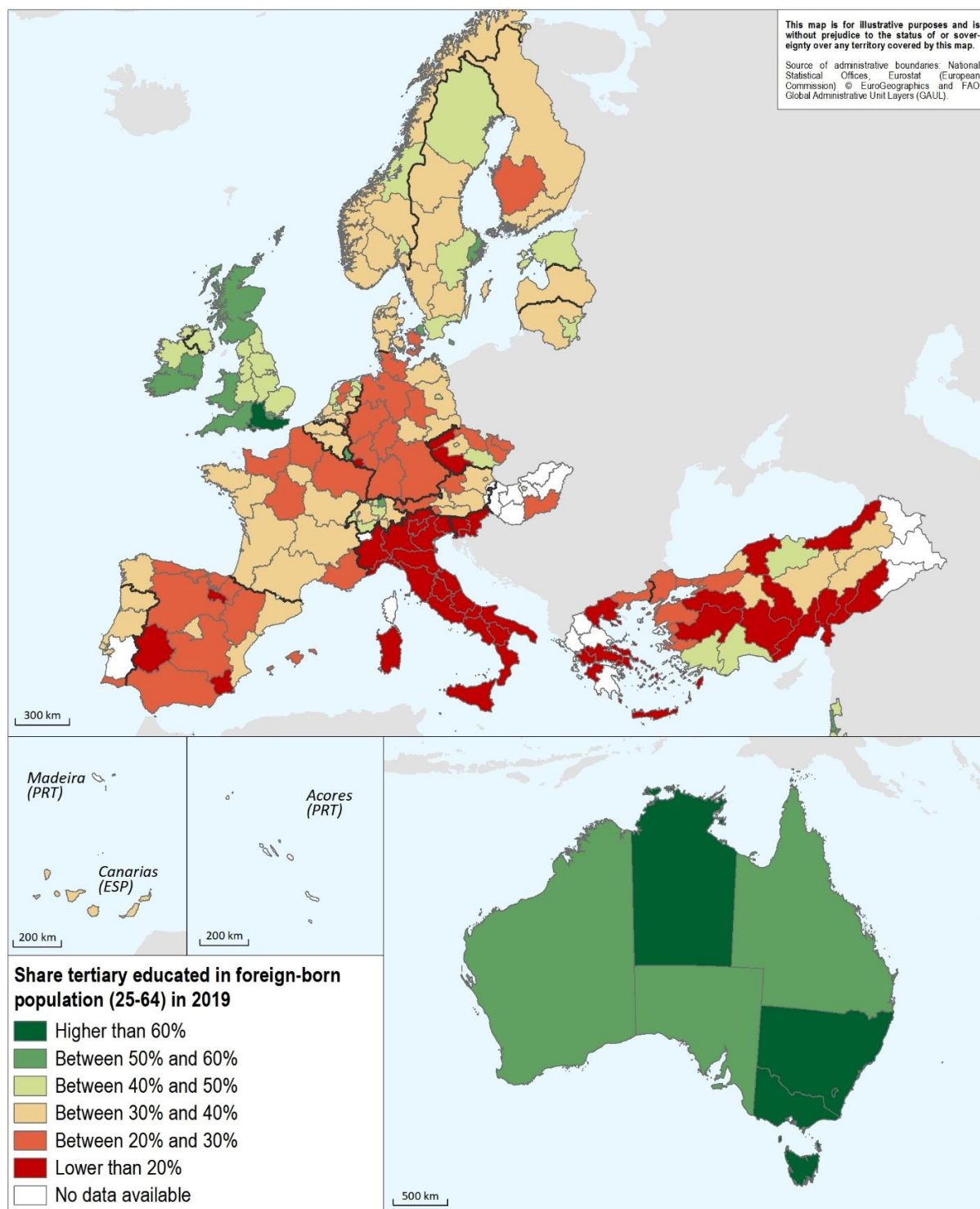


Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

Increasingly, specific regions concentrate both highly skilled native-born and migrant workers. Across OECD regions, the share of migrants with tertiary education is strongly correlated to that of the native-born population (Figure 2.21). The more educated a region's native population is, the more educated its migrant population tends to be. This geographic pattern has become clearer over time. Compared to 2010 and 2015, the concentration of highly educated migrant and native-born workers in the same regions has increased.

