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Employment Forecasts
Publication overview

Deloitte
Access Economics

Overview

Employment Forecasts is Deloitte Access Economics' flagship labour market analysis and forecasting publication.

Produced quarterly, *Employment Forecasts* provides detailed forecasts and commentary on employment in Australia across **industries**, **detailed occupations**, and **regions**, including insights structured by three worker classifications:

1. **White collar:** Workers in occupations typically attached to an office environment within each industry (for example, business professionals, administrative staff, IT workers, and lawyers).

2. **Blue collar:** Workers in occupations who typically engage in manual work such as those in industrial settings within each industry (for example, building & construction labourers, farm workers, and machinery operators).

3. **Human services:** Workers in occupations typically associated as service workers who may not be attached to an office environment within each industry (for example, health professionals, educators, retailers, and hospitality staff).

Employment Forecasts helps organisations understand changing industry and occupation employment patterns and can shed light on emerging trends: technological change, shifting skill needs, the move to net zero and a shift towards a knowledge-based workforce. Deloitte Access Economics' expert analysis and forecast data can help you understand how industry and occupation employment trends affect your **strategic planning**, **financial modelling**, and **investment decisions**.

Employment Forecasts supports public and private organisations take the pulse of the Australian economy:

Analysis of the major influences of industry and occupation employment offers critical guidance for workforce planning for **federal and state government departments**, **policy makers**, **University researchers** and the **business community** seeking to understand the future demand for skills and the evolving structure of the Australian economy.

White collar employment forecasts capture demand for Central Business District (CBD) office space across industry sectors, making it a vital resource for **property developers**, **landlords**, **brokers**, and the **business community**.

CBD and greater capital city employment estimates by industry and worker classification supports **local government planning** and helps organisations understand the structural trends that are underway in Australia's CBD and greater capital city areas.

The employment forecast data is broken down by **industry**, **occupation**, **state**, **greater capital city** and **CBD** regions, and provides a robust assessment of future employment demand. If you require additional methodological information, please contact the team to receive the methodology guide or data templates, contact details can be found at the end of the document.

Industry data

Industry classification

Employment Forecasts follows the ABS Australian and New Zealand Standard Industrial Classification (ANZSIC) 1-digit level (Division) in Australia, in total there are 19 industries. Each industry is split by its **white collar**, **blue collar**, and **human services** workforce.

Regions

The forecasts are produced by state / territory (level 1), greater capital city (level 2) and Central Business District (CBD) (level 3):

- **State / territory:** The ABS states and territories are a cartographic representation of legally designated state and territory boundaries.
- **Greater capital city:** Greater capital city level forecasts are based on the Statistical Area (SA) 4 level data within each Greater Capital City Statistical Area (GCCSA).
- **CBD:** CBD level employment is benchmarked to Census employment by industry within each CBD region defined by Deloitte Access Economics. The CBD regions are based on Destination Zones (DZN) and typically cover a few urban city blocks.

The publication includes all state and territory and greater capital city regions and covers a selection of eight CBD markets, including Sydney CBD, North Sydney, Melbourne CBD, Brisbane CBD, Brisbane Near City, Perth CBD and West Perth, Adelaide City and Canberra Central. A map of each CBD region can be found in the Appendix.

Time horizon

The time series commences in September 1980 and includes a ten-year forecast horizon. The forecasts are produced at a quarterly frequency and are also provided by financial year and calendar year.

Occupation data

Occupation classification

Employment Forecasts follows the ABS Australian and New Zealand Standard Classification of Occupations (ANZSCO) 4-digit level (Unit Group) in Australia excluding 'not further defined' (nfd) occupations, in total there are 358 occupations.

Regions

The forecasts are produced by state/territory (level 1):

- **State/territory:** The ABS states and territories are a cartographic representation of legally designated state and territory boundaries.

