



Policy Highlights

Migration and Regional Development in Australia

ABOUT THE OECD

The OECD is a unique forum where governments work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

ABOUT THE CENTRE FOR ENTREPRENEURSHIP, SMEs, REGIONS AND CITIES

The Centre helps local, regional and national governments unleash the potential of entrepreneurs and small and medium-sized enterprises, promote inclusive and sustainable regions and cities, boost local job creation and implement sound tourism policies.



Regional productivity, local labour markets, and migration in Australia

[LINK](#)

Migration and regional productivity: Evidence from individual wages in Australia

[LINK](#)

The impact of migration on regional labour markets in Australia

[LINK](#)

Migration and regional innovation in Australia

[LINK](#)

This document, as well as any statistical data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

© OECD 2023

This document is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries. The document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Policy highlights

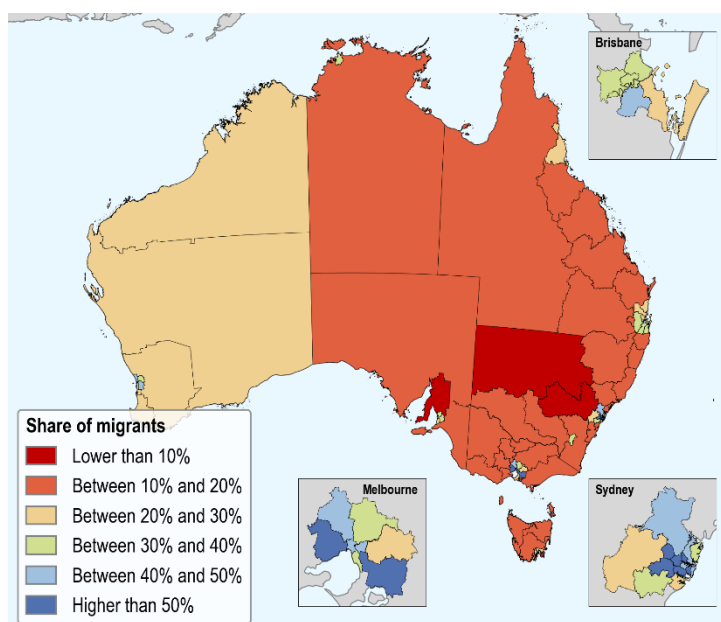
Migrants are an essential part of the Australian population and contribute to economic growth and regional development. As of 2021, nearly a third of Australia's overall population was foreign-born (i.e., migrants). Of all OECD countries, only Switzerland and Luxembourg had higher shares of migrants. Migrants in Australia are, on average, highly educated and well-integrated into the labour market. In fact, migrants have a higher average educational attainment than individuals born in Australia (i.e., natives). This project finds that migrants contribute positively to regional labour productivity, employment growth for natives, and regional innovation.

Migrants in Australia are highly educated and live in large cities

The share of migrants in Australian regions is highest in cities – especially Melbourne and Sydney – and in the western parts of the country. The southeastern rural regions have the lowest share of migrants (around 8% of the population), whereas half of the population in the southeastern cities such as Melbourne and Sydney consists of migrants. (Figure 1). In most OECD countries, migrants tend to concentrate in cities because of the economic advantages and denser ethnic networks in those places. Across Australia, more than eight out of ten migrants live in metropolitan regions, compared to less than seven out of ten natives. This means only one-fifth of migrants (18%) reside in non-metropolitan regions, compared to almost one-third (33%) of natives.

Figure 1. The share of migrants is highest in cities

Share of migrants across Australian SA4 regions, 2021



Note: The figure presents the share of foreign-born among the working-age population (15-64 year olds) in Australia disaggregated by regions. Data are for 2021. The Australian Bureau of Statistics (ABS) designated 89 Statistical Areas (SA4) covering the whole of Australia. SA4 regions were designed with a functional purpose to represent regional labour markets.

