

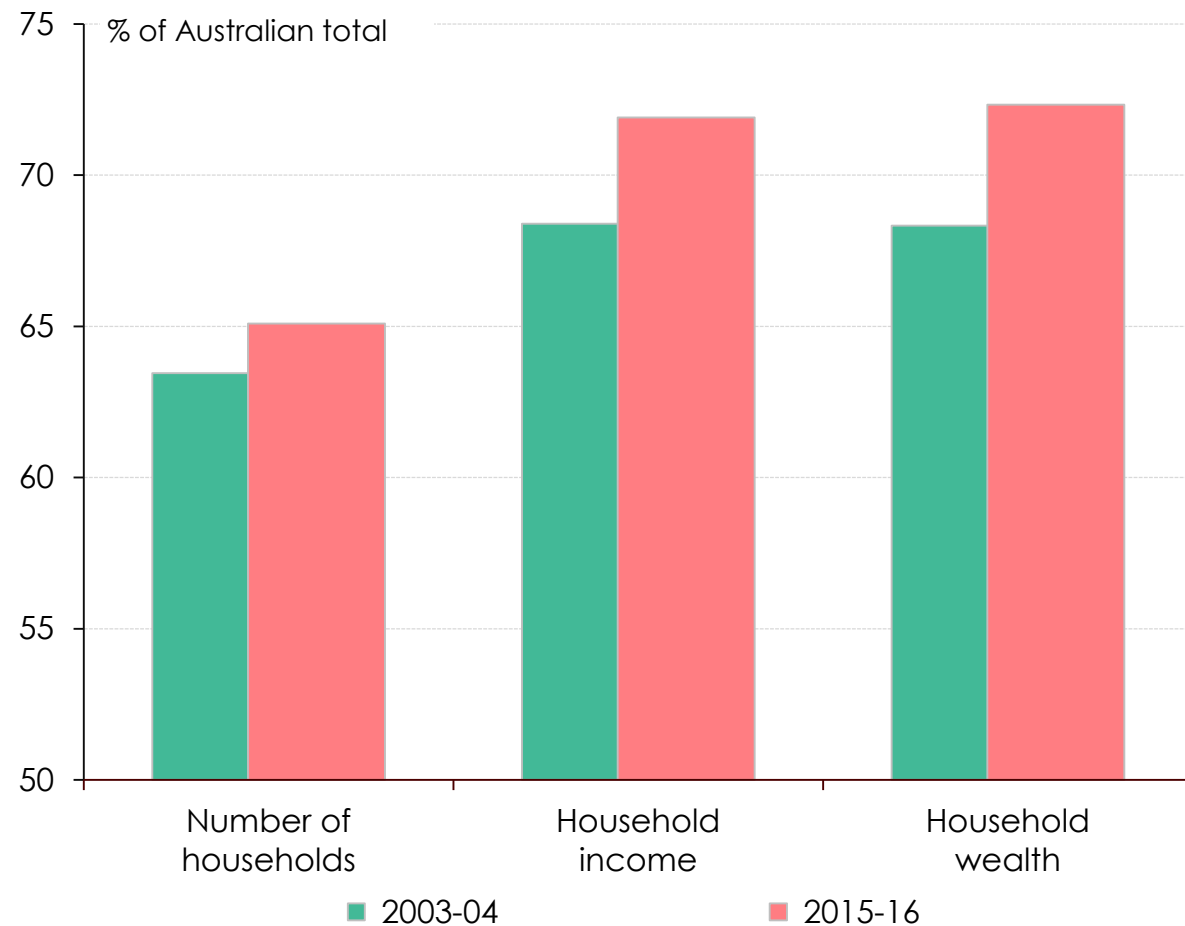
INEQUALITY BETWEEN PLACES AND REGIONAL ECONOMIC DEVELOPMENT

PRESENTATION TO THE AUSTRALIAN LOCAL GOVERNMENT ASSOCIATION'S
2018 REGIONAL COOPERATION AND DEVELOPMENT FORUM

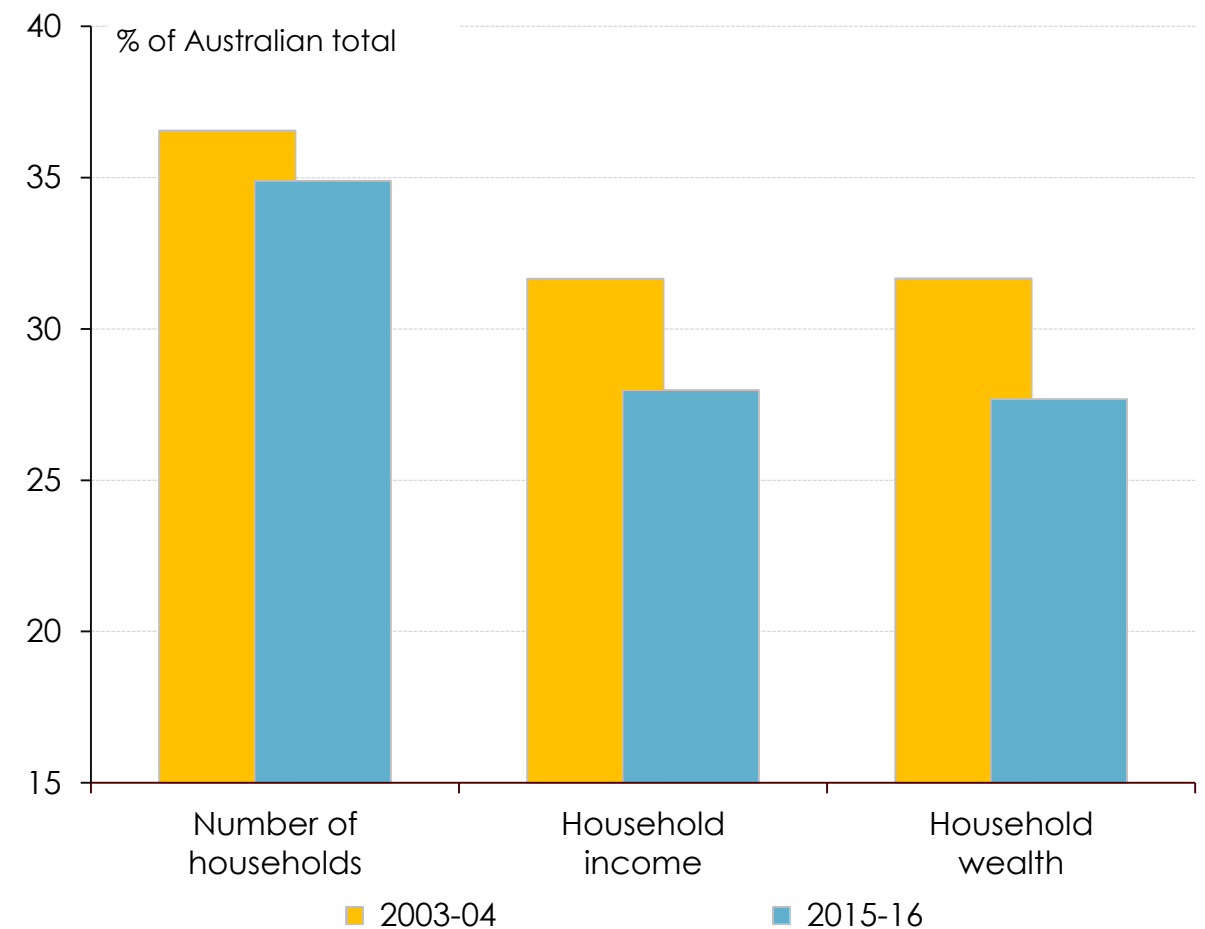
NATIONAL CONVENTION CENTRE, CANBERRA
17TH JUNE 2018

'Spatial inequality' has increased over the past 15 years

Capital cities' shares of household income and wealth, 2003-04 to 2015-16



Rest of Australia's shares of household income and wealth, 2003-04 to 2015-16



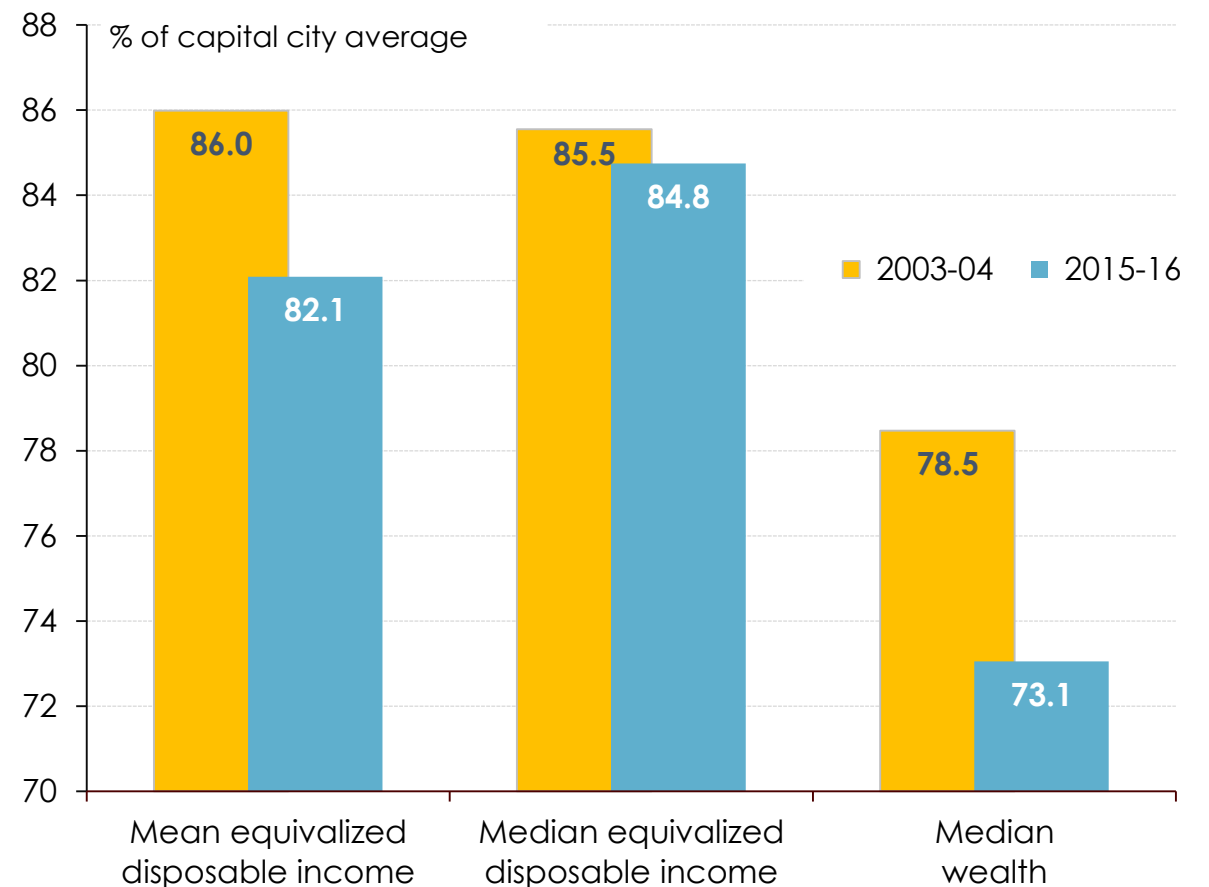
Source: ABS, Household Income and Wealth (6523.0), 2015-16 and previous issues.

'Spatial inequality' has increased over the past 15 years

Change in non-metropolitan households' shares of total household income & wealth, 2003-04 to 2015-16



Average household income and wealth, non-metropolitan households as a pc of capital cities, 2003-04 and 2015-16

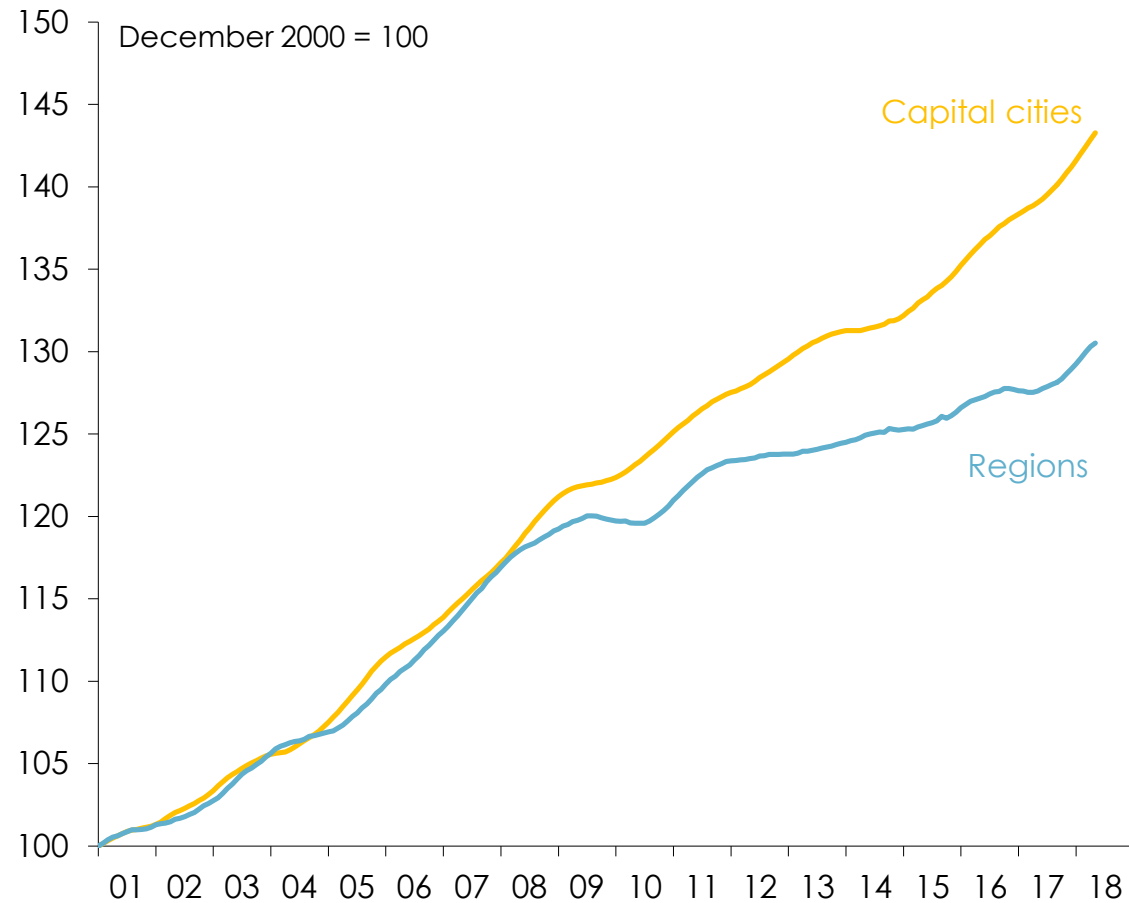


Note: 'Equivalized disposable income' takes account of differences in the number of people per household, and is after income tax and Medicare levy payments. 'Mean' income is total income divided by the number of households. 'Median' income or wealth is the level of income or wealth which divides households into two equal halves, one half having more than the median income or wealth and the other having less than the median.