Time horizon

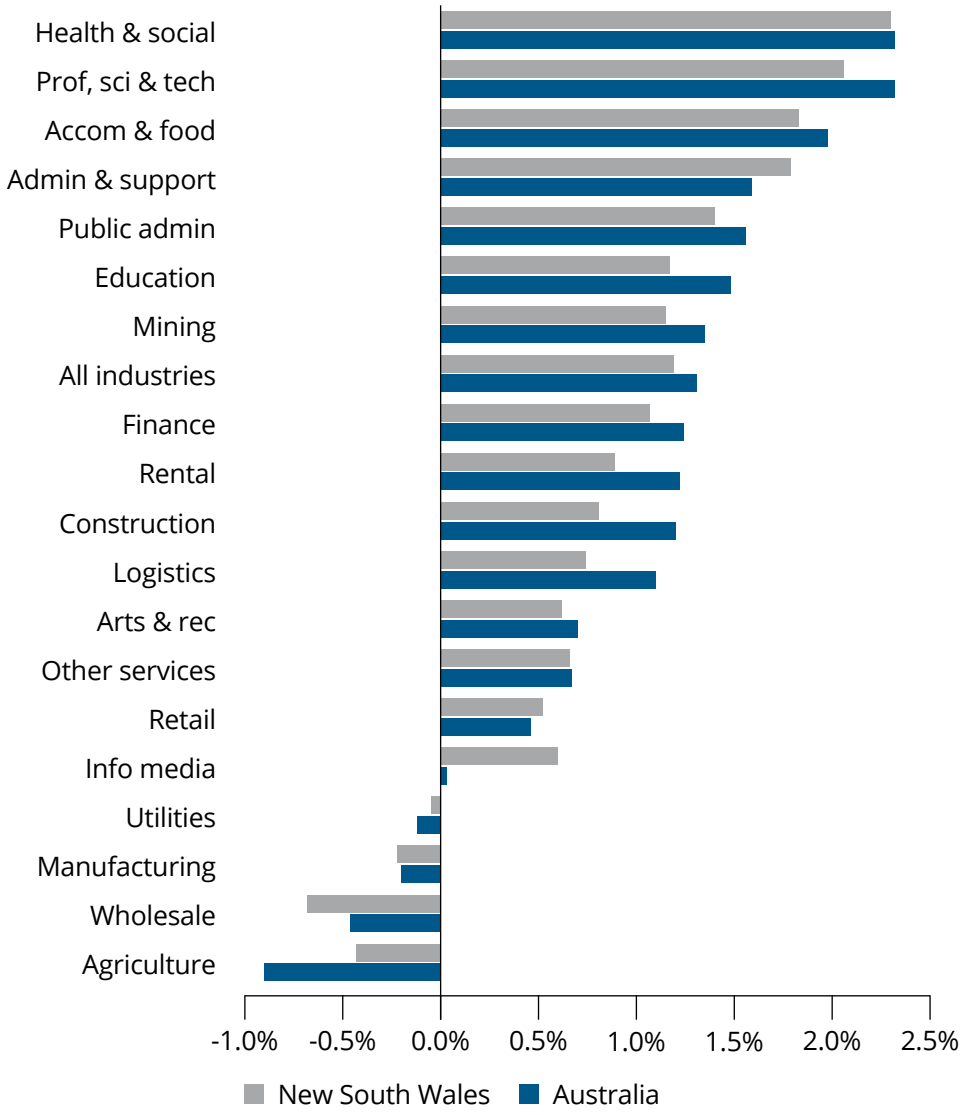
The time series commences in March 1992 and includes a ten-year forecast horizon. The forecasts are produced at a quarterly frequency and are also provided by financial year and calendar year. Forecasts can extend beyond a ten-year forecast horizon – please contact the team if you are interested in long-run detailed occupation forecasts, contact details can be found at the end of this section.

Forecast data examples

Below are illustrations of how *Employment Forecasts* can be used to analyse and inform the evolving structure of the Australian workforce.

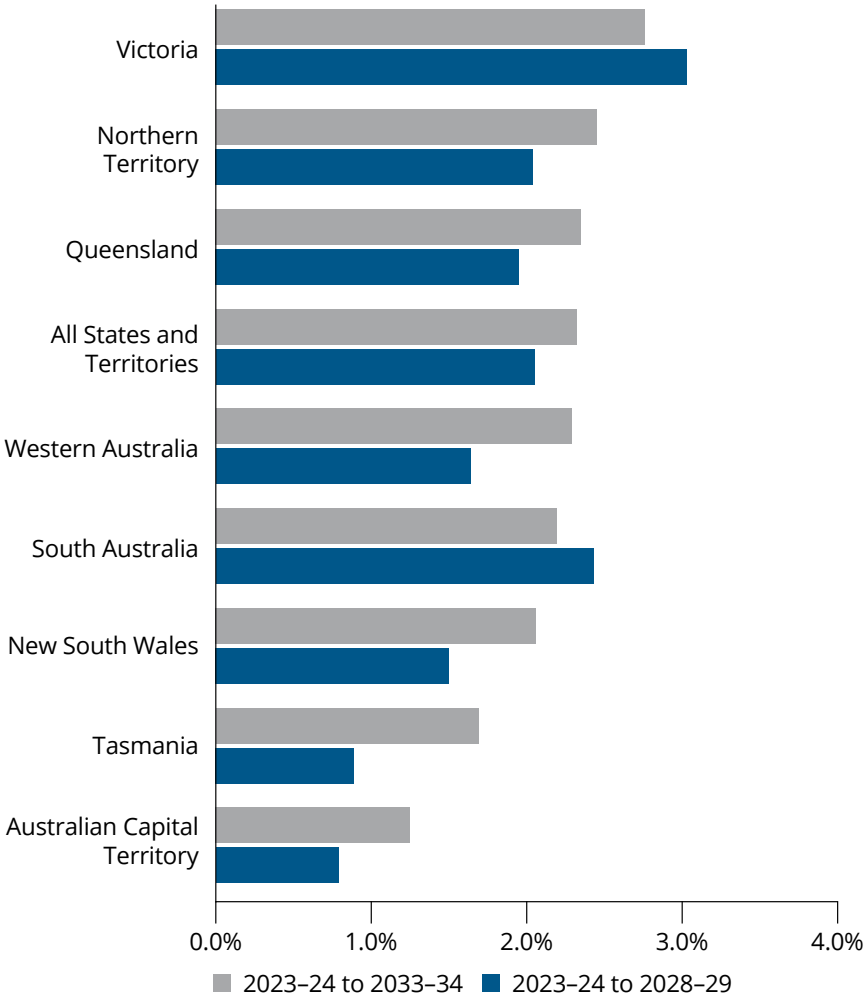
Industry data Industry employment growth examples