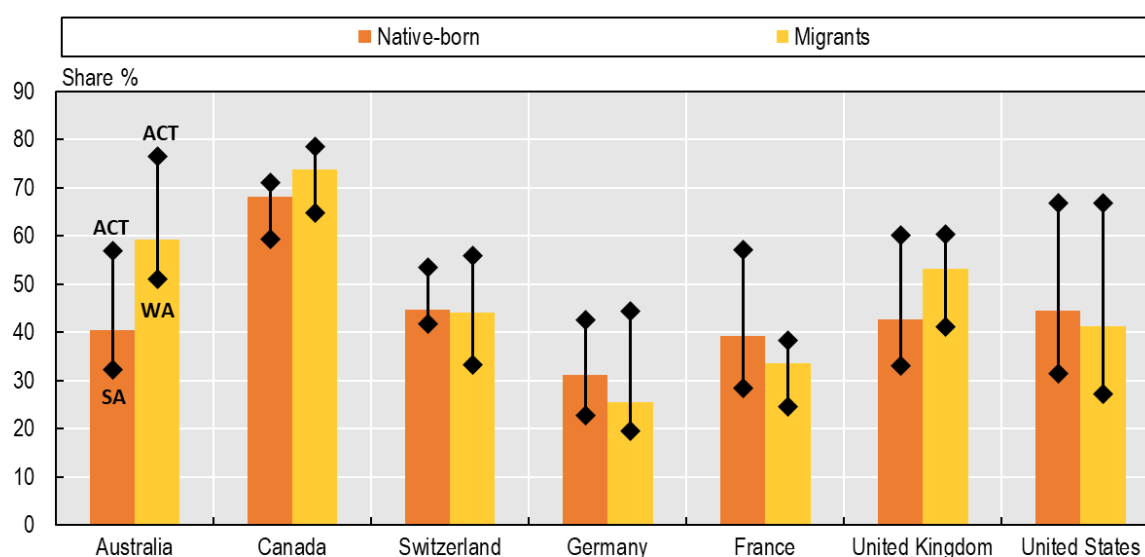
Source: Australian Census of Population and Housing 2021 accessed via ABS Census TableBuilder.

Migrants in Australia are among the most educated in the OECD

Australia has one of the highest educated migrant populations among OECD countries. Almost six in ten migrants have attained a university degree or higher education (i.e., tertiary education), compared to around four in ten migrants, on average, in the rest of the OECD (OECD/European Commission, 2023^[11]). Nevertheless, tertiary-educated natives and migrants concentrate in certain regions. For example, the share of migrants with tertiary education ranges from 51% in Western Australia to 77% in the Australian Capital Territory (Figure 2).

Figure 2. Migrants in Australia are amongst the most educated in OECD countries

Share of tertiary-educated migrants and natives, 2019 or the latest available year



Note: The figure presents the share of tertiary-educated native-born and migrants among the group population (25-64 year olds). The black diamonds mark the minimum and maximum values at the TL2 level. Data are for 2019. The acronyms in this figure denote Australian states and territories: ACT (Australian Capital Territory), WA (Western Australia), and SA (South Australia). For further information, see [OECD Territorial grids](#).

Source: OECD calculations based on data from OECD Regional Statistics (database).

