



Occupation Shortage Report

December quarter 2024

**25 February 2025**

**Contents**

[Introduction 2](#_Toc189487088)

[National results 3](#_Toc189487089)

[Fill rates continue rising but slowly 3](#_Toc189487090)

[Results by region 5](#_Toc189487091)

[Metropolitan area 5](#_Toc189487092)

[Regional area 6](#_Toc189487093)

[Results by Skill Level 7](#_Toc189487094)

[Results by major group 9](#_Toc189487095)

[Spotlight analysis: Beveridge curve, fill rates and suitability gap 11](#_Toc189487096)

[The Beveridge curve since 2014 11](#_Toc189487097)

[The pre COVID-19 era (2014-2019) 11](#_Toc189487098)

[The COVID and post-COVID era (2020-2024) 12](#_Toc189487099)

[Fill rates and suitability gaps 12](#_Toc189487100)

[Explanatory Notes 14](#_Toc189487101)

[Definitions of metrics 14](#_Toc189487102)

# Introduction

The Occupation Shortage Report offers quarterly analysis on potential shortage pressures of occupations. These insights are based on data from the Jobs and Skills Australia Survey of Employers who have Recently Advertised (SERA). The report highlights the percentage of advertised vacancies filled by occupation (fill rate) as the key metric. The [Explanatory Notes](#_Explanatory_Notes) section provides some background on the fill rate and other metrics covered in the report.

Box 1: Jobs and Skills Australia’s occupation shortage definition

|  |
| --- |
| An occupation is in shortage when employers are unable to fill or have considerable difficulty filling vacancies for an occupation or cannot meet significant specialised skill needs within that occupation at current levels of remuneration and conditions of employment, and in reasonably accessible locations.  Based on this definition, the fill rate is the key proxy measure of shortages. This metric has a simple intuition: if the fill rate is high, the likelihood of an occupation being in shortage or having high shortage pressures is low. In contrast, if the fill rate is low, the opposite is likely to be true.  Higher probability of No shortage  Higher probability of  Shortage  High  Low  Fill rate |

# National results

## Fill rates continue rising but slowly

Table 1: National snapshot

|  |  |  |  |
| --- | --- | --- | --- |
|  | December  quarter 2024 | Change over  the quarter | Change over  12 months |
| Vacancy fill rate (%) | 68.9% | ↑0.8% pts | ↑5.5% pts |
| Applicants per vacancy (no.) | 31.7 | ↑3.2 | ↑13.4 |
| Qualified applicants per vacancy (no.) | 9.5 | ↑0.8 | ↑3.4 |
| Suitable applicants per vacancy (no.) | 3.5 | ↑0.2 | ↑0.8 |
| Suitability gap (%) | 63.4% | ↑1.0% pts | ↑6.8% pts |

Source: Jobs and Skills Australia, SERA.  
Note: The change from previous quarter refers to the change from September quarter 2024 to December quarter 2024. The change from the previous year refers to the change from December quarter 2023 to December quarter 2024.

The fill rate across all occupations increased slightly by 0.8 percentage points to 68.9% over the December quarter 2024 (Table 1 and Figure 1).[[1]](#footnote-2) It increased by 5.5 percentage points over the last 12 months to the December quarter 2024. This increase in the fill rate over the quarter and past 12 months is supported by increases in the total number of applicants, qualified applicants, and suitable applicants per vacancy over the current quarter and year.

**Figure 1: Fill rate (%) and total, qualified, and suitable applicants per vacancy (no.), national level**

Source: Jobs and Skills Australia, SERA.

Rising fill rates potentially indicate easing employer difficulty in filling vacancies, and is consistent with movement in labour market indicators, signalling softening labour market conditions.

The recent December month Labour Force survey data from the Australian Bureau of Statistics (ABS) shows that the unemployment rate has increased from 3.9% in November 2024 to 4.0% in December. The number of internet vacancies, as measured by Jobs and Skills Australia’s Internet Vacancy Index (IVI) and the recruitment difficulty rate, from the Jobs and Skills Australia’s Recruitment Experiences and Outlook Survey (REOS), have been trending down since mid-2023 (Figure 2).

Figure 2: Fill rate (%, left axis) and monthly recruitment difficulty rate (%, left axis), and monthly internet vacancies (right axis), national level

Source: Jobs and Skills Australia: SERA; Recruitment Experiences and Outlook Survey; and Internet Vacancy Index (seasonally adjusted).

