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The extent and causes of the wage growth slowdown in Australia

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Executive summary

- A range of measures show a significant slowing in wage growth in Australia over the past five years. The Wage Price Index (WPI) grew at an annual average of 2.2 per cent in the five years to December 2018, which compares with average annual growth of 3.3 per cent in the previous five years to December 2013.
- Average annual growth in *real* wages in the five years to November 2018 was significantly less than the average recorded in the previous five years to November 2013¹—0.5 per cent per annum compared with 1.8 per cent per annum.
- Growth in wages for women has been stronger than wage growth for men over the five years to November 2018—increasing by an annual average of 2.8 per cent compared with an annual average of 2.1 per cent for men.² In the five years to November 2013 wages for women grew by an annual average of 4.3 per cent which compared with growth of 4.5 per cent for men.
- WPI data shows industries such as *Education and training* and *Health care and social assistance* (both characterised by relatively high concentrations of female employees) experienced strong annual average wage growth in the five years to December 2018 (up 2.7 per cent and 2.6 per cent respectively). However, wage growth slowed substantially in male-dominated industries such as *Mining* and *Construction*—with average annual growth of 1.6 per cent and 1.9 per cent respectively in the five years to December 2018—compared with the all-industries average growth rate of 2.2 per cent.
- The Average Annualised Wage Increase (AAWI) for current federal enterprise agreements in all industries fell progressively from 3.5 per cent in December 2013 to 2.7 per cent in December 2018.
- The major causes of the slowdown in wage growth cited by both the Reserve Bank of Australia (RBA) and Treasury include the presence of excess capacity in the labour market (demonstrated

¹ As measured by Australian Bureau of Statistics (ABS) average weekly ordinary time earnings for adult employees working full-time (adjusted for inflation).

² Average weekly ordinary time earnings for adult employees working full-time not adjusted for inflation.

by stubbornly high rates of underemployment); a steady decline in inflation and inflationary expectations; and a decline in the terms of trade since the end of the mining boom.

- There is less agreement among Australian economists about the impact that slowing labour productivity growth is having on wage growth. Some organisations, such as the RBA, claim it has had a significant impact in Australia—as does the Organisation for Economic Co-operation and Development (OECD) for its member countries since the global financial crisis.

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Summary indicator table

Indicator	Average annual growth (per cent) ³	
	2008–13	2013–18
Wage Price Index (WPI) ⁴ —Private sector	3.3	2.1
WPI—Public sector	3.5	2.5
WPI—Total economy	3.3	2.2
Average Weekly Ordinary Time Earnings (AWOTE) ⁵ for adults working full-time—Men	4.5	2.1
AWOTE for adults working full-time—Women	4.3	2.8
AWOTE for adults working full-time—Total	4.4	2.2
Consumer Price Index (CPI) ⁶	2.6	1.7
AWOTE for adults working full-time—Total—in real terms (December 2018 dollars)	1.8	0.5
Average Annualised Wage Increase (AAWI) ⁷ for current federal enterprise agreements—Private Sector	3.8	3.2
AAWI for current federal enterprise agreements—Public Sector	3.9	3.1
AAWI for current federal enterprise agreements—Total	3.8	3.2
National Minimum Wage ⁸	2.7	2.9
Labour productivity (in the market sector) ⁹	2.5	1.0

Notes:

All the data presented in the table, apart from average annualised wage increase (AAWI), is sourced from the latest issues of the following Australian Bureau of Statistics (ABS) publications: [Wage Price Index](#), cat. no. 6345.0; [Average Weekly Earnings](#), cat. no. 6302.0; [Consumer Price Index](#), cat. no. 6401.0; [Australian National Accounts: Income, Expenditure and Product](#), cat. no. 5206.0.

AAWI data is sourced from the [Trends in Enterprise Bargaining: September quarter 2018](#) report published by the Department of Jobs and Small Business, Canberra, 20 December 2018.

All calculations have been made using a compound annual growth rate formula to calculate average annual growth from the start of the series to the end, except for the AAWI figures.

³ Apart from AAWI.

⁴ WPI growth estimates refer to changes between December at the start and end of each period.

⁵ AWOTE growth estimates refer to changes between November at the start and end of each period.

⁶ CPI growth estimates refer to changes between December at the start and end of each period.

⁷ The AAWI figure for current agreements for 2008–13 and 2013–18 is not based on a compound annual growth rate formula. It reflects the average wage increase for all agreements that were current at each quarter during these periods.

⁸ Fair Work Commission, [Annual Wage Reviews](#). National Minimum Wage that was effective from 1 July at the start and end of each period.

⁹ Labour productivity growth in the market sector between December at the start and end of each period in trend terms.

Introduction

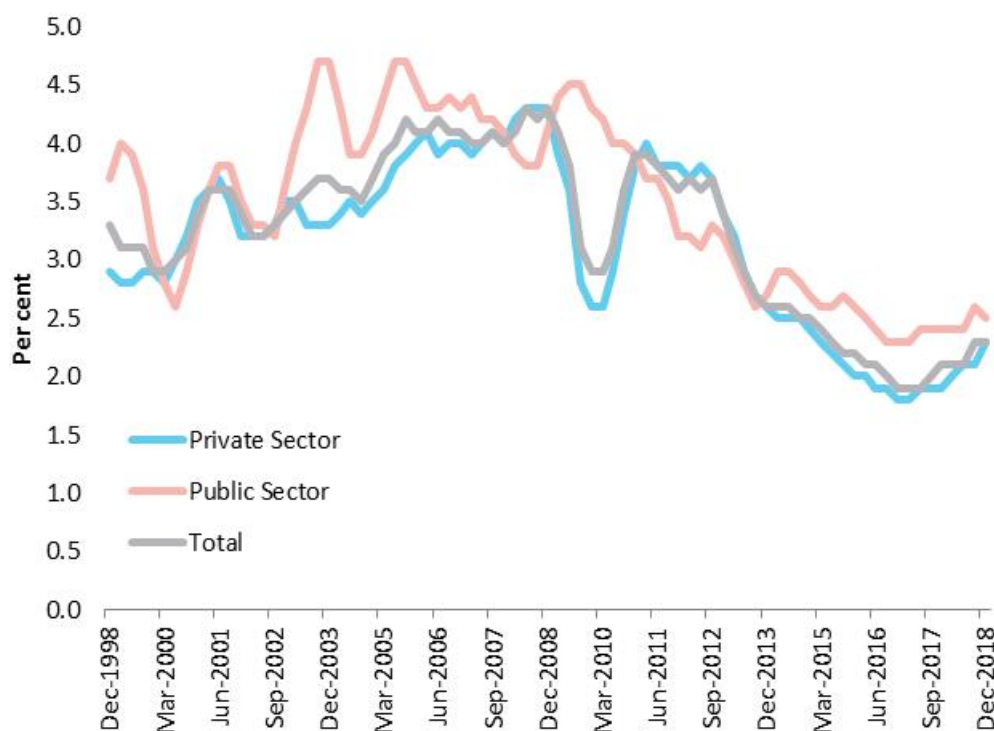
This paper pulls together the various sources of data available for wage growth in Australia and examines the reasons offered for slowing in wage growth provided by a range of organisations.

What are the data telling us about wage growth?

Declining annual growth in nominal wages

There has been a marked slowing in the rate of wage growth since March 2011—in both the public and private sectors. Wage growth as measured by the Australian Bureau of Statistics (ABS) *Wage Price Index* (WPI) was sitting at 2.3 per cent per annum in trend terms in December 2018 (see Figure 1), and has averaged growth of 2.2 per cent per annum in the five years to December 2018. This contrasts with average annual wage growth of 3.3 per cent for the previous five years to December 2013 using this measure.¹⁰

Figure 1: wages growth in the private and public sectors, 1998–2018



Source: Australian Bureau of Statistics (ABS), [Wage Price Index](#), cat. no. 6345.0, ABS, Canberra, 2018, Table 1 (trend data); total hourly rates of pay excluding bonuses.

The same data source shows the slowing in wage growth has been more pronounced in the private sector, with average annual growth of 2.1 per cent in the five years to December 2018, compared with an annual average of 3.3 per cent in the previous five years to December 2013.

By comparison, in the five years to December 2018, wages in the public sector grew by an annual average of 2.5 per cent, compared with an annual average of 3.5 per cent in the previous five years to December 2013.

¹⁰ ABS, [Wage Price Index](#), cat. no. 6345.0, ABS, Canberra, 2018, Table 1 (trend data).

Slowing in annual growth in real wages compared with previous periods

While nominal wage growth in the past five years has been sluggish, inflation as measured by the ABS *Consumer Price Index* (CPI) has also been growing at a relatively modest pace. The CPI grew at an annual average of 1.7 per cent in the five years to December 2018, which compares with an average annual inflation rate of 2.6 per cent in the previous five years to December 2013.

One of the indicators of the strength of the labour market, and the economy more generally, is growth in real wages. ABS *Average Weekly Earnings* (AWE) data shows real wages (as measured by average weekly ordinary time earnings of adult employees working full-time adjusted by the CPI) increased by 2.6 per cent (or an annual average of around 0.5 per cent) in the five years to November 2018. This compares with real wage growth of 9.4 per cent (or an annual average of around 1.8 per cent) in the previous five years to November 2013.¹¹ By this measure, we could conclude the economy has underperformed more recently compared with other periods of sustained economic growth when growth in real wages was much stronger.

Data from the Household Income and Labour Dynamics in Australia (HILDA) survey shows median equivalised household incomes have changed little in real terms (in December 2016 dollars) between 2009 and 2016—increasing slightly from \$79,160 to \$79,244.^{12,13} Relatively sluggish wage growth would have contributed to this outcome.