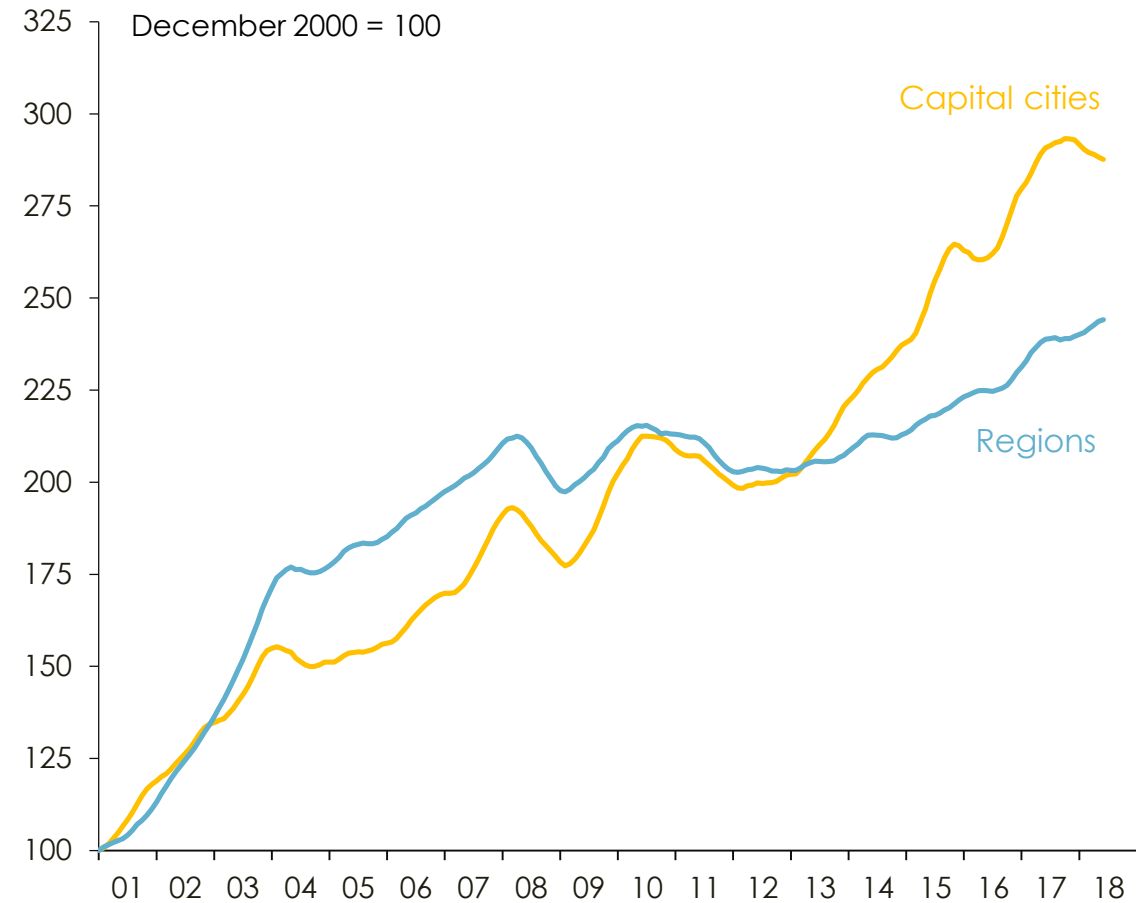
Source: ABS, *Household Income and Wealth* (6523.0), 2015-16 and previous issues.

The widening gaps in income and wealth between capital cities and regions partly reflect differences in employment growth and house prices

Employment, capital cities and regions, 2001-2018



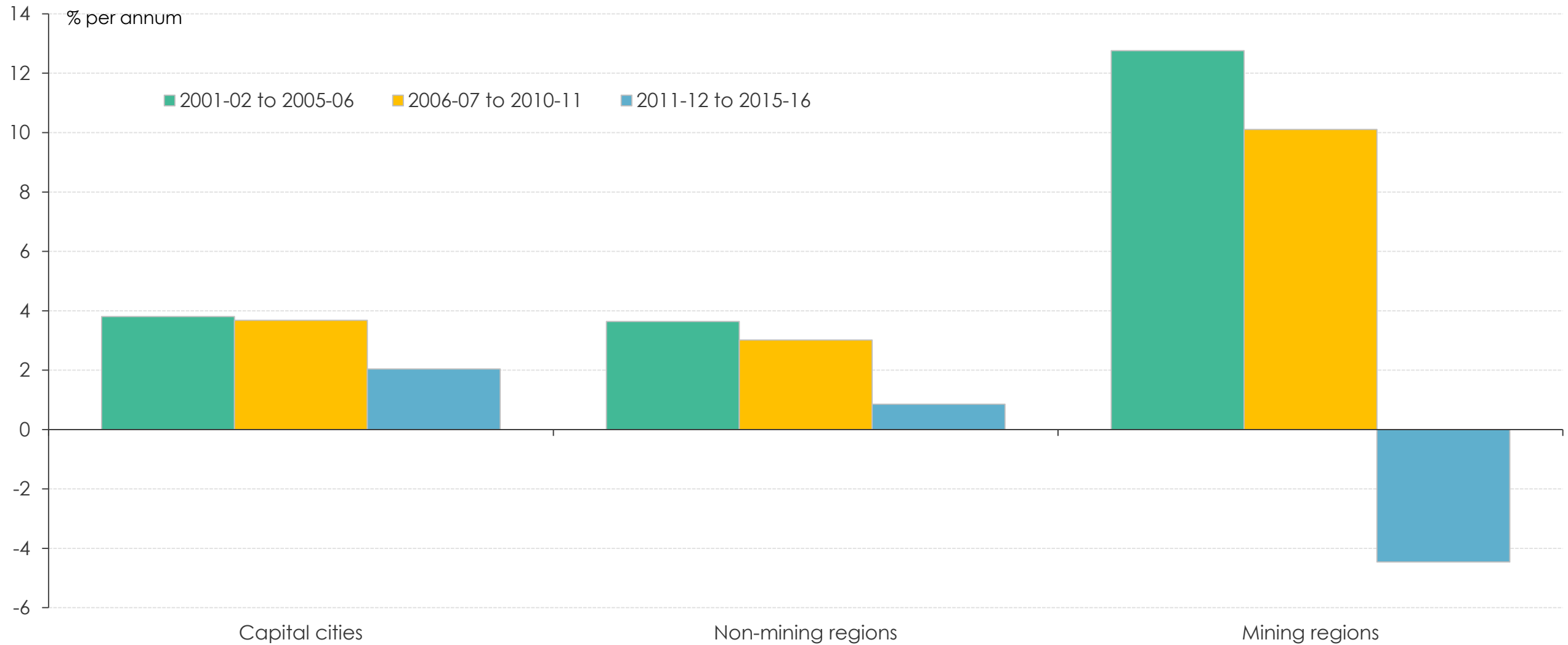
Residential property values, capital cities and regions, 2001-2018



Note: In the employment data shown here, Darwin is included in 'regions' rather than capital cities.
Sources: ABS, Labour Force, Australia – Detailed (6291.0.55.001); CoreLogic.

Regions, other than mining regions, have experienced slower economic growth than capital cities since the turn of the century

Growth in real gross regional product, by regional classification, 2000-01 to 2015-16



Source: Office of the Chief Economist, Department of Industry, Innovation and Science, *Industry Insights*, 1/2018.

A framework for understanding the reasons for differences in regional economic performance

$$\frac{\text{gross regional product}}{\text{population}} = \frac{\cancel{\text{employment}}}{\text{population}} \times \frac{\text{total hours worked}}{\cancel{\text{employment}}} = \frac{\text{gross regional product}}{\text{population}} \times \frac{\text{gross regional product}}{\text{total hours worked}}$$

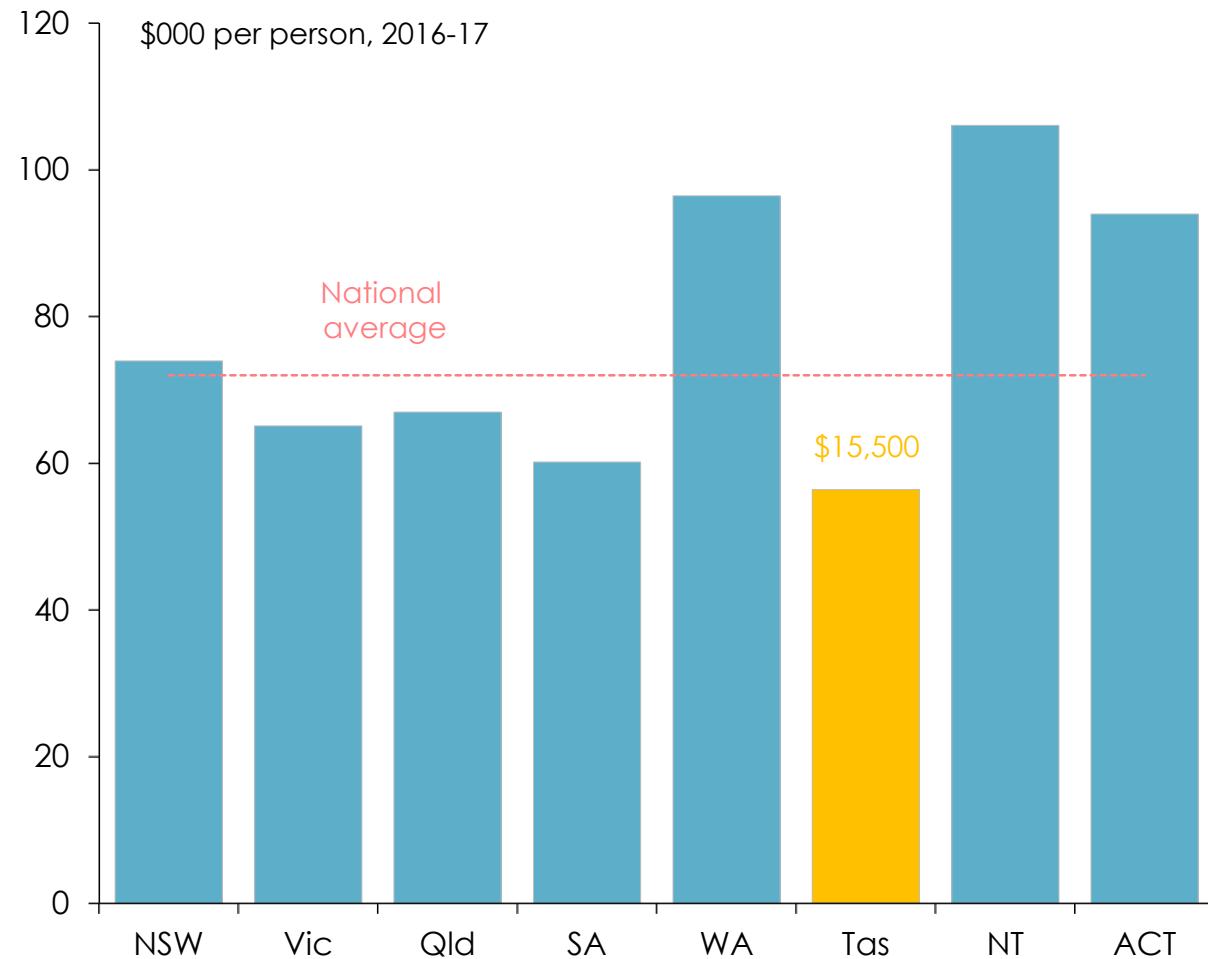
A framework for understanding the reasons for differences in regional economic performance

$$\frac{\text{gross regional product}}{\text{population}} = \frac{\text{employment}}{\text{population}} \times \frac{\text{total hours worked}}{\text{employment}} = \text{participation rate} \times \text{average hours worked} \times \text{labour productivity}$$

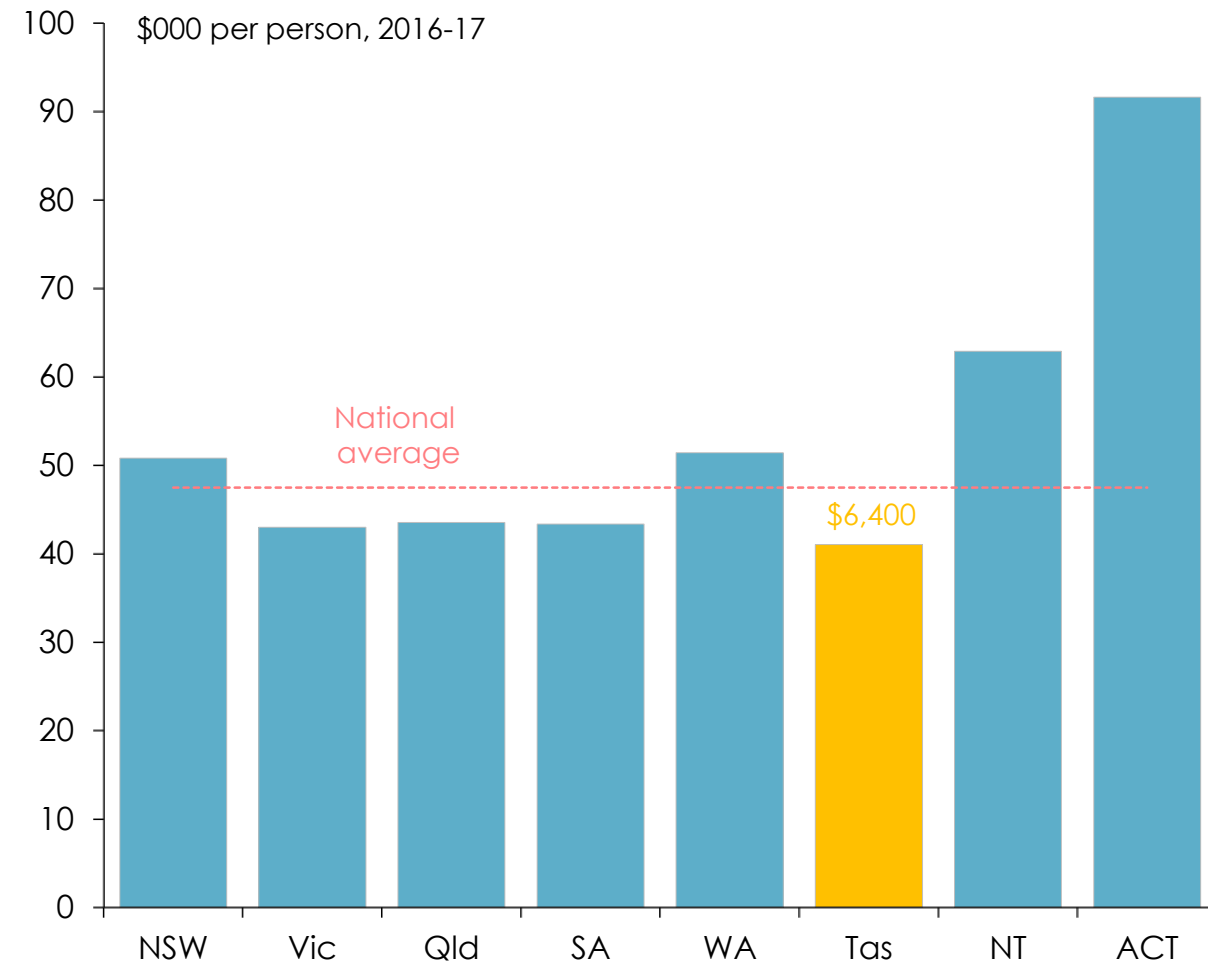
The diagram illustrates the decomposition of regional economic performance into three key components. It starts with the ratio of gross regional product to population, which is equal to the ratio of employment to population multiplied by the ratio of total hours worked to employment. This is further broken down into the participation rate (employment to population), average hours worked (total hours worked to employment), and labour productivity (gross regional product to total hours worked).