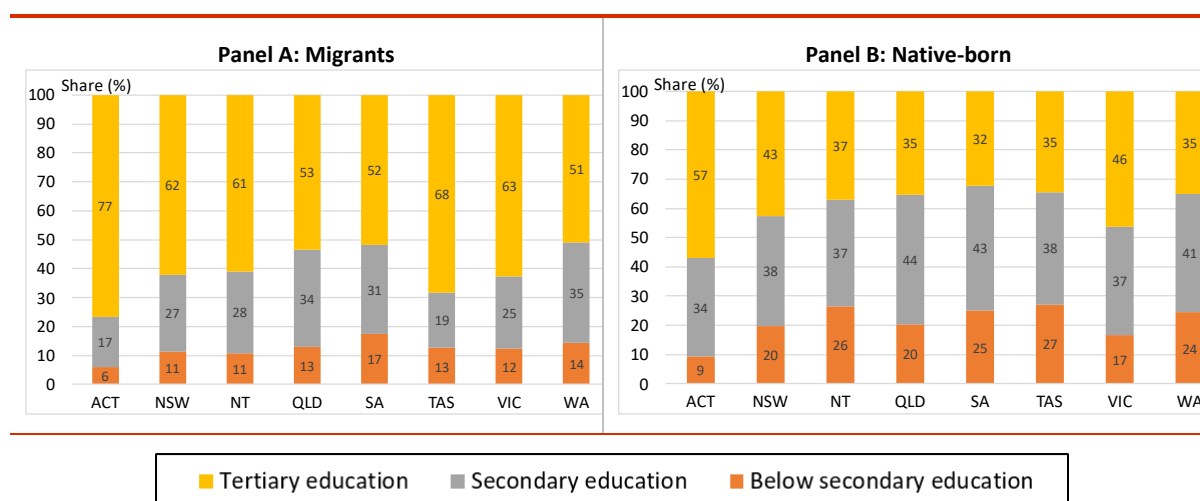


The presence of secondary and tertiary-educated migrants varies across Australian states and territories

More than 80% of Australia's migrants have completed at least secondary education in every state, illustrating the high educational attainment of migrants throughout the country (Figure 3). Although states with more tertiary-educated migrants also have higher numbers of tertiary-educated natives, migrants across all Australian states are consistently more likely to have tertiary education than natives, with the gap ranging from 16 percentage points in Victoria and Western Australia to 34 percentage points in Tasmania.

Figure 3. Migrants are more educated than natives across all Australian states and territories

Share of tertiary-educated, secondary-educated, and below secondary-educated migrants (25-64 years old), 2019



Note: The figure presents the educational attainment among the foreign-born and native-born populations (25-64 year olds), respectively. Data are for 2019. The acronyms in this figure represent Australian states and territories: ACT (Australian Capital Territory), NSW (New South Wales), NT (Northern Territory), QLD (Queensland), SA (South Australia), TAS (Tasmania), VIC (Victoria), and WA (Western Australia). For further information, see [OECD Territorial grids](#).
 Source: OECD calculations based on data from OECD Regional Statistics (database).

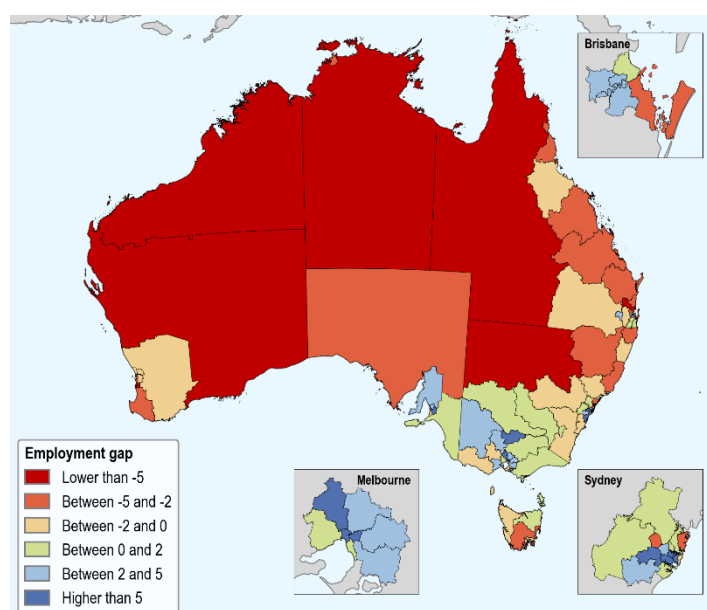


Migrants are slightly less likely to be employed than natives due to the lower labour force participation of migrant women

Migrants in Australia are, on average, less likely to be in employment compared to natives: in 2021, natives had a 2.3 percentage point higher employment rate than migrants. However, in around half of the regions, migrants actually had a higher employment rate than natives (an improvement relative to 2016 when the native-migrant employment gap was negative in only one in five regions). In central and western rural regions, migrants were *more* likely to be employed than natives, while they were *less* likely to be employed in the southeast and major cities like Sydney, Melbourne, and Brisbane (Figure 4).