Treasury used HILDA survey data to determine that subdued wage growth between 2010 and 2015 occurred across the household income distribution when compared with 2005 to 2010. Only households in the top 10 per cent and bottom 10 per cent of the distribution experienced wage growth that was comparable with the earlier period. Wage growth for the remaining 80 per cent of the household income distribution was considerably lower between 2010 and 2015 when compared with the earlier period.¹⁴

Wage growth, inflation and the cash rate have all moved in the same downward direction

One of the core functions of the Reserve Bank of Australia (RBA) is to ‘keep inflation within the bandwidth of two to three percent on average, over the business cycle, and set interest rates in response to potential movements beyond this range’.¹⁵

The target cash rate set by the RBA has been sitting at 1.50 per cent between September 2016 and March 2019, which is the lowest rate recorded since rates were first set in the early 1990s, and well below the historic long run average of around 4.90 per cent.¹⁶ Inflation has also ranged between 1.3 per cent and 2.1 per cent in the four years to December 2018 which is close to, or below, the bottom of the RBA bandwidth target.¹⁷

¹¹ ABS, [Average Weekly Earnings](#), cat. no. 6302.0, ABS, Canberra, 2018, Table 3 (original data) (as measured by average weekly earnings for adults working full-time adjusted for inflation (in December 2018 dollars), Parliamentary Library calculations).

¹² Equivalised household income is calculated by adjusting for differences in numbers of adults and children living in households.

¹³ R Wilkins and I Lass, [The Household, Income and Labour Dynamics in Australia Survey: selected findings from Waves 1 to 16](#), (13th annual statistical report of the HILDA Survey), Melbourne Institute: Applied Economic & Social Research, University of Melbourne, 2018.

¹⁴ Treasury, [Analysis of wage growth](#), Treasury, Canberra, November 2017, p. 45.

¹⁵ Reserve Bank of Australia (RBA), [‘Charter and Core Functions’](#).

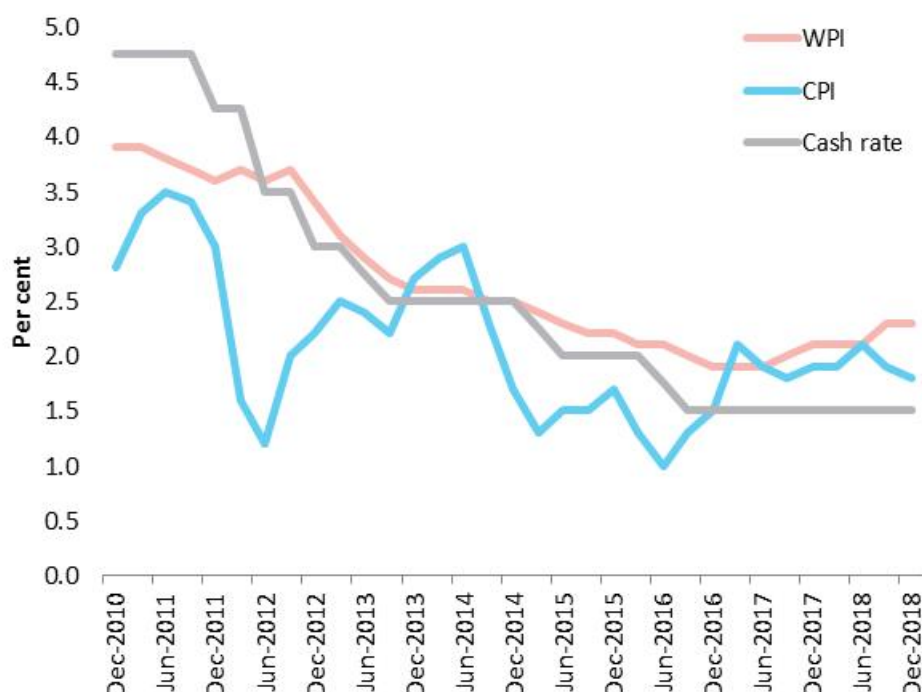
¹⁶ Reserve Bank of Australia (RBA), [Interest rates and yields](#) (monthly), RBA statistical tables, published 1 February 2019, Table F1.1 The historic long run average of 4.90 per cent is a calculation by the Parliamentary Library based upon data made available in the RBA source material. It is equivalent to the average monthly target cash rate for the period from August 1990 to January 2019.

¹⁷ ABS, [Consumer Price Index](#), cat. no. 6401.0, ABS, Canberra, 2019.

While relatively low wages growth has contributed to subdued growth in household incomes, it has also contributed to a prolonged period of much lower interest rates. This could be seen as beneficial to borrowers—particularly those with a housing mortgage—but perhaps less advantageous to those relying on interest accruing from savings deposits and investments (including retirees).

Given the strength of these relationships, it should be noted that a sustained and significant pick up in wage growth and inflation could be the trigger for the RBA to raise interest rates, which may dampen potential growth in household consumption expenditure for those households that have a mortgage. Figure 2 shows wages and the target cash rate have both been tracking in a similar downward direction since 2011.

Figure 2: movements in wages, inflation and the target cash rate, 2010–18



Sources: ABS, [Wage Price Index](#), cat. no. 6345.0 (trend data); ABS, [Consumer Price Index](#), cat. no. 6401.0, ABS, Canberra, 2019; Reserve Bank of Australia (RBA), [Interest rates and yields](#) (monthly), RBA statistical tables, published 1 February 2019, Table F1.1.

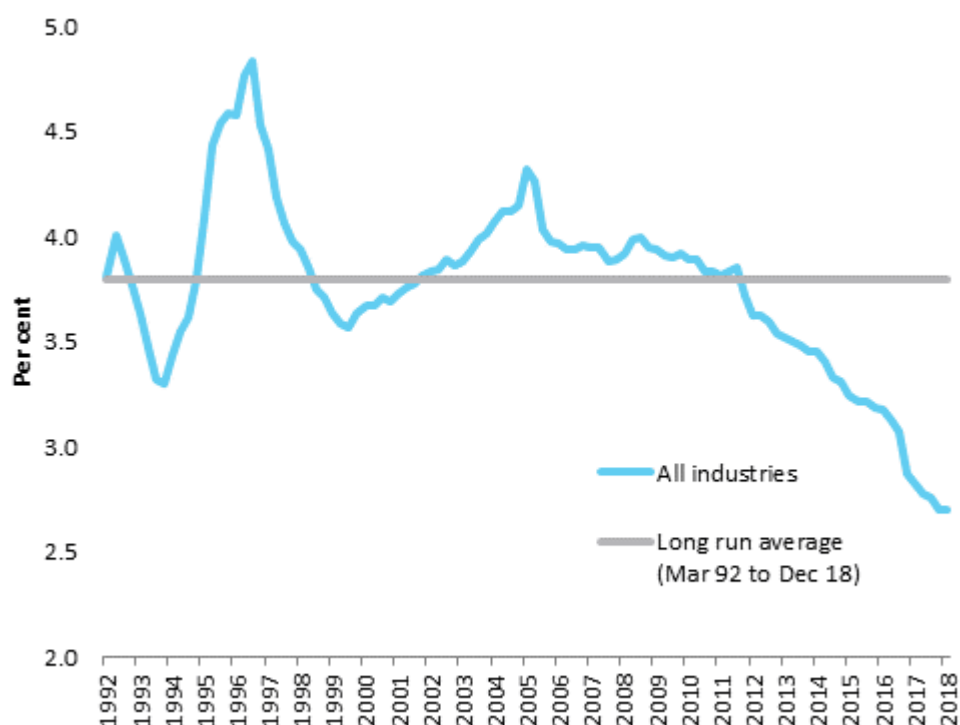
Wage growth outcomes from enterprise bargaining have been falling

The Department of Jobs and Small Business tracks changes in the number of enterprise agreements that are current, or have been lodged in the past quarter, in the federal workplace relations system. The data is sourced from the department's Workplace Agreements Database (WAD).¹⁸

The WAD shows the Average Annualised Wage Increase (AAWI) for current federal enterprise agreements in all industries has gradually fallen from the most recent peak of 4.3 per cent in March 2006 to 2.7 per cent in December 2018. The long-term average for this series (from March 1992 to December 2018) is 3.8 per cent (see Figure 3).

¹⁸ The Workplace Agreements Database (WAD) has information about every federal collective agreement made since the commencement of formal enterprise bargaining in federal workplace relations in 1991. The department reports on the number of employees covered by these agreements, and the average annual wage increase achieved in agreements by industry, for current agreements or those that have been lodged in the quarter.

Figure 3: average annualised wage increase for current federal enterprise agreements, March 1992—December 2018



Source: Department of Jobs and Small Business, [Trends in Federal Enterprise Bargaining](#), December quarter 2018 report, Canberra, 2 April 2019.

Wages for women have been growing at a faster pace than wages for men in most industries

While overall wage growth is subdued, nominal wages for women have grown at a faster pace than wages for men in recent years. In the five years to November 2018, average weekly ordinary time earnings for adult women working full-time grew by an annual average of 2.8 per cent, compared with average annual growth of 2.1 per cent for men.¹⁹ In the five years to November 2013 wages for women grew by an annual average of 4.3 per cent which compared with growth of 4.5 per cent for men.

Eleven of eighteen industries show stronger average annual wage growth for women in the five years to May 2018 and another two show the same rates of wage growth (see Table 1).

¹⁹ Not adjusted for inflation.

Table 1: average annual growth in average weekly earnings for adults working full-time, November 2013 to November 2018²⁰

Industry	Men (%)	Women (%)	Total (%)	Female share of total employment ²¹ (%)
Mining	0.9	2.1	1.1	15.9
Manufacturing	2.0	3.3	2.1	27.6
Electricity, gas, water and waste services	2.3	2.9	2.4	26.6
Construction	0.5	2.4	0.8	11.9
Wholesale trade	2.7	1.3	2.3	32.8
Retail trade	2.1	3.8	2.8	56.6
Accommodation and food services	2.1	2.1	2.1	53.5
Transport, postal and warehousing	3.2	2.4	3.0	21.5
Information media and telecommunications	3.3	3.4	3.4	40.4
Financial and insurance services	2.6	4.1	3.3	49.0
Rental, hiring and real estate services	1.8	2.4	2.5	46.2
Professional, scientific and technical services	1.1	2.6	1.7	43.4
Administrative and support services	3.9	2.2	3.1	54.5
Public administration and safety	1.7	2.2	1.9	50.6
Education and training	2.8	2.8	2.8	71.8
Health care and social assistance	1.3	2.9	2.0	78.2
Arts and recreation services	4.2	2.4	3.1	49.4
Other services	3.2	3.0	3.2	45.1
All industries	2.1	2.8	2.2	47.0

Sources: ABS, [Average Weekly Earnings](#), cat. no. 6302.0, original data; ABS, [Labour Force, Australia, Detailed, Quarterly](#), cat. no. 6291.0.55.003, ABS, Canberra, 2018, Table 06. Data is not available for Agriculture, forestry and fishing due to a high proportion of agricultural enterprises having no employees.