A case study – Tasmania is the poorest state in Australia, no matter how you measure it

Per capita gross state product, States and Territories, 2016-17



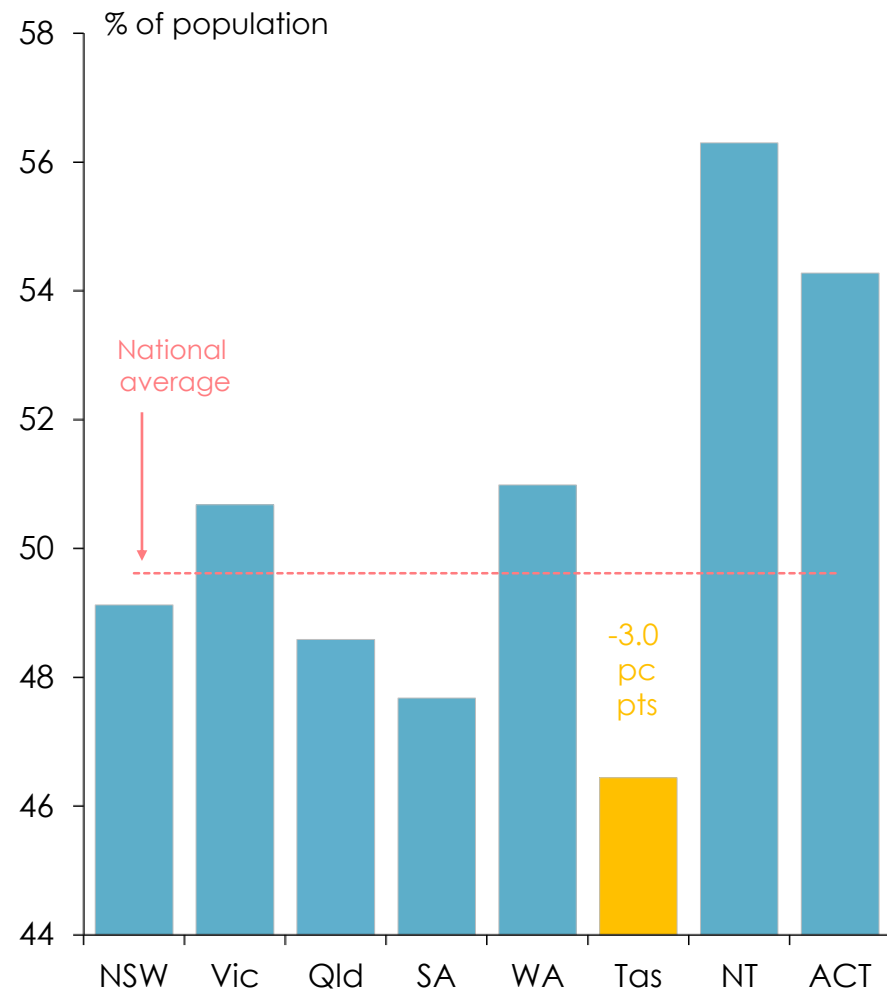
Per capita household disposable income, States and Territories, 2016-17



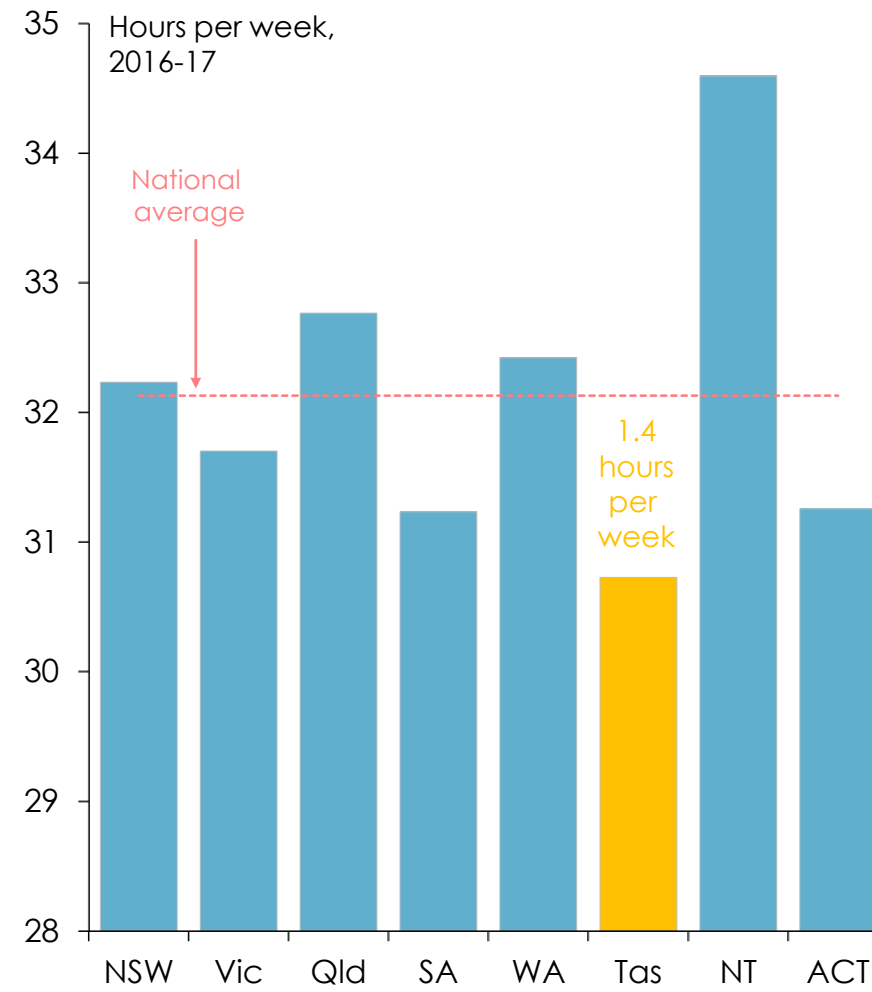
Source: ABS, State Accounts (5220.0), 2016-17.

Tasmania's below-average per capita GSP reflects below-average participation, below-average hours, and below-average productivity

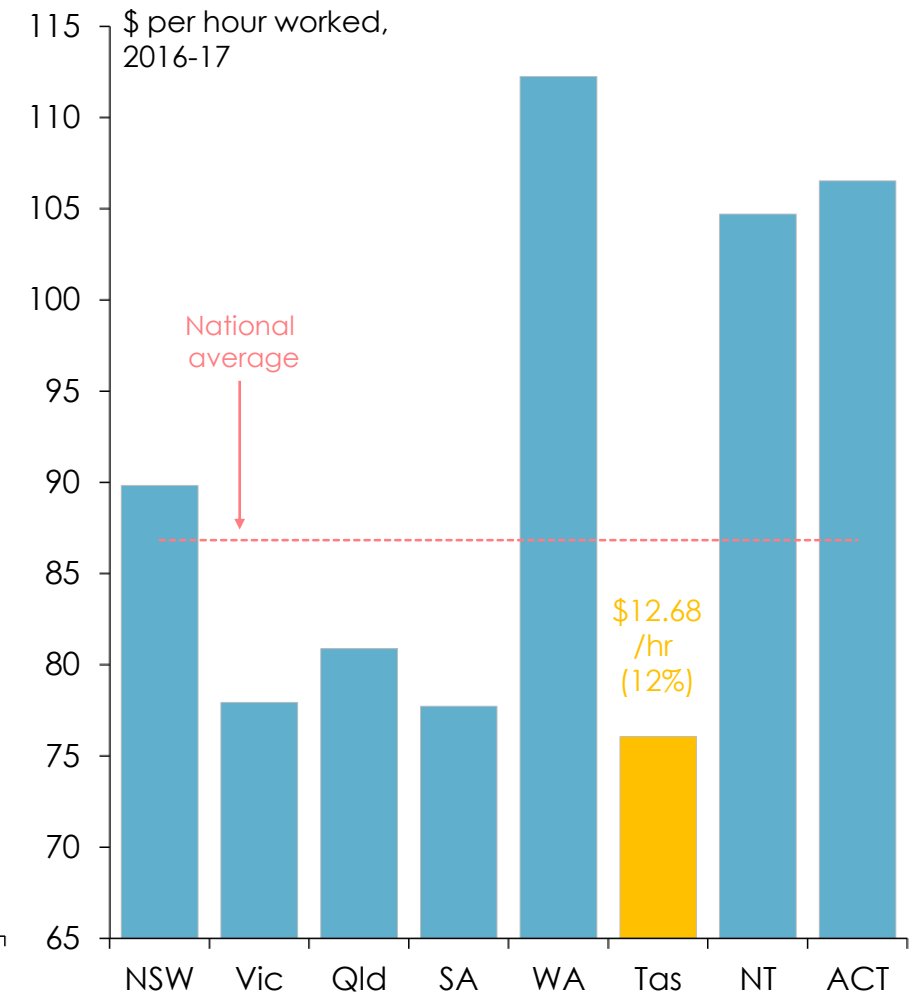
Employment-to-population ratio



Average weekly hours worked



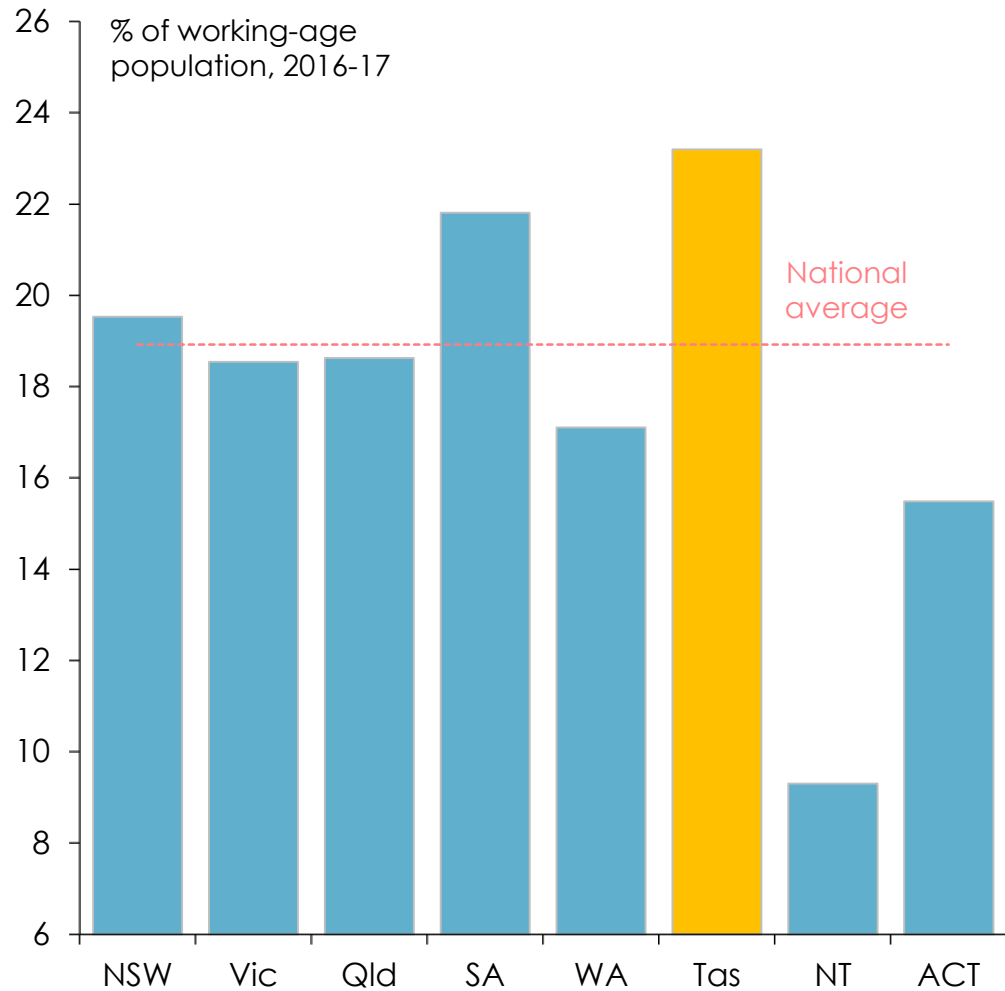
Output per hour worked (labour productivity)