The suitability gap captures the percentage of applicants who have the required qualifications but are deemed unsuitable by employers for the job advertised, leading to a gap between the number of qualified applicants and suitable applicants. In December quarter 2024, the suitability gap increased by 1.0 percentage point to 63.4%. The gap also increased by 6.8 percentage points over the past 12 months to the current quarter.

The suitability gap increases when the fill rate and unemployment rate increase, and vacancy rates fall. This may mean that as labour market conditions ease and fill rates rise, employers have a larger pool of applicants to choose from, allowing them to be more selective during recruitment. More analysis on the suitability gap, fill rates and the Beveridge curve is discussed in the spotlight analysis section.

# Results by region

## Metropolitan area

Table 2: Metropolitan snapshot

|  |  |  |  |
| --- | --- | --- | --- |
|  | December quarter 2024 | Change over  the quarter | Change over 12 months |
| Vacancy fill rate (%) | 70.6% | ↑0.9% pts | ↑5.0% pts |
| Applicants per vacancy (no.) | 37.1 | ↑4.1 | ↑15.7 |
| Qualified applicants per vacancy (no.) | 11.2 | ↑1.0 | ↑3.9 |
| Suitable applicants per vacancy (no.) | 3.9 | ↑0.3 | ↑0.9 |
| Suitability gap (%) | 65.2% | ↑0.8% pts | ↑6.3% pts |

Source: Jobs and Skills Australia, SERA.

The national metropolitan (metro) area fill rate increased by 0.9 percentage points to 70.6% over the December quarter 2024, and by 5.0 percentage points from December quarter 2023 (Table 2). This is supported by increases in the total number of applicants, qualified applicants, and suitable applicants per vacancy, over the quarter and in the last 12 months (Figure 3). In the current quarter, the suitability gap increased to 65.2%.

Figure 3: Fill rate (%) and total applicants, qualified, and suitable applicants per vacancy (no.)

Source: Jobs and Skills Australia, SERA.

## Regional area

**Table 3: Regional Snapshot**

|  |  |  |  |
| --- | --- | --- | --- |
|  | December quarter 2024 | Change over the quarter | Change over 12 months |
| Vacancy fill rate (%) | 63.9% | ↑1.0% pts | ↑5.0% pts |
| Applicants per vacancy (no.) | 19.2 | ↑1.8 | ↑8.1 |
| Qualified applicants per vacancy (no.) | 5.7 | ↑0.4 | ↑2.1 |
| Suitable applicants per vacancy (no.) | 2.5 | ↑0.1 | ↑0.6 |
| Suitability gap (%) | 56.1% | ↑0.8% pts | ↑8.3% pts |

Source: Jobs and Skills Australia, SERA.

The national regional fill rate increased by 1.0 percentage points to 63.9% in December quarter 2024 and by 5.0 percentage points over the past 12 months (Table 3 and Figure 4).

However, in regional areas, the fill rate remained well below that of metro areas. The average difference in fill rates between the two areas widened over time from 2.8 percentage points in December quarter 2022 to 6.7 percentage points in December quarter 2024, indicating shortage pressures in metro areas are easing faster. This is supported by the much greater pool of total applicants, qualified applicants and suitable applicants in metro areas compared to regional areas.

Total applicants, qualified applicants and suitable applicants have also increased in regional areas. In the December quarter 2024, the suitability gap also increased to 56.1%.

Figure 4: Fill rate (%) and total applicants, qualified, and suitable applicants per vacancy (no.)

Source: Jobs and Skills Australia, SERA.

# Results by Skill Level

In the December quarter 2024 and over the past 12 months, fill rates improved across skill levels 1 to 3 occupations. Fill rates for skill level 4 occupations decreased marginally by 0.1 percentage point over the quarter. However, all skill level occupation groups recorded a rise in the total number of applicants, qualified applicants, and suitable applicants per vacancy (Figure 5).

Despite the increase over the quarter and past 12 months, the fill rate for skill level 3 occupations is still significantly lower than the other skill level groups, at 55.3%. Occupations in this skill group typically require a Certificate III/IV qualification, and Vocational Education and Training provides the primary pathway to the labour market.

In addition, skill level 3 occupations display the highest increase in the suitability gap (not shown in Figure 5) compared to other skill levels. The suitability gap for this skill level increased by 3.7 percentage points over the quarter and 8.6 percentage points over the past 12 months. Increases in the suitability gap and improvements in fill rates may both be attributable to softening labour market conditions.

