

**MAKING  
BETTER USE  
OF MIGRANTS'  
SKILLS**

2024+



# ABOUT THIS PUBLICATION



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## **Making better use of migrants' skills (2024) © CEDA 2024**

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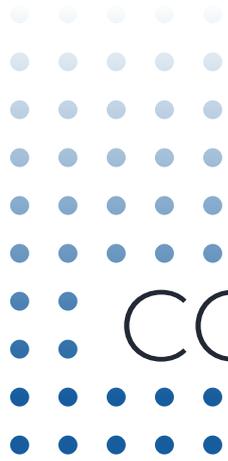
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Across all of its work, CEDA's purpose is to shape economic and social development for the greater good.

*Making better use of migrants' skills* continues CEDA's work exploring how to make Australia's migration system work better for migrants, employers and the broader community.

It focuses on how to improve the employment outcomes of migrants who are already in the country.

This report examines the causes of poor labour-market outcomes for migrants, in particular language proficiency, poor recognition of qualifications and discrimination.



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# Making better use of migrants' skills

CEDA found recent migrants earn significantly less than Australian-born workers, and this has worsened over time.

On average, migrants who have been in Australia for two to six years earn more than 10 per cent less than Australian-born workers.



Female migrants with a post-graduate degree have the worst wage outcomes, earning 31 per cent less than Australian-born women with similar education levels.



Many migrants still work in jobs beneath their skill level, despite often having been selected precisely for the experience and knowledge they bring.



Our failure to match the skills of migrants to the most appropriate jobs is holding back productivity at a time of historically weak productivity growth.



Ensuring migrants can use their skills within their first few years in Australia is crucial to addressing ongoing skill shortages across the economy.

If migrants earned comparable wages to similar Australian-born workers in their first six years in Australia, this would unlock around \$4 billion in foregone wages each year.



# RECOMMENDATIONS

1

## **EXPAND ACCESS TO ENGLISH LANGUAGE TRAINING**

Expand access to post-settlement English language training for skilled migrants, including occupation-specific training that enables them to achieve a competent or proficient level of English.

2

## **IMPROVE RECOGNITION OF INTERNATIONAL QUALIFICATIONS**

Improve recognition of international qualifications and work experience by:

- Assessing professional capacity through direct assessment of competence, rather than a requirement to hold qualifications under a specific system; and
- Requiring occupational regulators to justify their decisions where they decide not to recognise a migrant's international qualifications, and to identify skill top-ups and bridging courses to close the gap.

3

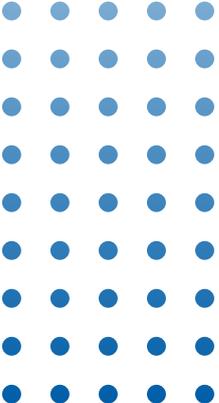
## **SECONDARY APPLICANTS**

Review the potential to give greater weight to the skills and work experience of secondary applicants to skilled migration visas, as part of the Federal Government's work towards a reformed points test for skilled migrants.

4

## **REDUCE MIGRANT LABOUR-MARKET DISCRIMINATION**

Work to reduce labour-market discrimination against migrants through initiatives that build local knowledge and experience, together with pilot programs that reduce prejudice by emphasising individual diversity within all ethnic groups.



# EXECUTIVE SUMMARY

On average,  
migrants who have  
been in Australia for  
two to six years earn  
more than

**10%**

less than otherwise  
similar Australian-  
born workers.

Australia is an immigrant nation. Around 30 per cent of the population was born overseas.<sup>1</sup> But we are still failing to make the best use of migrants' skills in our workforce. This is despite many migrants having been selected precisely for the skills and knowledge they bring in a system designed to target skilled workers.

Our failure to match the skills of migrants to the most appropriate jobs is holding back productivity at a time of historically weak productivity growth. In an economy facing widespread worker shortages, access to the right skills at the right time and getting the right people into the right jobs is critical.

CEDA research in 2021 found nearly a quarter of permanent skilled migrants in Australia were working in a job beneath their skill level (in other words, they were experiencing skills mismatch). The level of mismatch is substantially higher among migrants on Family and Humanitarian visas.

Our 2021 report recommended changes to the system to better target the right migrants to the right jobs before they arrive in Australia. In this report, we recommend changes to improve the labour-market outcomes of migrants already in the country, based on new analysis of ABS Census data.

We find that on average across all temporary and permanent visa types, recent migrants earn significantly less than the Australian-born population. This has worsened over time: the hourly wage gap between recent migrants and Australian-born workers increased between 2011 and 2021. On average, migrants who have been in Australia for two to six years earn more than 10 per cent less than otherwise similar Australian-born workers. Migrants' wages do catch up, but this process is slow, taking around 15 years.

There are big costs from not making the best use of migrants' skills. We estimate that if migrants who have been in Australia for two to six years earned comparable wages to similar Australian-born workers (allowing for weaker average English-language proficiency among migrants), this would unlock around \$4 billion in foregone wages each year.

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**The hourly wage gap between recent migrants and Australian-born workers increased between 2011 and 2021.**

Improving English language proficiency among migrants would unlock further gains. We find weaker English proficiency reduces wages for recent migrants by around nine per cent on average. The costs of weaker English are even greater for highly educated migrants. While this group has better English ability on average, they experience a bigger wage gap because strong communication, writing and comprehension skills are even more crucial in highly skilled jobs.

Currently, post-settlement English training is targeted at family and humanitarian arrivals, and those with very low English ability. Given the importance of English ability for the employment outcomes of all migrants, we should expand access to and funding of high-level, occupation-specific English training that meets higher standards to ensure they are finding work and pay that meets their skill level.

Recent female migrants suffer a bigger wage shortfall compared with similar Australian-born workers. The shortfall is largest for highly educated female migrants, including many entering under key high skilled visas. Almost half of the poorer wage outcomes for recent female skilled independent and employer sponsored migrants (compared with recent male migrants under these visas, based on wages measured relative to the Australian-born population of that gender<sup>i</sup>) can be explained by the much higher share of women than men who entered as secondary visa applicants.

The skills of secondary visa applicants (such as a spouse or partner) are not assessed separately, and account for less than 10 per cent of the points used to assess a primary applicant's claim. Secondary applicants underperform in the labour market, even after taking into account that they are younger, less educated and speak poorer English on average than primary applicants. Reforms to give greater weight to the skills and labour-market attachment of secondary applicants could boost economic outcomes and gender equality in the labour market.

“

**Recent female migrants suffer a bigger wage shortfall compared with similar Australian-born workers. The shortfall is largest for highly educated female migrants and those entering under key high-skilled visas.**

<sup>i</sup> For example, recent female independent skilled migrants earned 6 per cent higher wages on average than Australia-born females in 2021 – reflecting their higher educational attainment – whereas recent male independent skilled migrants earned 23 per cent more than Australian-born males. Just over 7 percentage points of this 17-percentage point gap is explained by the higher share of secondary applicants among females.

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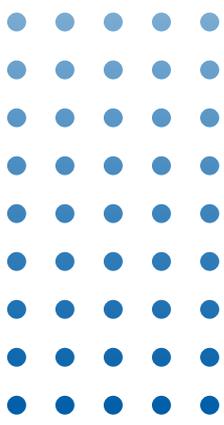
**Discrimination likely contributes to poorer employment outcomes for migrants. Discrimination occurs through an employer bias towards local work experience and networks. Reducing this bias requires initiatives that build local knowledge and experience.**

Failure to recognise international qualifications also reduces job opportunities for many migrants, again despite many having been selected for their skills and experience. In particular, occupational licensing in fields such as healthcare, teaching, accounting and trades can be a barrier to migrants using their skills where their qualifications or work experience are not recognised. We find that recent migrants earn at least 20 per cent less than similar Australian-born workers where they are educated in a field that is subject to licensing but are not currently working in that field.

There are ways to improve skills recognition while protecting consumer safety, beginning by direct assessment of competence, rather than a requirement to hold qualifications under a specific system. When occupational regulators decide not to recognise a migrant's international qualifications for licensing, they should be required to explain why and to identify skill top-ups and bridging courses to meet job licensing requirements.

Finally, discrimination likely contributes to poorer employment outcomes for migrants. Discrimination can occur through an employer bias towards local work experience and networks. Reducing this bias requires initiatives that build local knowledge and experience. Previous research also indicates that discrimination against some ethnic groups contributes to lower wages among migrants. While entrenched bias can be hard to change, interventions that emphasise individual diversity within all ethnic groups can reduce prejudice in a low-cost and scalable manner.

By reducing skill shortages and boosting productivity, our recommendations to enable better use of migrants' skills can deliver a win-win through a stronger, more productive economy and greater wellbeing among migrants.



# INTRODUCTION

Since the 1990s, Australia's migration system has targeted migrants who bring productive skills.<sup>2</sup> However, it is clear Australia is not making full use of their knowledge, skills and education.<sup>3</sup>

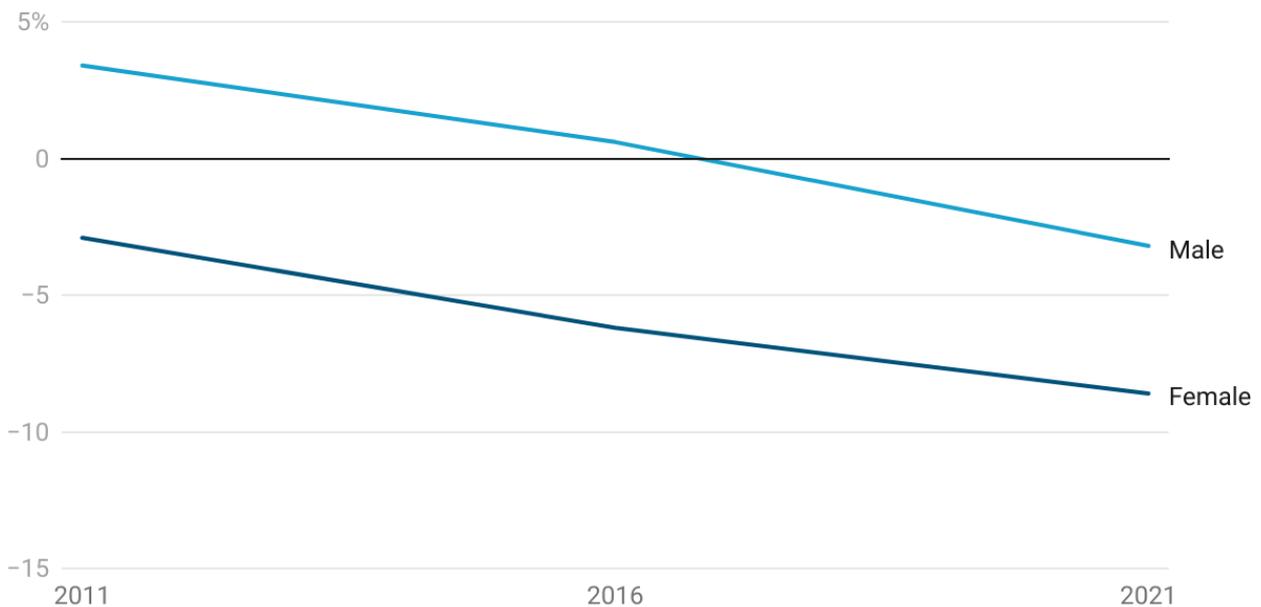
Previous CEDA research uncovered high levels of skills mismatch among permanent skilled migrants. It found that nearly a quarter were working in a job below their skill level.<sup>4</sup> Widespread skill shortages in wake of the COVID-19 pandemic mean it is even more critical that we make the best possible use of migrants' skills.<sup>5</sup> Australia is missing out on a substantial productivity benefit by failing to do so. A core objective of the Federal Government's 2023 Migration Strategy is to raise living standards by boosting productivity and meeting skills shortages.

Skills mismatch contributes to the gap between the wages of recent migrants and those of Australian-born workers, and this has continued to grow.

FIGURE 1

## Wages of recent migrants are falling behind

Average wages for employed migrants who have arrived in Australia in the past 2 to 6 years, per cent difference from average wages for Australian-born workers of that gender



Source: CEDA estimates based on regression analysis of ABS Census data • Created with Datawrapper

Across all temporary and permanent visa types, recent male migrants earned more, on average, than Australian-born workers in 2011 and 2016, reflecting their higher average skill level. However, this was no longer the case in 2021. Meanwhile, the shortfall in recent female migrants' wages that existed in 2011 has grown (Figure 1).

Labour productivity and wages are closely linked, indicating that migrant labour is not being used as productively as it could be.<sup>6</sup> This decade, migrants have become increasingly likely to work in lower productivity firms.<sup>7</sup> This is consistent with the recent Migration Review, which found that the economic impact of the skilled-migration stream has weakened in recent years due to growing labour-market mismatch.

Wage gaps between recent migrants and the Australian-born population are even larger when compared on a like-with-like basis that adjusts for the higher education, younger age, location, industry of work and lower English proficiency of migrants (Figure 2).

In contrast to the simple average wage gap in Figure 1, the decline in wages after controlling for differences in characteristics<sup>ii</sup> is concentrated between 2016 and 2021. This is because the recent migrant cohort in 2016 was somewhat weaker in terms of observable characteristics. Specifically, there was an increase in the share of recent migrants speaking English below a 'very well' level in 2016 that was not repeated in 2021, and relative to the Australian-born population there was a lower share of recent migrants with a bachelor/ diploma education or above in 2016.

Much of the relative decline in migrants' wage outcomes between 2011 and 2016 can thus be explained by a change in the characteristics of recent arrivals, whereas the decline between 2016 and 2021 represents a growing failure to make the best use of migrants' skills, as new arrivals continued to be highly skilled, educated and young.

<sup>ii</sup> See Appendix 2 for further detail of the wage model used.