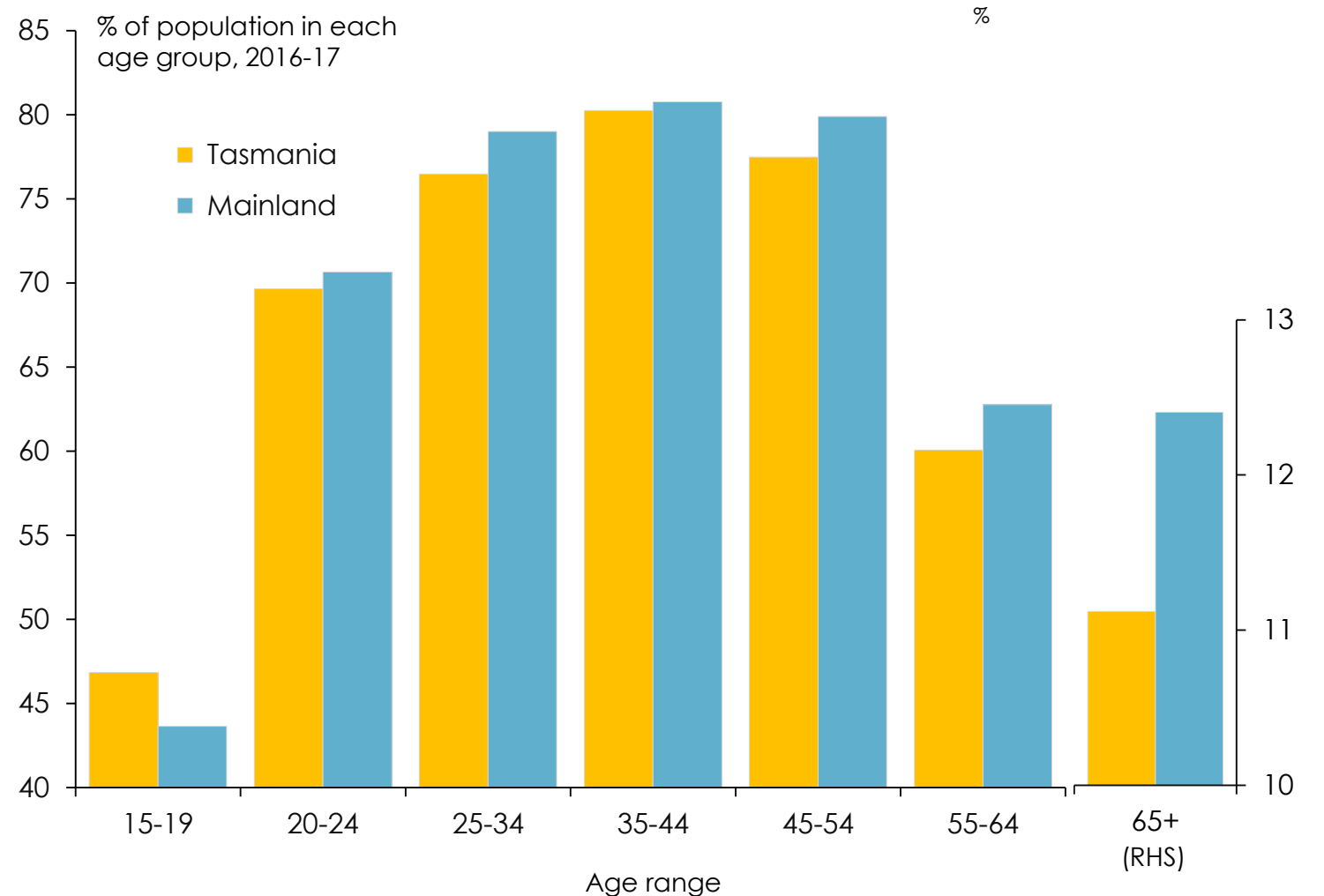
Sources: ABS, State Accounts (5220.0) and Labour Force, Australia (6201.0); Corinna Economic Advisory.

Tasmania's below-average employment-population ratio is partly the result of its demographic profile – but that's not the only reason

Population aged 65 & over as a pc of working-age population, 2016-17



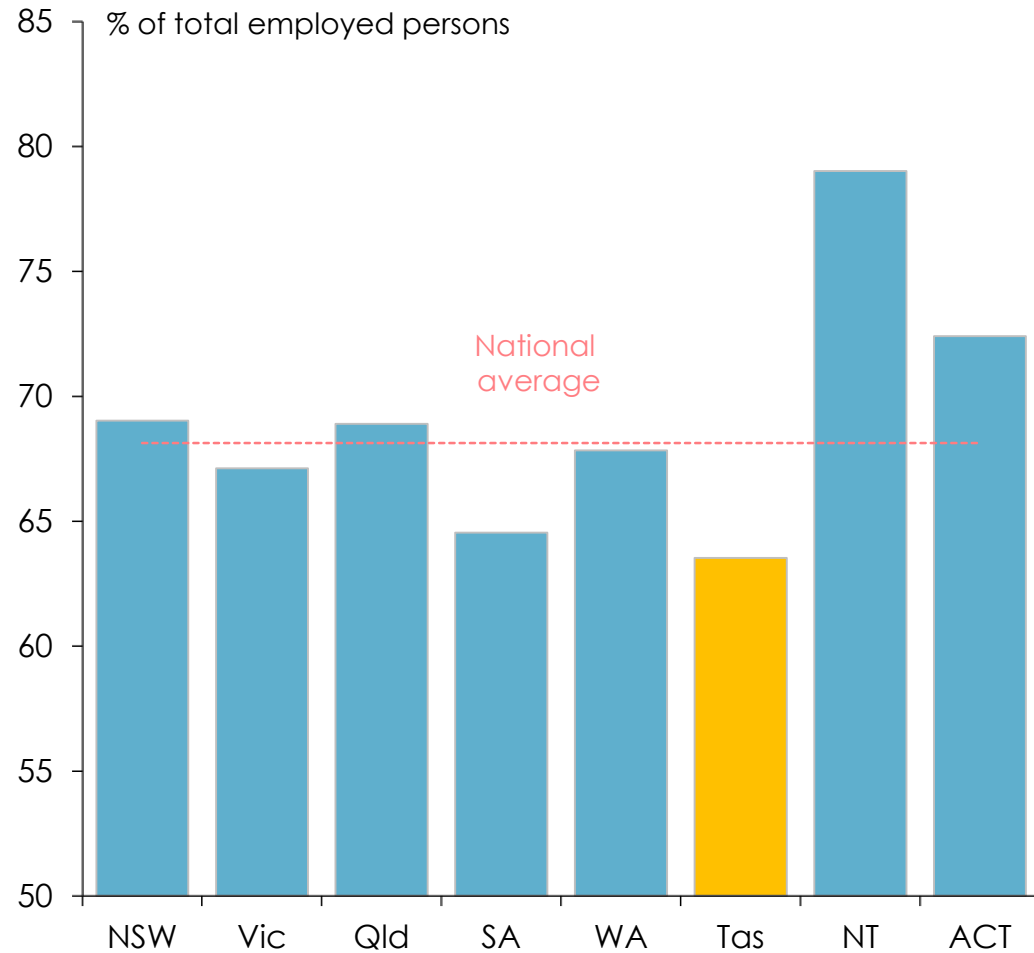
Employment-population ratios by age, Tasmania and mainland, 2016-17



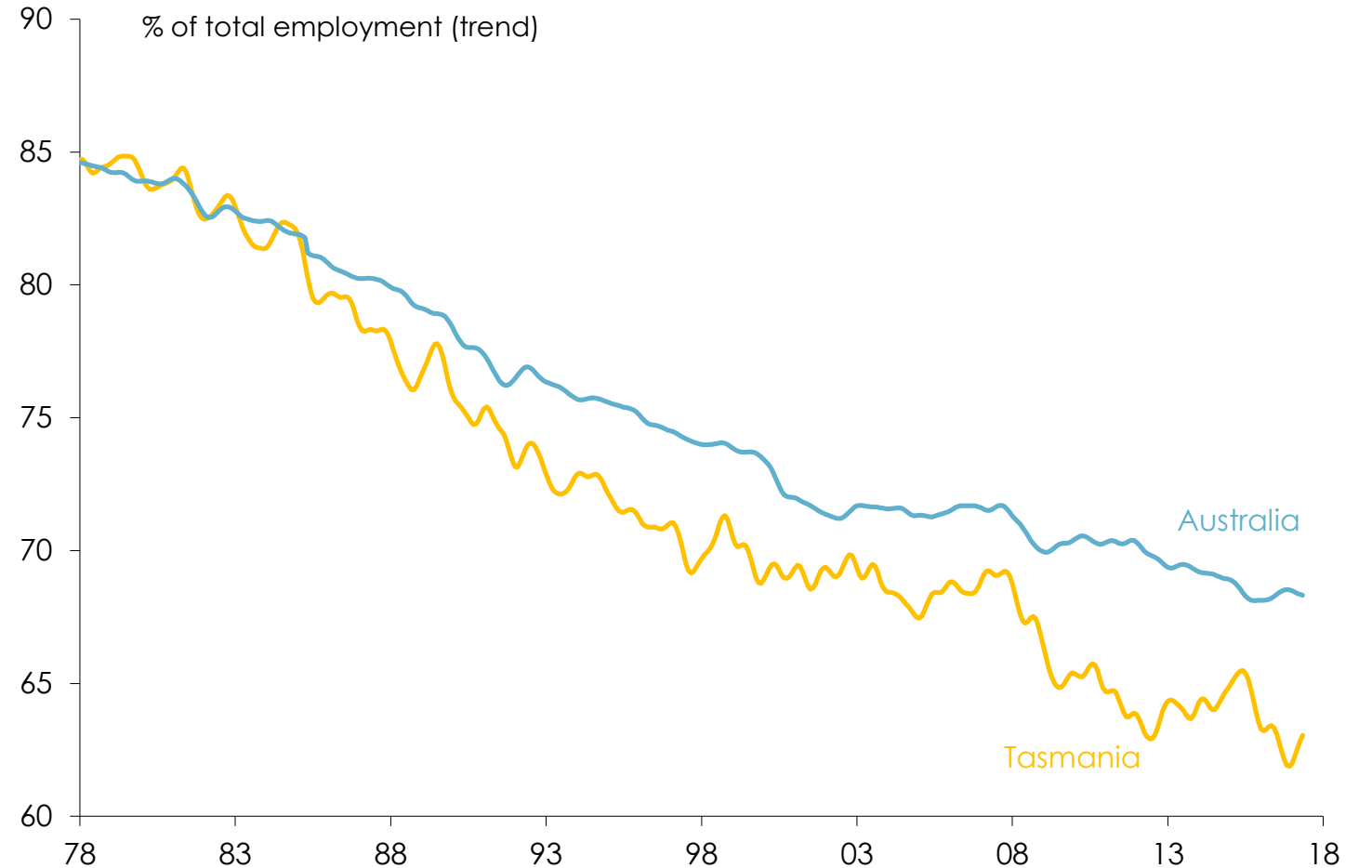
Source: ABS, Labour Force, Australia – Detailed (6291.0.55.001).

Tasmania's below-average hours worked is largely the result of a smaller proportion of jobs being full time – a forty-year trend

Full-time employment as a pc of total, by State & Territory, 2016-17



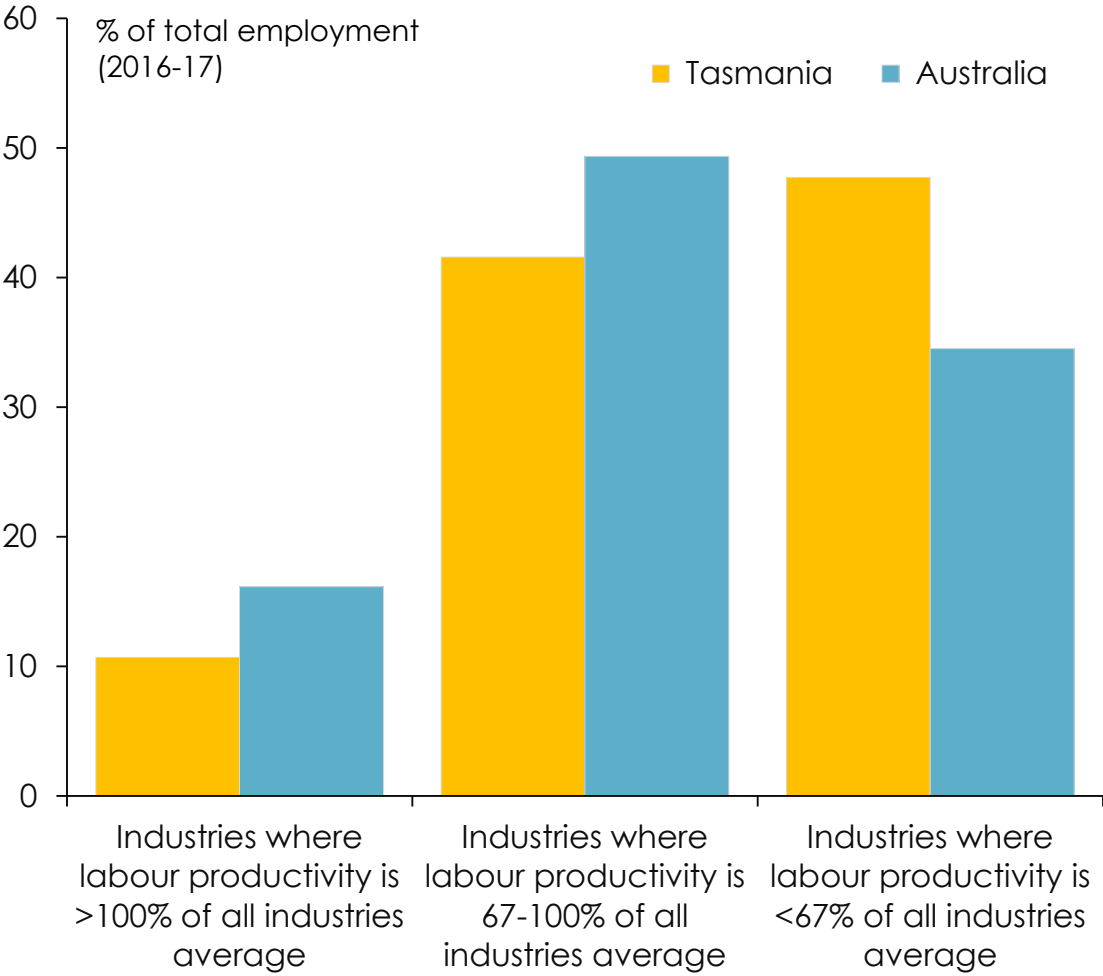
Full-time employment as a pc of total, Tasmania vs Australia, 1978-2018



Source: ABS, Labour Force, Australia (6201.0).