Figure 1 Industry employment growth, 2023–24 to 2033–34



Source: Deloitte Access Economics Employment Forecasts August 2024 Edition

Figure 2 State and territory professional, scientific, and technical services employment growth

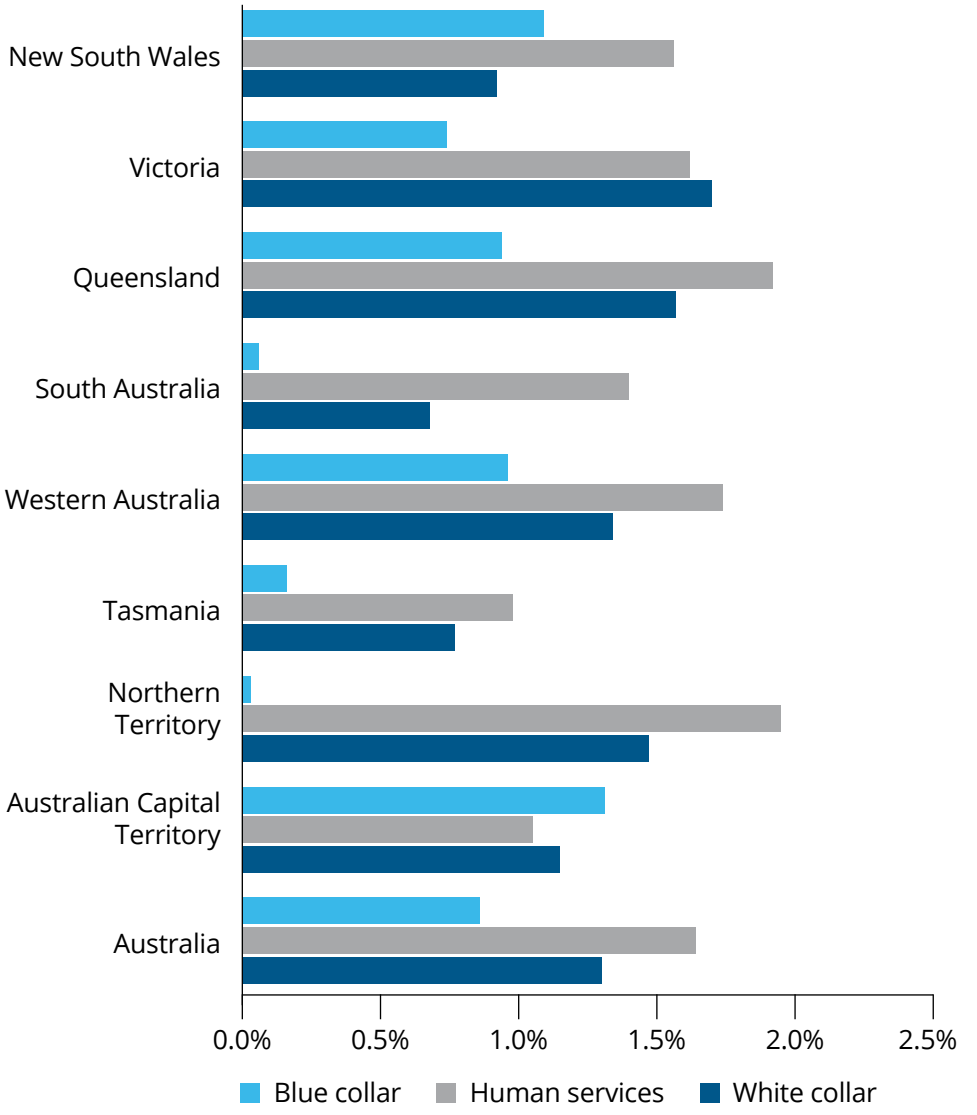


Source: Deloitte Access Economics Employment Forecasts August 2024 Edition

Insert useful data to promote worker classification employment growth

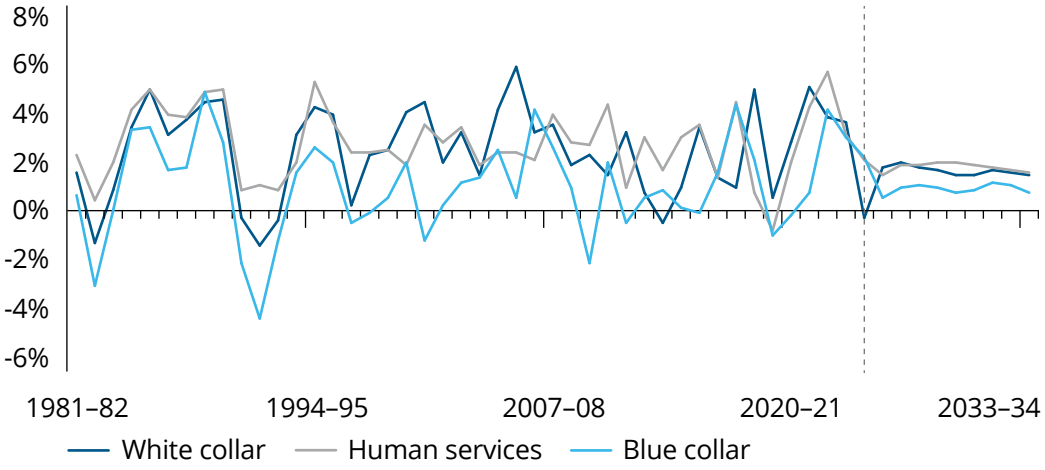
Worker classification employment growth examples