Figure 2.19. Educational attainment of migrants across OECD regions, 2019

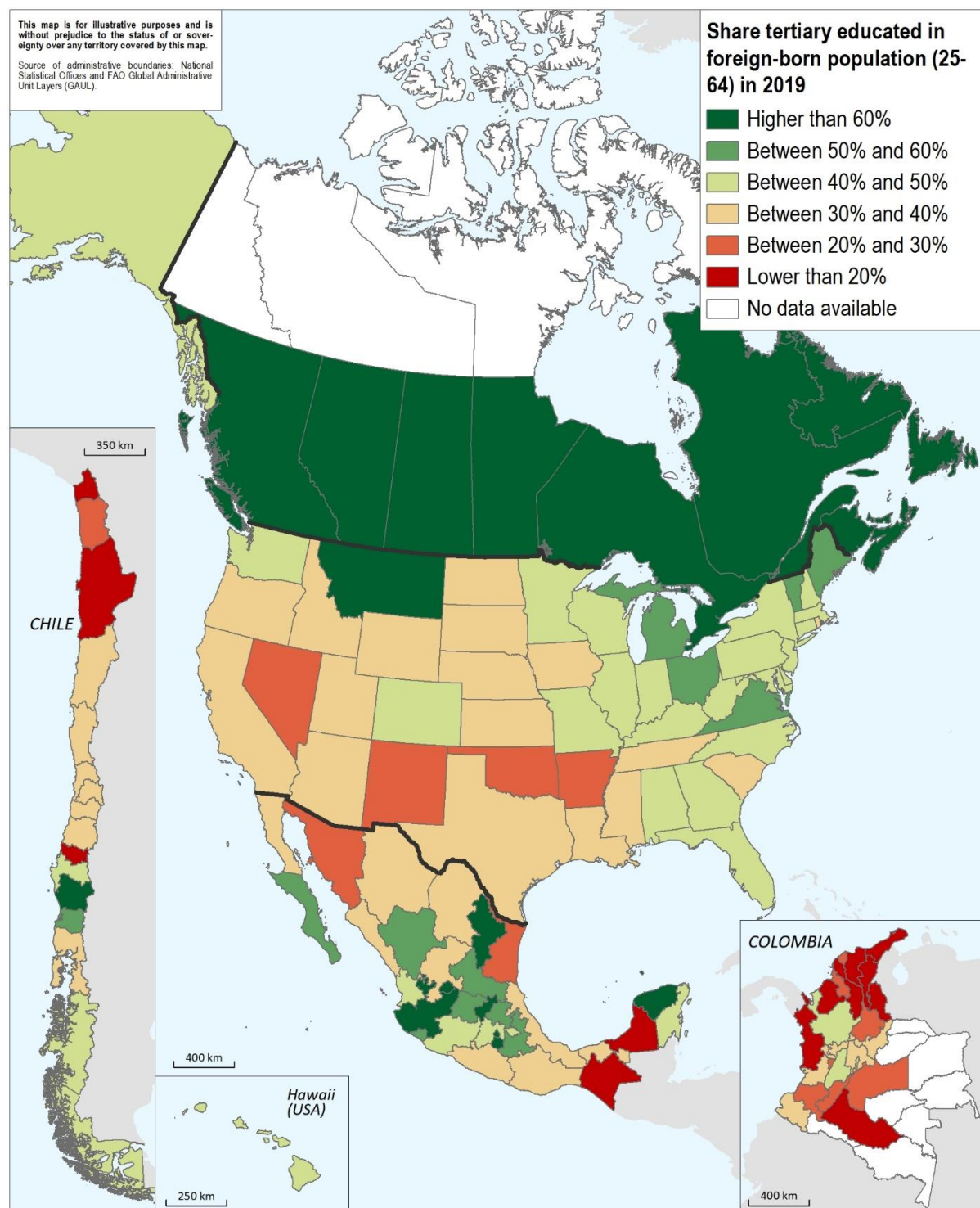
Share of tertiary-educated migrants by TL2 regions



Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

Figure 2.20. Educational attainment of migrants across OECD regions, 2019

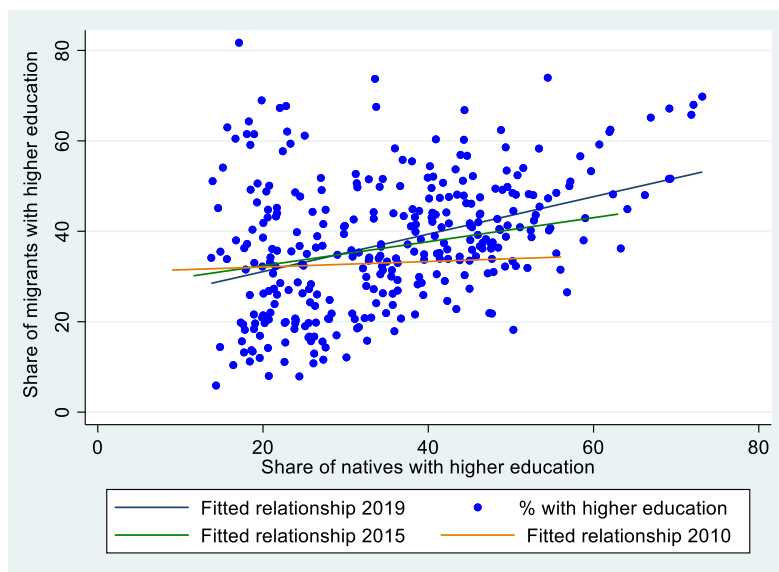
Share of tertiary-educated migrants by TL2 regions



Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

Figure 2.21. Regional patterns of tertiary education among native-born individuals and migrants

Correlations of the regional share of tertiary-educated native-born and migrant workers, 2010, 2015 and 2019



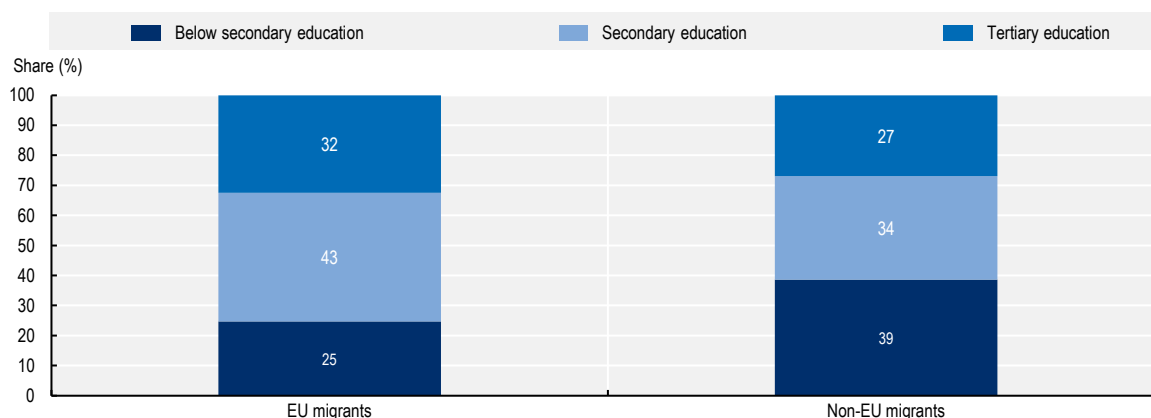
Note: The lines represent the predicted linear relationship between regions' share of tertiary education among their native- and foreign-born populations for 2010, 2015 and 2019.

Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

In Europe, migrants' average educational attainment depends on their country of origin. The distinction between EU and non-EU migrants offers clear differences. In EU27 countries, EU migrants tend to have significantly higher levels of education than non-EU migrants (Figure 2.22). The share of tertiary-educated individuals was 5 percentage points higher for EU migrants in 2019. In contrast, non-EU migrants are over-represented among the low-skilled population. While only 1 in 4 EU migrants had less than secondary education, 39% of non-EU migrants did. As higher educational attainment is broadly linked to better employment outcomes, non-EU migrants face higher difficulties of integrating into the labour market in regional economies.

Figure 2.22. Educational attainment of EU and non-EU migrants, EU27 countries, 2019