High-labour-productivity industries are ‘under-represented’ in Tasmania – and most Tasmanians work in industries where productivity is sub-par

Employment by high-, medium- and low-productivity industries, 2016-17



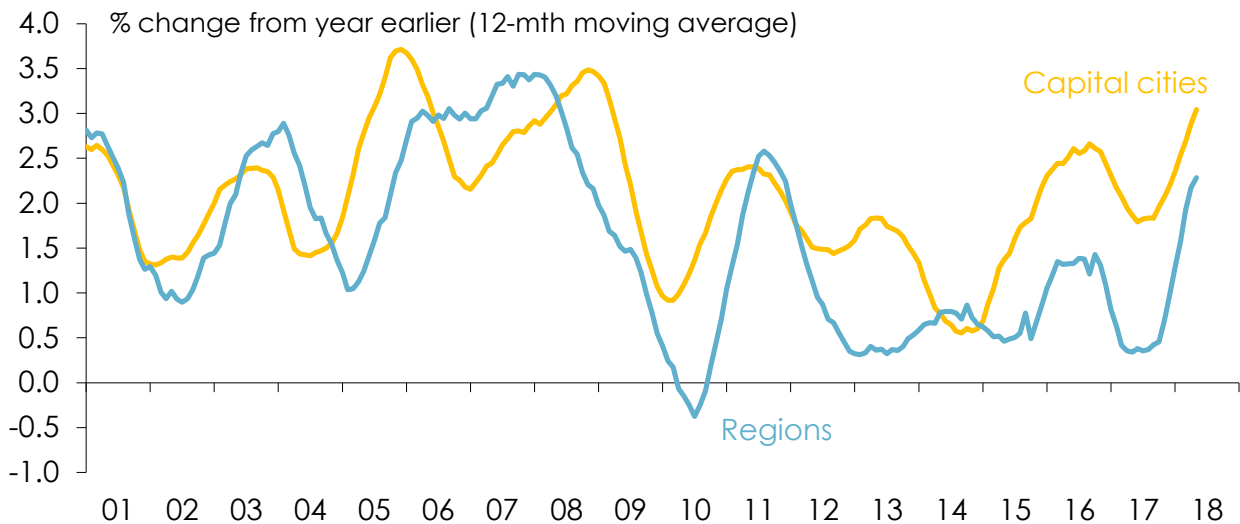
Tasmanian employment by industry productivity as a pc of national industry averages, 2016-17



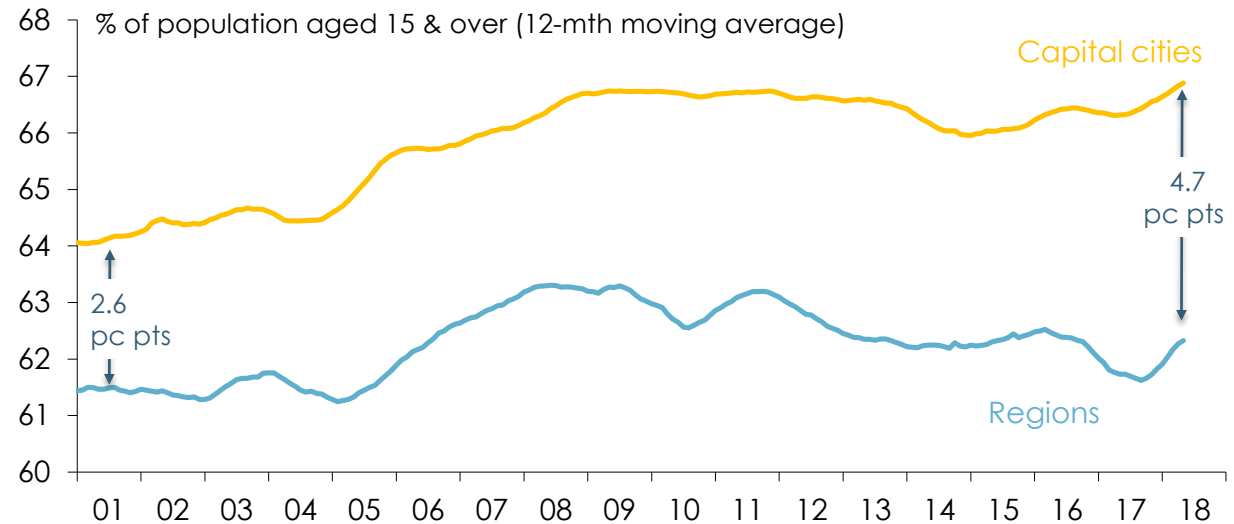
Source: ABS, State Accounts (5220.0) and Labour Force, Australia – Detailed, Quarterly (6291.0.55.003).

Capital city labour markets have been mostly stronger than regional ones – and in particular, participation rates have been much higher the cities

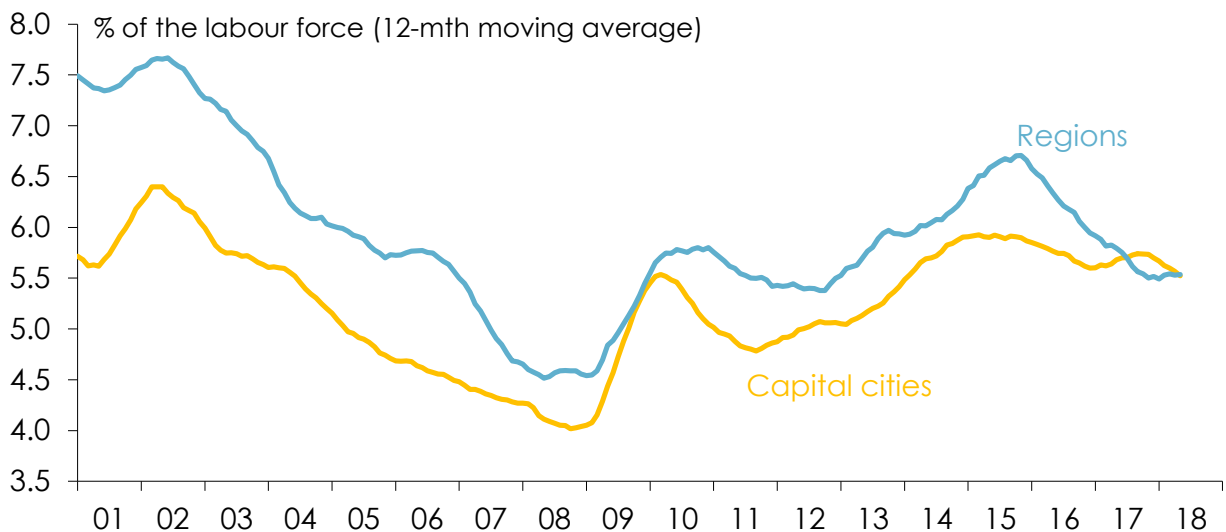
Employment growth



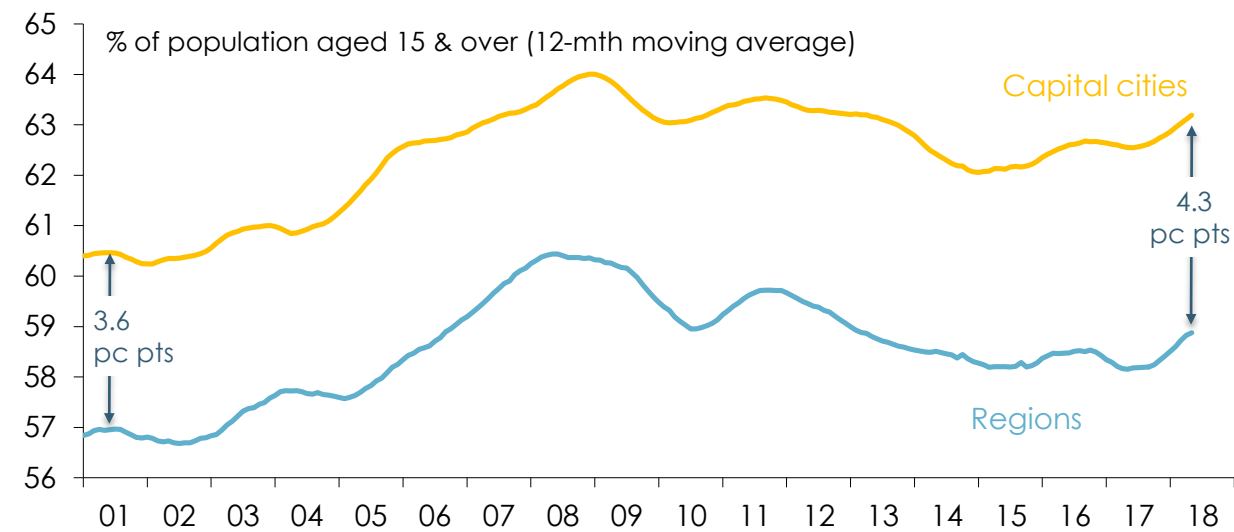
Labour force participation rate



Unemployment rate



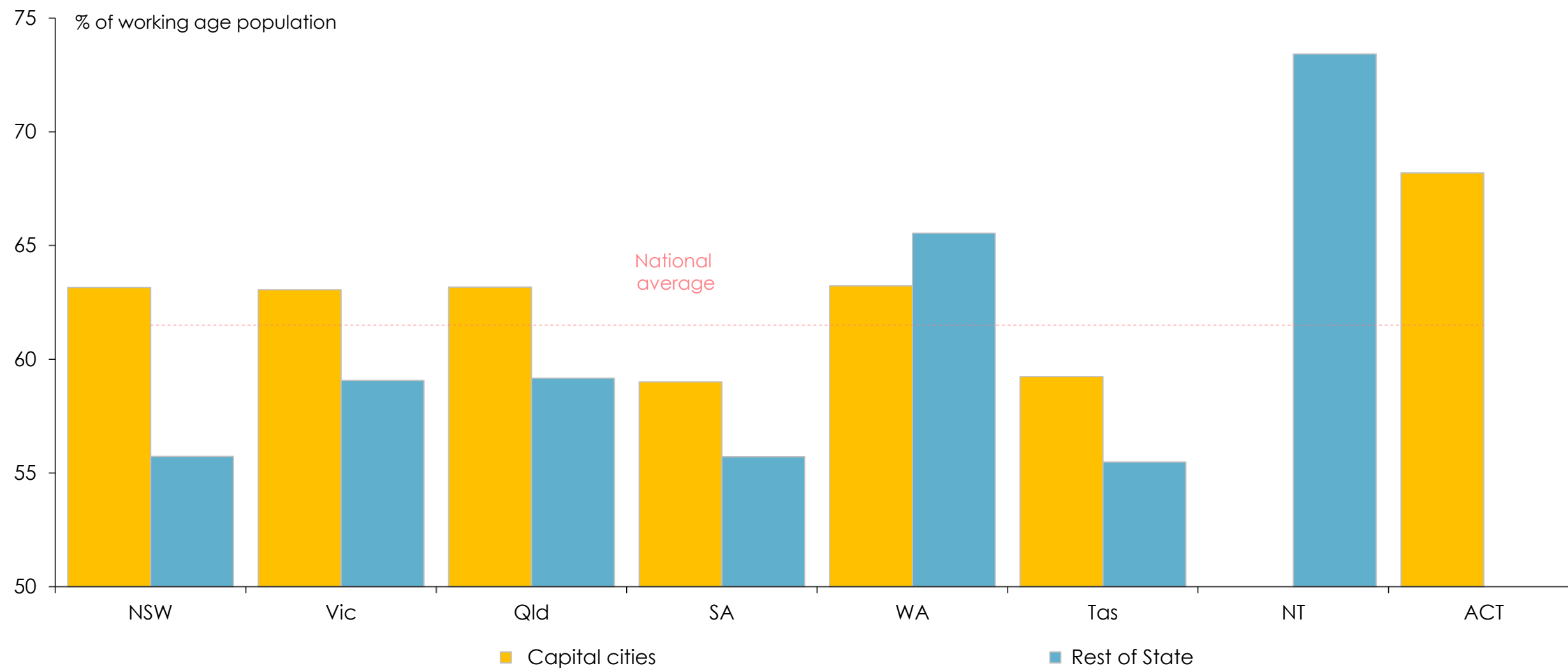
Employment-to-population ratio



Note: In these data, the whole of the Northern Territory is included in 'regions' while the whole of the ACT is included in 'capital cities'.
 Source: ABS, The Labour Force, Detailed (6291.0), April 2018.

Below-average employment rates are most acute in regional New South Wales, followed by regional areas of other eastern States

Employment as a pc of working age population, capital cities vs rest of state, 2017

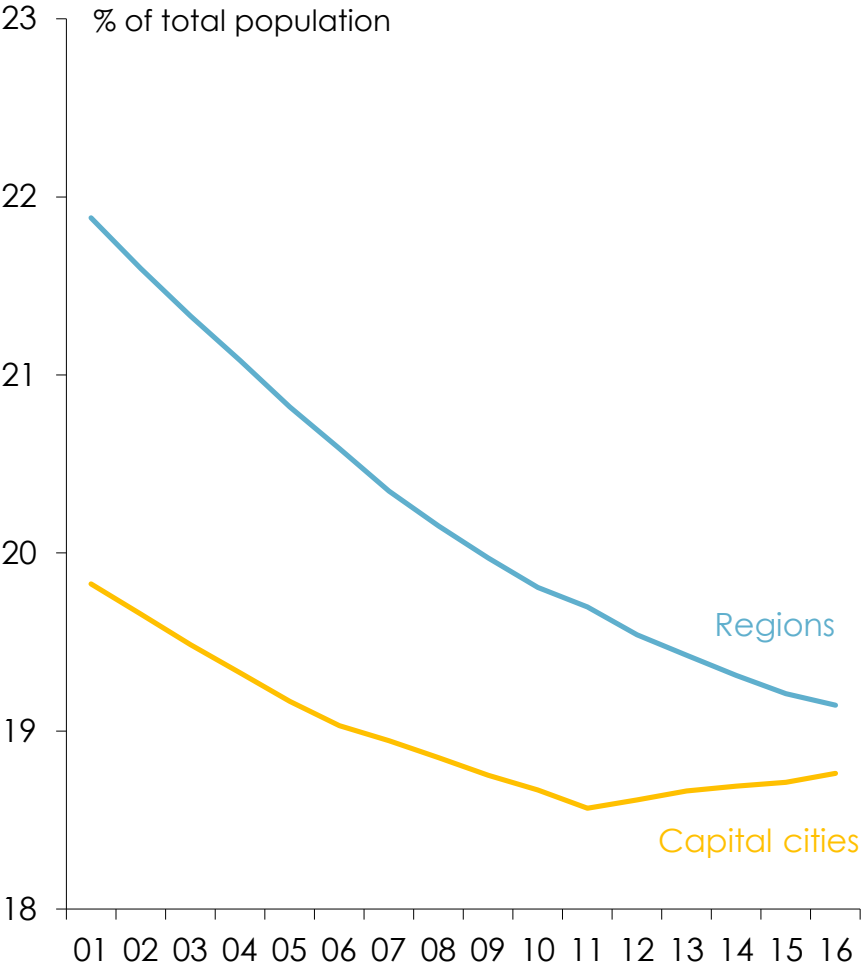


Note: In these data, the whole of the Northern Territory is included in 'regions' while the whole of the ACT is included in 'capital cities'.
Source: ABS, *The Labour Force, Detailed* (6291.0.55.001), April 2018.