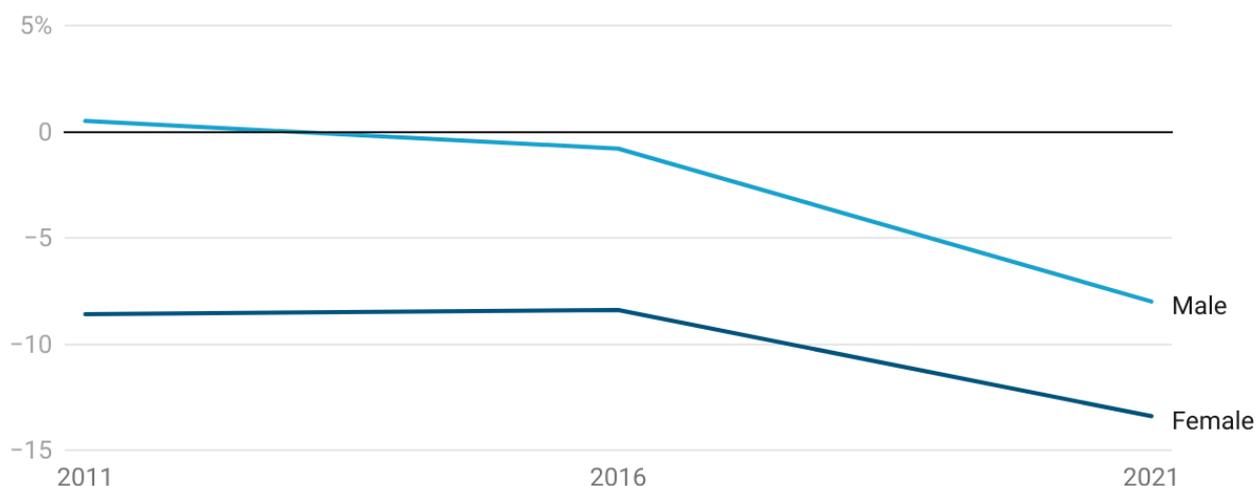
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**The relative decline in migrants' wage outcomes...between 2016 and 2021 represents a growing failure to make the best use of migrants' skills, as new arrivals continued to be highly skilled, educated and young.**

FIGURE 2

## Wage shortfalls for recent migrants are bigger when comparing against otherwise similar Australian-born people

Average wages for employed migrants who have arrived in Australia in the past 2 to 6 years, per cent difference from average wages for otherwise similar Australian-born workers of that gender



*This is a like-with-like comparison that adjusts for the higher education, younger age, location, industry of work and lower English ability of recent migrants.*

Source: CEDA estimates based on regression analysis of ABS Census data • Created with Datawrapper

If migrants who have been in Australia for two to six years earned comparable wages to similar Australian-born workers this would unlock around

**\$4bn**

in foregone wages each year.

If we can better match the skills of migrants to jobs, the potential benefits are large: if migrants who have been in Australia for two to six years earned comparable wages to similar Australian-born workers – accounting for their education, age, English ability, industry and location of work – this would unlock around \$4 billion in foregone wages each year. This estimate is based on achieving 10 per cent higher wages on average across 650,000 employed migrants who arrived in Australia between 2015 and 2019 and were still here in 2021.<sup>iii</sup>

Higher wages would provide direct benefits to migrants but could also unlock benefits for Australians more broadly. Where migrants earn lower wages because they are working in jobs below their skill level (as documented in previous CEDA research<sup>8</sup>), better matching will increase national productivity, delivering net welfare gains and spillover benefits for other Australians through a more dynamic economy, greater knowledge transfers and tax revenue.

<sup>iii</sup> This estimate is larger than the previous CEDA (2021) estimate that reducing skills mismatch among migrants could deliver \$1.25 billion in foregone wages. This is due to the broader migrant population considered in the current report: the 2021 work analysed the potential benefits (over 6 years) from better skill matching among 32,000 permanent skilled migrants who were working in a job lower than their skill level during their first year in Australia.

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**In this report, we present new analysis of ABS Census data to explore why recent migrants are earning less than Australian-born people with similar characteristics and skills.**

Conversely, it is possible that some recent migrants are already working in demanding jobs but being paid less than other Australians in similar roles; in this case higher wages will improve the fairness of labour market outcomes but will largely be a transfer from businesses to migrants. For overall welfare benefits to match the increase in wages, productivity would need to increase in line with wages, creating greater revenue for businesses (for example, through improved international competitiveness) so that job opportunities for other Australians are not adversely affected. The estimated \$4 billion in foregone wages is thus a rough upper bound on the potential benefit for Australia from better using migrants' skills.

In this report, we present new analysis of ABS Census data to explore why recent migrants are earning less than Australian-born people with similar characteristics and skills (see Box 1 for why we focus on wages, including its links with productivity, and Box 2 for some caveats). We focus on recent migrants, which refers to permanent and temporary migrants who have arrived in Australia in the two to six years preceding the relevant Census. Temporary migrants who have been in Australia for at least two years are included, as many become permanent residents.

Our analysis focuses on the role of two types of skills: (1) technical skills – such as education – which are largely transferrable across countries and (2) language – needed for a migrant to be able to use those technical skills in their chosen country. We may not be making the most of migrants' skills if:

1. We fail to recognise technical skills and experience;
2. Their language skills are inadequate; and
3. Migrants are discriminated against by employers.

As explained further, points 1. and 3. will show up as the unexplained components in the wage gap, while point 2. will show up as English language proficiency in the wage gap.

Ensuring that migrants can use their skills within the first few years of settlement is crucial to addressing skill shortages. We propose policy responses to improve outcomes for migrants, with potential benefits for all Australians through a more productive economy in the long-term.



#### BOX 1.

### Wages, productivity and skill matching

This report focuses on hourly wages as the best single measure of how productively labour is used. Migrants can also face difficulties finding work, resulting in lower rates of employment and hours worked. Hourly wages are an imperfect measure of productivity – wages also reflect the strength of employer and employee bargaining positions – but productivity growth is closely aligned with hourly wages as the main driver of real wage growth.

The efficient supply and matching of skills in the labour market is critical for productivity and thus wages. The more easily people can move into jobs that better match their skills, the more often labour resources are allocated to their most productive use.

Better matching migrants' jobs to their skills can increase productivity by increasing output. It can also provide broader benefits through knowledge spillovers, training and education. Administrative wage data has shown a positive link between skilled migration and labour productivity, which can be further boosted by better skill matching.

For example, migrant engineers who are unable to find work as an engineer are often forced into lower-paying jobs which do not utilise their skills – they are overqualified. This is one of many cases whereby skilled migrant labour has not been allocated to its most productive use. Barriers such as skills recognition, low levels of English ability and discrimination based on lack of local work experience all contribute to this inefficient allocation of labour.

Our focus on hourly wages seeks to indicate the potential productivity benefits from better matching migrants to jobs at their skill level. Links between productivity and wages are imperfect, however, and there can also be benefits from reducing barriers to employment of migrants.

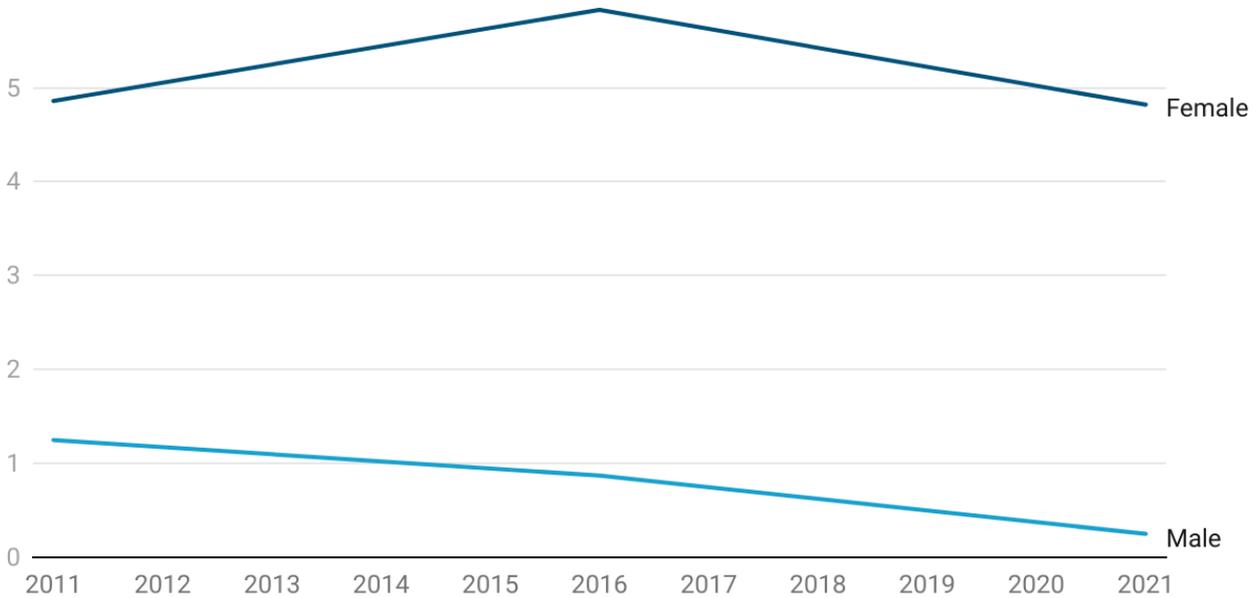
Over time, aggregate unemployment rates of recent male and female migrants have trended in different directions, but both remain higher than the Australian-born population (Figure 3). When disaggregating unemployment by visa type, female migrants consistently experience higher unemployment than their male counterparts. Unemployment is a greater problem for migrants on family and humanitarian visas, suggesting that removing barriers to employment would most benefit migrants with less human capital – a person's knowledge, skills and education (Figure 4). These outcomes improve with time but are not fully ameliorated.

Source: Productivity Commission (2023); OECD (2023).

FIGURE 3

## Unemployment rates of recent migrants are higher

Unemployment rates for migrants who have arrived in Australia in the past 2 to 6 years, percentage point difference from unemployment rate for Australian-born people of that gender



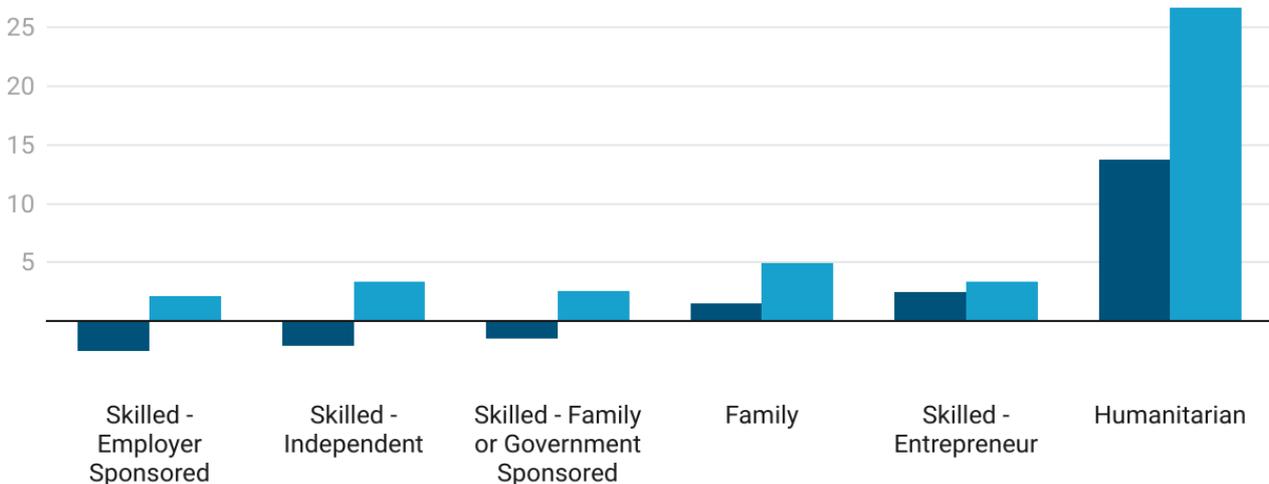
Source: CEDA estimates based on ABS Census data • Created with Datawrapper

FIGURE 4

## Skilled migrants have lower unemployment rates

Unemployment rates for migrants who have arrived in Australia in the past 2 to 6 years, percentage point difference from Australian-born population

■ Male ■ Female



Source: CEDA estimates based on ABS Census data • Created with Datawrapper



## BOX 2

### Caveats of the analysis

Based on past methodologies (notably that of the Productivity Commission), CEDA has produced an updated econometric analysis of the wage differences between migrants and Australian-born workers using the latest Census data. Census data offers open access, broad coverage and comparability over time, but there are some limitations:

- The 2021 Census was taken during the COVID-19 pandemic, which temporarily affected incomes as well as migrant flows. To reduce the distortion from fewer migrant arrivals in 2020 and 2021, we only included migrants who have been in Australia for at least two years at the time of each Census. We are also comparing migrant wages against Australian-born wages, which were subject to similar influences. Furthermore, participants were asked to enter their usual income and hours worked as it was before any COVID-19 lockdowns. However, there could still be a higher likelihood of error in the 2021 Census.
- Although our policy implications focus on permanent migrants, our analysis also includes temporary migrants, as a sizeable share end up becoming permanent residents. Moreover, our analysis only includes migrants who have been in Australia for at least two years. This ensures that we do not include those who only stay for a short period, such as working holiday makers.
- We are unable to properly control for unobservable variables, such as innate ability, motivation and quality of human capital. These are reflected in the unexplained components of the wage gaps between migrants and Australian-born workers. We have drawn on past research to try to explain the potential causes. A few empirical studies have attempted to control for unobservables; however, limitations of the Census prevent us from doing so.
- A lack of general equilibrium analysis to determine the flow-on effects of better matching migrants to jobs on the rest of the Australian-born population. For example, we do not consider whether higher wages for better matched migrants may come at the expense of lower business profits, in which case the welfare consequences would be relatively neutral. We also do not include the possibility that if wages are fixed to jobs, then if migrants take higher-paying jobs, other workers will be displaced to lower-paying jobs. Conversely, the benefits may be understated if well-matched migrants provide knowledge or skill spillover benefits to other colleagues.