Figure 5: Fill rate (%), total applicants, qualified and suitable applicants per vacancy (no.), by Skill Level

Source: Jobs and Skills Australia, SERA.

# Results by major group

Table 4: ANZSCO Major groups snapshot[[2]](#footnote-3)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Major group |  | | December quarter 2024 | Change over the quarter | Change over 12 months |
| Managers | Vacancy fill rate (%) | 82.2% | | ↓0.4% pts | ↑2.9% pts |
| Applicants per vacancy (no.) | 40.0 | | ↑3.0 | ↑13.0 |
| Qualified applicants per vacancy (no.) | 12.7 | | ↑0.8 | ↑3.5 |
| Suitable applicants per vacancy (no.) | 4.5 | | ↑0.2 | ↑0.9 |
| Suitability gap (%) | 64.5% | | ↑1.0% pts | ↑3.6% pts |
| Professionals | Vacancy fill rate (%) | 69.3% | | ↑1.6% pts | ↑6.6% pts |
| Applicants per vacancy (no.) | 32.5 | | ↑3.6 | ↑13.8 |
| Qualified applicants per vacancy (no.) | 11.7 | | ↑1.0 | ↑4.1 |
| Suitable applicants per vacancy (no.) | 3.3 | | ↑0.2 | ↑0.7 |
| Suitability gap (%) | 71.8% | | ↑0.8% pts | ↑6.1% pts |
| Technicians and Trades Workers | Vacancy fill rate (%) | 55.9% | | ↑1.6% pts | ↑6.9% pts |
| Applicants per vacancy (no.) | 22.3 | | ↑1.7 | ↑8.5 |
| Qualified applicants per vacancy (no.) | 6.1 | | ↑0.4 | ↑2.3 |
| Suitable applicants per vacancy (no.) | 2.3 | | ↑0.0 | ↑0.5 |
| Suitability gap (%) | 63.0% | | ↑2.0% pts | ↑9.9% pts |
| Community and Personal Service Workers | Vacancy fill rate (%) | 73.5% | | ↓1.0% pts | ↑5.0% pts |
| Applicants per vacancy (no.) | 25.8 | | ↑1.9 | ↑11.6 |
| Qualified applicants per vacancy (no.) | 7.3 | | ↑0.5 | ↑2.9 |
| Suitable applicants per vacancy (no.) | 3.3 | | ↑0.1 | ↑0.7 |
| Suitability gap (%) | 55.1% | | ↑1.4% pts | ↑13.8%pts |
| Clerical and Administrative Workers | Vacancy fill rate (%) | 83.0% | | ↑1.5% pts | ↑4.9% pts |
| Applicants per vacancy (no.) | 61.4 | | ↑8.8 | ↑27.5 |
| Qualified applicants per vacancy (no.) | 11.2 | | ↑1.9 | ↑3.2 |
| Suitable applicants per vacancy (no.) | 7.3 | | ↑1.2 | ↑2.5 |
| Suitability gap (%) | 34.8% | | ↑0.5% pts | ↓4.7% pts |
| Sales Workers | Vacancy fill rate (%) | 72.0% | | ↑0.3% pts | ↓4.1% pts |
| Applicants per vacancy (no.) | 31.8 | | ↑5.4 | ↑15.3 |
| Qualified applicants per vacancy (no.) | 5.6 | | ↑0.7 | ↑2.4 |
| Suitable applicants per vacancy (no.) | 3.6 | | ↑0.5 | ↑1.4 |
| Suitability gap (%) | 35.3% | | ↓0.6% pts | ↑5.9% pts |
| Machinery Operators and Drivers | Vacancy fill rate (%) | 69.4% | | ↓1.0% pts | ↑2.4% pts |
| Applicants per vacancy (no.) | 36.7 | | ↑6.6 | ↑21.1 |
| Qualified applicants per vacancy (no.) | 12.1 | | ↑2.5 | ↑5.7 |
| Suitable applicants per vacancy (no.) | 4.2 | | ↑0.5 | ↑1.4 |
| Suitability gap (%) | 65.2% | | ↑3.6% pts | ↑8.5% pts |
| Labourers | Vacancy fill rate (%) | 61.2% | | ↑2.5% pts | ↑0.3% pts |
| Applicants per vacancy (no.) | 13.7 | | ↑0.2 | ↑5.9 |
| Qualified applicants per vacancy (no.) | 4.0 | | ↓0.3 | ↑0.9 |
| Suitable applicants per vacancy (no.) | 2.0 | | ↓0.1 | ↑0.3 |
| Suitability gap (%) | 48.3% | | ↑0.1% pts | ↑6.9% pts |

Source: Jobs and Skills Australia, SERA.