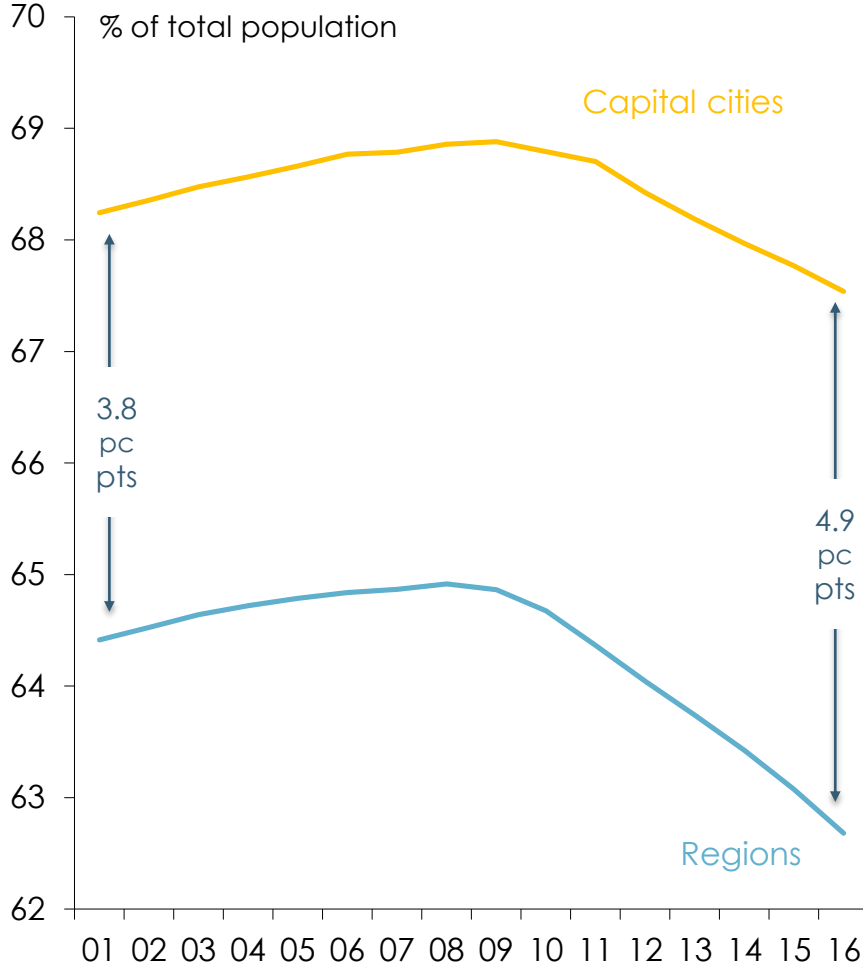
Regional Australia's population is ageing much more rapidly than that of the capital cities – which detracts from employment participation

Capital city and regional populations by age group

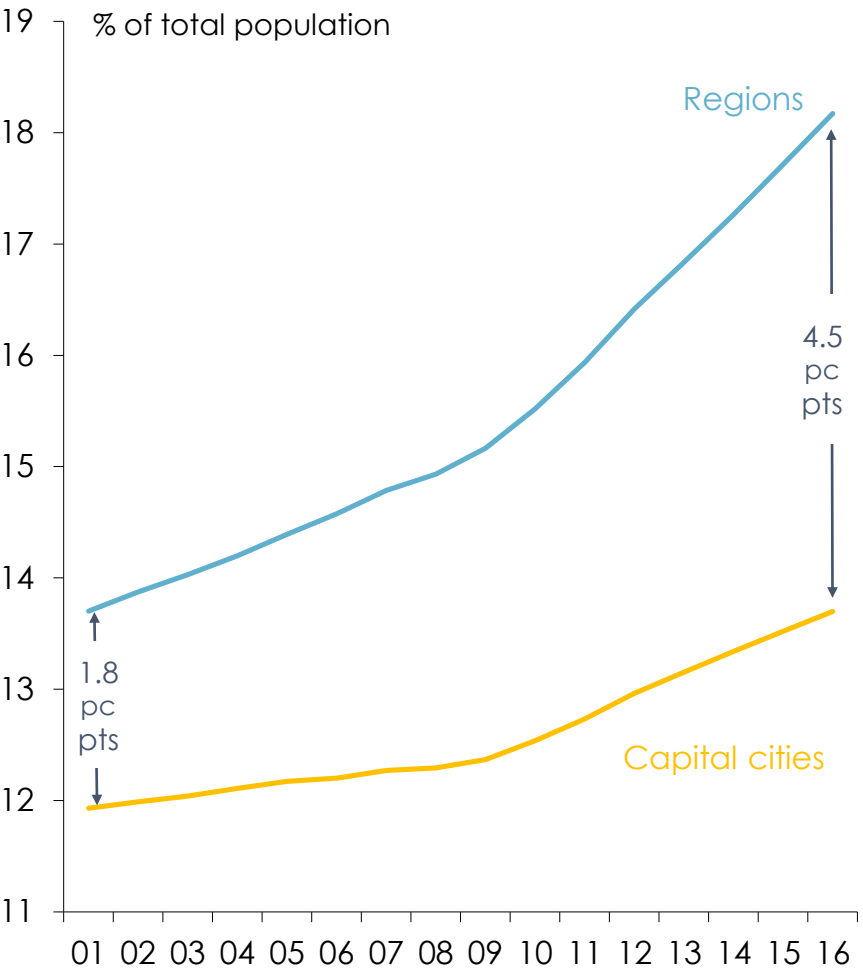
0-14



15-64



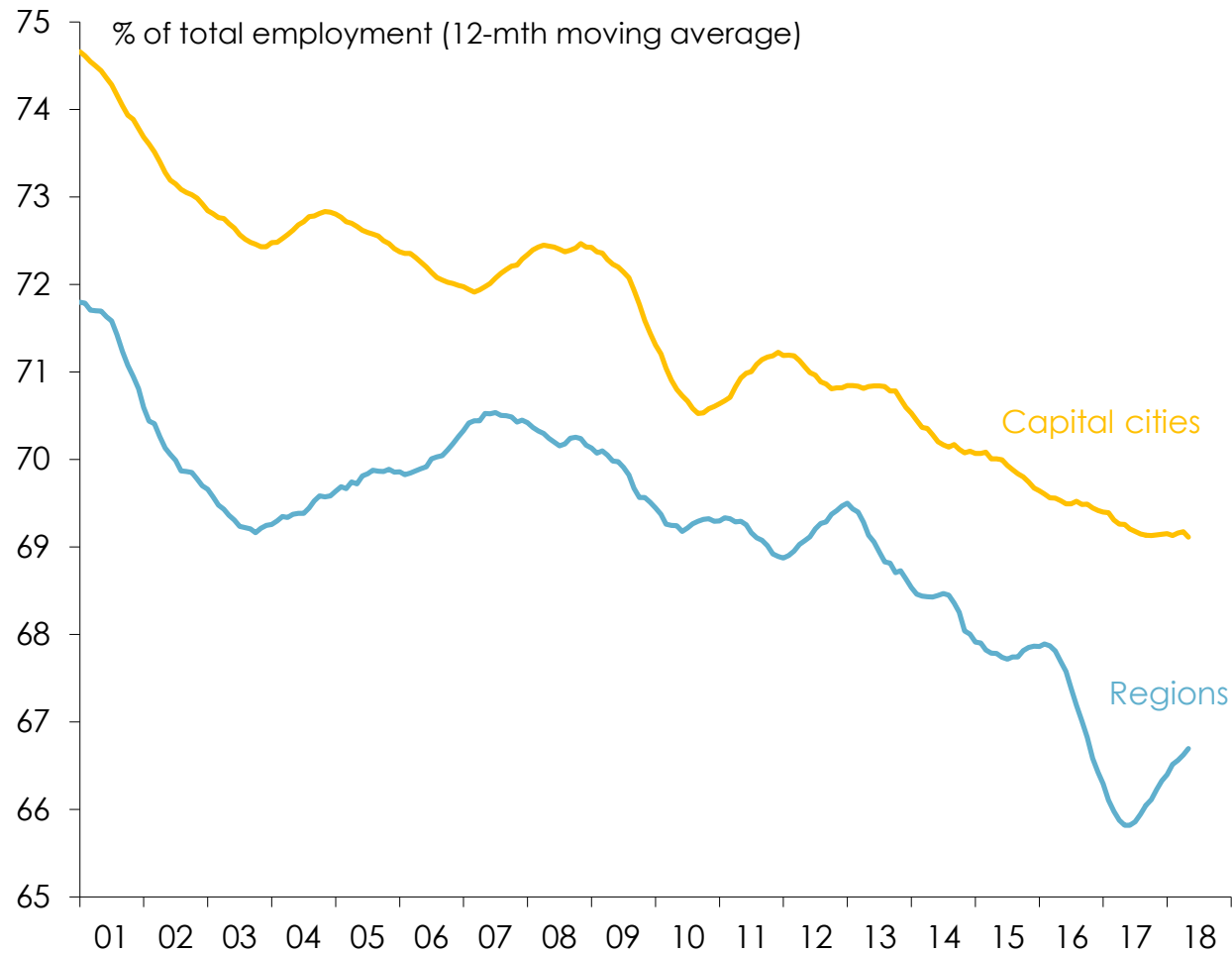
65 and over



Source: ABS, ABS.Stat BETA.

A smaller proportion of regional jobs are full-time – and again the problem is more acute in regional NSW than in other states

Full-time employment as a pc of total, capital cities vs regions



Full-time employment as a pc of total, cities vs regions, by State, 2017

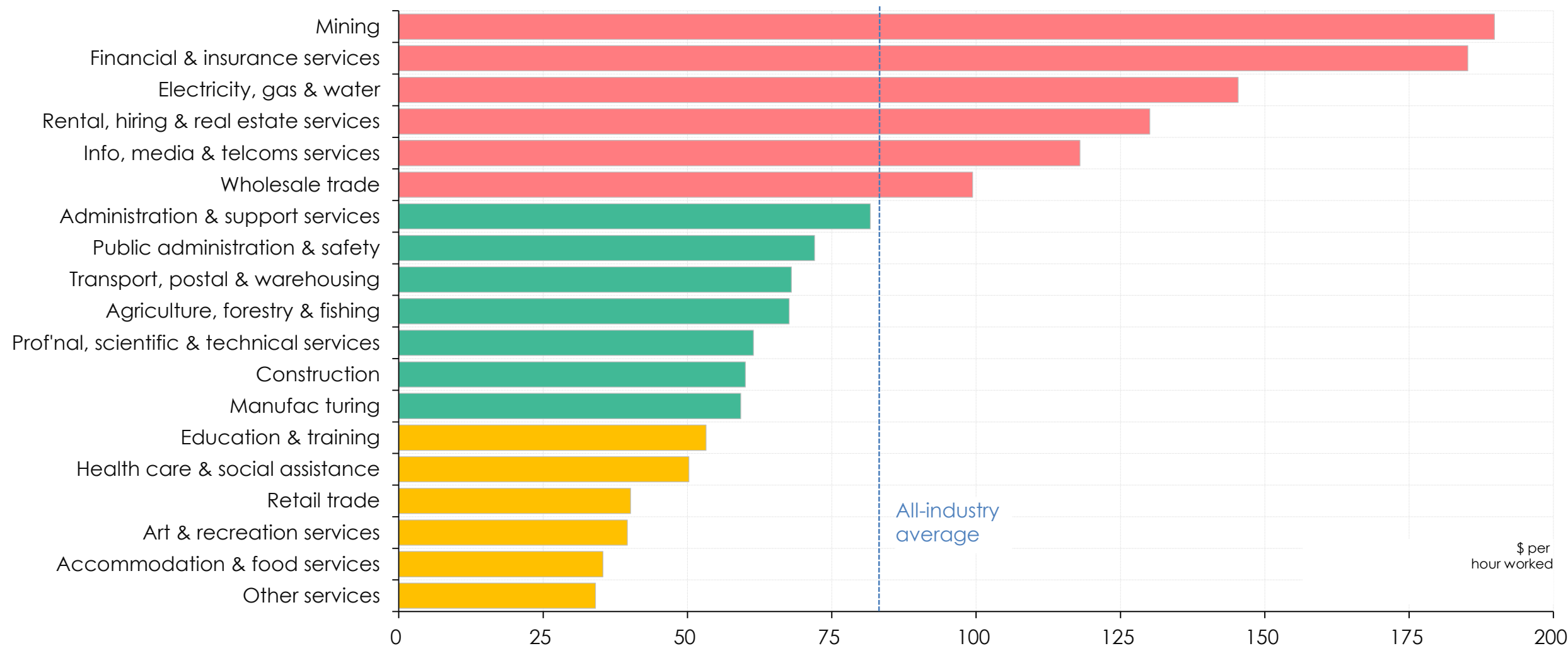


Note: In these data, the whole of the Northern Territory is included in 'regions' while the whole of the ACT is included in 'capital cities'.

Source: ABS, *The Labour Force, Detailed* (6291.0.55.001), April 2018.