A more detailed explanation can be found in Appendix 3.

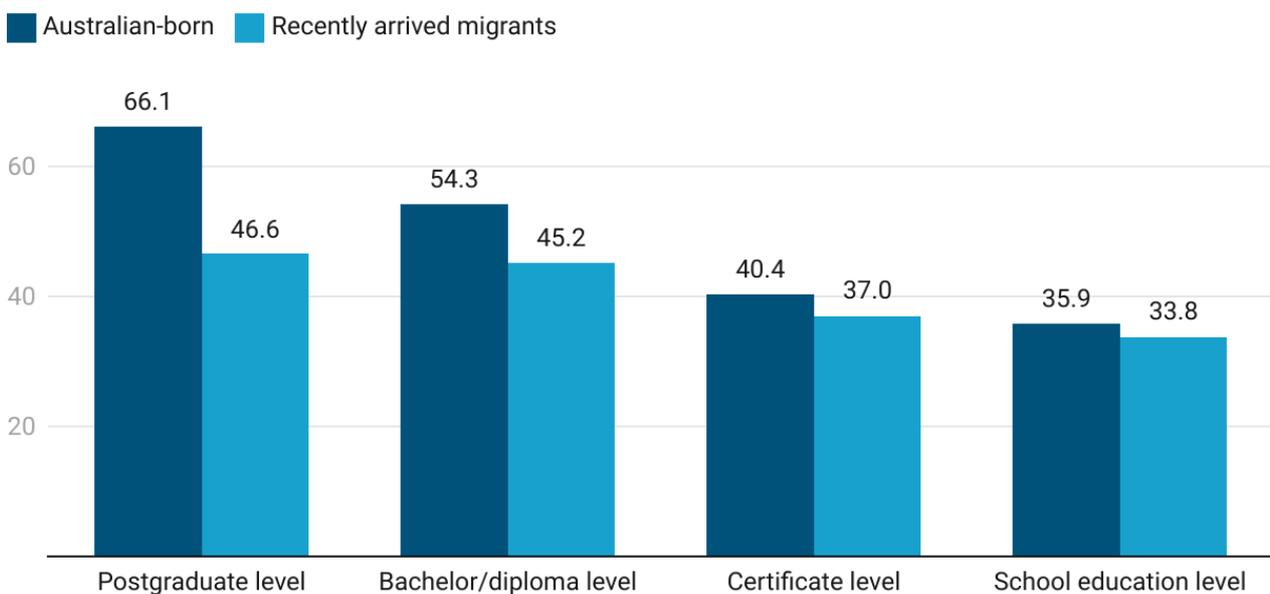
# RECENT MIGRANTS EARN LESS THAN AUSTRALIAN-BORN WORKERS

Across all levels of education, recent migrants earn less than Australian-born workers.<sup>iv</sup> And the wage gap increases with education level: recently arrived migrants with postgraduate education earn 30 per cent less than similarly educated Australian-born workers, whereas those migrants with only school education earn 6 per cent less (Figure 5).<sup>v</sup>

FIGURE 5

## Recently arrived educated migrants earn less than similar Australian-born workers

Mean hourly wages, 2021 (nominal dollars)



Source: CEDA analysis of ABS Census data • Created with Datawrapper

The larger wage gap for more highly educated migrants remains after controlling for other relevant factors to compare against Australian-born workers with similar education, age, location and industry of work (Figure 6; Appendix 1).

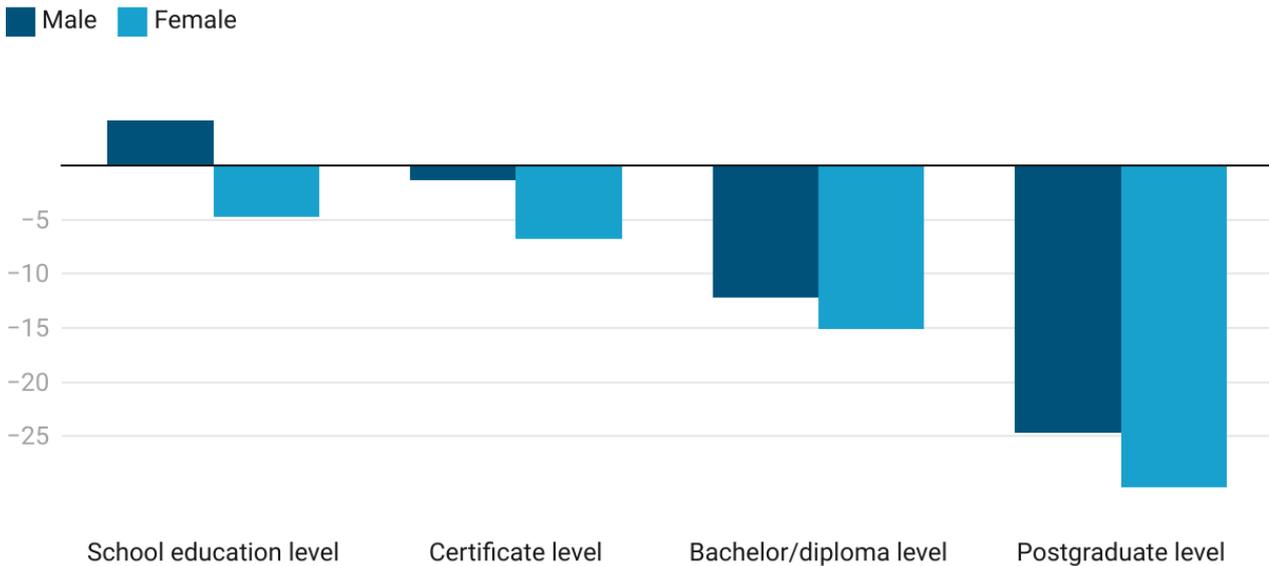
<sup>iv</sup> Comparison of averages across people with the same level of educational attainment. As elsewhere in this report, data are for total income per hour worked for employed people aged 15 to 64.

<sup>v</sup> This gap may be due to compositional factors: for example, the postgraduate category contains doctorate and master degrees, while school education level contains only those with high school education. Therefore, we would expect to see the school education level have more uniformity and therefore lower wage differences between migrants and Australian-born workers. However, large wage gaps remain for migrants with Doctorates (13 per cent) and with Masters Degrees (31 per cent).

FIGURE 6

## Wages are lower for recently arrived migrants

Migrants arriving 2015-2019, per cent difference from otherwise-similar Australian-born workers, 2021 Census



Controlling for education, age, location and industry of work. Not controlling for English language proficiency.

Source: CEDA estimates of ABS Census data based on regression analysis • Created with Datawrapper

Despite higher levels of education on average compared with Australian-born workers, a smaller proportion of recent migrants work in the top occupational levels (professionals and managers). This reflects more migrants working in jobs below their skill level. Among people with a diploma-level degree or higher, the proportion of Australian-born workers who are professionals or managers is 21 percentage points higher than that of migrants who arrived between 2015 and 2019, or 16 percentage points after adjusting for the younger age of recent migrants (Table 1).

While this magnitude of mismatch is broadly consistent with previous CEDA analysis showing that 23 per cent of permanent skilled migrants are in a job that is lower than their skill level 18 months after arrival, there is considerable variation in outcomes by visa class.

After two to six years in Australia, 63 per cent of highly educated skilled migrants are working as managers or professionals, which is only slightly lower than outcomes for Australian-born workers. This compares with only 40 per cent of highly educated Family visa holders and just 23 per cent of Humanitarian visa holders.<sup>9</sup>

“

**Across all levels of education, recent migrants earn less than Australian-born workers.**

While migrants catch up over time, this process is slow, taking more than 15 years. This is also broadly consistent with previous findings.<sup>10</sup> Australia is missing out on crucial skills during this time, and migrants are missing out on increased income and the satisfaction that comes with working in a job commensurate with their skills and education.

The catch up is also inconsistent across age groups: those aged under 35 (who would have arrived in Australia as children or students) are more likely to be in top occupations, while those older than 35 still lag the Australian-born population, even after 15 or more years in Australia. Previous studies have demonstrated the important role that age-at-migration has in labour-market outcomes.<sup>11</sup> Migrants who arrive in Australia younger, particularly as children, have an easier time integrating into society and the labour market, thus resulting in quicker catch-up.

**TABLE 1**

**Share of workers with a diploma, bachelor or postgraduate degree in top occupations (Age-standardised)**

	Manager	Professional	Total
Australian-born	18%	48%	66%
Migrants			
Arrived 2015-19	14%	36%	50%
Arrived 2010-14	15%	41%	55%
Arrived 2005-09	15%	40%	55%
Arrived prior to 2005	17%	48%	65%

*Note:* data for migrant cohorts are age-standardised by applying the Australian-born age distribution to the share of people working as managers or professionals in each age group.

*Source:* CEDA analysis of 2021 ABS Census data

# WAGE OUTCOMES VARY GREATLY BY VISA TYPE

Consistent with past research, we found skilled migrants performed better in the labour market, particularly those whose employer had more involvement in the selection process (Figure 7). Family and Humanitarian visa holders earned less, which is unsurprising given the broader social objectives of these programs.<sup>vi</sup> Humanitarian migrants in particular earn less due to being less educated, younger, working in lower paying industries and having poorer English ability.<sup>vii</sup> The Australian Government's support for English training is primarily targeted towards family and humanitarian migrants, and there is evidence of the benefits of continuing to emphasise English training in settlement services.<sup>12</sup>

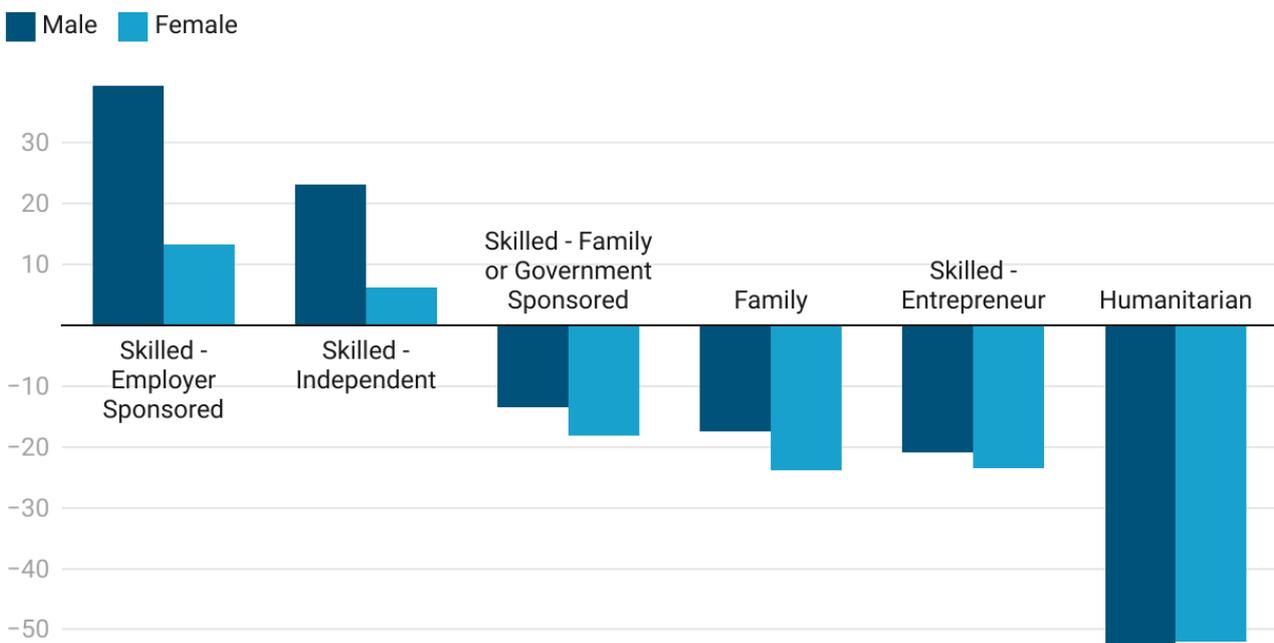
vi After controlling for characteristics, humanitarian and family migrants still earn between 16 and 24 per cent lower wages than Australian-born workers.

vii These poor outcomes are also reflected in employment rates, although there is disagreement on the causes. For example, refugees were 20 per cent less likely to be employed than non-refugees and this was not the result of discrimination but rather poor English ability. However, qualitative studies have found racial discrimination does play a role in the high unemployment rates of humanitarian migrants and refugees.

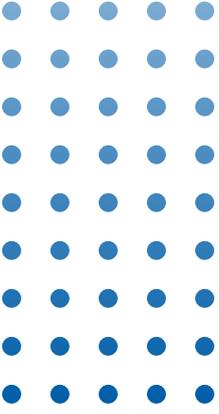
FIGURE 7

## There are big differences in wages by visa type

Migrants arriving 2015-19, per cent difference from Australian-born average, 2021 Census



Source: CEDA estimates of ABS Census data based on regression analysis • Created with Datawrapper



# ENGLISH-LANGUAGE PROFICIENCY HAS AN IMPACT ON EMPLOYMENT AND WAGES

English-language proficiency remains a significant factor explaining lower wages for recent migrants. This is consistent with past research both in Australia and internationally.<sup>13</sup>

Strong English-language proficiency is important not only for earnings<sup>14</sup> but also for employment rates<sup>15</sup>, labour-force participation rates<sup>16</sup> and hours worked<sup>17</sup>. Our results likely underestimate the true effect that language proficiency has on migrant wages, as studies that use sophisticated statistical techniques to adjust for measurement errors have found an even greater negative effect of poor English skills on wages (Appendix 3).