In the December quarter 2024 and over the past 12 months, the fill rates and the total, qualified and suitable applicants per vacancies improved for most major group occupations (Table 4). Consistent with the analysis reported earlier in the report, the improvements align with easing labour market conditions.

However, for Managers, the fill rate fell by 0.4 percentage points over the quarter despite increasing by 2.9 percentage points over the past 12 months. A similar result was observed for Community and Personal Service Workers and Machinery Operators and Drivers. The opposite occurred for Sales Workers: the fill rate fell by about 4.1 percentage points over the past 12 months but increased by 0.3 percentage points over the quarter.

For Clerical and Administrative Workers, the suitability gap fell by 4.7 percentage points over the past 12 months, with only a marginal increase in the current quarter. The opposite occurred for Sales Workers, where the suitability gap fell in the current quarter but increased over the past 12 months.

# Spotlight analysis: Beveridge curve, fill rates and suitability gap

This analysis constructs the Beveridge curve using the IVI from Jobs and Skills Australia and the ABS unemployment rate to examine labour market conditions from 2014 to 2024. In addition, we incorporate Jobs and Skills Australia SERA fill rates and suitability gaps into the analysis to understand how occupation shortages have evolved.

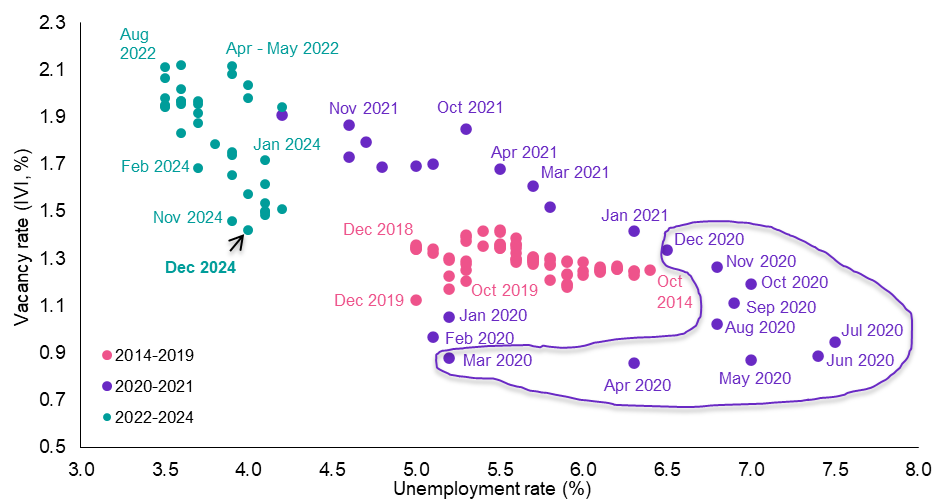
## The Beveridge curve since 2014

The Beveridge curve illustrates the relationship between the unemployment rate and the job vacancy rate over time. There is an inverse relationship between the two variables. That is, a higher unemployment rate is associated with a lower vacancy rate, while a lower unemployment rate is associated with a higher vacancy rate.

The position of the curve and its steepness reveals different stages of adjustment occurring in the labour market. A curve closer to the origin indicates a more efficient labour market with effective job matching or vice versa. A steeper Beveridge curve or movement towards the axis on the vacancy rate suggests a tighter labour market, which has more job vacancies for each unemployed person. In contrast, a flatter curve or movement towards the axis on the unemployment rate indicates a looser labour market, with more unemployed workers for each vacancy. The curve also has implications for shortage pressures.

Figure 6 shows the Beveridge curve at the national level from January 2014 to December 2024, covering periods before, within and after the COVID-19 pandemic.

**Figure 6: Beveridge Curve, 2014-2024**

  
Source: Jobs and Skills Australia, Internet Vacancy Index; ABS, Labour Force, December 2024.

### The pre COVID-19 era (2014-2019)

The curve during pre-COVID-19 era (2014-2019) shows that labour market conditions were softer.