Intrinsically high labour-productivity industries, other than mining, are typically 'under-represented' outside the capital cities

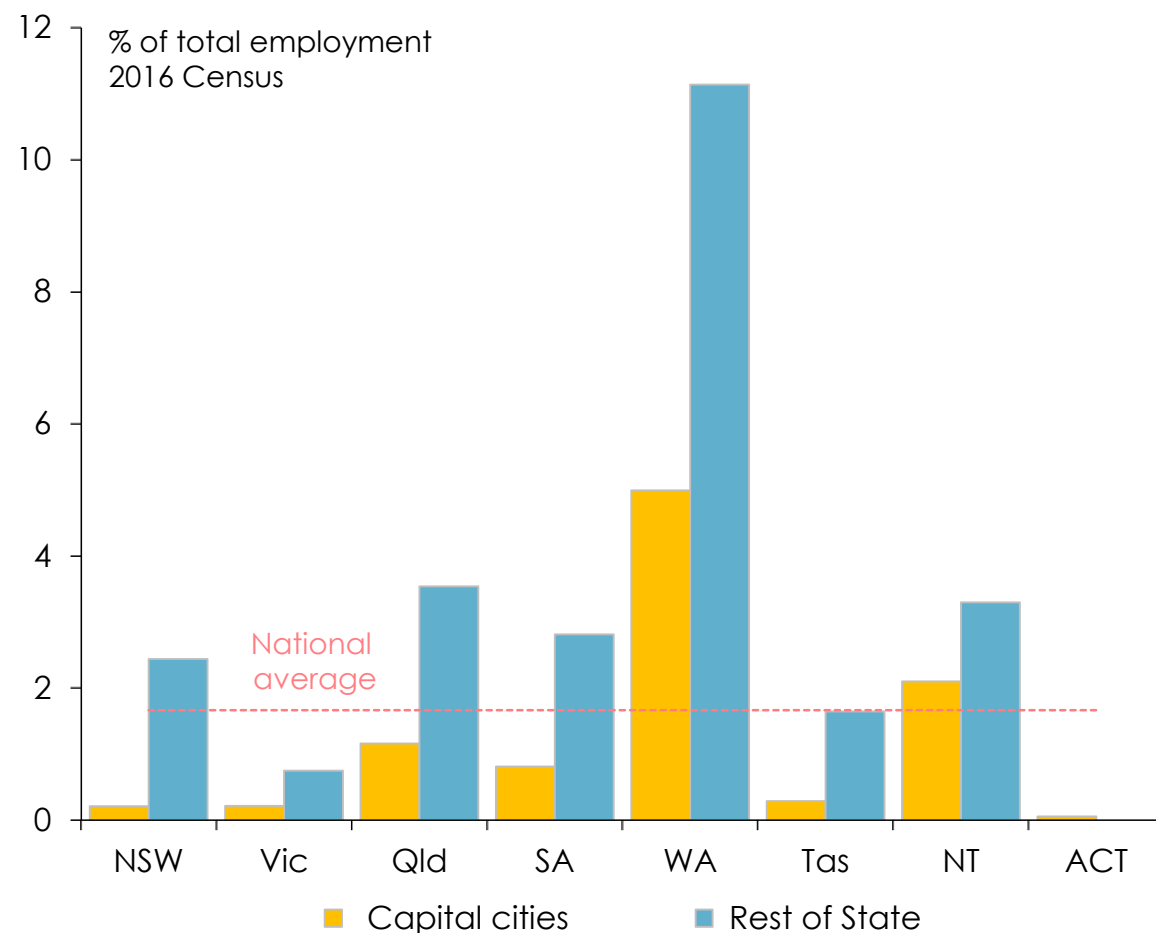
Labour productivity (gross value added per hour worked) by industry, Australia, 2016-17



Note: hours worked by industry calculated by multiplying the average of hours worked for the middle month of each quarter in 2016-17 by 52. Productivity in 'non-market' sectors (public administration & safety, education & training, and health care & social assistance) is notoriously difficult to measure and the estimates for these sectors, in particular, should be interpreted cautiously. Sources: ABS, *State Accounts* (5220.0) and *Labour Force, Australia – Detailed, Quarterly* (6291.0.55.003).

'High labour productivity' industries – other than mining – account for a smaller proportion of total employment in regions than in capital cities

Employment in mining as a pc of total, cities and regions, 2016 Census



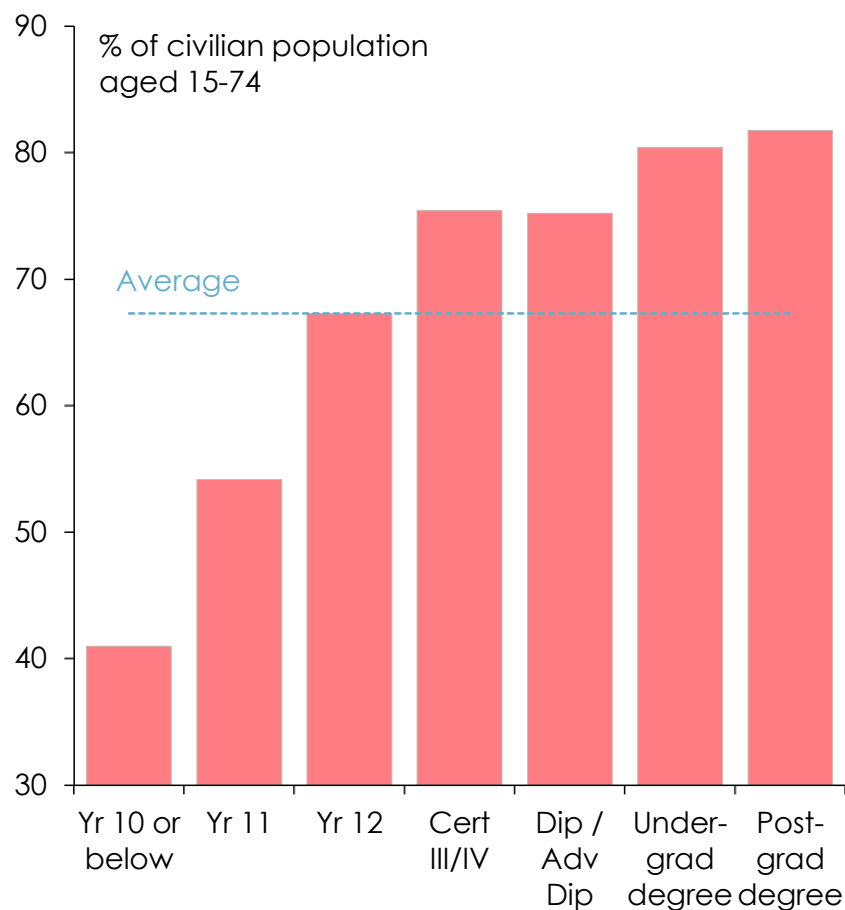
Employment in other 'high productivity' industries, cities and regions, 2016 Census



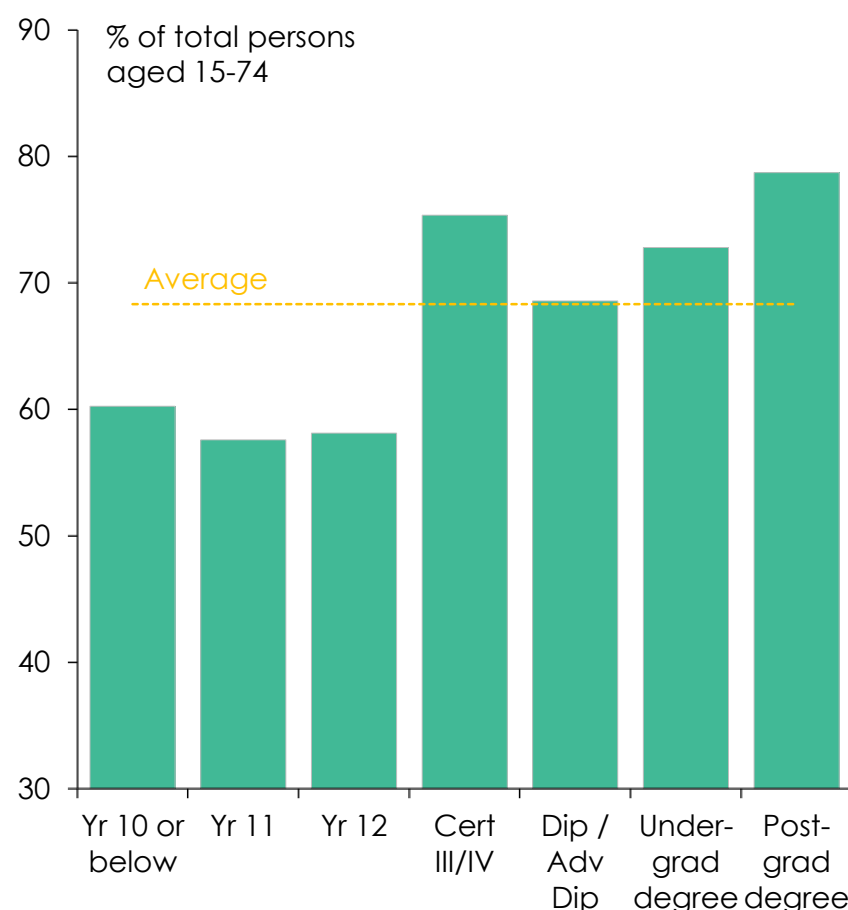
Note: Industries where Australia-wide labour productivity is above the national all-industries average are mining; financial & insurance services; electricity, gas, water and waste disposal services; rental, hiring & real estate services; information, media & telecommunications services; and wholesale trade.
Sources: ABS, *State Accounts* (5220.0) and *Labour Force, Australia – Detailed, Quarterly* (6291.0.55.003).

Levels of educational attainment are a major influence on employment participation, average hours and labour productivity

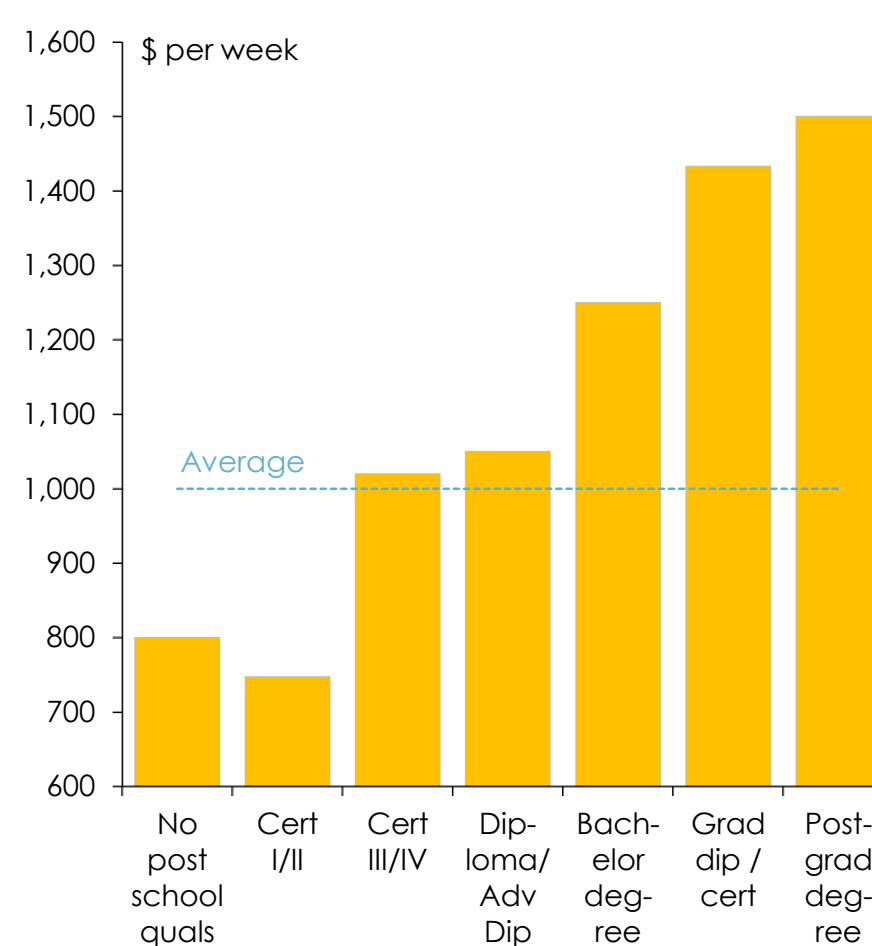
Employment-population rates by educational attainment, May 2017



Full-time employment as a pc of total, by educational attainment, May 2017



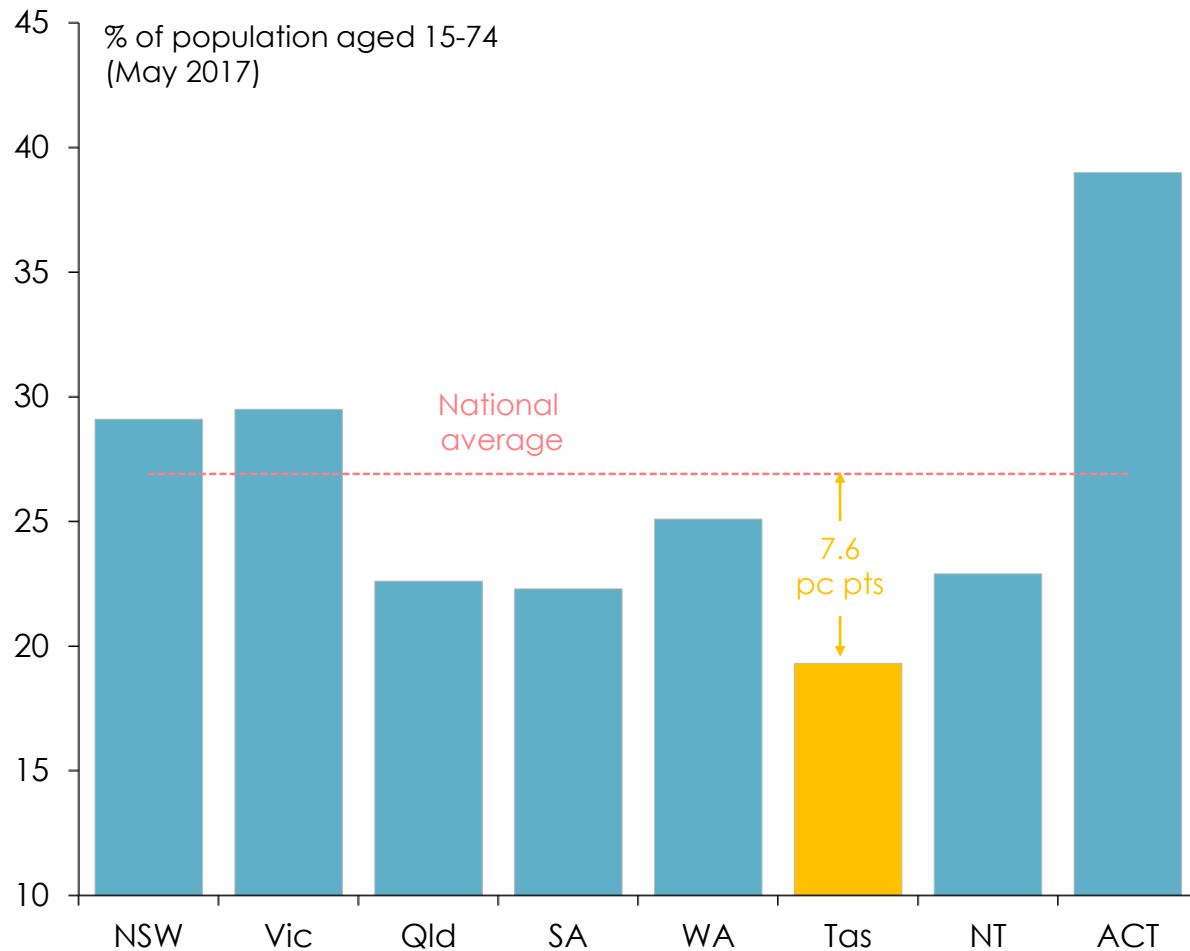
Median weekly earnings by educational attainment, August 2017