Figure 3 State and territory worker classification employment growth, 2023–34 to 2033–34



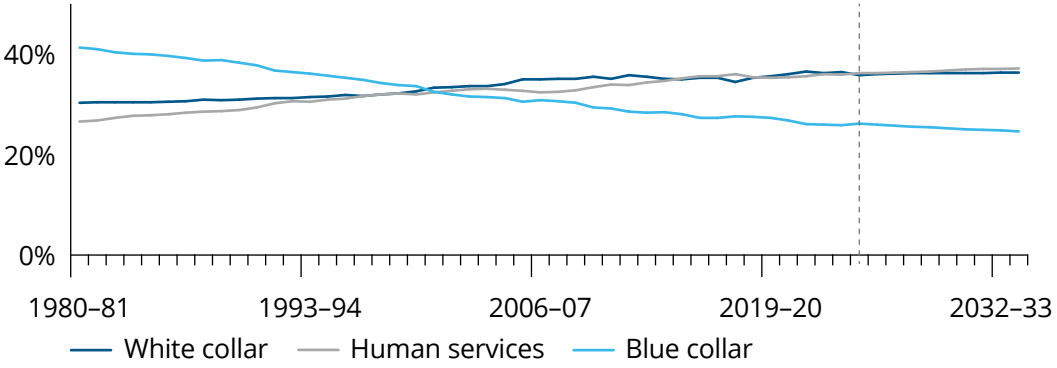
Source: Deloitte Access Economics Employment Forecasts August 2024 Edition

Figure 4 National worker classification employment growth, financial year



Source: Deloitte Access Economics Employment Forecasts August 2024 Edition

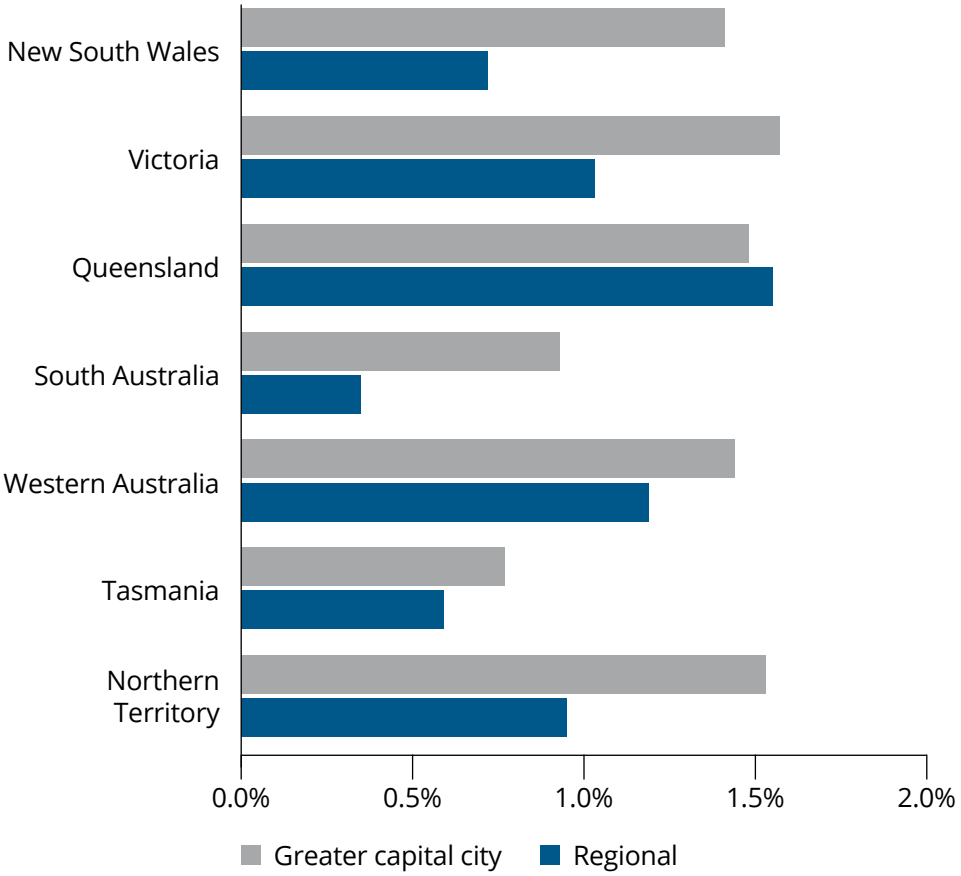
Figure 5 National worker classification employment share, financial year