Although wages for highly educated migrants tend to converge with those of the Australian-born population over time, research has found this occurs far more slowly for migrants from non-English speaking countries.<sup>18</sup>

Highly educated people tend to work in high-skilled sectors such as finance, medicine, teaching, engineering, law and other professional services, which require high levels of written and verbal English-language proficiency. English is the baseline requirement for migrants to be able to use their education in Australia.

Based on our analysis – and despite minimum English standards being in place for entry into Australia – it is clear that weaker language proficiency is still holding back migrants across all skill levels. There are two possibilities: the minimum standards as set out in the skilled-migration visa requirements are still unsatisfactory for employers, or testing for English proficiency is not good enough.

To help migrants improve their English skills, the Federal Government funds the Adult Migrant English Program (AMEP). It is designed primarily for family and humanitarian migrants. Only a small proportion of skilled migrants (between 14 and 16 per cent) undertake the program to fill gaps in their English ability.<sup>19</sup>

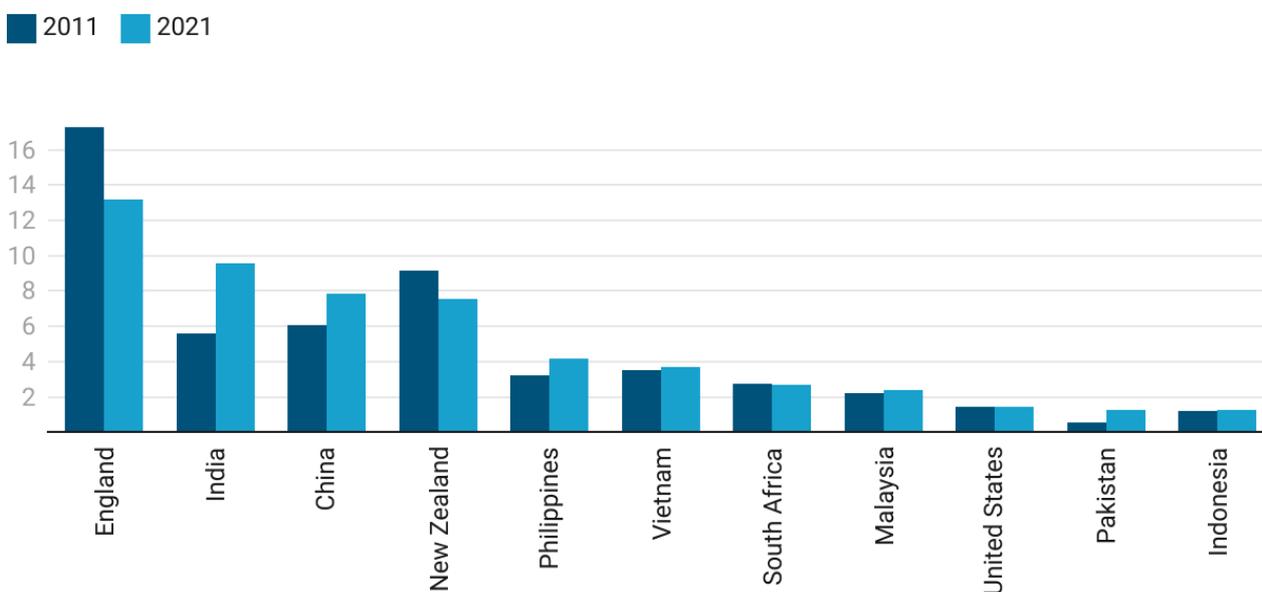
Given our finding that English ability is even more crucial for the employment outcomes of highly

educated migrants, the Government should consider additional funding for this program. The expectation that skilled migrants will be able to settle into Australia without any help is unrealistic, especially when more are coming from non-English-speaking backgrounds, particularly from China (Figure 8). Based on demographic trends and population growth, this is likely to continue.

FIGURE 8

## More migrants are coming from non-English speaking countries

Country of origin of migrants, per cent of total migrants in Australia



Source: CEDA analysis of ABS Census data • Created with Datawrapper

The Government expanded the AMEP in 2021 after concerns over its effectiveness.<sup>viii</sup> Amid wide acknowledgement that the quality of the program had deteriorated, and the allocated 510 hours of tuition was not enough to achieve even functional English (the standard required for basic everyday conversation), tuition hours were uncapped and the English standard exit level was raised.<sup>20</sup> The program will now allow migrants to achieve vocational English (a score of 5.0 on the International English Language Testing System (IELTS)) as opposed to just functional English (a score of 4.5).

The move from functional to vocational English has been criticised for not being high enough. This has been bolstered by confusion about what vocational English encompasses. The Department of Home Affairs defines vocational English as a score of 5.0 on the IELTS. However, the bill passing the amendment defines it as a score of 5.5. It has also been pointed out that when comparing different frameworks for testing language proficiency, the switch from functional to vocational English essentially amounts to no change.<sup>21</sup> Either way, some have questioned whether this change would dramatically improve labour-market outcomes.<sup>22</sup>

<sup>viii</sup> A new outcomes-based model was also introduced. However, a solid evaluation framework will be critical to see if it works, as the new model has been criticised for the move away from a national curriculum, the absence of Systemic Functional Grammar, and a lack of defining objectives clearly (see Moore 2022; Tilney 2023).

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**Canada has an unlimited and free language training program for all migrants. Australia's is more restrictive, despite there being higher visa fees across most categories.**

Expanding the program to allow all migrants an opportunity to achieve competent or proficient English (a score of 6.0 or 7.0 on the IELTS) would enable skilled migrants to use their skills and qualifications to the fullest extent.

Canada has an unlimited and free language training program for all migrants. Australia's is more restrictive, despite there being higher visa fees across most categories. Considering the immense importance of language proficiency in wage outcomes, increasing access to English training would likely yield large benefits to migrants at all levels of education at a small cost to the Federal Budget (the potential \$4 billion benefit from better matching migrants with higher skilled jobs dwarfs the \$20 million allocated to reforming the AMEP in the 2022-23 Federal Budget). International evidence suggests that publicly funded language programs for migrants are very effective and tend to pay for themselves, as the increased tax revenue from higher earnings pays for program costs over time.<sup>23</sup>

Further research and evaluation – preferably a randomised trial as recommended in previous CEDA work<sup>24</sup> – will be needed to ensure standards are high enough and that sufficient skilled migrants would access these courses. A more rigorous evaluation method is needed because the most recent large-scale evaluation of the AMEP had large limitations that prevented researchers from establishing a direct causal impact. Greater investment in the evidence base alone would be helpful.

Language instruction that is contextualised for workplace use carries potential benefits by combining language and skills training.<sup>25</sup> High-level English training that is occupation specific can be especially beneficial for skilled migrants who need to work full-time to support their family, as they can receive training while they work.<sup>26</sup> Tailored occupation-specific training can also help to deliver the high levels of English proficiency required to work in many high-skilled sectors.

Australia already has a publicly funded program providing advanced language training integrated within a workplace context, called Skills for Education and Employment (SEE). Unfortunately, skilled migrants are ineligible for this program.<sup>27</sup>

Another way to improve English proficiency among recent migrants would be to raise language requirements for some or all visas. While our analysis shows that English proficiency is an important factor

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**There is a risk that setting English standards too high across-the-board may act as a barrier to migration in some occupations where high-level English is not necessary.**

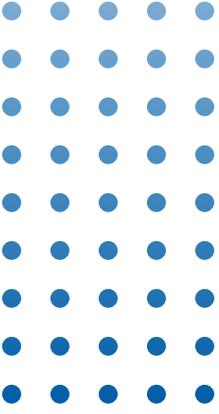
in wage outcomes, other stakeholders have argued that English standards are already too high for some specific occupations.<sup>28</sup> There is a risk that setting English standards too high across-the-board may act as a barrier to migration in some occupations where high-level English is not necessary.

However, the Government's decision to raise language requirements for international students as part of its Migration Strategy is welcome. Longstanding concerns about low levels of English skills among international students could not be ignored any longer.<sup>29</sup> In addition to overwhelming anecdotal evidence, research has indicated that universities had lowered the standards of some of their degrees to enable international students to pass.<sup>30</sup> Although aligning English requirements with other skilled visas is a step in the right direction, the Government must also close widely reported loopholes that allow international students to be assessed at a lower level than standard requirements.

The importance of improving English proficiency can also be illustrated by the experience of migrants who settle outside major cities. Thirty-six per cent of migrants settling in regional, rural or remote areas speak English less than 'very well' during their first two to six years in Australia, compared with 31 per cent of recent arrivals in cities. This changes for those who have been in Australia for a further decade. The share of people with weaker English in regional, rural or remote areas more than halves to 17 per cent, while 22 per cent of migrants in major cities still report English proficiency that falls below 'very well'.

Improved English proficiency among migrants outside major cities coincides with a disproportionate improvement in their wages relative to Australian-born workers. We found that migrants in regional, rural or remote areas faced lower wages when they first arrived in Australia – even after adjusting for characteristics including their location and weaker English ability – but earned roughly three per cent more than would otherwise be expected after more than seven years living in Australia. This is consistent with other recent evidence finding that the gap between regional and (higher) major city incomes is smaller among migrants.<sup>31</sup>

In addition to more rapid improvement in English language proficiency, better wages may reflect the greater willingness of migrants to move to regional areas that have good employment opportunities. Further analysis is needed to investigate drivers and implications for policy, for example for the design of regional visa programs.



# WAGE OUTCOMES ARE WORSE FOR RECENT FEMALE MIGRANTS

Relative to Australian-born people of the same gender and similar education, overall wage outcomes are worst for highly educated female migrants (averaged across all visa types – Figure 9). Our analysis shows that the younger age of highly educated female migrants and their poorer English are the biggest drags on their wages. The significance of age reflects the tendency for more highly educated peoples' wages to peak later in life.<sup>32</sup> Although highly educated migrants speak better English on average than less educated migrants, the greater importance of language ability in high-skilled jobs means it has a bigger negative effect on their wages.

One of the only factors that does boost the wages of postgraduate-educated female migrants is their industry of employment, as they are more likely to work in higher paying industries than Australian-born workers. Meanwhile, bachelor- or diploma-educated female migrants are more likely to work in lower paying industries.

There are a couple of key reasons for this bigger gap. The first, and most important, is the much higher share of women entering as secondary applicants for skilled visas (analysed further below).

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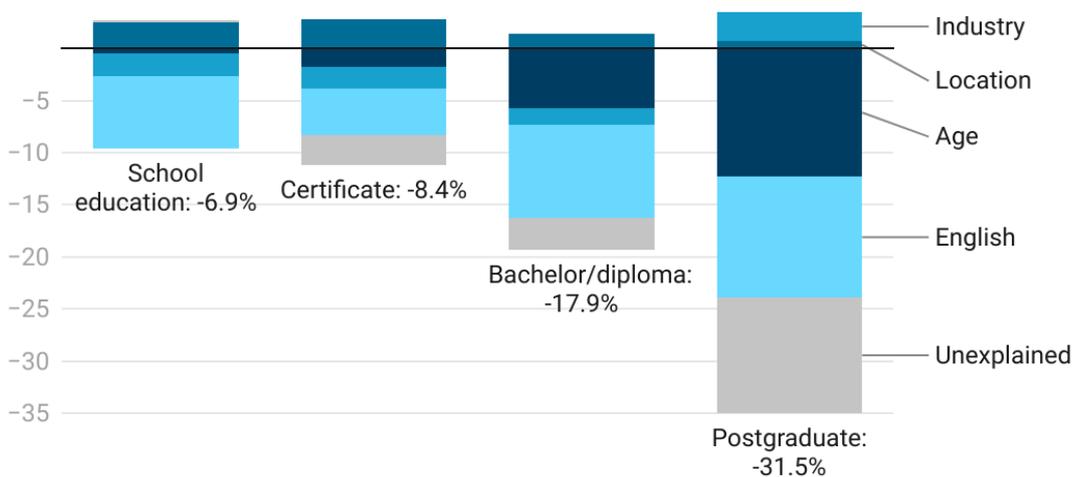
A second but smaller driver is a bigger gap between wages of mothers and fathers among migrants. While employment and hours worked are lower among migrant and Australian-born mothers alike, there is a further effect on wages for parents among recently arrived migrants: parents earn hourly wages that are three per cent (men) to five per cent (women) lower than would otherwise be expected.<sup>ix</sup> This may reflect the lack of other social supports among migrants, such as grandparents' assistance, with a bigger impact on women reflecting gender norms around responsibility for domestic labour and childcare.

<sup>ix</sup> Compared with otherwise similar recent migrants who are not parents, based on regression analysis that controls for their year of arrival into Australia, age, education, region, industry of work and English proficiency. By contrast, Australian-born parents are not found to earn lower hourly wages than non-parents, consistent with recent Treasury (2023) analysis.

FIGURE 9

## Highly educated female migrants have the biggest wage gap

Female migrants arriving 2015-2019, per cent difference from otherwise similar Australian-born women, 2021 Census



The total divergence from Australian-born women with that level of education (reported in the education level labels) is the sum of positive and negative explanations for migrants' wages. For example, postgraduate migrants earn more than Australian-born people with postgraduate education because they are more likely to live in a city and work in high-paying industries, but earn less because they are younger and have poorer English proficiency on average.