The WPI is the preferred measure of changes in wages by industry as it measures changes in the price of wages and salaries over time unaffected by changes in the quality or quantity of work performed.

²⁰ Parliamentary Library calculations using a compound annual growth rate formula.

²¹ As at November 2018 according to [ABS, Labour Force, Australia, Detailed, Quarterly](#), cat. no. 6291.0.55.003, Datacube EQ06.

Table 2: average annual growth in the Wage Price Index (WPI) by industry, December 2013 to December 2018²²

Industry	Average annual increase in WPI (%)	Average annual increase in employment ²³ (%)
Mining	1.6	-0.9
Manufacturing	2.3	0.8
Electricity, gas, water and waste services	2.4	0.2
Construction	1.9	3.2
Wholesale trade	2.0	-0.9
Retail trade	2.0	0.6
Accommodation and food services	2.3	3.1
Transport, postal and warehousing	2.2	2.1
Information media and telecommunications	2.0	3.1
Financial and insurance services	2.4	1.5
Rental, hiring and real estate services	1.8	2.0
Professional, scientific and technical services	1.8	3.6
Administrative and support services	1.7	1.0
Public administration and safety	2.3	2.2
Education and training	2.7	3.0
Health care and social assistance	2.6	4.0
Arts and recreation services	2.6	3.3
Other services	2.2	0.5
All industries	2.2	2.1

Source: ABS, [Wage Price Index](#), Table 5a; ABS, [Labour Force, Australia, Detailed, Quarterly](#), cat. no. 6291.0.55.003, Table 04 (trend data).
Note: Data are not available for Agriculture, forestry and fishing.

The WPI data series shows average annual growth in wages in the five years to December 2018 was more subdued in male-dominated industries such as Mining and Construction (at 1.6 per cent and 1.9 per cent respectively) (see Table 2).²⁴ Female dominated service industries such as Education and training (2.7 per cent) and Health care and social assistance (2.6 per cent)

²² Estimates are the average annual increase in total hourly rates of pay (excluding bonuses) for private and public enterprises in each industry. Parliamentary Library calculations using a compound annual growth rate formula.

²³ Average annual growth (or decline) in employment in each industry in the five years to November 2018 (source: ABS, Labour Force, Australia, Detailed, Quarterly, cat. no. 6291.0.55.003, Table 06, trend data). Data is released in February, May, August and November.

²⁴ Men accounted for 84 per cent of all employment in Mining in November 2018 and 88 per cent of all employment in Construction (see table 1).

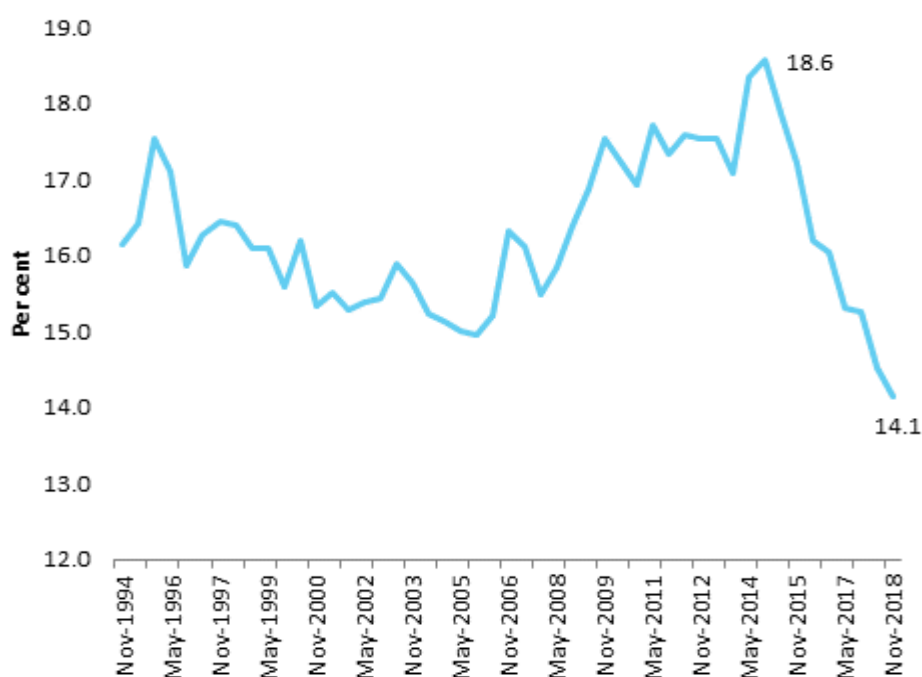
experienced growth in wages that was well in excess of the industry average (2.2 per cent) in this period.²⁵

Some of these wage growth outcomes can be partially explained by the strength of demand for employment in particular industries. For example, employment in Health care and social assistance and Education and training grew strongly by an annual average of 4.0 per cent and 3.0 per cent respectively in the five years to December 2018, which compares to the industry average of 2.1 per cent per annum.

Employment in Mining fell by an annual average of 0.9 per cent which may have contributed to subdued wage outcomes in the industry. Construction and Professional, scientific and technical services appear to be anomalies, with employment growing strongly by an annual average of 3.2 per cent and 3.6 per cent respectively in the five years to December 2018, but wage growth outcomes in the two industries were comparatively weak.

Stronger growth in wages for women more recently has contributed to a narrowing of the gender pay gap (using this measure) from 18.6 per cent in November 2014 to 14.1 per cent in November 2018 (see Figure 4).²⁶

Figure 4: gender wage gap, November 1994—November 2018



Source: ABS, [Average Weekly Earnings](#), cat. no. 6302.0, Tables 10A and 10D, original data.

This measure enables wage comparisons between male and female full-time employees but it is limited as it excludes the wage outcomes of employees working part-time. Further, average hours worked by men working full-time tend to be slightly longer than hours worked by women working full-time, which may be contributing to their relatively higher average weekly earnings.²⁷

²⁵ Women accounted for 78 per cent of total employment in Health care and social assistance in November 2018 and 72 per cent of total employment in Education and training (see table 1).

²⁶ The gender wage gap is the difference between female average weekly earnings for adult employees working full-time to male average weekly earnings for adult employees working full-time expressed as a percentage of male average weekly earnings for adult employees working full-time (Source: ABS, [Average Weekly Earnings](#), cat. no. 6302.0).

²⁷ Men employed full-time worked an average of 44.1 hours per week in December 2018 which compared with an average of 40.9 hours for women employed full-time. Source: ABS, [Labour Force, Australia, detailed quarterly](#), cat. no. 6291.0.55.001, datacube

The gender pay gap was 13.6 per cent in May 2018 based on average hourly total cash earnings for all non-managerial employees paid at the adult rate.²⁸ This compares with a gap of 12.4 per cent using this measure in May 2016. The advantage of this hourly measure is it includes all adult employees working on a full-time and part-time basis, and it adjusts for the number of hours worked.

What are the major causes of the wage growth slowdown in Australia?

In 2015, the Reserve Bank of Australia (RBA) provided some insights as to why the rate of wage growth in Australia has slowed in recent years, including:

- the presence of excess capacity in the labour market
- a sharp fall in the terms of trade as a result of the winding back of the mining investment boom, and
- a decline in inflationary expectations.²⁹

While shifts in the terms of trade were having an impact on wage movements when the RBA made these observations, perhaps the more important and persistent factors over the subsequent three years were the continued presence of slack (or excess capacity) in the labour market and continuing subdued inflationary expectations.

Excess capacity in the labour market

More than three years after the RBA paper was released, there is still evidence of excess capacity in the labour market. While the trend unemployment rate³⁰ has fallen steadily from 6.3 per cent in December 2014 to 5.0 per cent in February 2019, the underemployment rate³¹ has remained at stubbornly high levels—falling only slightly from 8.5 per cent to 8.1 per cent in the same period.

In aggregate, the labour force underutilisation rate³² has fallen from 14.8 per cent in November 2014 to 13.1 per cent in February 2019, and is still well above the most recent low of 10.0 per cent recorded in June 2008 (see Figure 5).³³

EM1a (accessed 21 February, 2019). This difference in hours worked may contribute to higher average weekly earnings for men working full-time.

²⁸ ABS, [Employee Earnings and Hours](#), cat. no. 6306.0, Data Cube 4. For more information on how the gender pay gap is measured see 'P Vandenbroek, [Gender wage gap statistics: a quick guide](#), Research paper series 2017–18, Parliamentary Library, Canberra, 6 December 2017.

²⁹ D Jacobs and D Rush, 'Why is wage growth so low?', *RBA Bulletin*, June quarter, 2015.