Figure 4. The native-migrant-employment gap varies across regions

Employment gap between natives and migrants across Australian SA4 regions, 2021



Note: The figure shows the percentage point difference in the employment rate of native-born and foreign-born among the working-age population (15-64 year olds) in Australia disaggregated by regions. A positive value indicates a higher employment rate among the native-born. Data are for 2021. The Australian Bureau of Statistics (ABS) designated 89 Statistical Areas (SA4) covering the whole of Australia. SA4 regions exhibit a functional purpose to represent regional labour markets.

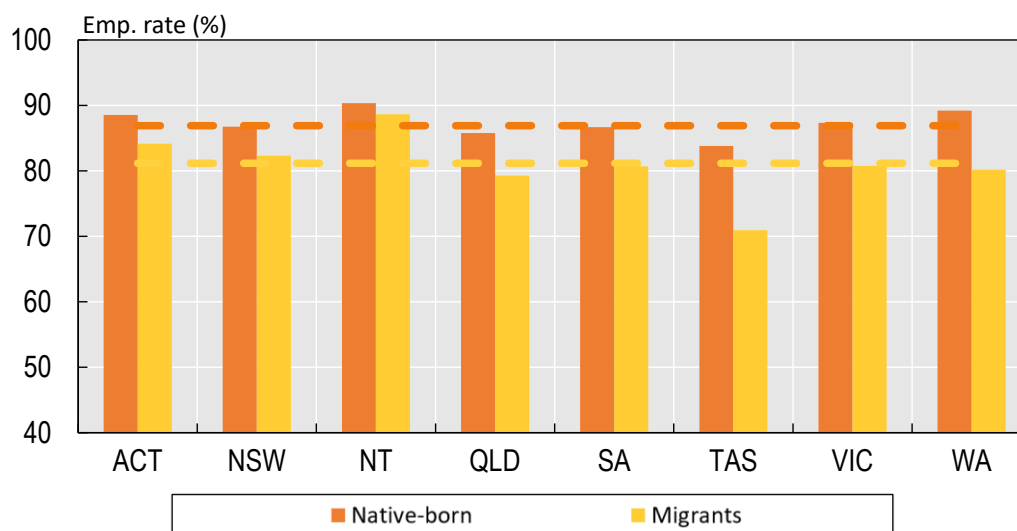
Source: Australian Census of Population and Housing 2021 accessed via ABS Census TableBuilder.

Tertiary-educated native workers have a six percentage points higher employment rate (87%) than similarly educated migrants (81%) (Figure 5). This holds in all Australian states and territories, with some variation: in the Northern Territory, the employment gap is smallest (less than two percentage points), while in Tasmania it reaches 13 percentage points. Similarly large gaps favouring native workers are also evident for those with secondary and below-secondary education.



Figure 5. Tertiary-educated migrants are less likely to be employed across Australia

Native-born and migrant (25-64 year olds) employment rate among tertiary educated population in Australian states and territories, 2019



Note: The figure presents the native and migrant employment rate among the population (25-64 years old) with tertiary education. Data are for 2019. The acronyms in this figure represent Australian states and territories: ACT (Australian Capital Territory), NSW (New South Wales), NT (Northern Territory), QLD (Queensland), SA (South Australia), TAS (Tasmania), VIC (Victoria), and WA (Western Australia). For further information, see [OECD Territorial grids](#).

Source: OECD calculations based on data from OECD Regional Statistics (database).

Lower employment rates among female migrants drive the native-migrant employment gap

Similar to trends in other OECD countries, the lower employment rates among female migrants compared to native females contribute significantly to the relatively lower overall employment rates of Australian migrants compared to natives (OECD, 2022^[1]). In 2021, female migrants had a six percentage points lower employment rate compared to female natives. In contrast, migrant males had one percentage point higher employment rate compared to native males.