Average educational attainment of EU and non-EU migrants in EU27 countries

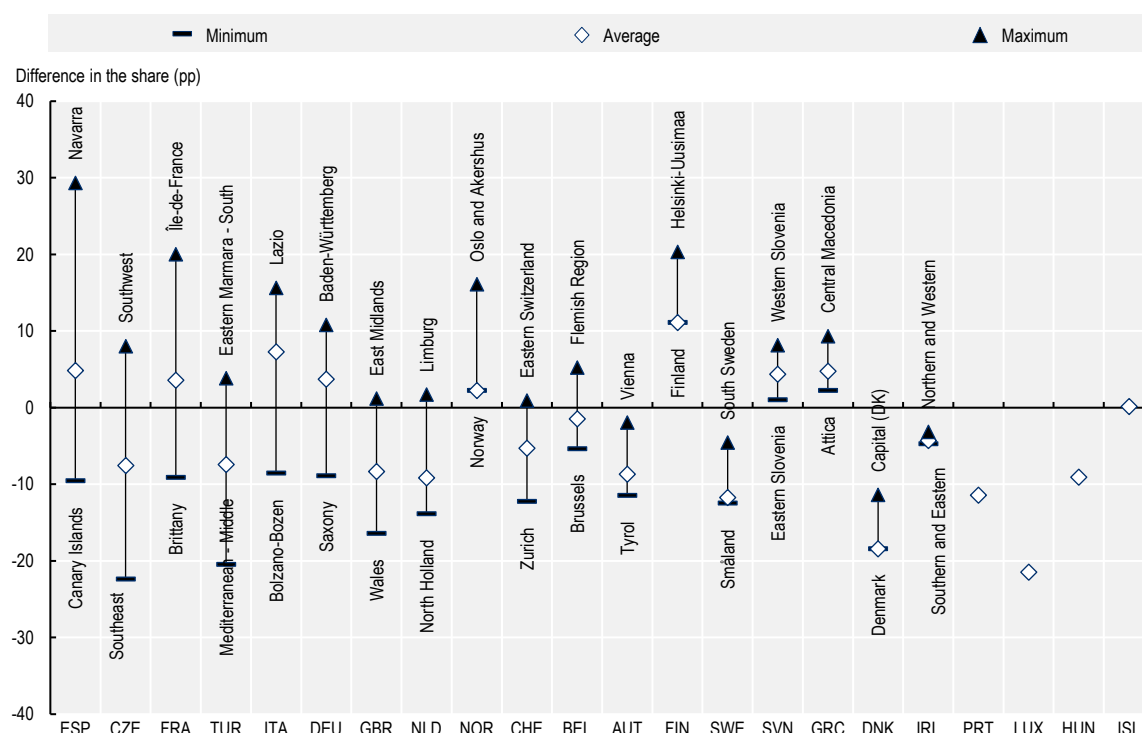


Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

Despite the overall high level of educational attainment of EU migrants, not all regions manage to attract high-skilled EU migrants. In fact, the difference in educational attainment between the native-born and EU-born migrant population is region-specific. Even in countries such as Belgium, Switzerland or the UK where EU migrants are more likely to be tertiary-educated than native-born, some regions report higher educational attainment for the native-born population (Figure 2.23). In many countries, capital regions concentrate large shares of highly skilled native-born workers. As a result, in various capital regions, including Helsinki (Finland), Ile-de-France (France), Lazio (Italy) or Oslo (Norway), native-born workers appear to have higher educational attainment than migrants.

Figure 2.23. Differences in tertiary education of native-born individuals and EU migrants across regions, 2019

Difference in the share of tertiary-educated native-born individuals and EU migrants across TL2 regions



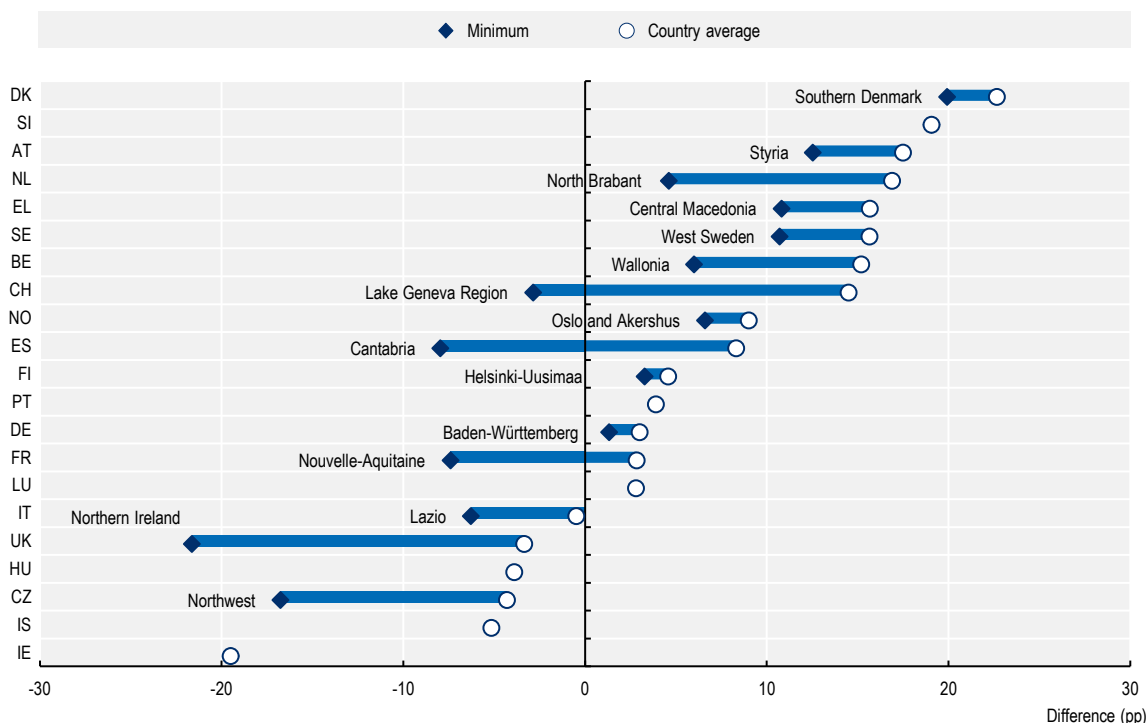
Note: Negative values indicate a higher share of tertiary-educated individuals among the EU migrant population than among the native-born population.

Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

The discrepancy in education attainment between migrants from EU countries and those born elsewhere also varies widely across regions in European OECD countries. In 15 out of 21 countries with available data, EU migrants tend to have higher rates of educational attainment than their non-EU countries (Figure 2.24). However, the extent of this educational gap differs regionally within countries. In the Netherlands for example, tertiary education is 17 percentage points higher for EU migrants nationally but only 5 percentage points higher in North Brabant. In Spain, the educational attainment of non-EU migrants surpasses that of EU migrants in Cantabria, even though the population share with tertiary education is more than 8 percentage points higher among EU migrants nationally.

Figure 2.24. Differences in the share of tertiary-educated EU and non-EU migrants, 2019

Share of tertiary-educated EU migrants minus share of tertiary-educated non-EU migrants by TL2 regions



Note: Positive values indicate higher shares of tertiary education for EU migrants than non-EU migrants.

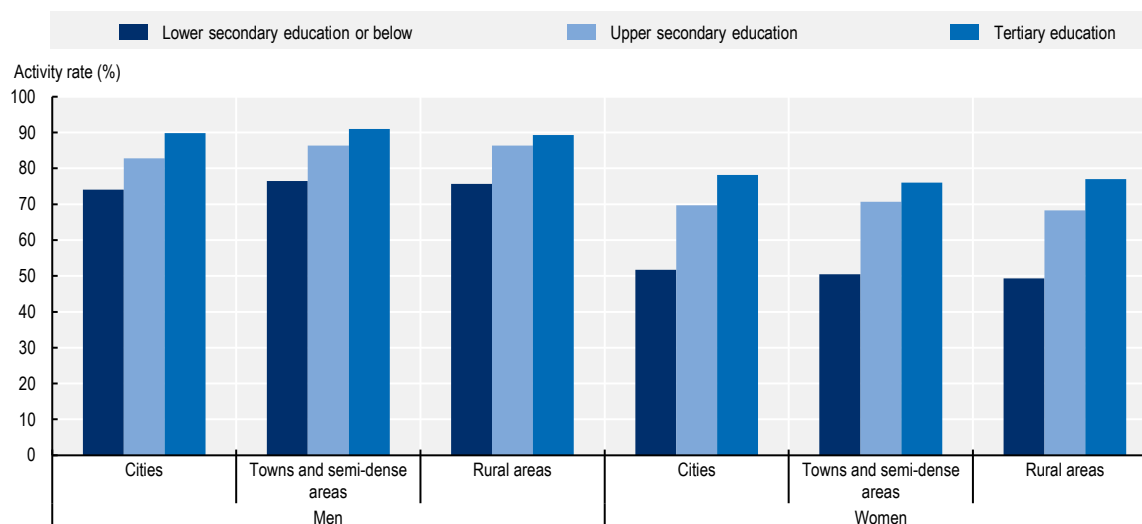
Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.

Subnational differences in the educational attainment of migrants affect migrants' ability to find employment or integrate economically. In Europe, those differences in educational attainment between different groups of migrants are linked to discrepancies in economic activity. Among female migrants, higher educational attainment is associated with higher rates of economic activity (either being employed or unemployed, i.e. looking for a job). Additionally, female labour market activity rates differ by the degree of urbanisation. Overall, female migrants of all levels tend to be more likely to be economically active in cities than in other areas (Figure 2.25). This pattern holds for female migrants from both EU and non-EU countries. However, among non-EU migrant women, spatial differences between cities and towns and semi-dense areas are less pronounced.