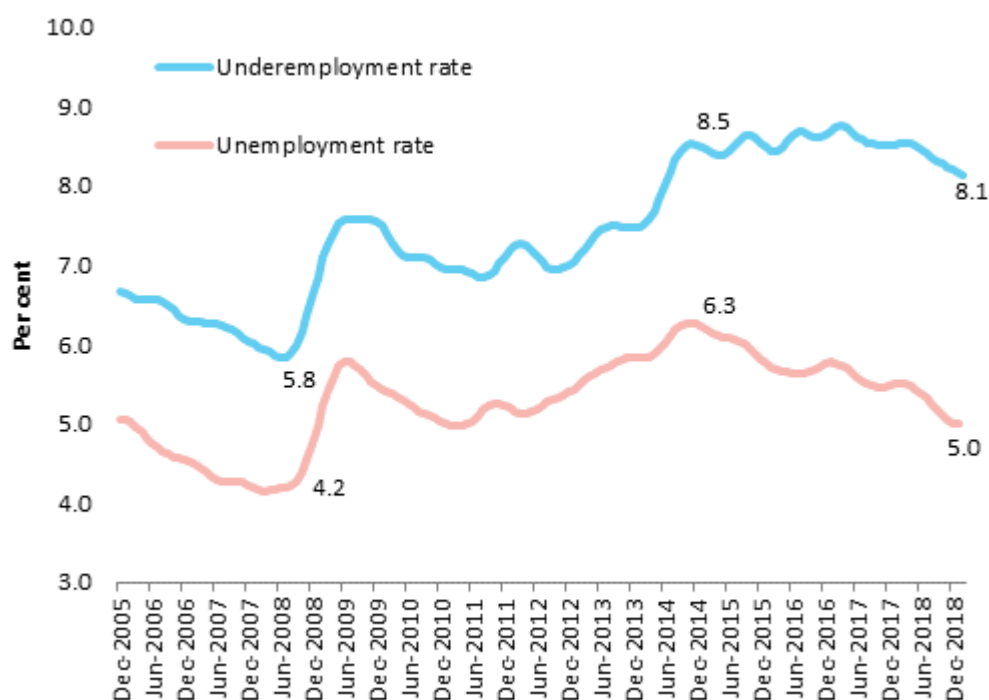
³⁰ The unemployment rate is the share of the labour force that is unemployed.

³¹ The underemployment rate is the share of the labour force that is underemployed. This group consists of employed people currently working part-time or full-time who would prefer more hours of work and are available to work longer hours.

³² Underutilisation is the combination of those who were unemployed and those who were underemployed as a proportion of the labour force.

³³ ABS, [Labour Force](#), cat. no. 6202.0, ABS, Canberra, 2019, Table 22 (trend data).

Figure 5: trends in unemployment and underemployment rates, 2005–19



Source: ABS, [Labour Force](#), cat. no. 6202.0, ABS, Canberra, 2019, Table 23.

These results suggest there is still a relatively large number of people who are looking for a job or more hours of work, which may be contributing to subdued wages growth. ABS Labour Force survey data shows there were around 673,000 unemployed Australians in February 2019, and 1,093,000 workers who would prefer more hours of work. By comparison, if we look back to the period when annual wage growth was well over 4 per cent in the middle of 2008, there were around 469,000 unemployed Australians and just over 655,000 workers who were categorised as underemployed.³⁴

The unemployment and underemployment rates are headcount measure of those seeking a job or more hours of work. The ABS also has a time series of volume measures of labour underutilisation which relate to the potential increase in hours worked in the economy if preferences for hours of work are realised. This data source shows the number of hours sought by *unemployed* persons has dropped from a four quarter average of 21.8 million in the 12 months to February 2016 to a four quarter average of 19.8 million in the 12 months to February 2019—a fall of 2.0 million or 9.1 per cent.

In contrast the additional hours sought by *underemployed* people has increased from a four quarter average of 14.7 million in the 12 months to February 2016 to a four quarter average of 14.9 million in the 12 months to February 2019, which constitutes an increase of 239,000 or 1.6 per cent. This data reveals that underemployed people accounted for around 43 per cent of all hours sought by underutilised people in the four quarters to February 2019 which compared with 40 per cent in the four quarters to February 2016.³⁵

³⁴ ABS, [Labour Force](#), cat. no. 6202.0, Table 22 (trend data).

³⁵ ABS, [Labour Force, Australia, Detailed, Quarterly](#), cat. no. 6291.0.55.003, Table 23a. The total volume measure underutilisation rate is the total volume of underutilised labour in the labour force (hours preferred by those in unemployment, plus additional hours preferred by those in underemployment), as a percentage of the volume of potential labour in the labour force. Four quarter averages have been used for comparisons due to the volatility of original estimates from quarter to quarter.

These measures provide evidence of some tightening in the labour market in terms of falling unemployment and hours sought by those who are unemployed, but persistent underemployment among those workers who have a job but are seeking more hours of work.

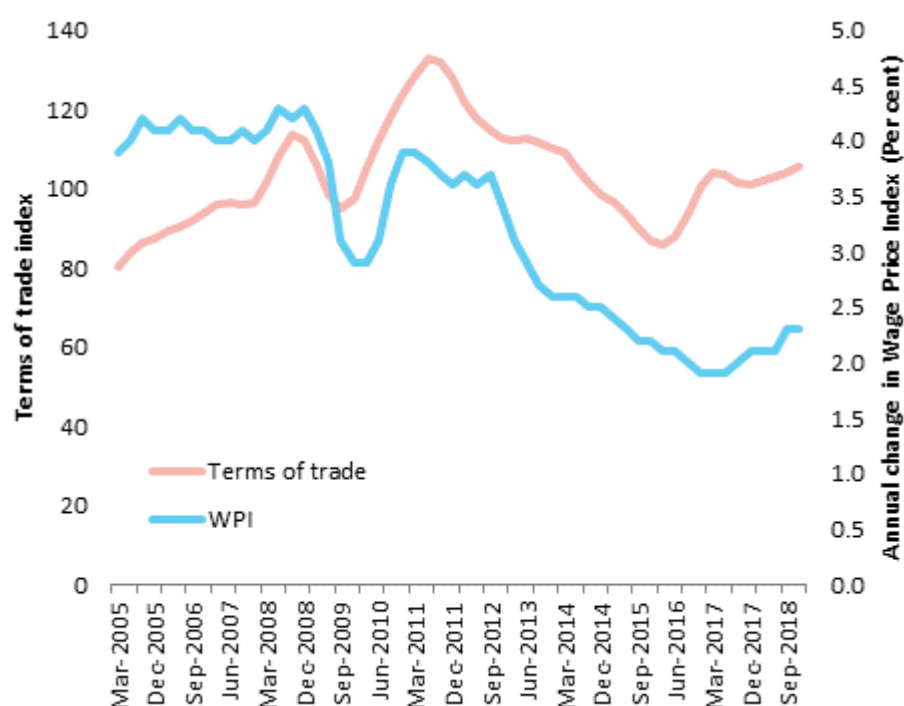
Researchers at the International Monetary Fund (IMF) have pointed to involuntary part-time employment as a key driver of low wage growth across a number of countries, along with slower rates of productivity growth.³⁶

Decline in the terms of trade

Firms in Australia were more likely to offer higher wages during the period when the terms of trade were becoming more favourable (between early 2008 and mid-2011).³⁷ The terms of trade increased in response to higher prices for export commodities and lower prices for imports due to an appreciating exchange rate. The higher terms of trade at this time contributed to higher output prices for firms—particularly mining companies and the firms that serviced them—which facilitated an increase in nominal wages at the same time as profits were increasing.³⁸

Since the mining boom has subsided, the terms of trade returned to lower levels—falling by 35.4 per cent between the most recent peak, achieved in June 2011, and March 2016. But the terms of trade has recovered since, increasing by 22.6 per cent between March 2016 and December 2018. Despite the increase in the terms of trade more recently there has only been a moderate increase in the rate of wage growth (see Figure 6).³⁹

Figure 6: changes in the terms of trade and WPI, 2005–18



Source: ABS, [Australian National Accounts: National Income, Expenditure and Product](#), cat. no. 5206.0, ABS, Canberra, 2018, Table 1; ABS, [Wage Price Index](#), cat. no. 6345.0, Table 1.

³⁶ G Hee Hong et al., [More slack than meets the eye? Recent wage dynamics in advanced economies](#), IMF working paper 18/50, March 2018.

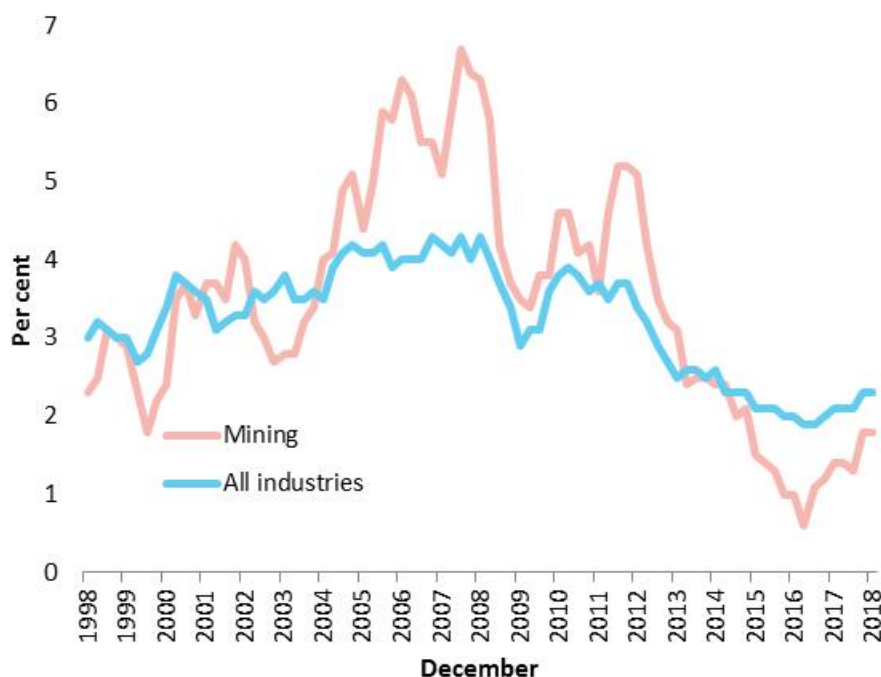
³⁷ The terms of trade represent the relationship between export and import prices. Australia's terms of trade are calculated by dividing the implicit price deflator of exports by the implicit price deflator of imports in the national accounts.