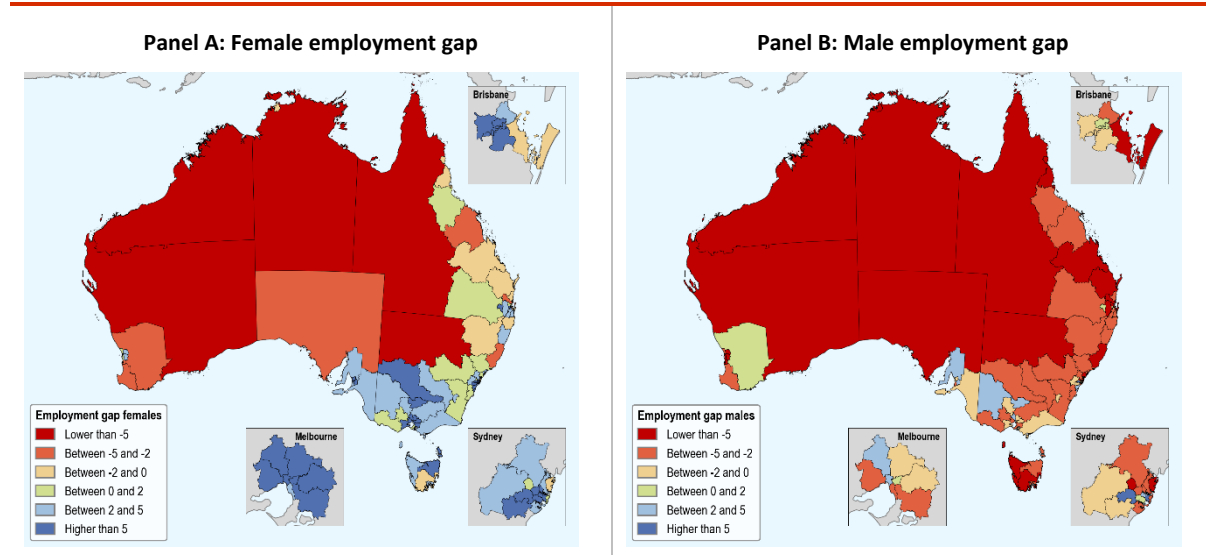
Across all regions, the employment gap between native and migrant females is more pronounced than the gap between native and migrant males, with the exception of the Wheat Belt in Western Australia (Figure 6). In 2021, male migrants exhibited higher employment rates than male natives in 74 out of 88 regions, while female migrant surpassed their native counterparts in only 22 regions.

The employment gap between female migrants and natives in Australia can be primarily attributed to lower labour force participation rather than higher unemployment. In 2021, the gap in the labour force participation rate of native females (77%) compared to migrant females (72%) was 4.7 percentage points. Meanwhile, the unemployment rate of migrant females was an average of 1.6 percentage points higher than that of female natives. The lower labour force participation among migrant females may stem from restrictions related to specific visa statuses, limited language proficiency, and cultural differences (including childcare and domestic responsibilities).



Figure 6. The female native-migrant employment gap is larger than the male native-migrant gap

Employment gap between natives and migrants by gender, SA4 regions, 2021



Note: The figure presents the percentage point difference in the employment rate of native-born and foreign-born among the working-age population (15-64 year olds) in Australia disaggregated by region. A positive value indicates a higher employment rate among the native-born compared to migrants. Panel A presents the gap for females. Panel B presents the gap for males. Data are for 2021. The Australian Bureau of Statistics (ABS) designated 89 Statistical Areas (SA4) covering the whole of Australia. SA4 regions exhibit a functional purpose to represent regional labour markets.

Source: Australian Census of Population and Housing 2021 accessed via ABS Census TableBuilder.

Migrants significantly contribute to the regional economy in Australia

Evidence from OECD countries shows that migrants can play a crucial role in their regional economies by increasing international trade, fostering regional innovation, and positively impacting local labour markets. New OECD analysis, leveraging rich administrative data covering the entire population of Australia, finds evidence of a positive impact of migration on regional productivity, employment growth for natives and regional innovation.

