

# 3. Economic fluctuations





### Economic Periods in Australia

- Over the course of the last 30 years Australia experienced several economic periods in which the economy has grown and contracted. These include:
  - the productivity boom (from 1993 to 2001), noting there was an economic downturn in 2001;
  - the resources boom (from 2002 to 2007) (economic growth);
  - the global financial crisis and recovery (spanning 2008 to 2011);
  - the period of low growth from 2012 (termed the 'dog days').
- Our subsequent analysis confirms that the rates of economic shocks and recoveries vary substantially between these periods.

Studying negative earnings shocks is important as households may face financial hardship if they lose a large share of their earnings and hence income. The consequences of earnings shocks should be expected to vary with the business cycle. In expansion periods, there are more employment opportunities and employers are more willing to offer pay rises. In recessions, there are fewer job opportunities, wages may fall and people may experience long periods of unemployment. Using US data, Guvenen et al. (2014) find a strong countercyclical relationship between business cycles and earnings shocks: periods of economic growth decrease the probability of a shock and periods of economic decline increase the probability. A second crucial point is that the consequences of recessions are unequal. Guvenen et al. (2014) show that during the Great Recession in the US, the fall in earnings for those at the bottom of the earnings distribution was 18 percent worse than experienced by those at the top.

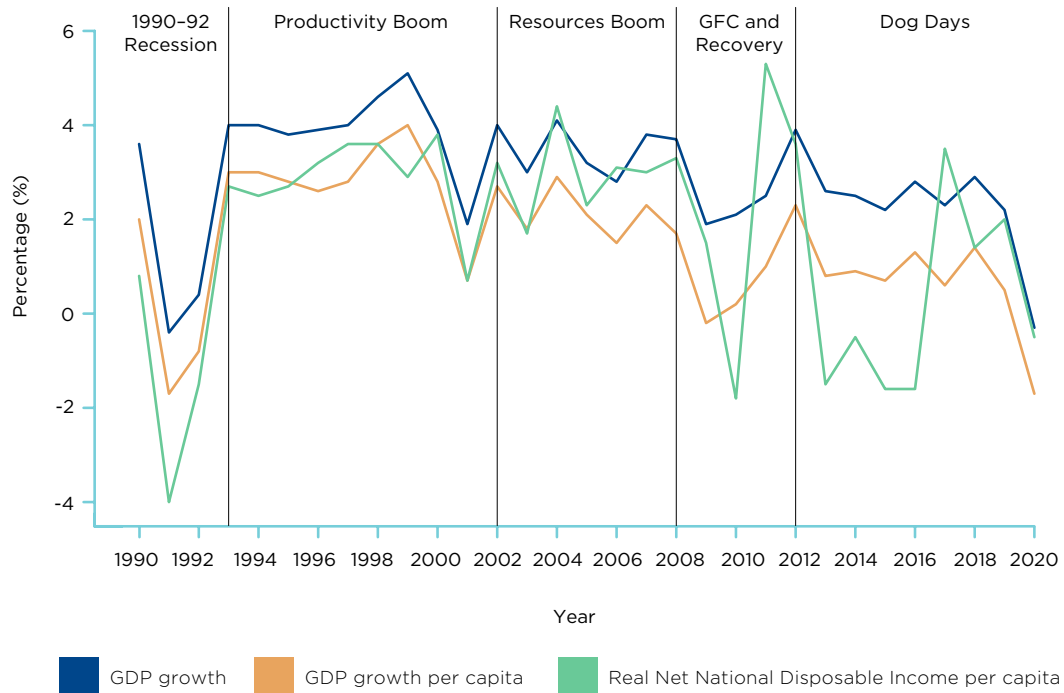
Hoynes et al. (2012) find that the Great Recession in the US had greater negative impacts on males, ethnic minorities, young people and less educated workers. In a more recent study of the consequences of the COVID-19 pandemic, Adams-Prassl et al. (2020) use survey data for the US, UK and Germany to show that females and less educated workers were the most adversely affected and that employees with fixed-term contracts were more likely to lose their job.

In light of the 2020 pandemic recession in Australia, should we expect there to be unequal patterns in the effects of the recession on lower income workers? Over the last several decades, does the variability in earnings during periods of booms, busts and other periods of slow or rapid economic growth mirror what is observed in other countries?

In this chapter we provide a brief overview of the Australian economic cycle over the last 30 years to assist in an understanding of how macroeconomic cycles may affect the likelihood and the duration of the effects of a negative earnings shock as explored in future chapters. We explore further the role of macroeconomic cycles as outlined in Ananyev et al. 2023.

Using Garnaut's (2021) characterisation of macroeconomic periods, we classify the years from 1990 to 2020 into five periods:

- the early 90s recession (spanning 1990 to 1992);
- the productivity boom (spanning 1993 to 2001), noting there was an economic downturn in 2001;
- the resources boom (spanning 2002 to 2007);
- the global financial crisis and recovery (spanning 2008 to 2011);
- and what has been termed the 'dog days' or low growth period (2012 onwards, up to the pandemic).

**Figure 3.1. GDP growth, GDP growth per capita, Real Net Disposable Income per capita, 1990–2022**

Notes: Data are taken from the Australian National Accounts (ABS series 5206).