During this period, average vacancy rates were 1.3%, while the unemployment rate averaged 5.6%. The curve is relatively flat and clustered in the centre of the graph, indicating that the labour market was also relatively stable during this period.

### The COVID era (2020-2021)

The year 2020 marked the onset of the global pandemic, which severely impacted the labour market. From March to August 2020, the vacancy rate fell below 1.0%, and the national unemployment rate surged from 5.2% in March to 7.5% in July, due to the sharp declines in economic activities bounded by pandemic-related restrictions. In this period, the data points representing the curve were clustered in the lower right corner of the graph (as shown in the circle). In this area, generally, for each vacancy rate, the unemployment rate was high. This indicates that labour market conditions were very subdued and weak.

**The post-COVID era (2022 to 2024)**

Following the lifting of restrictions and border re-opening in early 2022, the vacancy rates increased sharply due to a higher demand for labour. This was associated with a decline in the unemployment rate from 4.2% in January 2022 to 3.5% in July 2022, the lowest rate recorded since March 1974.

By the last quarter of 2023, despite inflationary and rising interest rates, the demand for skilled workers remained strong, with an average vacancy rate of 1.8% and an unemployment rate of 3.9%.

The pace of change in the labour market during this time, including the tight conditions, can also be seen by the slope in the curve, which is steeper compared to other periods. For any given level of unemployment, the vacancy rates were much higher.

As of December 2024, there were indications of softening labour market conditions, with a slightly higher unemployment rate of 4.0% and a relatively low vacancy rate at 1.4%. But the vacancy rate was still higher than pre-COVID levels.

Using a line to connect all the data points together throughout the three periods described above creates a loop pattern. The line dropped down at the onset of the pandemic, moved back up during late 2020 to 2022, and then declined slightly in the recent years. The loop may signify different periods of labour market conditions and adjustments taking place. For a more detailed discussion on the significance of this loop, see Borland (2024).[[3]](#footnote-4)

## Fill rates and suitability gaps

The Beveridge curve analysis above illustrated the evolution of the labour market overtime. Incorporating the SERA fill rate and suitability gap into the analysis may reveal additional insights on labour market dynamics.

Figure 7 shows the distinct patterns of development in four labour market indicators (unemployment rate, the vacancy rate, the SERA fill rate, and the suitability gap) from 2014 to 2024.

Firstly, the vacancy rate and unemployment rate exhibit an inverse relationship, which is consistent with that depicted in the Beveridge curve. Periods of high unemployment are accompanied by lower vacancy rates. During these periods, fill rates are also higher and shortage pressures lower. This trend was particularly evident during the COVID-19 pandemic when economic disruptions led to a sharp increase in unemployment and corresponding fall in vacancy rates.

Secondly, the SERA fill rate generally moves along with the unemployment rate over time. The two series are positively and significantly correlated. That is, higher SERA fill rates suggest that jobs are being filled more quickly as there are more job seekers relative to the number of available positions. This can be seen during the early pandemic period when the fill rate rose from 60% in March 2020 to 65% in December 2020 due to high unemployment.

**Figure 7: Key labour market Indicators (2014-2024)**

Source: Jobs and Skills Australia, Internet Vacancy Index and SERA database; ABS, Labour Force Statistics 2024.

COVID-19 period

There are, however, some time-lags between fill rates and unemployment rates, such as the immediate post-Global Financial Crises period and early pandemic period. This indicates that the market does not always adjust at the same pace.[[4]](#footnote-5)

Despite generally moving together, the gap between unemployment rates and fill rates has widened since the post-COVID period. This is mainly due to a high labour force participation, particularly strong among young people and women entering or re-entering the labour market rate, that occurred when labour market conditions significantly tightened.

Finally, the suitability gap, indicating the mismatch between job requirements and job seekers' skills and/or experience, also tends to rise with the unemployment rate and the fill rate.[[5]](#footnote-6)

Data during the second phase of COVID era (2021-2022) shows a reduction in the suitability gap, along with a sharp decline in unemployment and a significant rise in vacancy rates. The reduction in suitability gaps was likely due to service delivery backlogs from COVID-19, which increased labour demand and led employers to be less critical of job seekers, rather than improvements in workforce skill alignment.

In late 2023-2024, the labour market showed significant adjustment from the pandemic effects. The unemployment rate hovered between 3.6% and 4.2%, while job vacancy rates, while elevated compared to pre-COVID period, trended down. Under the softening labour market conditions, the fill rate increased and so did the suitability gap as employers had a larger pool of applicants to choose from.