Regions with higher migrant shares have larger regional productivity

Migration can boost regional labour productivity by introducing new ideas and skills, and complementing the work of natives. OECD analysis finds that a 10% increase in the migrant share of the population increases regional labour productivity by 1.3% on average (OECD, 2023^[2]). The positive effects are even more pronounced for migrants in higher-skilled occupations, such as managers or professionals: a region with a 10% larger share of higher-skilled migrants adds, on average, a further 1% to regional productivity in addition to the 1.3% increase. These additional benefits mainly accrue to more productive regions and those with higher migrant shares than the median region.



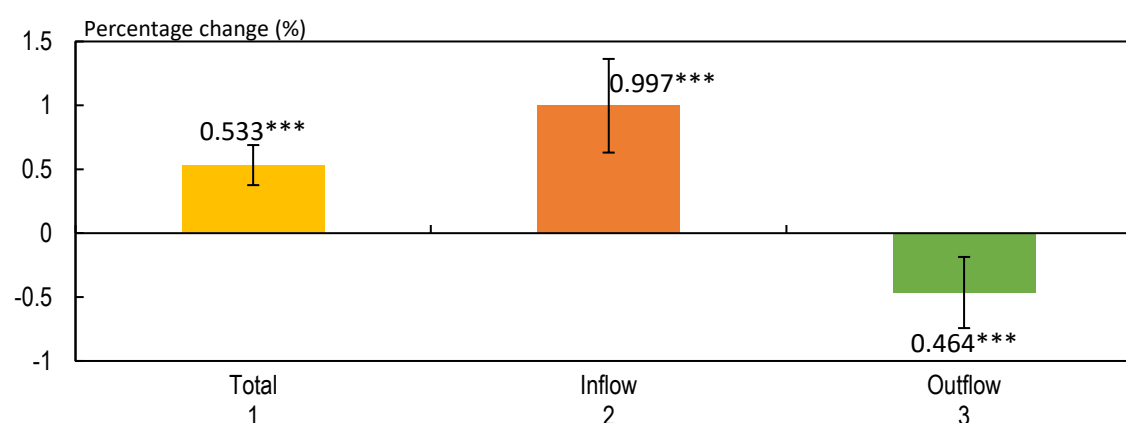
Migration boosts native employment growth by attracting natives from other regions while wage growth is unaffected

Migrants can alleviate labour market shortages and complement the native workforce, leading to higher productivity and, ultimately, more employment opportunities for natives. The analysis finds that migration enhances the labour market outcomes of natives in Australia, and that regions with larger inflows of migrant workers also experience higher native employment growth. In the short run, on average, a one percentage point increase in the annual inflow of migrant workers to a region increases native employment by 0.53%. Natives of all skill levels, ages, and genders benefit from this positive effect, which persists in the medium run (five years). In contrast to the positive effect of migration on native employment growth, the analysis finds no evidence of an impact (negative or otherwise) on the growth of native wages.

The inflow of migrants leads to the arrival of natives previously employed or unemployed in other regions, driving the positive employment effect (Figure 7). While migration also leads to the departure of previously employed natives from the region, the arrival of new natives outweighs this effect.

Figure 7. Natives arriving from other regions contribute to the employment effect

Estimated impact of migration inflows on native employment at the regional level, 2011-2018



Note: The figure presents estimates on the effect of migrant workers on sub-flows of native workers. The independent variable is the percentage inflow of employed migrants. Column 1 presents the baseline analysis encompassing the annual percentage changes in the number of employed natives as the dependent variable. Columns 2 and 3 separately consider the native inflow and outflow to the regional labour market relative to the native employed population, respectively. Past settlement patterns from 1976 are used to instrument the endogenous variable percentage inflow of employed migrants. The estimations are weighted by. The analysis uses time fixed-effects to account for time-varying shocks affecting the whole country and clustered standard errors at the regional level in all the specifications. The analysis relies on 25 845 298 observations. Statistical significance is denoted by ***, **, and * at the 1%, 5%, and 10% levels, respectively. Source: OECD calculations based on MADIP.