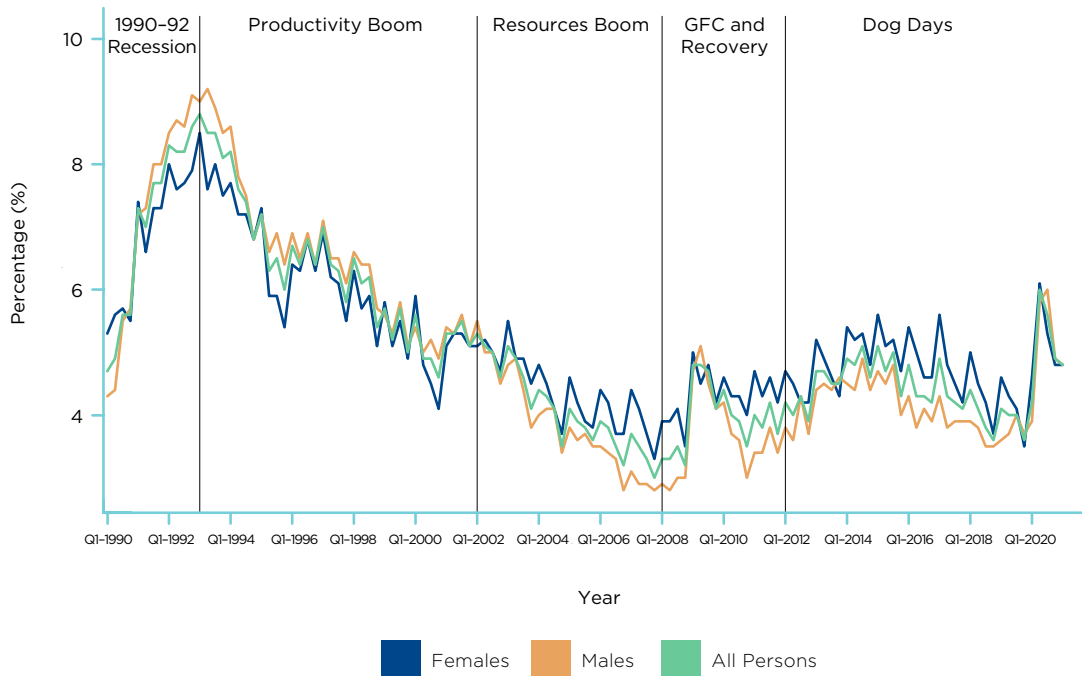
### Definitions of GDP, GDP growth, GDP per capita, Real Net Disposable Income and the unemployment rate

Gross Domestic Product (GDP) is a measure of the market value of the goods and services produced in a country in a given period. The GDP annual growth rate (see Figure 3.1) is defined as the percentage change of the chain volume measure of GDP. Applying the chain volume measure to GDP we account for prices changes across the years.

Gross Domestic Product (GDP) per capita is calculated by dividing GDP by the number of residents in Australia. Compared to GDP, GDP per capita adjusts for changes in the resident population. This is relevant for Australia, which has experienced a growth in population in the last 30 years.

The Real Net Disposable Income adjusts GDP for changes in export and import prices (terms of trade effect), depreciation of assets (consumption of fixed capital) and incomes payable to and receivable from the rest of the world.

The unemployment rate is the proportion of the labour force who is unemployed. The labour force is composed of employed and unemployed and excludes non-employed people not actively seeking employment. The unemployment rate of the Australian population aged 25 to 54 (see Figure 3.2) is calculated by dividing the number of unemployed aged 25 to 54 by the labour force aged 25 to 54.

**Figure 3.2. Unemployment rate, 1990–2020—Australian population aged 25 to 54**

Notes: Data are taken from the ABS Labour Force (ABS series 6202). Q1 corresponds to the unemployment rate in March, Q2 in June, Q3 in September, Q4 in December.

In Figures 3.1 and 3.2, we depict standard macroeconomic indicators for the period under study. Figure 3.1 presents Gross Domestic Product (GDP) growth per capita, GDP growth and Real Net National Disposable Income per capita. Figure 3.2 depicts unemployment rates, overall and by gender, for individuals aged 25 to 54. At the beginning of the 1990s the Australian economy was hit by a recession. In 1991 GDP fell by 0.4 percent and GDP per capita decreased by 1.7 percent. The unemployment rate among people aged 25 to 54 grew from 4.7 percent in 1990 to 7.7 percent in 1991, peaking at 8.8 percent in the first quarter of 1993.

Notably, at the peak of the early 1990s recession, the unemployment rate for females (8.5 percent) was lower than the rate for males (9.3 percent). After that recession, Australia experienced a strong increase in productivity that led to seven years of sustained growth—the productivity boom period.

From 1993 to 2000, GDP and GDP per capita grew on average respectively by 4.2 percent and 3.1 percent per year and the unemployment rate decreased year by year to reach 4.6 percent in the last quarter of 2000. The productivity boom ended in 2001 when GDP growth slowed to 1.9 percent and the unemployment rate bounced back to 5.5 percent.

After 2001, Australia experienced a second period of expansion from 2002 to 2011 and included the period of the global financial crisis ('GFC', 2008–2009). This period is named the 'resources boom' as the growth in the economy was largely sustained by the demand for Australian resources from China, which drove prices of materials such as iron ore, coal and metallic minerals to record levels. Between 2001 and 2008, the unemployment rate fell from over 5 percent to less than 4 percent. Australia only experienced a modest change in macroeconomic indicators during the GFC, largely attributable to the demand for resources by China. GDP grew by 1.9 percent, GDP per capita fell by 0.2 percent and the unemployment rate rose to 6 percent.

The resources boom continued until 2012 when the 'Dog Days' period started. 'Dog Days' covers the period from 2013 to 2020, in which GDP growth was mainly driven by population growth and productivity growth was low. As we see in Figure 3.1, although GDP continued to increase at a pace faster than 2 percent, GDP per capita grew on average by only 0.9 percent and the unemployment rate of Australians aged 25 to 54 remained stable between 4 percent and 5 percent. Effectively the 'Dog Days' period ended with the onset of the pandemic. By the end of 2020, Australia's unemployment rate had increased and GDP growth fell.