Source: CEDA estimates based on regression analysis of ABS Census data • Created with Datawrapper

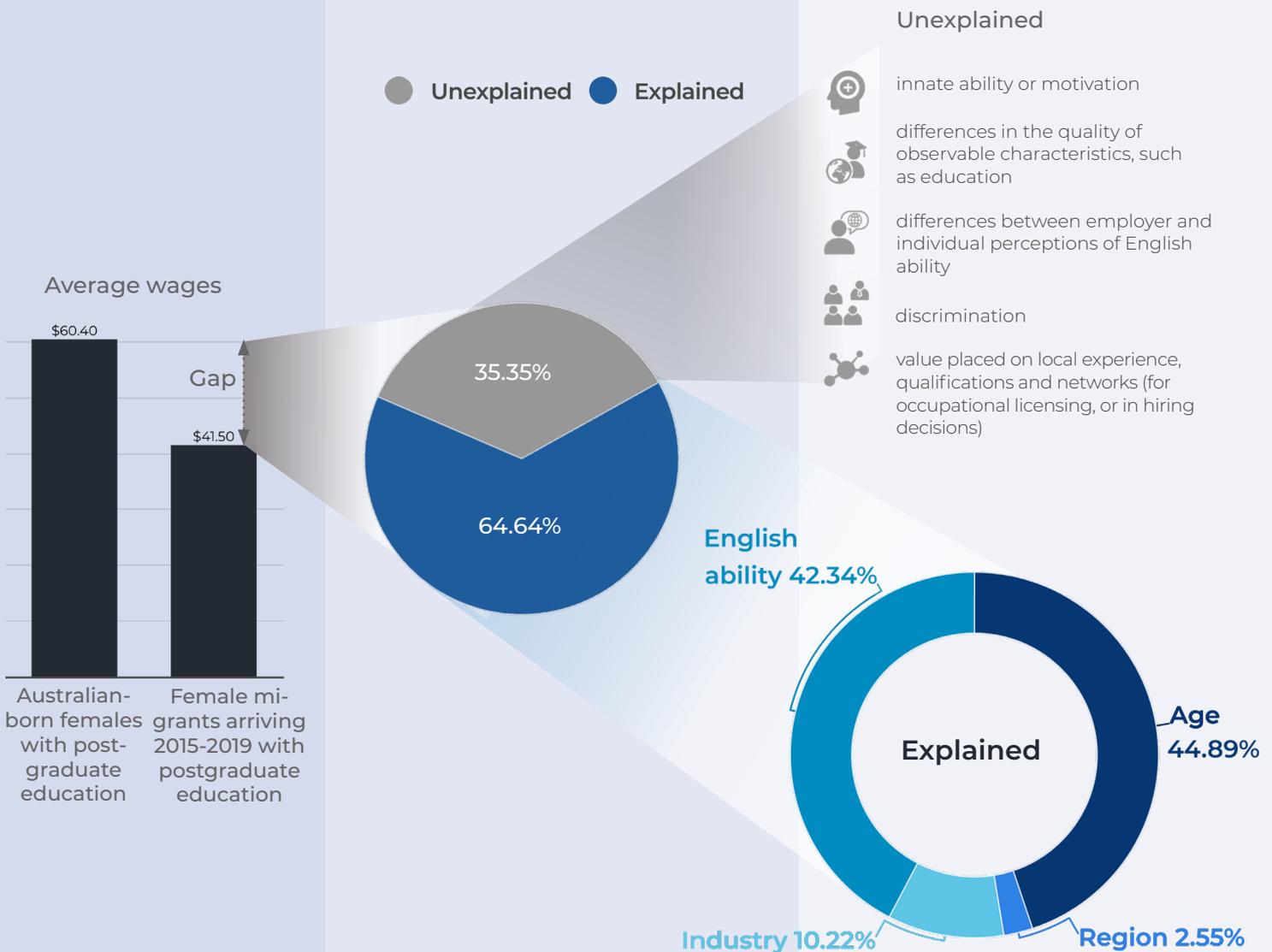
**BOX 3**

**Other explanations of lower wages for recent migrants**

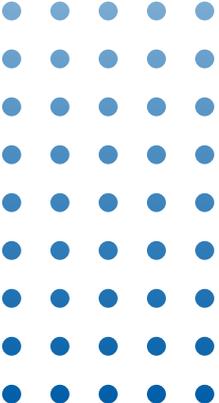
Wage gaps that cannot be explained by easily observed characteristics of migrants such as their age and English ability can have a number of sources. Some key explanations are presented for recent female migrants with postgraduate education in Figure 10 below.

**FIGURE 10**

**Key factors in lower wages for recent female migrants with postgraduate education**



Source: CEDA (2024)



## LACK OF LOCAL EXPERIENCE AND RESTRICTIVE LICENSING

Research has shown that transferring human capital – a person’s knowledge, skills and education – across borders is imperfect.<sup>33</sup> Common reasons given for this include employers’ bias towards local experience and local education, under a perception that international education is of lower quality.<sup>34</sup> A survey of migrant engineers in Australia found a lack of local experience or qualifications to be one of the biggest barriers to employment and career promotion.<sup>35</sup> Recent research also indicates that 85 per cent of Australian expatriates face barriers to finding work back in Australia, suggesting that a lack of recognition of skills developed internationally is a widespread cultural problem among Australian employers.<sup>36</sup>

Industry consultation suggests international qualification recognition is important to help migrants make the best use of their skills by easing some of the concerns of employers.<sup>37</sup> There are potentially big benefits from large-scale reforms to qualification recognition. Research from Germany found there were large and long-lasting positive effects on the labour market outcomes of migrants who attained full recognition. More importantly, it found that recognition was not only beneficial to regulated occupations but also to freely accessible occupations. Recognition sends a positive signal by eliminating an employer’s uncertainty about a migrant worker’s skills.<sup>38</sup>

It has been widely acknowledged that we need to improve the recognition of migrants’ skills and qualifications.<sup>39</sup> Compared with other countries, the share of recent migrants whose overseas qualifications are recognised in Australia is low (Figure 11). Part of this may be information gaps – migrants, particularly those from non-English speaking countries, may struggle to navigate the recognition process or are simply not aware of it.<sup>40</sup> The complexity of the system also puts off many migrants from pursuing recognition.

Information kits that help skilled migrants navigate these processes would help. Previous research has recommended a framework that provides a pre-migration kit, an employment kit and a settlement kit to bridge the gap between the migration selection process and the employment realities new migrants are likely to face.<sup>41</sup> The fact that many surveys show

migrants are surprised and unaware of the challenges they would face once in Australia suggests there is not enough information to prepare them for such realities. Australia could also look to the UK, where the recent establishment of an assistance centre for migrants looking to have their qualifications recognised is another positive step towards addressing informational barriers to recognition.<sup>42</sup>

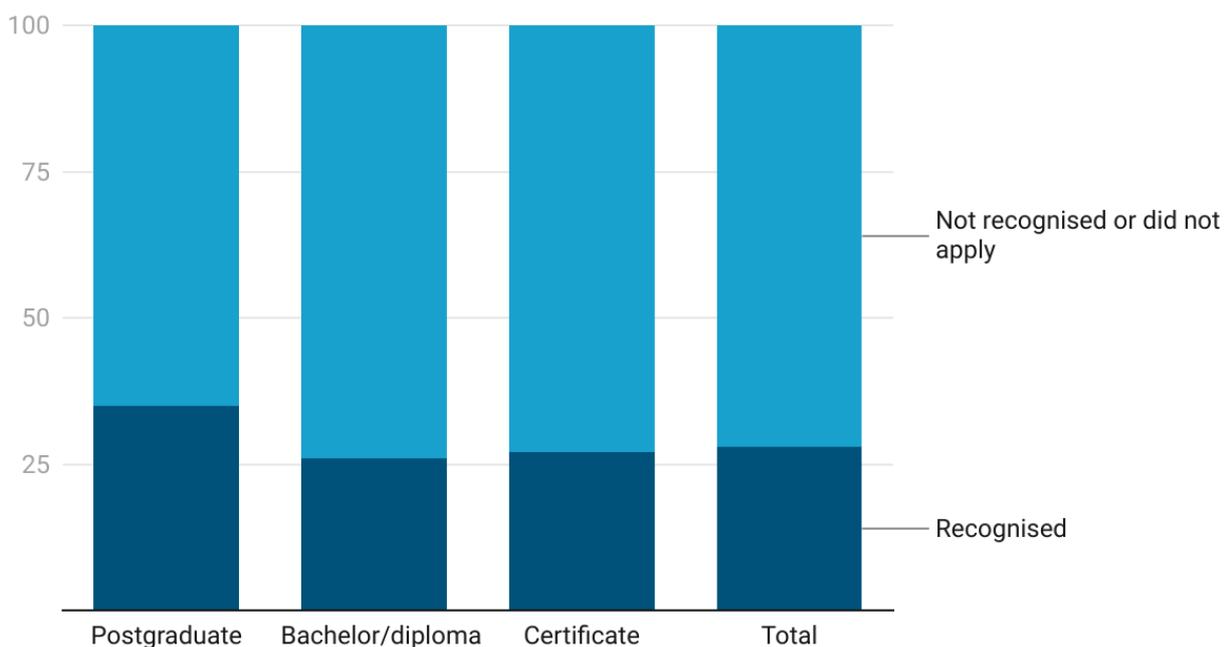
In many occupations, there are still limited opportunities to practically demonstrate work skills. While improvements have been made over time, these have been uneven within and across sectors/states and territories, and challenges such as delays and costs to achieve recognition remain.

Flexible pathways to recognise international qualifications are necessary.<sup>43</sup> Experience and on-the-job skills can come second place to formal qualifications in some occupations.<sup>44</sup> Continuing to expand competency-based assessment to occupations is a worthwhile pathway, as has been shown in the nursing industry.<sup>45</sup> This would reduce the length of time needed for a migrant's skills to be recognised and remove the need for additional training. A comprehensive review of skills-recognition processes would highlight the differences in assessments between occupations and identify gaps where assessing competency is most needed.

FIGURE 11

## Australia has low levels of migrant occupational recognition

Migrants arriving 2015-2019, share who had overseas qualification recognised, 2021 Census



Source: CEDA analysis of ABS Census data • Created with Datawrapper

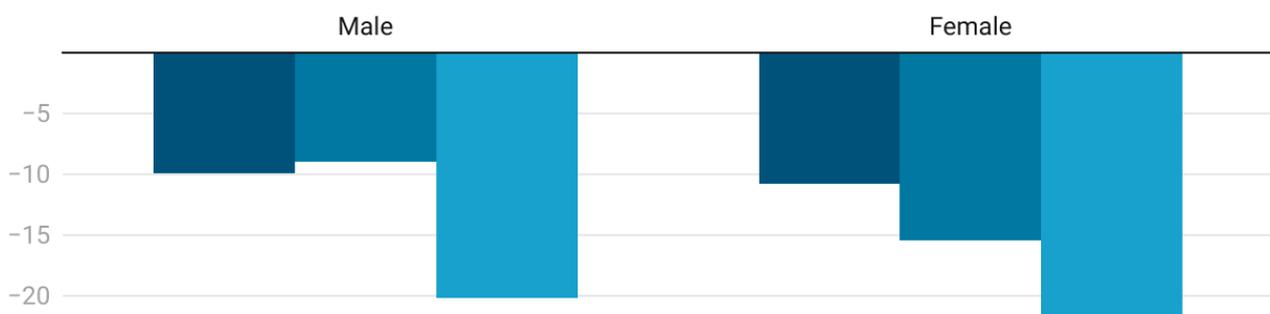
Mismatches between migrants' skills and wages are greater in occupations subject to licensing. Occupational licences are specific legal requirements to practice an occupation, such as minimum qualifications or recent work experience, in fields such as healthcare, teaching, accounting, security services, taxi driving and trades such as plumbing, painting and electricians. While licensing plays an important role in protecting consumer safety, it is complex and burdensome for migrants to navigate the two separate processes to access a labour migration visa and satisfy occupational licensing.<sup>46</sup> The concept of licensing alone acts as a barrier to entry but is amplified by an inefficient and complex foreign-recognition system.<sup>47</sup> The difficulty faced by migrants who are unable to meet licensing requirements is reflected in wage outcomes: recent migrants educated in a licensed field but working in a non-licensed occupation earn 20 per cent less than similar Australian-born workers (Figure 12).

FIGURE 12

## Migrants who are qualified in licensed fields but working in non-licensed professions earn a lot less

Difference in hourly wages between recent migrants and Australian-born workers, per cent

■ Licensed qualification working in licensed profession 
 ■ Non-licensed qualification working in non-licensed profession 
 ■ Licensed qualification working in non-licensed profession



*Licensed professions included doctors, nurses, engineers, architects, building and construction workers, taxi and truck drivers, lawyers, accountants, real estate agents and teachers. Licensed qualifications included medicine, engineering, accounting, law, real estate and teaching. Controlling for differences in characteristics (age, region, education level, English ability)*

Source: CEDA estimates of ABS Census data based on regression analysis • Created with Datawrapper

Australian and international research has found that although licensing raises earnings and reduces over-education for those skilled migrants fortunate enough to be working in licensed jobs, it produces worse outcomes for those whose skills are not recognised, exacerbating skills mismatch.<sup>48</sup>

Locals within a regulated profession may often turn to occupational licensing as a protectionist barrier to prevent competition from migrant workers.<sup>49</sup> This problem is likely to be greater in Australia, which has a decentralised recognition system in which a multitude of professional associations are responsible for recognition. Currently, there are 39 skilled-migration assessing authorities which undertake assessments for more than 650 occupations. Professional associations bring a strong understanding of skills required and risks if these requirements are not met, but there is also risk of 'regulatory capture' where associations use licensing to restrict entry and maintain the incomes of existing practitioners.<sup>50</sup> Despite automatic mutual-recognition schemes being widely implemented, in practice, regulators still sometimes maintained restrictions.<sup>51</sup>

To combat the potential for regulatory capture, there must be stronger independent oversight of regulators. The Office of the Fairness Commissioner (OFC) in Ontario, Canada is a leading example of an external body that oversees whether recognition requirements of regulators are fair, transparent and reasonable.<sup>52</sup> The OFC has conducted wholesale reviews of Canada's occupational regulation, finding that some underlying barriers to improving recognition included a lack of motivation to change and resistance to transparency.<sup>53</sup>

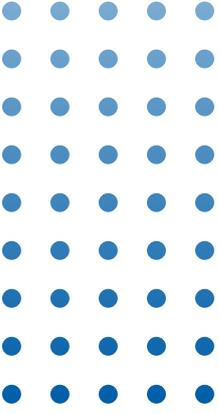
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**Despite automatic mutual-recognition schemes being widely implemented, in practice, regulators still sometimes maintained restrictions.**

An Australian equivalent would be logically housed within the Australian Competition and Consumer Commission (ACCC). A similar assessment would likely unearth some serious issues with Australia's recognition system.<sup>54</sup> For example, the Economic Regulation Authority in Western Australia has documented the high costs of occupational licensing, finding inconsistencies and inaction across industries.<sup>55</sup> In particular, an external body should emphasise the recognition of international qualifications and put a strong onus of proof on regulators to justify rejections.<sup>56</sup>

This starting assumption against restrictive licensing is akin to National Competition Policy in the 1990s, which placed the burden of proof on organisations looking to retain anti-competitive regulations. Recent reform in the UK has moved in this direction, which has made the recognition process easier.<sup>57</sup> Migration and care-sector experts have reported that this makes it quicker and cheaper for nurses trained in other countries to move to the UK rather than Australia.<sup>58</sup> In line with our recommendation, the Government's Migration Strategy has committed to improving recognition through enhanced accountability and transparency, although it is light on detail and does not mention the establishment of a new independent body to oversee this.