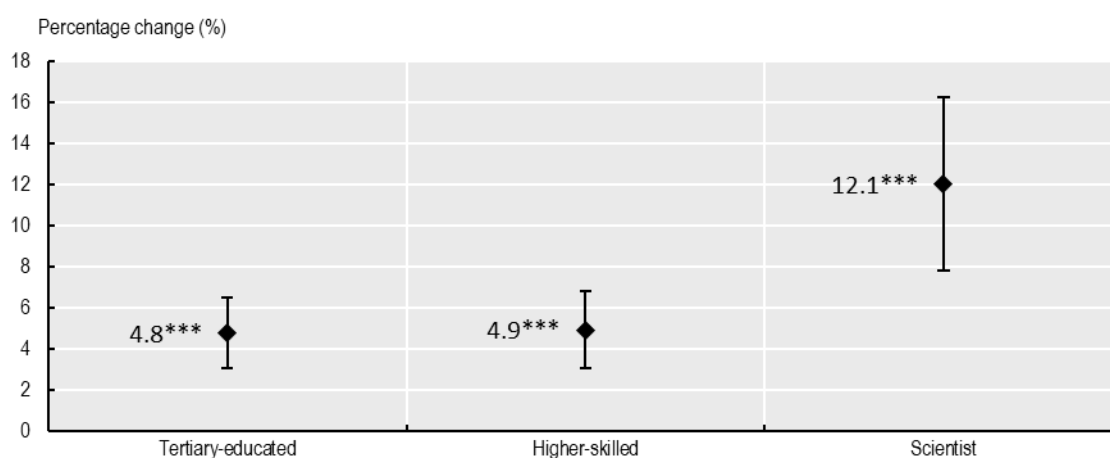


Migrants contribute to innovation by boosting patenting activity

Migrants foster innovation by bringing new skills and ideas. According to OECD analysis, migrants, especially those with tertiary education, contribute significantly to regional innovation by enhancing patenting activity. In the medium run (within five years), a one percentage point increase in regional employment resulting from the arrival of tertiary-educated migrants leads to an average 4.8% rise in patent applications (Figure 8). While migrants across all education levels contribute to regional innovation, those in scientific occupations have the most substantial impact.