Source: Deloitte Access Economics Employment Forecasts August 2024 Edition

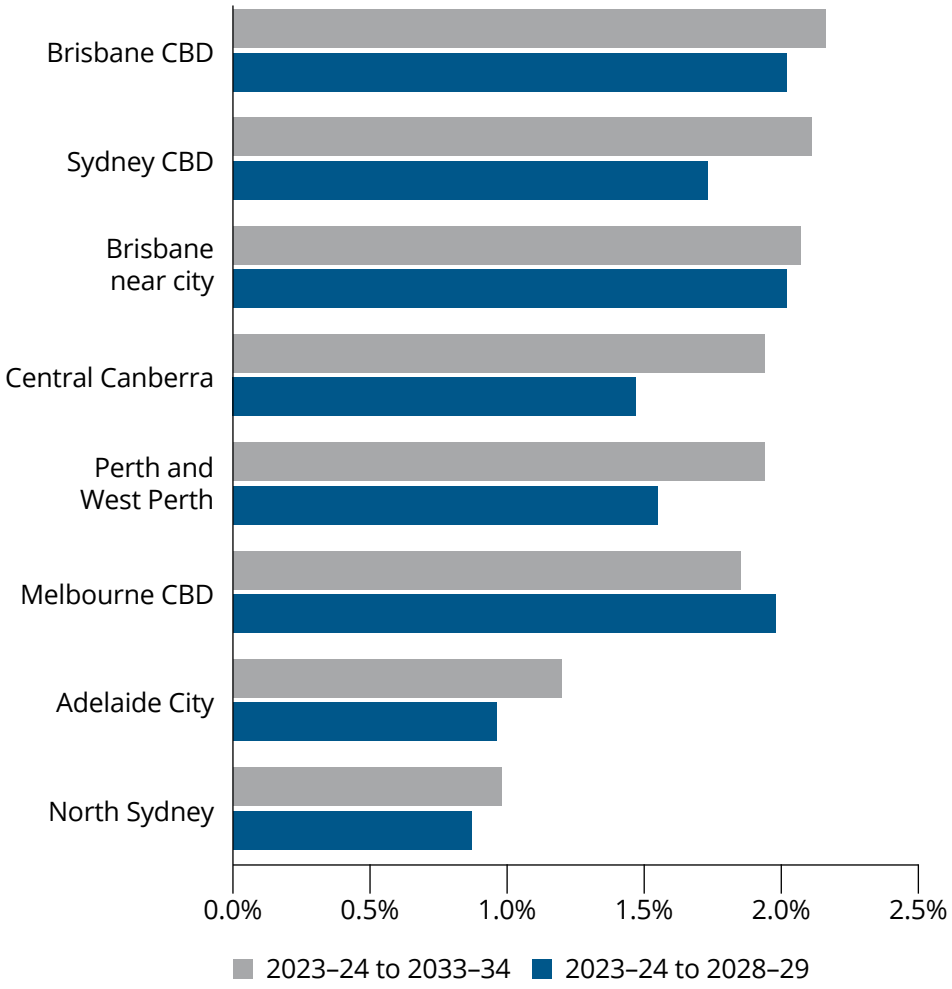
Regional employment growth examples

Figure 6 Greater capital city employment growth, 2023–34 to 2033–34



Source: Deloitte Access Economics Employment Forecasts August 2024 Edition

Figure 7 CBD white collar employment growth

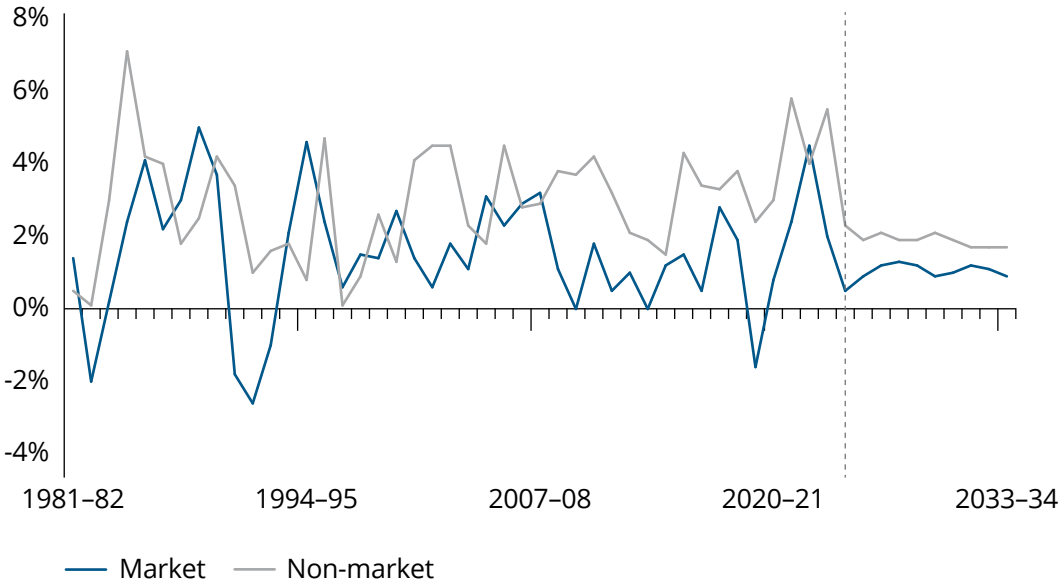


Source: Deloitte Access Economics Employment Forecasts August 2024 Edition

Insert useful data to promote worker classification employment growth

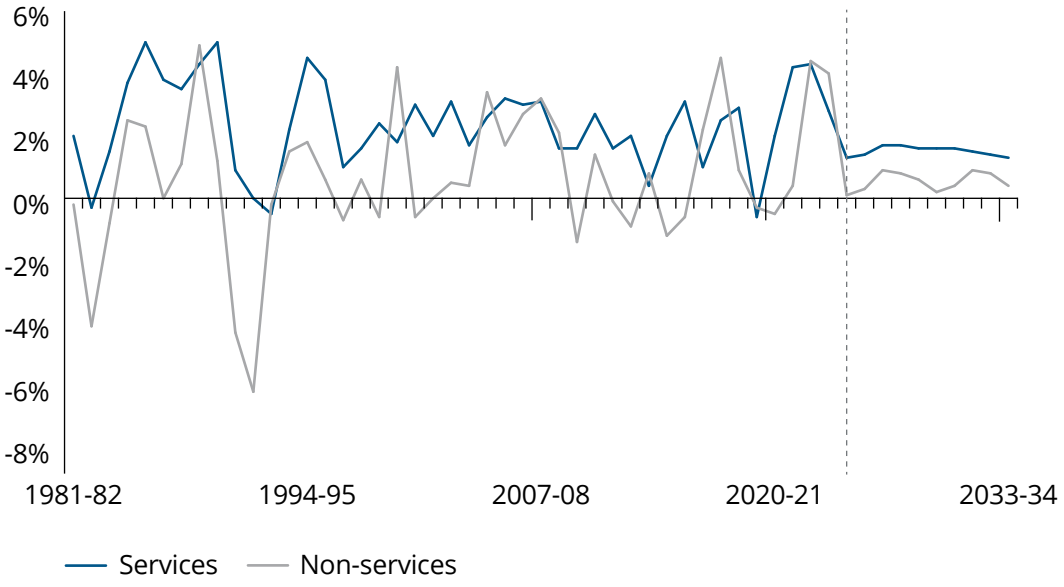
Other aggregation examples