# Explanatory Notes

The SERA is designed for the specific purpose of assessing occupational shortages for skilled occupations and provides a direct measure of the employer experience when recruiting. The survey receives around 2,000 responses each quarter from employers who have advertised vacancies online. Only those occupations with a sufficient quarterly sample size are included for analysis in this report to ensure data changes are more reflective of labour market developments.

The survey covers occupations, as defined by [Australian and New Zealand Standard Classification of Occupations](https://www.abs.gov.au/statistics/classifications/anzsco-australian-and-new-zealand-standard-classification-occupations/latest-release), generally requiring a university degree, trade apprenticeship or Certificate III or Certificate IV. As a result, the survey outcomes are reflective of occupations requiring post-school education and training.

The fill rate is used as a proxy for identifying occupations that may be in shortage: lower fill rates generally imply greater employer difficulties filling vacant positions. In contrast, higher fill rates suggest fewer challenges and in general, imply a lower likelihood of shortage.

Additional metrics collected in SERA include applicants on a per vacancy basis; the average number of total applicants; qualified applicants; suitable applicants; and the average years of labour market experience sought by employers (for definitions, refer to the following section). Movements in these variables add context to changes in fill rates over time.

Data found in Occupation Shortage Quarterly is not an indicator of occupations appearing on the 2024 Occupation Shortage List (OSL).

Caution should be exercised when interpreting data for Tasmania, the Northern Territory and the Australian Capital Territory given lower sample sizes.

## Definitions of metrics

**The fill rate** is the percentage of vacancies employers advertised that were filled. The metric is calculated by dividing the number of filled vacancies by total advertised vacancies.

**The average number of applicants per vacancy** is calculated as the sum of the number of applicants divided by the sum of advertised vacancies.

**The average number of qualified applicants per vacancy** is calculated as the sum of the number of qualified applicants divided by the sum of advertised vacancies. Qualified applicants are the applicants who are assessed by employers as meeting the required qualification criteria of an advertised vacancy.

**The average number of suitable applicants per vacancy** is calculated as the sum of the number of suitable applicants divided by the sum of advertised vacancies. Suitable applicants are those who are deemed by employers to be suitable for the job advertised.

**The average years of labour market experience** sought by employer is the average number of years that employers require applicants to have spent in relevant occupations and is calculated as the mean of the years required per employer.

**Metropolitan area** refers to Capital City, while **Regional area** refers to Rest of State locations. Capital City and Rest of State areas are defined by the [Australian Statistical Geography Standard (ASGS) Edition 3: Main Structure and Greater Capital City Statistical Areas, July 2021 – June 2026.](https://www.abs.gov.au/statistics/standards/australian-statistical-geography-standard-asgs-edition-3/jul2021-jun2026/main-structure-and-greater-capital-city-statistical-areas)

**Suitability gap** is the difference between the average number of qualified applicants per vacancy and the average number of suitable applicants per vacancy as a proportion of the number of qualified applicants per vacancy.

A suitability gap greater than zero would mean that there are fewer suitable applicants than qualified applicants. The formula for calculating the suitability is:

For more information, contact [OccupationShortageList@jobsandskills.gov.au](mailto:OccupationShortageList@jobsandskills.gov.au).

Please refer to [Occupation Shortage Analysis | Jobs and Skills Australia](https://www.jobsandskills.gov.au/data/occupation-shortages-analysis#occupationshortage-1) for more information on the 2024 OSL.

1. The fill rate and other metrics in the table are based on using 12 months of data leading to the latest quarter. Using a rolling annual period, as opposed to the latest quarter itself, removes the impact of data volatility attributable to SERA sampling, whereby concentrations of sampling with respect to different occupational major groups can occur at different times of a year. [↑](#footnote-ref-2)
2. ABS, Australian and New Zealand Standard Classification of Occupations (ANZSCO), 2022 version. [↑](#footnote-ref-3)
3. J Borland, Labour market snapshot, *Department of Economics, University of Melbourne*, #104, April (8); J Borland, Labour market snapshot, *Department of Economics, University of Melbourne* #105, October (28), 2024. [↑](#footnote-ref-4)
4. Borland, Labour market snapshot # 105, October (28) 2024. [↑](#footnote-ref-5)
5. Data for suitability gap is only available from the September quarter 2012. [↑](#footnote-ref-6)