³⁸ Jacobs and Rush, [‘Why is wage growth so low?’](#), op. cit., p. 12.

³⁹ ABS, [Australian National Accounts: National Income, Expenditure and Product](#), cat. no. 5206.0, ABS, Canberra, 2018, Table 1.

Wage growth in the mining industry peaked at 6.7 per cent in mid-2008.⁴⁰ Despite the presence of skills shortages in Australia, and mining companies offering higher wages to skilled tradespeople, there is little evidence of strong growth in wages in the mining sector between 2005 and 2009 spilling over into the wider economy (see Figure 7).⁴¹

Figure 7: annual growth in WPI for mining compared with all industries, 1998–2018



Source: ABS, [Wage Price Index](#), cat. no. 6345.0, Table 5a.

Declining inflationary expectations

The decline in inflationary expectations reported by the RBA as a reason for subdued wage growth is supported by their own separate measures of union official and market economist expectations for inflation (forecasting 12 months into the future).

Expectations for the inflation rate in 12 months for both union officials and market economists have been consistently below 3.0 per cent since December 2012.

Actual inflation rates recorded were often well below expectations for both union officials and market economists between 2010 and 2016. For example, the annual inflation rate in December 2018 was 1.8 per cent but 12 months earlier trade union officials expected it to be 2.0 per cent in December 2018 while market economists expected it to be 2.2 per cent (see Figure 8).⁴²

Expectations for inflation are taken into account by both unions and employers when considering potential wage increases in the process of negotiating an enterprise agreement, as does the Fair Work Commission in making minimum wage determinations as part of the Annual Wage Review.⁴³

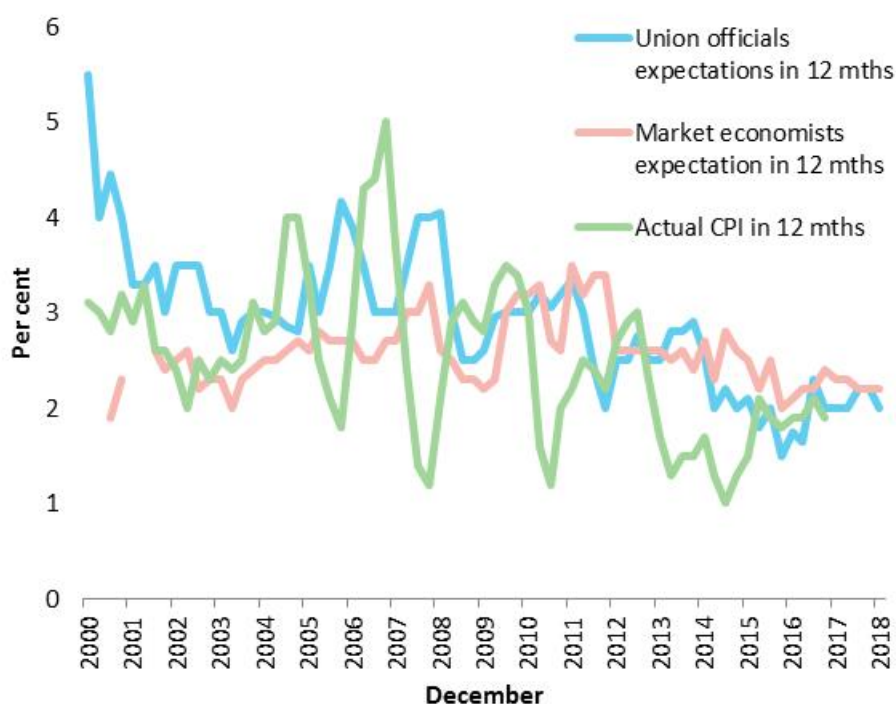
⁴⁰ ABS, [Wage Price Index](#), cat. no. 6345.0, Table 5a.

⁴¹ Department of Jobs and Small Business, [Historical list of skill shortages in Australia](#), Department of Jobs and Small Business dataset, last modified 5 June 2018.

⁴² RBA, [Inflation Expectations](#), RBA statistical tables, published 8 February 2019, Table G3.

⁴³ Fair Work Commission (FWC), [Annual wage reviews](#).

Figure 8: inflationary expectations (12-month forecasts) and actual inflation, 2000–18



Source: RBA, [Inflation Expectations](#), RBA statistical tables, published 8 February 2019, Table G3; ABS, [Consumer Price Index](#), cat. 6401.0.

Other factors that could be impacting upon the wage growth slowdown

Other factors have been proposed as having a moderating impact on wage growth. The strength of these arguments, based on data that are available, is discussed in the following section.

Growth in less secure employment

In its 2017 report, the RBA pointed to some international evidence of greater insecurity among workers having a dampening effect on wage growth:

It has been posited in the international literature that low wage growth may reflect a decline in workers' bargaining power. For example, new arrangements, such as a restructuring of work processes due to technological progress, an increase in contract work, and increased competitive pressure from growing internationalisation of services trade, may be weighing on wage growth. These factors, alongside spare capacity in the labour market, may be making workers feel less secure about their jobs and, in turn, they may be less inclined to push for larger wage increases.⁴⁴

There appears to be little evidence of a significant increase in the number of independent contractors in Australia in recent years. ABS data show the number of independent contractors hovering at around 1 million between August 2015 and August 2018—while their share of total employment fell slightly from 8.5 per cent to 8.0 per cent during the same period.⁴⁵ The same data source shows the number of employees on fixed-term contracts has increased slightly from

⁴⁴ J Bishop and N Cassidy, 'Insights into Low Wage Growth in Australia', [RBA Bulletin, March quarter 2017](#).

⁴⁵ G Gilfillan, [Trends in use of non-standard forms of employment](#), Research paper series 2018–19, Parliamentary Library, Canberra, 10 December 2018.

522,000 in August 2015 to 548,000 in August 2018 but their share of total employees has actually fallen slightly, from 5.4 per cent to 5.2 per cent.⁴⁶

While ABS data does not provide much evidence of strong growth in contract work, it does show a slight increase in the casual employee share of total employment in Australia—up from 23.5 per cent in August 2012 to 24.6 per cent in August 2018. Over this period, the number of casual employees (or employees without leave entitlements) grew by an annual average of 2.7 per cent, compared with annual average growth of 1.8 per cent for permanent employees (or employees with leave entitlements).⁴⁷

The growing prevalence of casual employees in the past six years may have had a slight dampening effect on wages growth in Australia. ABS data shows casual employees are much less likely than permanent employees to be trade union members—5.6 per cent compared with 20.0 per cent.⁴⁸ As a consequence, casual employees are less likely to have a third party bargaining on their behalf in determining their wages and conditions of employment. Casual employees tend to feel less secure about their job than other employees, which may also impact on their capacity, as individuals, to bargain for higher wages.⁴⁹

Low rates of job turnover

More recently the RBA has offered other reasons for sluggish wage growth, including the relatively low rate of voluntary job turnover among workers.

Workers tend to choose to leave their job for a better job—be it in conditions or pay. The fact that little of this is occurring is likely to be contributing to subdued wages growth.⁵⁰

It follows that, with lower rates of turnover, employers have less incentive to offer higher wages to retain their workers. ABS data confirms that the proportion of workers who left their job in the past 12 months has fallen from 11.5 per cent in February 2008 to 8.1 per cent in February 2018.⁵¹

Alternative forms of remuneration

The RBA also cites evidence of employers offering compensation in forms other than wages to reward employees, which may assist in their retention, but do not affect rates of wage growth:

... as the labour market has tightened, businesses are finding ways to retain some of their employees without raising wages for everyone. Many businesses in our liaison program report that they are linking wages growth outcomes to individual performance, which provides employers the flexibility to reward and retain strong performers and valued skill sets while keeping average wages growth contained. The use of bonuses, especially to retain key staff, is also prevalent, which doesn't permanently raise labour costs. Some firms are attempting to retain staff by using non-wage incentives, including flexible work

⁴⁶ ABS, [Characteristics of Employment](#), cat. no. 6330.0, ABS, Canberra, 2018, Table 9.1; estimates derived using Table Builder. Employees on fixed-term contracts are on contracts that specify that their employment will be terminated at a particular date or event.

⁴⁷ Ibid., Table 1b. Parliamentary Library calculations.

⁴⁸ G Gilfillan, [Trends in union membership in Australia](#), Research paper series 2018–19, Parliamentary Library, Canberra, 15 October 2018, p. 3 (Table 1).

⁴⁹ G Gilfillan, [Characteristics and use of casual employees in Australia](#), Research paper series 2017–18, Parliamentary Library, Canberra, 19 January 2018, p. 13 (Table 8).

⁵⁰ G DeBelle (RBA, Deputy Governor), [The state of the labour market](#), transcript of speech to the Citi 10th Annual Australia and New Zealand Investment Conference, Sydney, 17 October 2018, p. 8.

⁵¹ ABS, [Participation, Job Search and Mobility](#), cat. no. 6226.0, ABS, Canberra, 2018, Table 17.1.

arrangements, shares, subsidised gym memberships, development opportunities and additional annual leave.⁵²

Decline in union density and low levels of industrial disputation

Another possible contributor to lower wage growth outcomes is the impact of the decline in bargaining power of workers. Employee bargaining power has been affected by the steady decline in union membership and restrictions on the use of industrial action in the wage negotiation process. Union density (or the union member share of total employment) in Australia has fallen progressively over the longer term from 41.6 per cent in 1988 to 13.6 per cent in August 2018.⁵³

The Australia Institute has argued that a strong relationship exists between low levels of industrial disputation more recently and lower wage outcomes.⁵⁴ However, a closer look at the data shows higher wage outcomes were achieved from the early 2000s to 2007 when levels of industrial disputation were also declining rapidly. A stronger relationship exists between the two series from 2008 onwards (see Figure 9).

Figure 9: annual wage growth and working days lost to industrial disputation, 1998–2018



Source: ABS, [Industrial Disputes](#), cat. no. 6321.0.55.001, Table 2a; ABS, [Wage Price Index](#), Table 1.