Even though the educational attainment of migrants, and thus the skills they can bring to the local economy, have improved, the labour market integration of migrants still faces a number of challenges. First, a big gap remains between native-born individuals or EU migrants on the one hand and non-EU migrants in terms of educational attainment. Additionally, migrants often struggle to find jobs that match their level of qualification. Effective regional development policies need to address these challenges by both encouraging additional learning and training opportunities among non-EU migrants and ensuring a better recognition of foreign qualifications and professional skills (OECD, 2017^[29]). This endeavour becomes even more pressing as migrants, and especially non-EU migrants, are more concentrated in jobs that are at high risk of automation (OECD, 2019^[30]). Tailored regional policies that allow migrants to up-skill, re-train or find jobs that better correspond to their skillsets will contribute to regional development by better using the talents and skills that migrants have and by supporting their labour market integration and resilience for future economic shocks.

Figure 2.25. Activity rates of migrants by level of education and degree of urbanisation, 2019

Activity rates of female EU and non-EU migrants by level of education and degree of urbanisation



Note: Activity rate is the percentage of active persons in relation to the comparable total population. The economically active population comprises employed and unemployed persons.

Source: OECD calculations based on Eurostat (2021^[31]), *Migrant Integration Statistics - Regional Labour Market Indicators*, https://ec.europa.eu/eurostat/statistics-explained/index.php/Migrant_integration_statistics_-_regional_labour_market_indicators.

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Notes

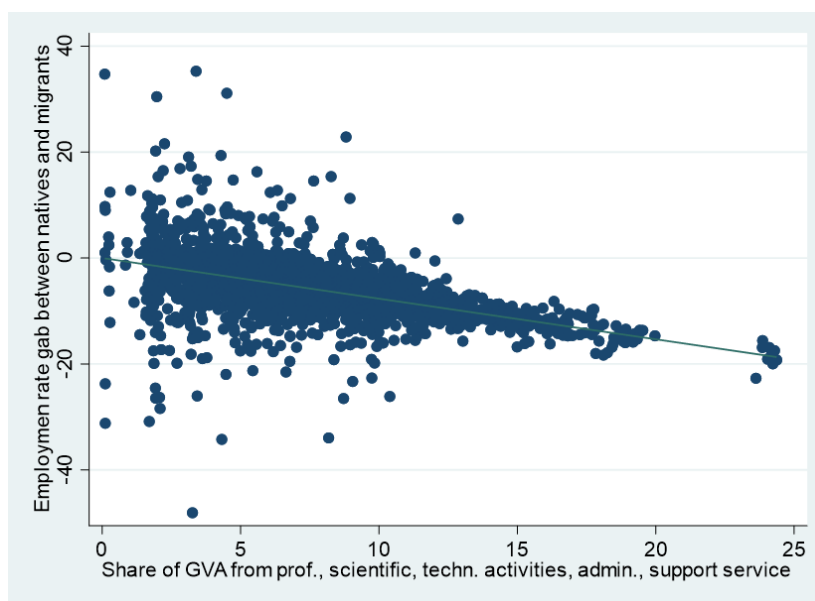
¹ The chapter focuses primarily on employment rates as well as labour force participation rates because regional unemployment statistics are not available everywhere due to sample size issues.

² For the purpose of this chapter, EU migrants contain those born in the UK. The most recent available data are for 2019 when the UK was still formally an EU member state, giving UK citizens the same rights as those from other EU countries.

Annex 2.A. Supporting evidence

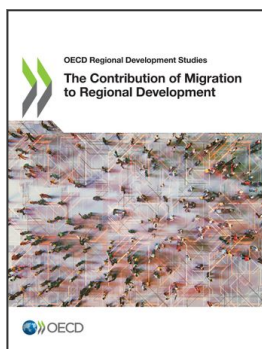
Annex Figure 2.A.1. Change in regional employment rate gap and GVA in services, 2010-18

Change in employment rate gap (native-migrant) based on regional GVA from services by TL2 regions



Note: Figure displays residual component plots that take into account region and year fixed effects.

Source: OECD calculations based on labour force surveys. See Box 2.1 for detailed information on sources.



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