Figure 8 National market vs non-market employment growth, financial year



Source: Deloitte Access Economics Employment Forecasts August 2024 Edition
Note: The market and non-market series follow the ABS aggregation of ANZSIC 1-digit industries of market sector divisions.

Figure 9 National services vs non-services employment growth, financial year



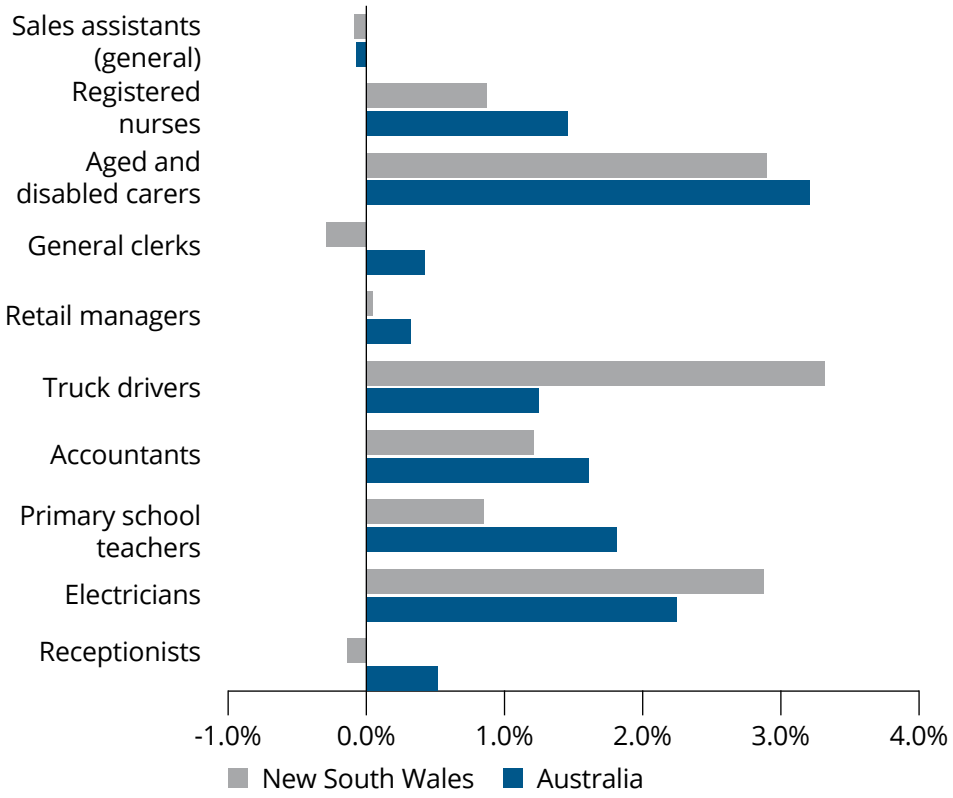
Source: Deloitte Access Economics Employment Forecasts August 2024 Edition
Note: The services series is defined as total industry employment excluding agriculture, mining, manufacturing, utilities, and construction.