This inconsistency suggests that other factors may have contributed more to wage movements at different points of the economic growth cycle.

Part of the reason for the sharp decline in industrial disputation in the past two decades could be the imposition of a prohibition on industrial action during the terms of a current enterprise agreement, and limits on the type of allowable bargaining demands that can be legitimately tied to ‘protected’ industrial action.⁵⁵ Another reason for the decline could be the ‘unprotected’ status of industrial action taken in relation to matters outside a proposed collective agreement (for

⁵² Debelles, G., [The state of the labour market](#), op. cit., p. 9.

⁵³ ABS, [Trade Union Members, Australia](#), cat. no. 6325.0, ABS, Canberra, 1997; ABS, [Characteristics of Employment](#), op. cit., Table 12.3. The estimates includes owner managers of unincorporated enterprises as employees.

⁵⁴ J Stanford, [Historical data on the decline in Australian industrial disputes](#), Australia Institute briefing note, 30 January 2018, pp. 5-7.

⁵⁵ J Stanford, op cit, p. 2.

example, modern award wage rate rises). In effect, this limitation means that only employees covered by a collective agreement (who accounted for around 40 per cent of all employees in May 2018) are allowed to undertake industrial action. And industrial action can only be undertaken for a prescribed period—when a new agreement is being determined.⁵⁶

Protracted collective bargaining processes

Another possible contributory factor to the wages slowdown is the protracted collective bargaining process undertaken for many agreements in both the public and private sectors in recent years.

A number of Commonwealth government departments and agencies were involved in very long bargaining processes between 2013 and 2017. During this period, many agreement offers were rejected by employees that effectively contributed to a wage freeze for many employees after agreements expired until a new agreement took effect.

The protracted bargaining process that occurred in some agencies was driven in part by a requirement by Government that productivity improvements be identified by agencies to support proposed remuneration increases. The subsequent refusal by employees in some agencies to accept changes to their current employment conditions as part of the proposed new agreements contributed to further delays.⁵⁷

Under the current Australian Government Workplace Bargaining Policy framework, remuneration increases can only be negotiated up to an average of 2.0 per cent per annum. One of the key principles is ‘remuneration increases are to be modest and to remain within agencies’ existing budgets, reflecting the need for wages restraint in the current economic circumstances’.⁵⁸

The actions of the Commonwealth and state governments in exercising wage restraint in recent years may have had some impact on wage outcomes in the private sector. Academics Tess Hardy and Andrew Stewart link low wage growth in the public sector to effects in the broader labour market:

Public sector jobs constitute around 15% of total employment, so anything that reduces wage growth in the public sector will automatically have a compositional impact on economy-wide averages. More powerfully, the imposition of wage caps by governments (who are the largest single employers in the whole economy) sends a strong signal to participants in the broader labour market. Companies that sell goods and services to governments will naturally feel pressure to restrain their own wages in line with these new targets. And private employers more generally will feel increasingly empowered to demand similar wage restraint on the part of their own employees. It is no coincidence, therefore, that the imposition of wage restraint by governments has been accompanied by a parallel deceleration of wage growth in the private sector.⁵⁹

Over the past few years a number of very large retail companies including McDonalds, Coles and Woolworths have been involved in protracted enterprise agreement processes. And in a number

⁵⁶ Fair Work Commission, [Common requirements for protected industrial action](#).

⁵⁷ The Senate Education and Employment Reference Committee, [Siege of attrition: the Government’s APS Bargaining Policy](#), November 2016

⁵⁸ Australian Public Service Commission, [Workplace Bargaining Policy 2018](#), pp. 1–3.

⁵⁹ T Hardy and A Stewart, ‘What’s causing the wages slowdown?’ in A Stewart, J Stanford and T Hardy (eds), [The wage crisis in Australia](#), University of Adelaide Press, Adelaide, 2018, pp. 62–63.

of cases companies were found to be underpaying their workers and failed the Better Off Overall Test (BOOT).⁶⁰

The full bench of the Fair Work Commission (FWC) considered an appeal by an employee of Coles against the decision to approve the *Coles Store Team Enterprise Agreement 2014-17* on the grounds that the agreement was disadvantaging some employees financially. The FWC reviewed the evidence and concluded in their decision of 31 May 2016:

Taking into account all of these matters we are not satisfied that the Agreement passes the BOOT. For some employees, particularly those who work primarily at times which attract lower penalty rates under the Agreement when compared to the Award, the loss in monetary terms is potentially significant. The potential loss is likely to be of significance for part-time and casual employees. We have considered whether or not the other benefits of the Agreement when compared to the Award can make up for this deficit. We are not satisfied that a consideration of all benefits and detriments under the Agreement results in each employee and each prospective employee being better off overall under the Agreement compared to the Award. It follows that we are not satisfied that the Agreement passes the BOOT.⁶¹

These types of negative outcomes for workers have also occurred in other agreements. According to Hardy and Stewart:

There has been much critical scrutiny of agreements struck by the shopworkers union, the Shop, Distributive and Allied Employees' Association (SDA), with large retailers and fast food employers. Many of these have cut wages for evening and weekend work below award levels, while granting wage increases to weekday workers. Such deals have had a negative impact on a large number of low-paid employees. The exposure and ultimate rejection by the Fair Work Commission of some such deals have also contributed to the current slowdown in enterprise bargaining, as affected employers work out whether, and how, to make agreements that will now be more carefully examined by the Commission. Some employers, such as Domino's Pizza, have decided to revert to award conditions for their workers.⁶²

The shift in employees covered by collective agreements to award coverage

Another reason posited by Treasury for declining growth in wages between 2012 and 2016 was the steady shift of employees away from coverage by collective agreements to being covered by an award.⁶³

It should be noted that the Department of Jobs and Small Business uses the term enterprise agreements to describe coverage of employees through the federal workplace relations system whereas the ABS uses the term collective agreements to describe employees covered by collective agreements in both the State and Federal workplace relations systems. The Fair Work Commission uses the term enterprise agreement to cover collective agreements provided for by the *Fair Work Act 2009* from 1 July 2009.

ABS data shows the proportion of all non-managerial employees covered by an award steadily increased from 17.8 per cent in May 2012 to 22.4 per cent in May 2016 (when using a consistent comparable methodology), while the proportion of employees covered by a collective agreement fell from 44.9 per cent to 41.0 per cent. This trend continued over the following two years with

⁶⁰ Under the Better Off Overall Test (BOOT), workers covered by agreements should be receiving higher remuneration than they could have received under the relevant award.

⁶¹ [Hart v Coles Supermarkets Australia Pty Ltd and Bi-Lo Pty Limited; Australasian Meat Industry Employees Union, The v Coles Supermarkets Australia Pty Ltd and Bi-Lo Pty Limited \[2016\] FWCFB 2887](#).

⁶² Hardy and Stewart, 'What's causing the wages slowdown?', op. cit., p. 59.

⁶³ Treasury, *Analysis of wage growth*, op. cit., pp. 60–66.

22.5 per cent of non-managerial employees being covered by awards in May 2018 compared with 40.0 per cent coverage by collective agreements. Around 37.5 per cent of all employees were covered by individual agreements in May 2018.⁶⁴

Part of the reason for the decline in collective agreement coverage between 2012 and 2016 was the decision by the ABS to re-categorise some employees from being covered by collective agreements to awards.⁶⁵ A further refinement in the conceptual categorisation was undertaken and incorporated into the estimates provided for 2018. But even allowing for the improvements to ABS coding processes, the switch in the number of employees being covered by collective agreements to awards between 2012 and 2016 is significant.

ABS data shows employees covered by awards tend to be paid less on average than those covered by an enterprise agreement.⁶⁶ However, some of this difference in average hourly rates can be explained by different skill levels of workers and industry coverage of employees by awards or agreements. Industries such as retail and hospitality have higher rates of award coverage and also have large shares of their workforce that are less skilled and are paid less than workers in other industries.

Despite differences in average hourly wage rates for employees covered by awards and agreements it is not possible to attribute direct causality of the slowing in wage growth to the shift to award coverage.

As Treasury explains:

If average wage relativities were constant, an increase in the share of employees on awards would tend to lower wage growth in the period in which it occurred. But there is no reason to assume this will generally be the case. In recent years, increases in award wages have generally been larger than the overall increase in the WPI, so greater reliance on award wages could have supported stronger wage growth. Overall, the relationship between methods of setting pay and wage growth is complex, with causality potentially running in both directions, and no clear overall effect.⁶⁷

While hourly and weekly wage rates tend to be lower for employees covered by awards, it is possible that growth in wages in the past few years may have been stronger for those employees covered by awards than for those covered by collective agreements. The national minimum wage has increased by an average annual 2.9 per cent between 2013 and 2018; whereas the Wage Price Index increased by an average annual 2.2 per cent during the same period.⁶⁸ Increases in the national minimum wage flow through to all employees covered by industry and occupation awards, and the increases in wage rates across awards have been consistent with the percentage increase in the minimum wage since 2011.⁶⁹

Data collected by the Department of Jobs and Small Business shows the number of employees covered by current federal enterprise agreements fell steadily, from just under 2.6 million in June 2012 to 1.9 million in December 2018—a fall of just over 700,000 or 27.3 per cent.⁷⁰ Private sector

⁶⁴ ABS, *Employee Earnings and Hours*, op. cit., A Guide to Understanding Employee Earnings and Hours Statistics, [Appendix 1, Table 1](#).

⁶⁵ Australian Government, [Submission](#) to the FWC Annual Wage Review, 29 March 2017.

⁶⁶ ABS, *Employee Earnings and Hours*, op. cit., Table 7.

⁶⁷ Treasury, *Analysis of wage growth*, op. cit., pp. 65–66.