Finally, in occupations where existing qualifications are still not recognised, bridging courses have been effective in filling the gap and reducing skills mismatch, particularly those which lead to a domestic qualification but do not require a migrant to start again from scratch.<sup>59</sup> International research has suggested that further education following migration is a worthwhile investment and produces better employment outcomes.<sup>60</sup> However, if we are to harness migrants' skills as quickly as possible, bridging courses should only be triggered where necessary, as they still add to the length and cost of migration. The Federal Government should remain committed to funding bridging courses and ensuring support for the various providers of these courses.



## DISCRIMINATION MAY PLAY A ROLE

Discrimination is another factor that could contribute to the wage gap between migrants and Australian-born workers. Discrimination can be based on race or ethnic background, or may reflect a bias in favour of local education and experience. Each cause warrants different policy responses, as we cannot assume that employer discrimination is based on nefarious intent against migrants. Past research has shown that a migrant's country of birth was strongly linked with their wage outcomes. Migrants from English-speaking countries earned around the same as Australian-born workers, whereas migrants from non-English-speaking backgrounds suffered a persistent wage gap.<sup>61</sup>

There is some research to suggest that discrimination occurs along ethnic or racial lines.<sup>62</sup> A recent study found Australian public service employees from non-English speaking backgrounds (particularly Asian migrants) were less likely to be promoted. This was due to race – being non-white – as opposed to poor English ability or cultural differences.<sup>63</sup> Discrimination may also explain why migrants from non-English-speaking countries seem to benefit less from further education than their English-speaking background counterparts. However, sharing similar cultural histories and education systems may also facilitate the easier transfer of human capital between English-speaking countries.<sup>64</sup>

Although studies and policymakers have focused on measures to encourage contact between people from different social groups to reduce prejudice in the workplace, emerging evidence suggests that a greater focus on measures to reduce prejudice by increasing understanding of the variability between individuals in a group can be more effective.<sup>65</sup> According to this theory, it is harder for a person to dislike a group when they believe that a wide range of people belong to that group.<sup>66</sup> Experiments that highlighted the unique qualities of individuals within the same race, such as personality or interests, reduced prejudice towards that group of people. These interventions are low cost and highly scalable.<sup>67</sup>

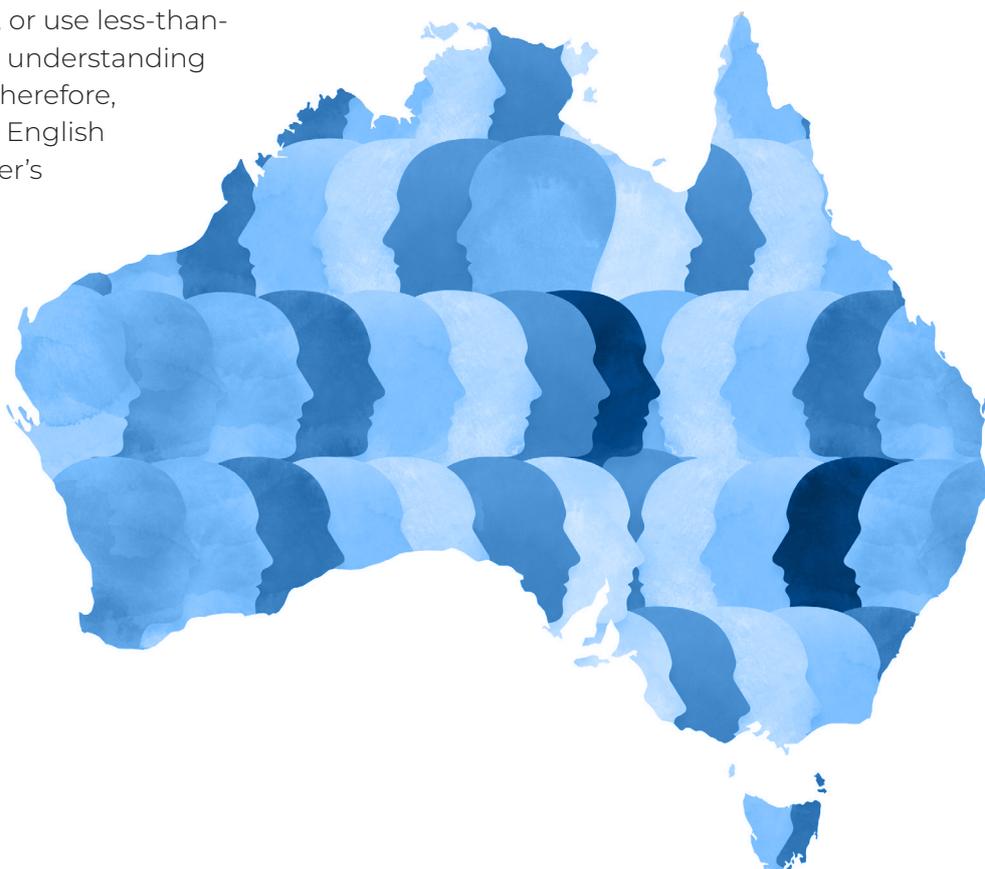
Combining these interventions with specific English training for migrant workers from non-English

speaking countries – as previously recommended – in addition to workplace policies that help migrants understand the local workplace culture, would likely help to reduce prejudice and improve employment outcomes.<sup>68</sup> Starting with pilot programs in the public service, with rigorous evaluation, would provide an evidence base to encourage private businesses to try the same. This should be considered as part of the Federal Government’s Multicultural Framework Review.<sup>69</sup>

Our research does not directly indicate how much discrimination contributes to migrants’ employment outcomes, which is notoriously difficult to disentangle empirically. But a large body of research suggests strong employer preferences for local experience – whether Australian work experience, workplace training through studying an Australian qualification or a reference from an Australian employer – is a key driver holding back migrants’ labour-market prospects, both when finding a job and when finding work commensurate with their skills and qualifications. The Catch-22 is that migrants gain no local work experience because they have no local work experience. Migrants may remain unemployed for long periods of time or be forced to work in low-skilled jobs below their capabilities. The longer this occurs, the greater the cost to the Australian economy.

Discrimination based on local experience will also tend to vary across occupation, which is reflected in patterns of wage inequality. The local work experience issue is particularly acute in engineering. Potential policy responses include coordinating initiatives to establish local networks for migrants that allow them to build local knowledge and experience. Past schemes as applied to foreign-trained doctors, professional association programs to partner migrants with local mentors (such as those run by Engineers Australia), and state government community-based initiatives have achieved some positive results. A recent evaluation of the Skilled Professional Migrants Program (SPMP) – a settlement service giving skilled migrants the opportunities to build local networks – found it had large benefits in terms of employment growth and reducing skills mismatch. However, medium to long-term funding was a recurring issue, highlighting the need to provide funding certainty to these services.

These policies to address discrimination should not be used in isolation to address migrant skills mismatch – they are by no means a silver bullet. Employers may believe requiring local work experience lessens the risk from migrants having difficulties with English proficiency, or use less-than-proficient English as a proxy for not understanding the Australian workplace culture.<sup>x</sup> Therefore, enabling migrants to improve their English ability – as it may affect the employer’s perception of other issues – is important to consider alongside these interventions. Improving recognition of prior skills is also critical, as this can reduce risks for employers when they cannot properly evaluate international education or experience.



<sup>x</sup> This is the difference between the increased human capital effect or English proficiency acting as a proxy for other unobserved skills. A large body of Australian and international research (most recently, Carlsson, Eriksson & Rooth, 2023) suggests increasing host-country language proficiency is primarily a direct increase in human capital.

# EMPLOYER-SPONSORED AND SKILLED INDEPENDENT MIGRANTS HAVE GOOD WAGE OUTCOMES

Recently arrived employer-sponsored and skilled independent migrants earn more than the average across all Australian-born workers because they are more educated, of prime working age, more likely to live in cities and work in higher paying industries (Figures 13 and 14).

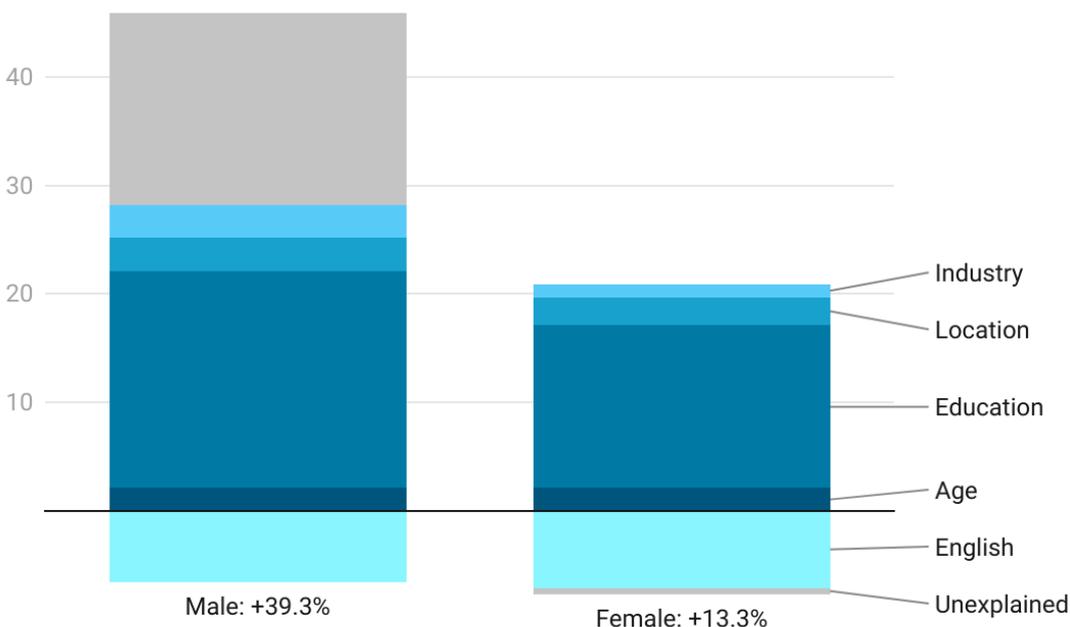
These positive effects on wages are partly offset by weaker English ability. Although a large share of these skilled migrants speak English as their first language, because English ability is such an important determinant of wages, it has a significant negative effect on the wages of even the most skilled migrants. Other studies have shown this effect could be even bigger than we have estimated (Appendix 3).

For employer-sponsored and skilled independent migrants, there is a large wage gap between recent male and female migrants, little of which is explained by differences in observable characteristics. Males

FIGURE 13

## Employer-sponsored migrants have the best wage outcomes

Employer-sponsored migrants arriving 2015-19, % difference in wages with Australian-born, 2021



Source: CEDA estimates of ABS Census data based on regression analysis • Created with Datawrapper

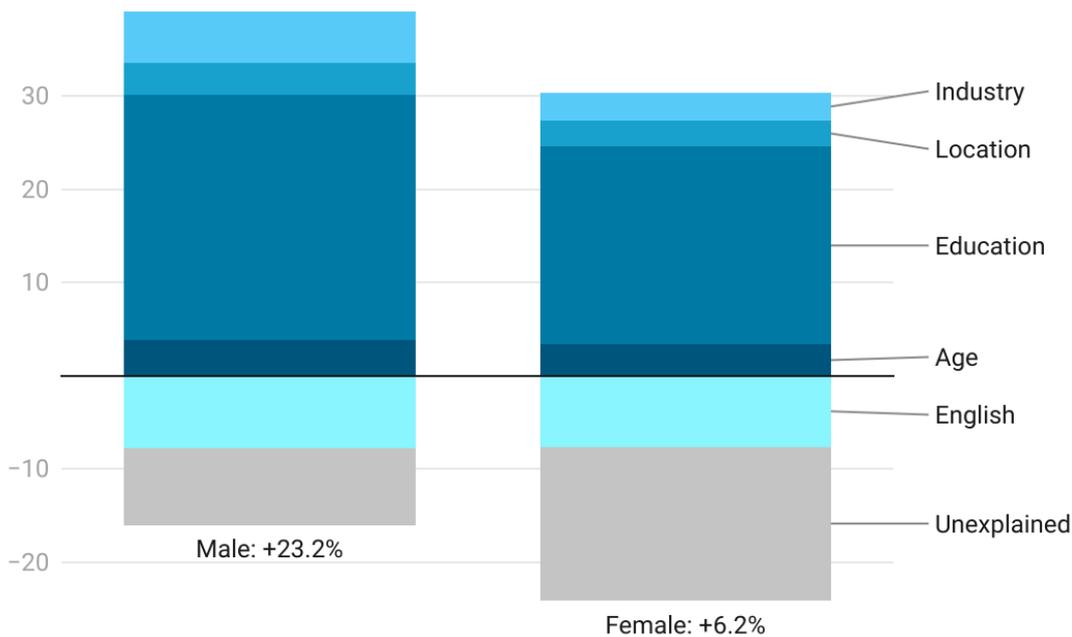


are more likely to be primary applicants, who are selected based on their characteristics (skilled independent migrants) or through nomination by their employer (employer sponsored migrants). Secondary applicants are typically female and on average earn lower wages. This explains almost half of the poorer wage outcomes for female employer-sponsored and skilled independent migrants (relative to Australian-born people of that gender<sup>xi</sup>).