Occupation data Occupation employment growth examples examples

Figure 10 National occupation employment growth

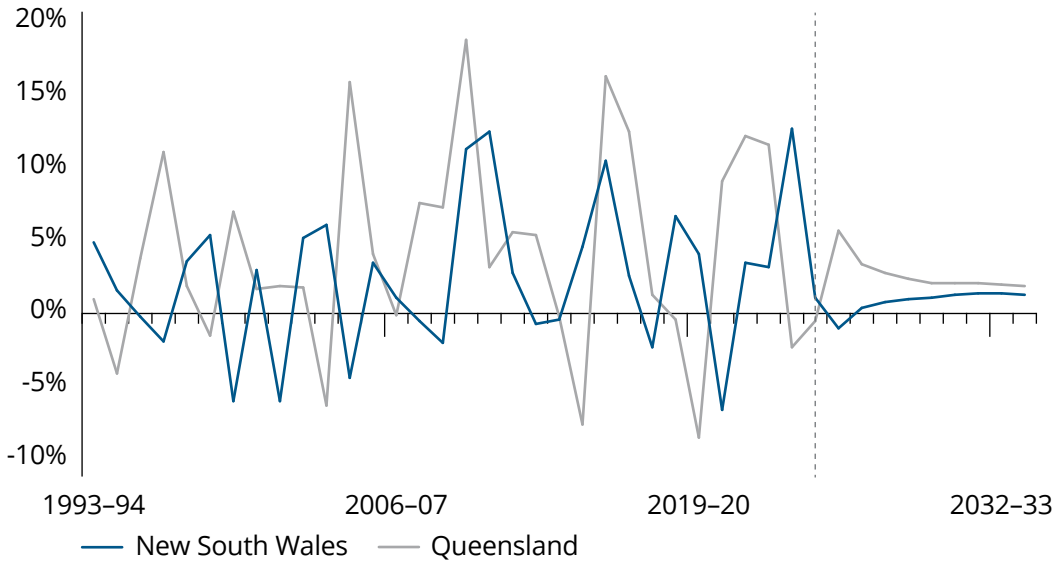
Source: Deloitte Access Economics Employment Forecasts August 2024 Edition

Figure 11 Occupation employment growth by top 10 detailed occupations



Source: Deloitte Access Economics Employment Forecasts August 2024 Edition
Note: The occupations are ordered by the top 10 occupations for Australia as of 2023–24

Figure 12 Select states and territories Registered Nurses employment growth



Source: Deloitte Access Economics Employment Forecasts August 2024 Edition

General information

Approach

The *Employment Forecasts* publication is underpinned by the Deloitte Access Economics Australian Macroeconomic Model (DAEM), a dynamic model of the Australian economy which is regularly used for macroeconomic forecasting and incorporates demographic trends and global economic influences. Figure 13 in the Appendix outlines the modelling steps and describes the top-down approach that disaggregates DAEM forecasts into **industry**, **occupation**, and **regional employment** forecasts for the *Employment Forecasts* publication.

Place of work classification

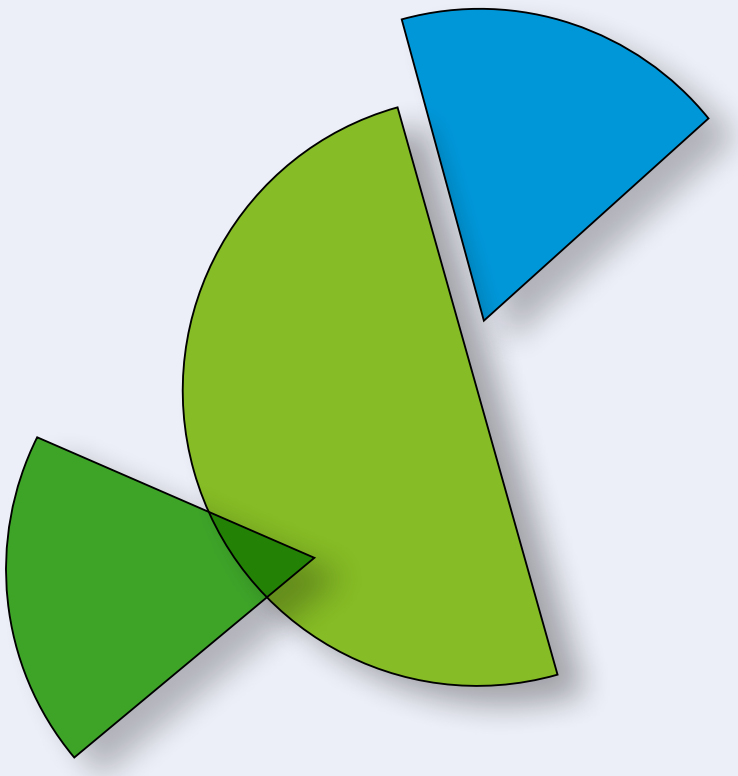
For state and lower-level disaggregation, *Employment Forecasts* presents employment on a Place of Work (POW) basis. This is distinct from the typical way that the Australian Bureau of Statistics (ABS) Labour Force Survey (LFS) employment data are reported, which is on a Place of Usual Residence (PUR) basis. At the national level, individuals are assumed to share the same POW and PUR. All sub-state level analysis accounts for differences between these values. The Australian Census of Population and Housing (Census) is used to establish the relationship between PUR and POW employment across all regions. For example, workers living in the Illawarra SA4 may work throughout areas in Greater Sydney and these trends are captured in the model.