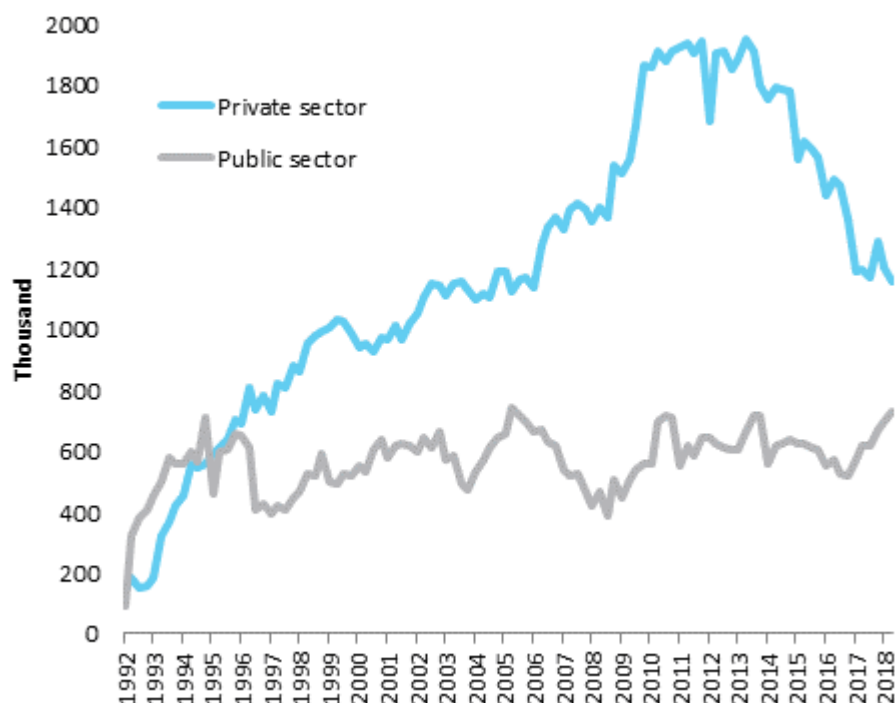
⁶⁸ Minimum wage decisions from FWC, [Annual Wage Review](#), 2012–2018 (Parliamentary Library calculations using a compound annual growth rate formula); ABS, *Wage Price Index*, op. cit., Table 1 (trend data).

⁶⁹ Department of Employment, [Report on enterprise bargaining](#), Department of Employment, February 2017.

⁷⁰ Data collected by the department only refers to federal enterprise agreements. In contrast, ABS data would include those employees covered by federal and state collective agreements; and employees covered by federal agreements that may have expired but have not been terminated.

employees covered by federal enterprise agreements fell by 787,000 (or 40.6 per cent) to just over 1,150,000 in this period, while the number of public sector employees covered grew by 81,000 (or 12.6 per cent) to 726,000 (see Figure 10).⁷¹

Figure 10: employees covered by current federal enterprise agreements, 1991–2018



Source: Department of Jobs and Small Business, [Trends in enterprise bargaining](#).

The number of private sector federal enterprise agreements that were current fell from 22,636 in June 2012 to 10,391 in December 2018—a fall of 54.1 per cent. The number of public sector agreements that were current fell from 661 to 506 which constituted a fall of 23.4 per cent.⁷²

While the number of employees on current federal enterprise agreements in the private sector has fallen steadily in recent years, this is partly due to many employees being covered by agreements that have expired (but not terminated).⁷³ Some of the very large retailers (such as Coles, Woolworths, Kmart and Bunnings) and large fast food companies (such as McDonalds, Dominos and KFC) would come under this category. Workers employed with these companies were still covered by an expired agreement but are not recorded as employees covered by current agreements in the Workplace Agreement Database (WAD).

As noted earlier, a number of these companies were involved in protracted bargaining processes, which proceeded until the Fair Work Commission was convinced that they passed the BOOT test.

Other industry trends of note include the long-term decline in federal enterprise agreements and employee coverage in manufacturing, associated with the slow and steady decline of the industry itself. There has also been a contraction in the number of federal enterprise agreements and associated employee coverage in the construction industry, and some evidence of small and medium enterprises (SMEs) using expired agreements as a strategy to reduce labour costs.⁷⁴ WAD

⁷¹ Department of Jobs and Small Business, [Trends in enterprise bargaining](#), op. cit.

⁷² Ibid.

⁷³ An enterprise agreement remains legally operational after expiry until it is either terminated or replaced.

⁷⁴ Department of Jobs and Small Business, [Trends in enterprise bargaining](#), op. cit.

data shows the decline in current private sector agreements recorded between 2009 and 2016 was mainly driven by small firms (with less than 20 employees) and medium sized firms (with between 20 and 99 employees). Current agreements for small businesses fell by 44 per cent between June 2009 and June 2016.⁷⁵

More analysis is required to determine whether the shift of employees from coverage by federal enterprise agreements to award coverage has had a significant effect on moderation in wage growth.

The link between productivity performance and wages

Real wage growth is linked to productivity growth or Gross Domestic Product (GDP) per hour worked. According to Treasury:

The key driver of wage growth over the long-term is productivity and inflation expectations. This means that real wage growth—wage growth relative to the increase in prices in the economy—reflects labour productivity growth.⁷⁶

The Organisation for Economic Co-operation and Development (OECD) and IMF have posited a slowing in the rate of labour productivity growth has been as one of the major reasons for the slowdown in wage growth across a number of OECD countries.⁷⁷ The IMF stated:

In economies where unemployment rates are below their averages before the Great Recession, slow productivity growth can account for most—about two-thirds—of the slowdown in nominal wage growth since 2007.⁷⁸

However, there is some divergence in views about the contribution of lower productivity growth to the slowdown in wage growth in Australia. Treasury reported:

... weaker labour productivity growth seems unlikely to be a cause of the current period of low wage growth in Australia, at least in aggregate. Over the past five years, labour productivity in Australia has grown at around the 30-year average annual growth rate of 1.6 per cent and has generally been higher than in other countries.⁷⁹

In contrast, researchers at the RBA estimated that subdued productivity growth accounts for around a quarter of the slowdown in wage growth in the United Kingdom and Australia over the past decade.⁸⁰

ABS data shows average annual growth in labour productivity in the market sector has slowed, from around 2.5 per cent between December 2008 and December 2013 to 1.0 per cent between June 2013 and June 2018.⁸¹ This constitutes a reduction in average annual growth in labour productivity of just under 60 percent. As mentioned earlier in this paper, growth in real wages (as measured by average weekly earnings for adults working full-time) fell from an annual average of 1.8 per cent in the five years to November 2013 to 0.5 per cent in the five years to November 2018. This constituted a fall in average annual growth in real wages of around 71 per cent.

⁷⁵ Department of Employment, [Report on enterprise bargaining](#), February 2017.

⁷⁶ Treasury, Analysis of wage growth, op. cit., p. 2.

⁷⁷ Organisation for Economic Co-operation and Development (OECD), [Employment Outlook 2018](#), OECD, Paris, pp. 31–33.

⁷⁸ Hee Hong, *More slack than meets the eye? Recent wage dynamics in advanced economies*, op. cit., p. 6.

⁷⁹ Treasury, Analysis of wage growth, op. cit., pp. 17–18.

⁸⁰ I Arsov and R Evans, [‘Wage Growth in Advanced Economies’](#), *RBA Bulletin*, March quarter 2018, p. 6.

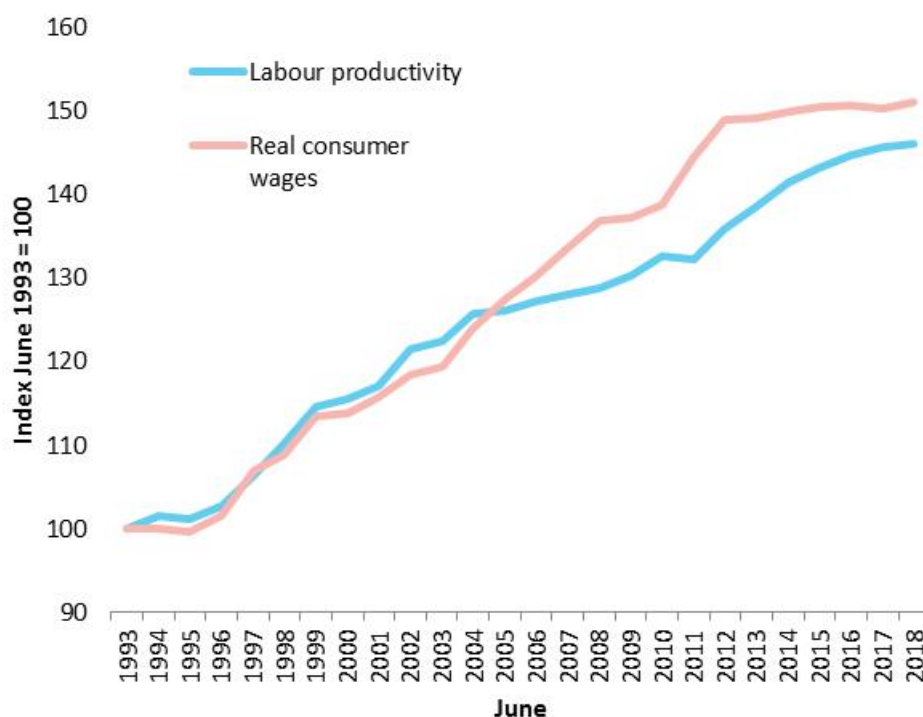
⁸¹ ABS, *Australian National Accounts: National Income, Expenditure and Product*, op. cit. The 'market sector' includes all industries apart from Public administration and safety, Education and training, Health care and social assistance, and excludes Ownership of dwellings.

This information highlights that real wage growth has been much lower than growth in labour productivity between 2013 and 2018 (albeit the two time periods compared are not matched exactly). But the slowing in the rate of growth in productivity in Australia is not sufficient to explain all of the contraction in growth in real wages.