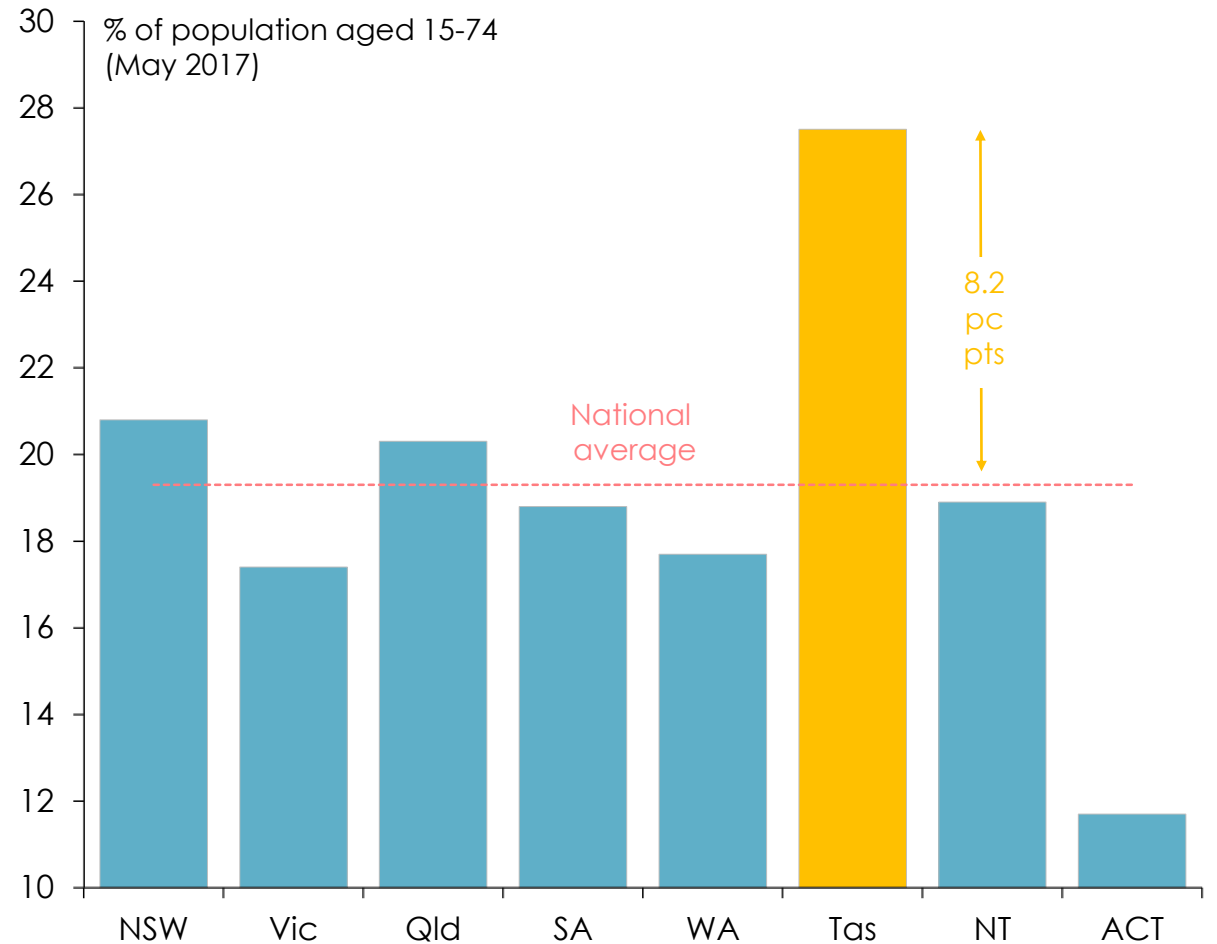
Sources: ABS, Education and Work (6227.0), May 2017; Characteristics of Employment (6333.0), August 2016.

So it's pretty obvious what one of the major reasons for Tasmania's poor performance in all of these areas is

Population aged 15-74 with a bachelor's degree or higher



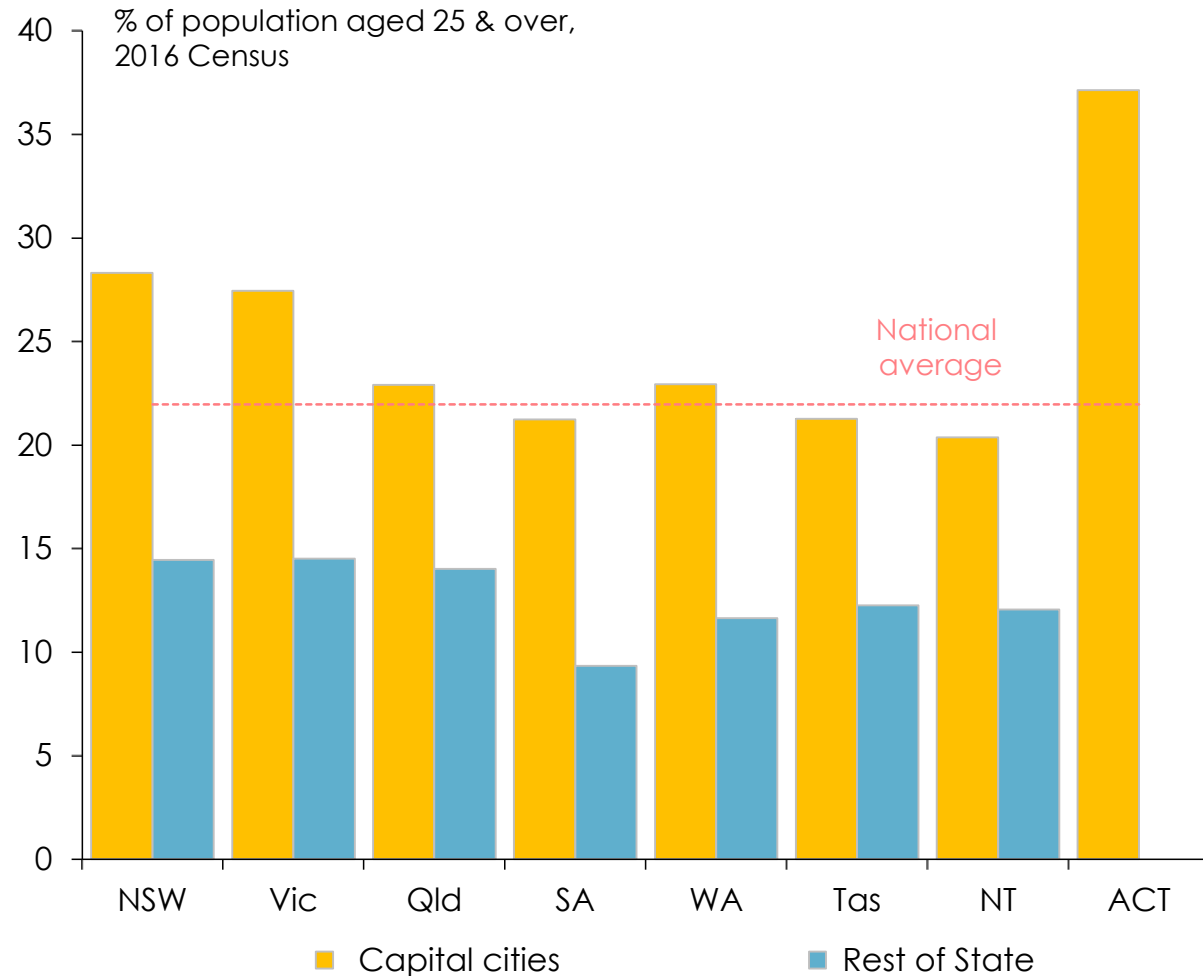
Population aged 15-74 with no qualification beyond Year 10 of high school



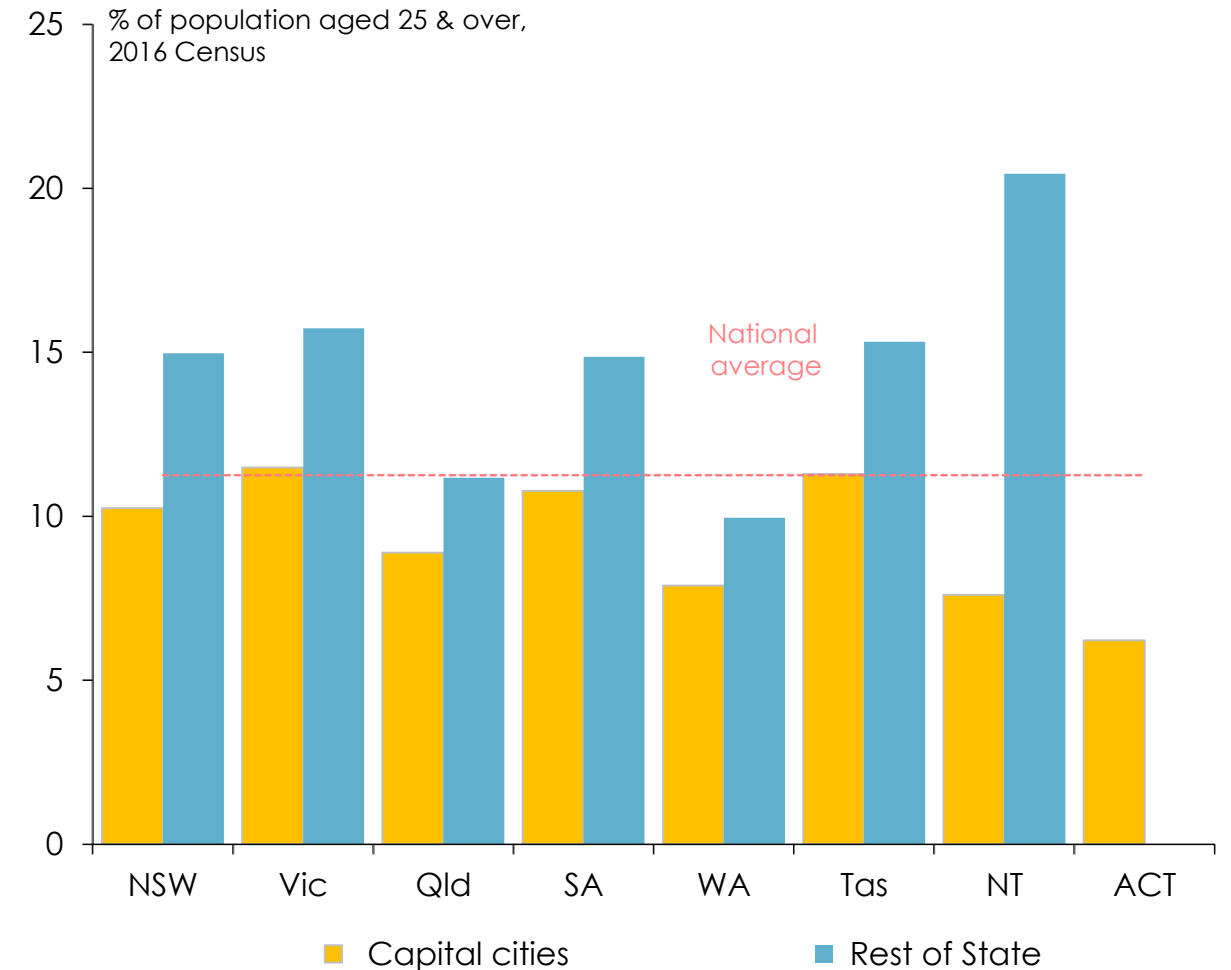
Source: ABS, Education and Work (6227.0), May 2017.

And levels of educational attainment are uniformly lower in regional areas across Australia than in capital cities

Population aged 25 & over with a bachelor's degree or higher



Population aged 25 & over with no qualification beyond Year 10 of high school



Source: ABS, 2016 Census data, General Community Profiles.

Access to infrastructure is another important productivity enabler

Households with internet access, 2016 census



Source: ABS, 2016 Census data, *General Community Profiles*.

Summary

- ❑ **‘Spatial inequality’ (the gap between people living in different parts of Australia) has been a neglected aspect of public discussion about inequality in Australia**
 - Non-metropolitan households’ share of national income and wealth has been declining at a faster rate than can be explained by changes in population shares alone
- ❑ **Differences in regional economic performance can be entirely attributed to**
 - differences in employment participation (partly, but not wholly, explained by differences in age structure)
 - differences in average hours worked (largely, the mix of full- vs part-time employment), and
 - differences in labour productivity (partly, but not wholly, explained by differences in economic structure)
- ❑ **Levels of educational participation and attainment are a major influence on all of these determinants of differences in economic performance**
 - funding cutbacks disproportionately affecting regional universities are distinctly unhelpful from this standpoint
- ❑ **Infrastructure also plays a crucially important role**
 - but that doesn’t justify governments funding infrastructure that doesn’t pass cost-benefit tests
- ❑ **Regional authorities need to think carefully about what sort of industries they want to attract or retain**
 - trying to preserve low-productivity activities won’t make regions richer
- ❑ **Advocates for greater attention to regional disadvantage might find it useful to make their case in terms of ‘spatial inequality’**