The Australian Census of Population and Housing (Census) is used to establish the relationship between PUR and POW employment across all regions.

Benchmarking and data cleaning

Every quarter Deloitte Access Economics revises historical employment data based on adjustments by the ABS. In addition, every five years Deloitte Access Economics revises historical data when the new Census employment is released which is used to create new benchmarks across industries, occupations, and regions. When Census re-benchmarking occurs, there are revisions to the historical employment data between Census years. Given the granularity of data there is inherent risk of historical revisions and volatility in the estimates. Deloitte Access Economics cleans the underlying data to smooth the estimates and as such the historical industry and occupation employment estimates do not align with the ABS LFS Detailed release.

Every five years Deloitte Access Economics revises historical data when the new Census employment is released which is used to create new benchmarks across industries, occupations, and regions.



Sample report

DAE Employment Forecasts August 2024

Appendix

Figure 13 Deloitte Access Economics forecasting approach

Global inputs

- Global context is essential to our macroeconomic forecasting.
- Inputs on the global economy are based on the latest research and data published by key international bodies, and the forecasts of our international network of economists. Australia's share of global trade and the threat of supply-chain disruption for key goods and services are tracked carefully.

Demographic modelling **DAE-DEM**

- Our in-house demographic model.
- Demographic forecasts for Australia and all states and territories by single-year-of-age.
- These demographic forecasts are a key input into DAEM.

Macroeconomic modelling **DAEM**

Deloitte Access Economics model of the Australian economy

- Our global inputs, demographic modelling, and climate change levers enrich the insights produced by the DAEM model.
- Within DAEM, global economic conditions influence the Australian economy via trade volumes and the terms of trade, exchange rates and interest rates, which help determine Australia's potential output growth.
- The model is used on a quarterly basis to produce our forecasts for key time series macroeconomic variables for Australia and states/territories.
- The model informs our view of total and industry employment for Australia.

Detailed employment by state **DAEM-SI**

Detailed state and industries model

We will use DAEM-SI to distribute and produce state level expenditure components to create state-specific 'induced' industry output and determine industry employment.

DAEM-O

Detailed state and occupations model

- Occupation employment (ANZSCO 4-digit) by state is forecast using a combination of drivers: industry composition changes (from DAEM-SI) and new types of work / evolving technologies.
- This approach enables the forecasts to be produced based on structural changes, as well as longer term trends.
- The final ANZSCO 4-digit level forecasts are split out by each ANZSIC 1-digit industry at the state level using historical relationships to establish worker classification shares by industry for each state and territory.

Detailed employment by region **DAEM-R**

Detailed regional employment model

- Our regional employment model follows a top-down approach combined the industry employment outputs from DAEM-SI and the occupation by worker classification outputs from DAEM-O.
- Capital city and CBD level forecasts are benchmarked against Census data and updated using quarterly ABS LFS employment data at the Statistical Area (SA) 4 level.

Figure 14 Sydney CBD boundary

Figure 15 North Sydney boundary

Figure 16 Melbourne CBD boundary

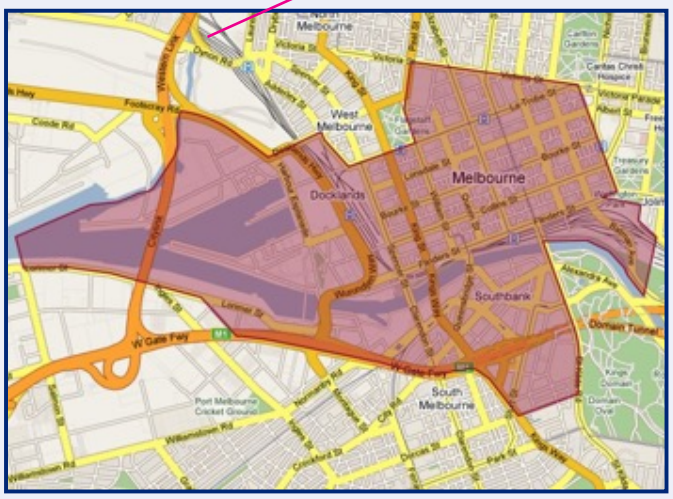


Figure 17 Brisbane CBD boundary

PLACEHOLDER

Figure 18 Brisbane Near City boundary

Figure 19 Adelaide City boundary

Figure 20 Perth CBD & West Perth boundary

Figure 21 Canberra Central boundary

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