FIGURE 14

## Skilled independent migrants have good wage outcomes

Skilled independent migrants arrived 2015-2019, % difference in wages with Australian-born, 2021

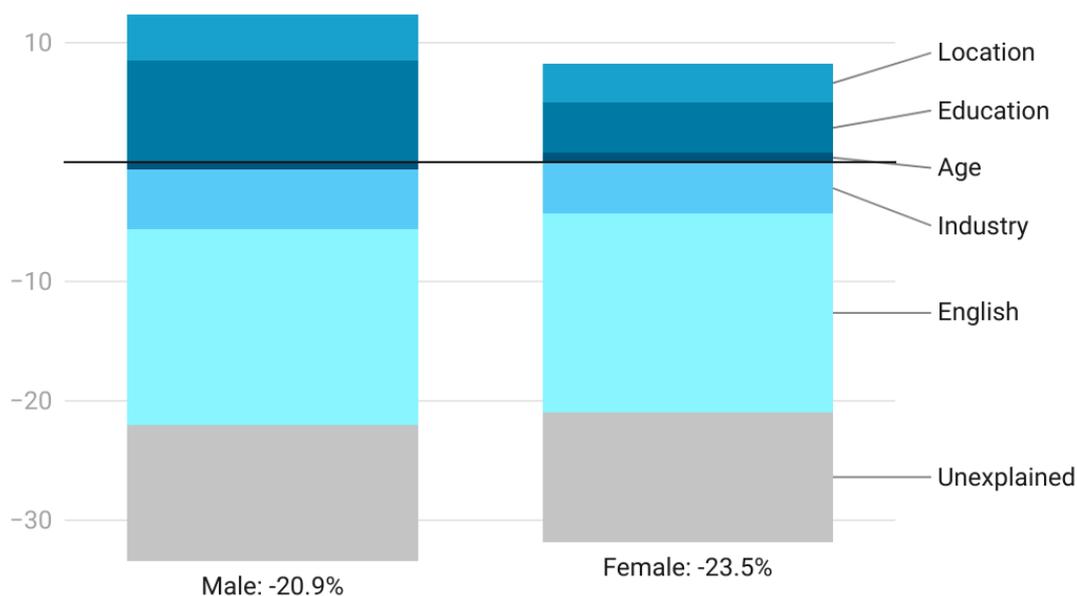


<sup>xi</sup> Recent female independent skilled migrants earned 6 per cent higher wages on average than Australia-born females in 2021 – reflecting their higher educational attainment – whereas recent male independent skilled migrants earned 23 per cent more than Australia-born males. Just over 7 percentage points of this 17-percentage point gap is explained by the higher share of secondary applicants among females.

FIGURE 15

## Business Innovation and Investment visa holders suffer a large wage penalty due to English ability

BIIP migrants arriving 2015-2019, % difference in wages with Australian-born, 2021



Source: CEDA estimates of ABS Census data based on regression analysis • Created with Datawrapper

Meanwhile, the relatively poor wage<sup>xii</sup> outcomes for Business Innovation and Investment Program (BIIP) migrants – largely explained by poor English ability – are inconsistent with its economic aims (Figure 15). The Government’s recent decision not to provide new allocations for this visa is welcome. Care needs to be taken in the design of a new Talent and Innovation visa to ensure these poor outcomes are not repeated.

### Primary and secondary applicants

Among recent skilled migrants, both male and female secondary applicants earn significantly lower wages than primary applicants (Figure 16). In large part this is because they are younger, less educated, working in lower paying industries and have poorer English proficiency.

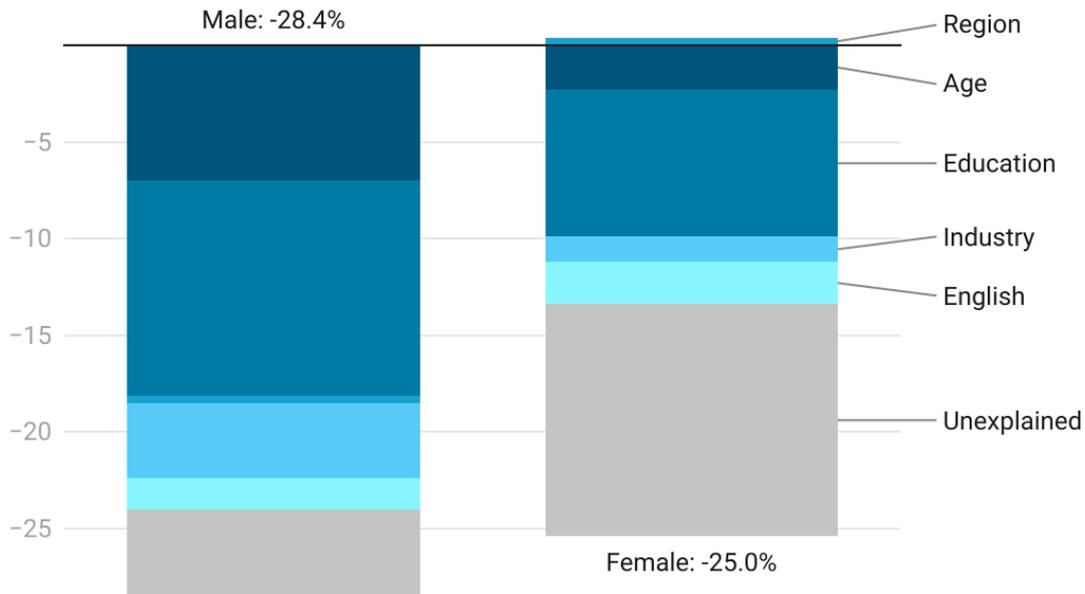
These results are unsurprising. Secondary applicants of skilled migrants are not assessed separately for their skills or work experience, which (where applicable) account for less than 10 per cent of their contribution towards the primary applicant’s points test. When secondary applicants are not selected for their skills and experience, it is likely that, on average, they will be less educated and have weaker English compared to skilled migrants, translating into worse employment outcomes.

<sup>xii</sup> Wages are calculated as total income divided by hours worked (Appendix 2) and thus include business income and dividends for business owners, but exclude profits retained within an incorporated business.

FIGURE 16

## Secondary applicants of skilled migrants have lower wages than primary applicants

Migrants arriving 2015-2019, % difference in wages of secondary and primary applicants, 2021



Source: CEDA estimates of ABS Census data based on regression analysis • Created with Datawrapper

Female migrants are disproportionately secondary applicants –

**57%**

of recently-arrived skilled visa holders, compared with

**27%**

of males.

Female migrants are disproportionately secondary applicants – 57 per cent of recently-arrived skilled visa holders, compared with 27 per cent of males. This arguably reinforces the dependency within a couple where the secondary applicant is often a “trailing spouse”.<sup>70</sup> As shown in previous CEDA research, there is consequently a higher share of female migrants entering lower-paid occupations. This contributes to occupational gender segregation in Australia’s labour market and has negative implications for labour-market flexibility and productivity. The large earnings disadvantage for secondary migrants persists over time.<sup>71</sup>

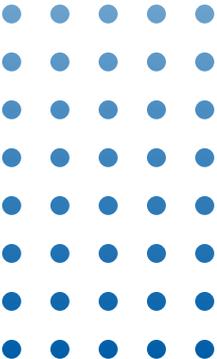
Giving greater weight in the points system to secondary applicants may shift the balance towards selecting skilled independent migrants who have skilled partners, with consequently better and more gender-equal employment outcomes. There is international precedent, as Canada and New Zealand allocate a somewhat higher proportion of points for the language skills, experience and education of a skilled primary applicant’s partner.<sup>72</sup> Although employer-sponsored migrants are not subject to a points test, encouraging and prioritising the sponsorship of skilled employer-sponsored migrants who have skilled partners may lead to better outcomes in the same vein.

Further research is needed to inform the right balance between selecting migrants based on the mix of skills between primary and secondary applicants. The vast majority of research on migrant labour-market outcomes has tended to focus on primary applicants and males, leaving scant empirical evidence focusing on secondary applicants and the direct impact of providing them greater weight in the points system.<sup>xiii</sup>

Giving greater weight to the skills brought by secondary applicants would not necessarily rule out admitting couples in which just one applicant has skills that are highly desired in the Australian workforce. However, on the margin, there is a risk of not selecting some desirable primary applicants. Giving more equal weight to skills brought in by both applicants has the potential to provide greater benefits overall. This should be reviewed as part of the Government's Migration Strategy to "explore a reformed points test to better identify migrants who will drive Australia's long-term prosperity". Moreover, our recommendations to improve post-settlement English language training, better recognise international qualifications and work experience, and reduce labour-market discrimination all have potential to improve labour-market outcomes for secondary applicants.

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<sup>xiii</sup> For example, Sweetman & Warman (2013) empirically analysed Canada's migrant labour market outcomes for both primary and secondary applicants. However, the implications for giving greater weight to secondary applicants is not discussed.



## CONCLUSION

Migrants often come to Australia with high levels of education and eagerness to establish a footing in the labour market. However, despite the migration system choosing them, employers often do not. As a result, many migrants work in jobs beneath their skills and qualifications. More must be done to help migrants make the best possible use of their human capital.

Focusing on English-language proficiency, improving the recognition of international skills and qualifications, valuing the skills of secondary applicants and addressing discrimination could all contribute to reducing migrant skills mismatch. This will benefit not only our migrants, but also the productivity of our economy.

# APPENDIX 1: METHOD

Three main techniques are used in this report:

- Descriptive statistics showing the average wage outcomes of recent migrants compared with the Australian-born population;
- Ordinary least square regressions estimating the impact of factors such as education and English language proficiency on wage outcomes; and
- Blinder-Oaxaca analysis breaking down the differences in wage outcomes between groups of migrants into explained and unexplained components.<sup>73</sup>

## Ordinary least square regressions

To analyse the wage outcomes of migrants and Australian-born workers, we used ordinary least squares regressions (OLS) on grouped data.

The natural log of hourly wages was regressed on a set of explanatory variables drawn from previous empirical studies. The model can be expressed:

$$\ln Y_i = \beta_0 + \gamma_i A_i + \alpha_i B_i + \rho_i C_i + \varepsilon_i$$

where  $Y$  is hourly wage rate,  $\beta_0$  is the constant,  $\gamma_i A_i$  represents a vector of dummy variables for demographic characteristics including age, sex, year of arrival in Australia and location along with their coefficients,  $\alpha_i B_i$  represents a vector of dummy variables for human capital characteristics including education level and English-language proficiency along with their coefficients,  $\rho_i C_i$  represents a vector of dummy variables for industry of employment along with their coefficients and  $\varepsilon_i$  is the error term.

## Blinder-Oaxaca decomposition

To pinpoint the sources of differences in wages between migrants and Australian-born workers, the Blinder-Oaxaca decomposition procedure was used.

This statistical technique divides the differences in wages between migrants and Australian-born people into two parts:

- An explained component reflecting differences in observable characteristics such as education, age, location, industry of employment and English proficiency; and
- An unexplained component reflecting differences in unobservable characteristics such as innate ability, motivation, discrimination and ease of labour-market transition.

# APPENDIX 2: DATA AND VARIABLES

Data used in this report are from the Australian Bureau of Statistics (ABS). Data was sourced from:

- 2011, 2016 and 2021 Australian Census of Population and Housing;
- 2011, 2016 and 2021 Australian Census and Migrants Integrated Dataset<sup>74</sup>; and
- 2011, 2016 and 2021 Australian Census and Temporary Entrants Dataset.<sup>75</sup>

The ABS conducts the Census every five years and gathers information from residents across Australia. It collects data on a variety of variables, such as individuals' earnings, demographic characteristics such as age, human capital characteristics such as educational attainment and employment characteristics such as industry of employment. A description of these variables and their categories is listed below.

The two latter datasets integrate Census data from the ABS and the Department of Home Affairs to include migrant visa type in the analysis.

Census and Migrants contains data on only permanent migrants – those individuals granted a permanent skilled, family, humanitarian or other permanent visa.

Census and Temporary Migrants contains data on only temporary migrants – those individuals granted a temporary skilled, bridging, working-holiday maker or student visa.

This analysis was restricted to employed persons aged between 15 and 64 to cover the working-age population of Australia.

## **Dependent variables**

One labour market statistic was used as the dependent variable in the regression analysis: Hourly income (weekly total income for each group divided by hours worked per week).

## **Explanatory variables**

Each explanatory variable was a categorical variable, with each observation falling into one category for each variable. For the 2021 Census, migrants arriving in the years 2021 and 2020 were excluded due to the impact of COVID-19. The 2016 Census also excludes migrants arriving in the previous two years, for comparability with 2021 Census data. The variables are shown in the group means for males and females, which are provided in Table 2.1 and 2.2. Remaining variables not in the tables are listed below.