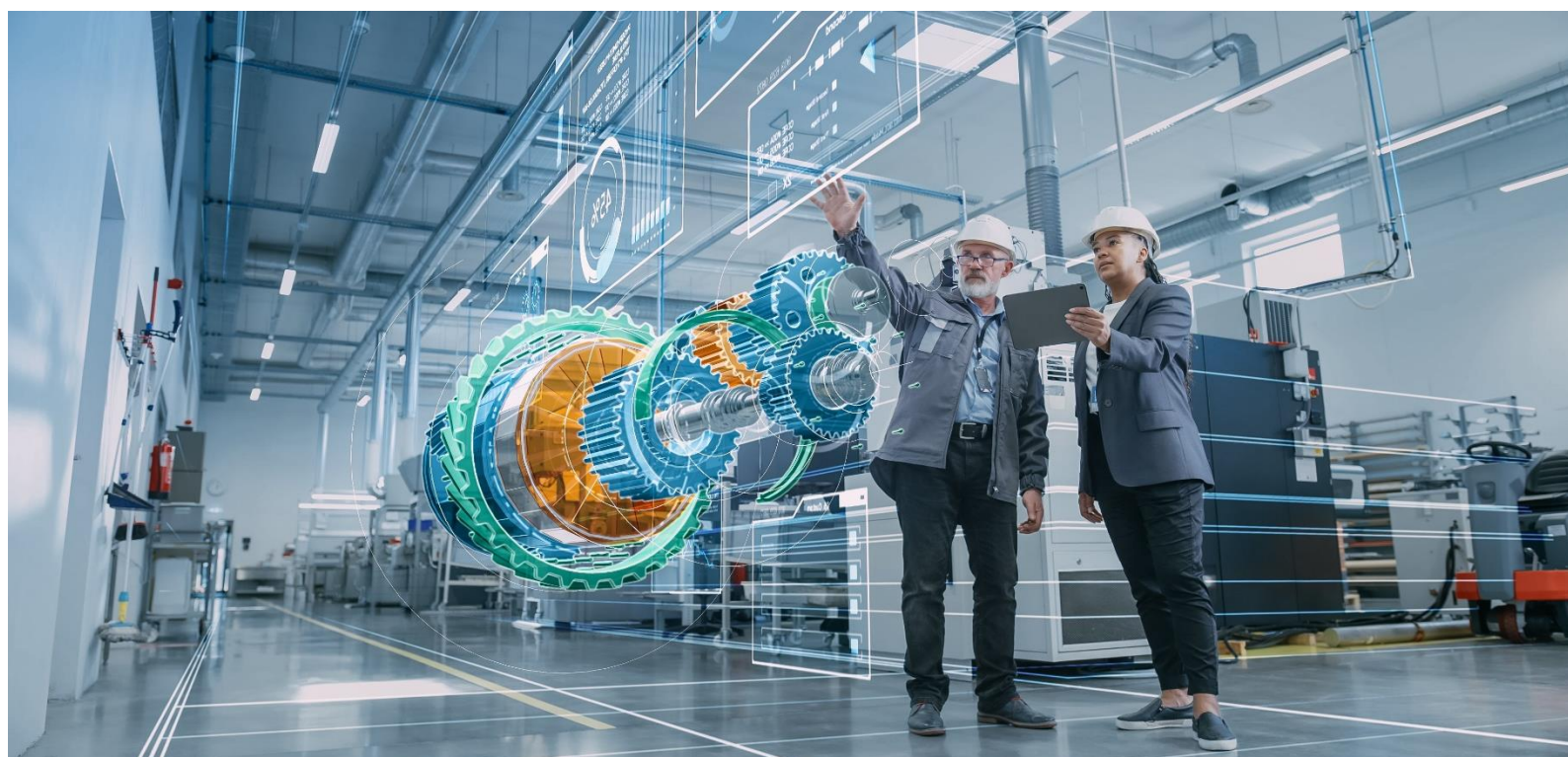
Figure 8. Migrants raise regional patenting applications

Estimated effect of a one percentage point increase in employment due to tertiary-educated migration on regional application to IP rights across Australia, 2011-2018, SA4 regions



Note: The figure presents estimates for the impact of a one percentage point increase in the workforce due to different migrants subgroups. The left panel presents the effect of an arrival of tertiary-educated migrants on regional patent applications per worker. The middle and right panel consider higher-skilled migrants and migrants in Scientist occupations, respectively. IV estimations use the predicted increase in the workforce due to respective migrant subgroup as the instrument. All specifications are weighted by the number of employed natives in the considered region. Time fixed-effects are applied to account for time-varying events that might affect the entire country or economy. Standard errors are clustered at the regional level in all specifications. Standard errors are clustered at the regional level in all columns. ***, **, * denote statistical significance at the 1%, 5% and 10% levels respectively.

Source: OECD calculations based on MADIP.



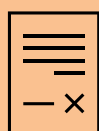
Policy Recommendations



Enhance labour market participation of migrant women and secondary applicants to unlock untapped economic potential.



Leverage higher-skilled migrants for regional cohesion: Encouraging higher-skilled migrant to settle in less productive regions can reduce economic disparities across regions.



Improve access to work: Accelerate the recognition of foreign diplomas and ensure skilled migrants can readily access suitable job opportunities to benefit migrants and the native workforce, and tap into underutilised potential.



Promote regionally balanced migration: Encourage migrants to settle in non-metropolitan areas, equipping them with talent needed to foster regional innovation and balanced development.



Contacts

Dr. Cem Özgüzel | Economist
OECD Centre for Entrepreneurship, SMEs, Regions and Cities
Cem.OZGUZEL@oecd.org

Jasper Hesse | Policy Analyst
OECD Centre for Entrepreneurship, SMEs, Regions and Cities
Jasper.HESSE@oecd.org

www.oecd.org/cfe/regionaldevelopment/migrationandregionaldevelopment

 @OECD_local  OECD-local
Blog: oecd.cogito.blog/