### *Visa type variables*

The visa type category variables for permanent migrants were defined:

- Skilled
  - » Independent
  - » Family or Government Sponsored
  - » Entrepreneur
  - » Employer Sponsored
- Family
  - » Partner
  - » Other
- Humanitarian
  - » Refugee
  - » Special Humanitarian Program

### *Applicant status variables*

- Primary applicant
- Secondary applicant

TABLE 2.1

## Male group means, 2021 Census

	<i>Units</i>	<i>Australian-born</i>	<i>Recent migrants</i>	<i>All migrants</i>
Hourly earnings	\$/hr	44.4	43.0	48.7
<b>Age</b>				
15 to 24	%	17.9	15.4	7.9
25 to 34	%	23.8	49.9	24.3
35 to 44	%	21.2	26.3	29.5
45 to 54	%	21.1	6.7	21.5
55 to 64	%	16.0	1.6	16.8
<b>Education</b>				
Postgraduate level	%	5.0	25.3	18.3
Bachelor/diploma level	%	29.0	46.7	43.8
Certificate level	%	31.2	7.8	15.3
School education level or below	%	34.8	20.2	22.6
<b>Location</b>				
Major cities	%	68.3	88.4	88.9
Regional	%	29.7	10.8	10.4
Remote or very remote	%	2.0	0.8	0.7
<b>English ability</b>				
English is first language	%	93.7	20.9	40.5
Very well	%	5.9	46.7	38.6
Well	%	0.3	26.5	17.2
Not well or not at all	%	0.1	5.9	3.7

	<i>Units</i>	<i>Australian-born</i>	<i>Recent migrants</i>	<i>All migrants</i>
<b>Industry of employment</b>				
Accommodation and Food Services	%	5.5	13.1	7.7
Administration and Support Services	%	2.8	5.4	3.6
Agriculture, Forestry and Fishing	%	3.3	2.1	1.3
Arts and Recreation Services	%	1.8	1.0	1.2
Construction	%	17.9	9.6	11.4
Education and Training	%	5.2	3.7	4.5
Electricity, Gas, Water and Waste Services	%	1.9	0.9	1.4
Financial and Insurance Services	%	3.3	4.1	4.9
Health Care and Social Assistance	%	5.6	8.1	8.8
Information Media and Telecommunications	%	1.6	2.0	2.1
Manufacturing	%	8.3	8.3	9.2
Mining	%	3.4	1.1	2.3
Other Services	%	4.1	3.2	3.4
Professional, Scientific and Technical Services	%	7.6	12.7	11.3
Public Administration and Safety	%	8.1	2.7	5.5
Rental, Hiring and Real Estate Services	%	1.5	0.9	1.4
Retail Trade	%	8.6	9.1	7.7
Transport, Postal and Warehousing	%	6.1	9.4	8.7
Wholesale Trade	%	3.5	2.7	3.5

Source: CEDA estimates based on unpublished ABS Census data

TABLE 2.2

## Female group means, 2021 Census

	<i>Units</i>	<i>Australian-born</i>	<i>Recent migrants</i>	<i>All migrants</i>
<b>Hourly earnings</b>	\$/hr	42.2	38.6	43.8
<b>Age</b>				
15 to 24	%	18.9	15.2	8.3
25 to 34	%	23.3	54.9	25.6
35 to 44	%	21.0	22.6	28.7
45 to 54	%	21.6	5.9	21.8
55 to 64	%	15.3	1.4	15.7
<b>Education</b>				
Postgraduate level	%	6.6	24.4	17.8
Bachelor/diploma level	%	43.5	53.7	52.6
Certificate level	%	17.4	5.3	9.3
School education level or below	%	32.5	16.7	20.3
<b>Location</b>				
Major cities	%	68.5	87.2	87.9
Regional	%	29.7	11.8	11.4
Remote or very remote	%	1.8	1.0	0.7
<b>English ability</b>				
English is first language	%	93.7	22.3	40.7
Very well	%	6.0	46.8	38.9
Well	%	0.2	25.8	16.9
Not well or not at all	%	0.0	5.1	3.4

	<i>Units</i>	<i>Australian-born</i>	<i>Recent migrants</i>	<i>All migrants</i>
<b>Industry of employment</b>				
Accommodation and Food Services	%	7.4	14.1	7.9
Administration and Support Services	%	3.1	6.5	4.3
Agriculture, Forestry and Fishing	%	1.4	1.8	1.0
Arts and Recreation Services	%	1.8	1.0	1.2
Construction	%	2.9	2.1	2.4
Education and Training	%	15.3	7.8	11.0
Electricity, Gas, Water and Waste Services	%	0.6	0.5	0.6
Financial and Insurance Services	%	3.6	4.1	5.1
Health Care and Social Assistance	%	22.7	26.0	27.4
Information Media and Telecommunications	%	1.2	1.2	1.2
Manufacturing	%	3.2	4.7	4.7
Mining	%	0.8	0.4	0.6
Other Services	%	3.8	3.3	3.3
Professional, Scientific and Technical Services	%	7.1	10.4	9.0
Public Administration and Safety	%	7.7	2.0	5.1
Rental, Hiring and Real Estate Services	%	1.6	1.0	1.5
Retail Trade	%	12.0	9.0	8.8
Transport, Postal and Warehousing	%	2.1	2.1	2.5
Wholesale Trade	%	1.7	1.9	2.2

Source: CEDA estimates based on unpublished ABS Census data

# APPENDIX 3: LIMITATIONS

There are a number of limitations to using Census data. These relate both to the nature of the data and the way it is collected:

- Census data is self-reported, which might suffer from bias or human error. For example, data from the Australian Taxation Office (ATO) tracking actual income would be more accurate, however, there is no such dataset from the ATO suitable for this analysis.
- Income data are given in bands instead of continuous form, which are compressed at the upper end. To address this, the midpoints of each band were used to construct the dependent variable.
- Census data is cross-sectional; by tracking individuals over time, panel data can enable deeper analysis. The Household, Income and Labour Dynamics in Australia (HILDA) survey is a comprehensive panel dataset; however, it would not have been suitable for this analysis as the migrant sample sizes are too small to enable detailed multivariate analysis.
- Income data are reported for all earnings sources, such as income from wages and salaries, overtime and allowances.

There are also some limitations of our econometric analysis:

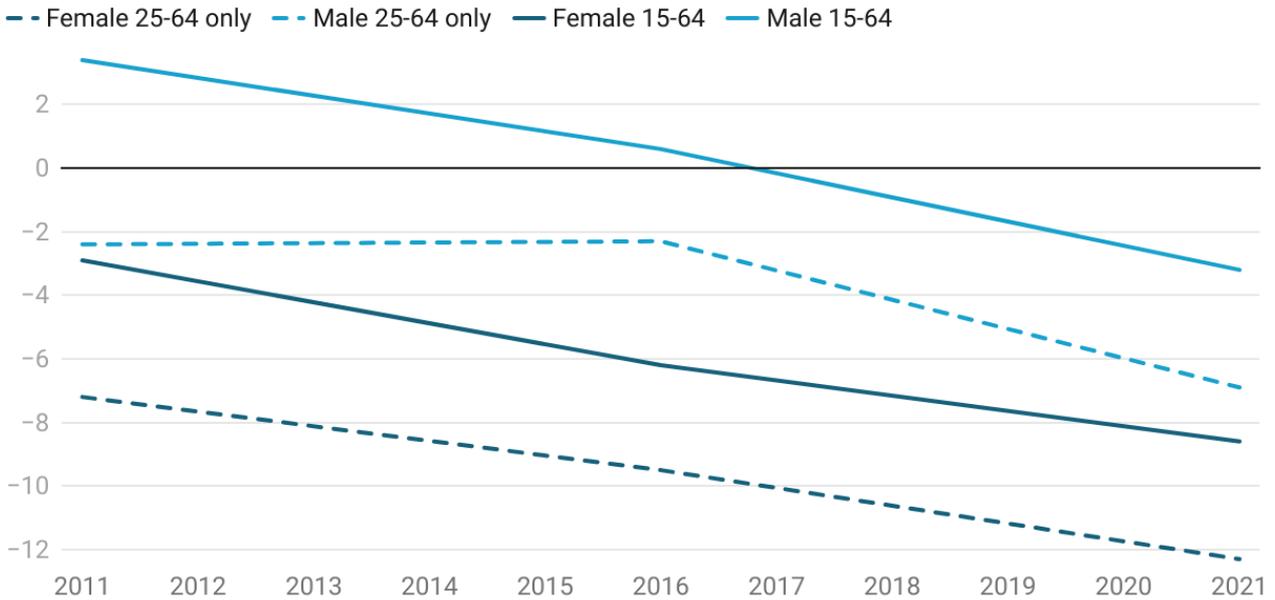
- Unobserved endogeneity of education – Census data lacks information regarding an individual's innate ability, which is a common problem throughout the literature due to the challenge of measuring innate ability.<sup>76</sup> Endogeneity of education upwardly biases wage return estimations, although the magnitude is regarded as relatively small;<sup>77</sup>
- Unobserved endogeneity of English ability – the literature finds that downward attenuation bias resulting from measurement error far outweigh upward omitted variable bias.<sup>78</sup> This means the real effect of English ability on wages would be greater than estimated using OLS regression. Past studies using an instrumental variable approach to correct for endogeneity find the instrumental variable estimate is much higher than the OLS estimate.<sup>79</sup> In other words, our analysis is a conservative estimate of the magnitude of effect of English ability on wages. Our recommendations for English-language proficiency are arguably even more important under these results; and
- Unobserved heterogeneity refers to variables that would be hard to measure but nonetheless relevant in determining migrant labour-market outcomes. These would include things like ambition and motivation, quality of human capital and innate ability and intelligence. Past research has suggested that these unobservable characteristics play an important role in migrant selection, whereas selection policy explicitly looks for observable characteristics. The typical finding in the literature is that when using more sophisticated methods (such as panel data methods, repeated cross sections, or synthetic cohorts) to control for unobserved heterogeneity, migrant wage convergence tends to be slower than previously thought and the wage gaps tend to be larger during the period of assimilation into the labour market.<sup>80</sup>

Sensitivity analysis was conducted by excluding 15 to 24 year olds from the analysis (Figure 3.1 and 3.2). The downward trend in wages for migrants relative to the Australian-born population between 2011 and 2021 was maintained, albeit the decline was slightly smaller and more concentrated between 2016 and 2021. After controlling for differences in characteristics to allow a like-with-like comparison, wages for 25 to 64 year old recent migrants increased between 2011 and 2016, but declined by a greater magnitude between 2016 and 2021.

FIGURE 3.1

## Sensitivity analysis without controls

Average wages for employment migrants who have arrived in Australia in the past 2 to 6 years, per cent difference from average wages for Australian-born workers of that gender

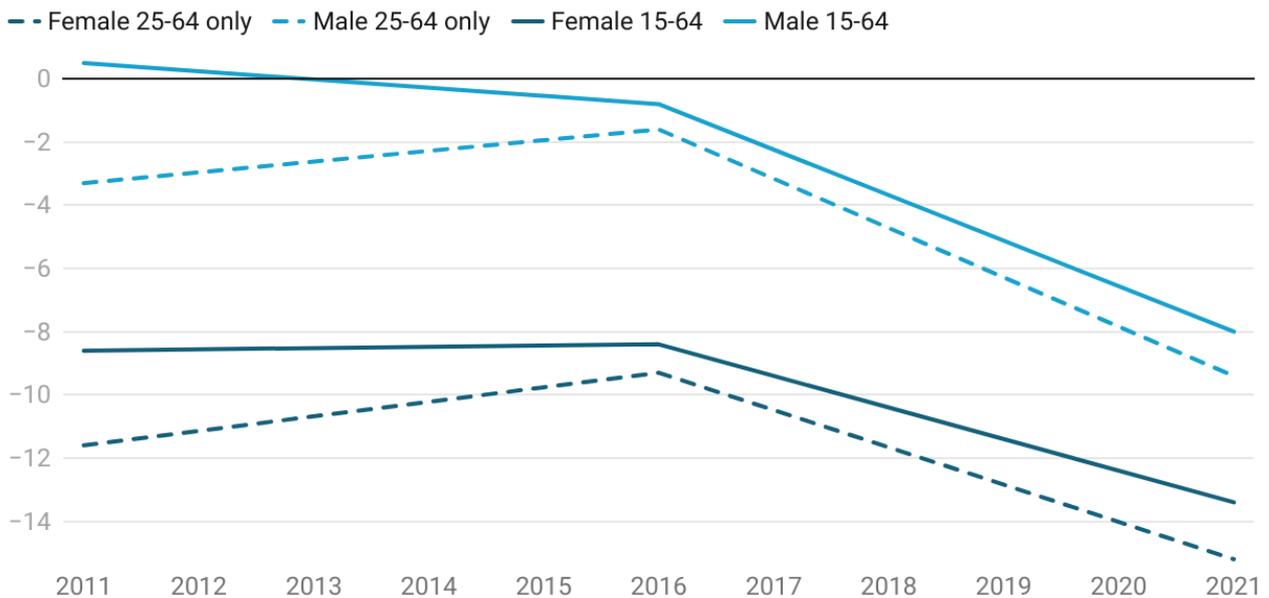


Source: CEDA estimates based on regression analysis of ABS Census data • Created with Datawrapper

FIGURE 3.2

## Sensitivity analysis with controls

Average wages for employment migrants who have arrived in Australia in the past 2 to 6 years, per cent difference from average wages for Australian-born workers of that gender



Source: CEDA estimates based on regression analysis of ABS Census data • Created with Datawrapper

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CEDA's purpose is to improve the lives of Australians by enabling a dynamic economy and vibrant society.

Through independent research and frank debate, we influence policy and collaborate to disrupt for good, and are currently focused on tackling five critical questions:

- How can Australia develop and grow a more dynamic economy?
- How can we build vibrant Australian communities?
- How can Australia develop leading workforces and workplaces?
- How can Australia leverage the benefits of technology?
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