Trends in growth of labour productivity and real wages in Australia can differ depending upon the measures used. Researchers have found if ABS WPI data is used as the proxy for wages, adjusted by the CPI, real wage growth has not kept pace with growth in labour productivity since the early 2000s. And the gap between the two series has been more pronounced since 2012.⁸²

But the outcomes are quite different if we use data exclusively from the ABS national accounts data series as shown in Figure 11. In the chart, labour productivity is measured by GDP per hour worked (using chain volume measures), while changes in real wages are measured by total compensation of employees in the economy per hour worked (adjusted by a consumption deflator). Wages in this analysis are also referred to as real consumer wages which reflect the purchasing power of workers.⁸³

Figure 11: trends in growth of labour productivity and real consumer wages, 1993–2018



Source: ABS, [Australian National Accounts: National Income, Expenditure and Product](#), cat. no. 5206.0, Tables 34, 35 and 36; (Parliamentary Library calculations with assistance from the ABS).

The national accounts data show from the early 1990s to around 2005, growth in real consumer wages tracked growth in labour productivity. However, from 2005 to 2012, growth in real consumer wages was much stronger than growth in labour productivity—increasing by 16.9 per cent (or an annual average of 2.3 per cent) compared with an increase of 7.8 per cent for labour productivity (or an annual average of 1.1 per cent). Consumers benefited from higher export prices and lower import prices during this period resulting from the appreciating Australian dollar.

⁸² J Stanford, 'Charting wage stagnation in Australia' in *The wage crisis in Australia* A Stewart, J Stanford and T Hardy (eds), op. cit., p. 33.

⁸³ Treasury, Analysis of wage growth, op. cit., p. 18.

These trends were reversed between 2012 and 2018, when growth in real consumer wages lagged growth in labour productivity—increasing by only 1.4 per cent (or an annual average of 0.2 per cent) compared with a 7.5 per cent increase in labour productivity (or an annual average of 1.2 per cent).⁸⁴

Treasury analysis shows real producer wages tracked labour productivity much more closely than consumer wages between 1993 and 2017.^{85,86} Producer wages reflect the cost of hiring from an employer's perspective.⁸⁷

International evidence on slowing in wages growth and reasons for the slowdown

The OECD publishes an annual measure of real wages for employees based on national accounts wages data adjusted to full-time equivalence (see Table 3).⁸⁸

Table 3: average annual growth in annual real wages for selected OECD countries (%)

	2000–10	2010–17
Australia	1.2	0.3
Canada	1.4	1.0
Denmark	1.7	0.6
Finland	1.6	0.1
France	1.3	0.7
Germany	0.3	1.5
Japan	-0.1	0.1
Netherlands	1.1	-0.04
New Zealand	2.0	1.0
Norway	2.7	1.1
Sweden	1.6	1.3
Switzerland	1.1	0.4
United Kingdom	1.6	-0.3
United States	1.0	0.6

Source: OECDStats; Parliamentary Library calculations.⁸⁹

⁸⁴ ABS, [Australian National Accounts: National Income, Expenditure and Product](#), cat. no. 5206.0, Tables 34, 35 and 36; (Parliamentary Library calculations with assistance from the ABS).

⁸⁵ Treasury, Analysis of wage growth, op. cit., pp. 18-19.

⁸⁶ The real producer wage is Average Earnings in the National Accounts (AENA) per hour deflated by the GDP deflator.

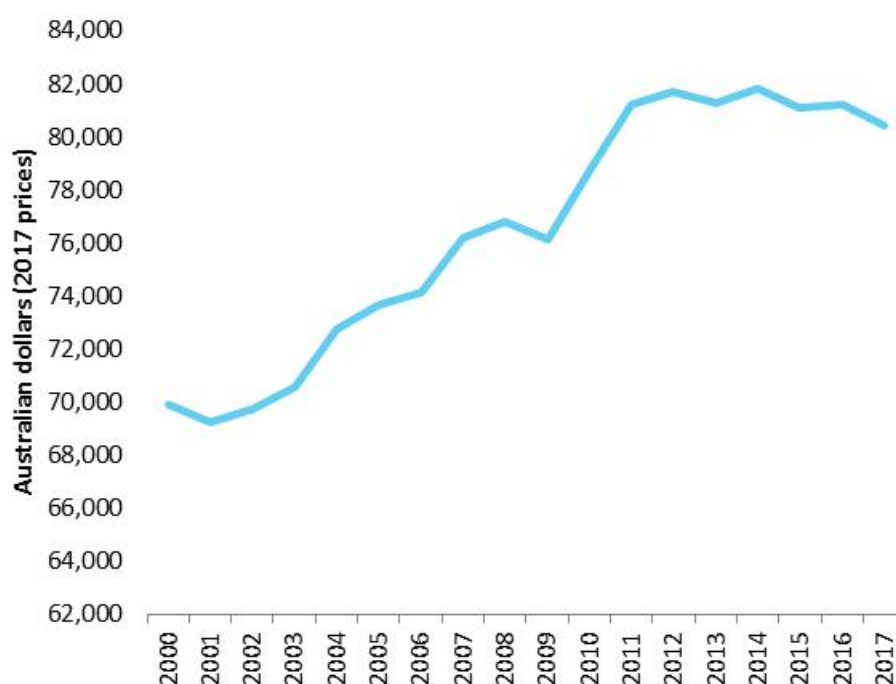
⁸⁷ La Cava, G., [The Labour and Capital Share of Income in Australia](#), (RBA Bulletin-March 2019).

⁸⁸ Ibid., p. 33. This OECD dataset contains data on average annual wages per full-time and full-year equivalent employee in the total economy. Average annual wages per full-time equivalent dependent employee are obtained by dividing the national-accounts-based total wage bill by the average number of employees in the total economy, which is then multiplied by the ratio of average usual weekly hours per full-time employee to average usually weekly hours for all employees.

⁸⁹ Average annual wages expressed in 2017 or 2016 constant prices (depending upon availability) and National Currency Unit (NCU).

The OECD measure enables comparisons between OECD countries that shows average annual growth in real annual wages in Australia in the seven years to 2017 has been much lower than rates recorded in Germany, Sweden, Norway, New Zealand and Canada; but stronger than rates recorded in the Netherlands and the United Kingdom. Figure 12 shows movements in average annual wages for full-time employees in Australia in real terms between 2000 and 2017.

Figure 12: average annual real wages for full-time employees in Australia, 2000–17



Source: OECDStats.

Using this OECD measure, average annual wages in Australia (in 2017 dollars) have gradually fallen from \$81,676 in 2012 to \$80,407 in 2017.⁹⁰

The OECD has highlighted slowing growth in real wages across many member countries in the period between 2010 and 2017.⁹¹ This slowing has occurred despite the progressive reabsorption of underutilised labour that has contributed to a lowering of unemployment rates across member countries. A decline in real wage growth has been common among most OECD countries in the seven years to 2017 compared with the previous decade. The OECD attributed the wage slowdown across OECD countries to the combination of low inflation; a slowing in productivity growth; and the presence of labour underutilisation (also known as slack in the labour market) manifested as involuntary part-time employment.

The OECD recorded a slowing in the rate of real wage growth across the earnings distribution in 2007–16 relative to 2000–07. This means those at the top of the earnings distribution (in high-skilled, better-paying jobs) were experiencing a slowing in wage growth, along with those in the middle and those at the bottom of the distribution (who were working in less-skilled, lower-paid jobs).⁹² The OECD also reported a halving of labour productivity growth averaged across the OECD in the period between 2012 and 2017 compared with between 2000 to 2007 (an average of 1.2 per cent per annum compared with 2.3 per cent per annum).⁹³

⁹⁰ OECDStats; extracted 9 February 2019.

⁹¹ OECD, [Employment Outlook 2018](#).

⁹² OECD, *Employment Outlook 2018*, op. cit., p. 33.

⁹³ Ibid., pp. 32–33.

In a separate report, the OECD attributed part of the moderation of wage growth in Australia to a decline in average earnings for part-time jobs relative to full-time jobs associated with an increase in involuntary part-time employment.⁹⁴

While the underemployment ratio⁹⁵ in Australia increased from 7.4 per cent in August 2012 to 9.0 per cent in August 2017 (in trend terms), the ratio of earnings for part-time workers relative to full-time workers increased slightly during this period. ABS data shows the ratio of the median *hourly* earnings of part-time workers to full-time workers in Australia increased marginally, from 78 per cent in August 2012 to 80 per cent in August 2017; while the ratio of median *weekly* earnings for part-time workers to full-time workers also increased slightly, from 36 per cent to 40 per cent in the same period.⁹⁶

Conclusion

This research paper has outlined the extent of the slowdown in wage growth in Australia over the past five years. The slowing in wage growth has been more pronounced for men and employees working in the private sector. Service industries such *Education and training* and *Health and social assistance* (that have relatively high concentrations of female employees) have experienced stronger wage growth than industries such as *Mining* and *Construction* (that have relatively high concentrations of male employees).

Several causes of the wage growth slowdown have been highlighted in this research paper, including the continued presence of excess capacity in the labour market (most notably persistent high rates of underemployment) and a lowering of inflation and inflationary expectations. There is less agreement among Australian economists about the contribution of the slowing in labour productivity as a contributing factor to the recent slowing in wage growth.

The OECD attributed the slowing in wage growth among member countries to the combination of low inflation, a slowing in productivity growth and the presence of labour underutilisation. The OECD has cautioned that ‘a prolonged period of stagnating wages might significantly reduce worker’s living standards and consumer spending, endangering aggregate demand and growth’.⁹⁷

It is possible that a decline in bargaining power associated with declining union membership and lower rates of industrial disputation in Australia has impacted upon wage growth, but the magnitude of their influence is more difficult to measure. There is also evidence of periods where rates of industrial disputation were low but wages were growing relatively strongly.

The combination of restrictions on when employees can undertake industrial action, protracted enterprise bargaining processes, ceilings on remuneration increases in the public sector, and movement of employees away from being covered by enterprise agreements to award coverage may have also contributed to lower wage growth outcomes.

HILDA data shows growth in median household income in real terms has plateaued since 2009—partially as a result of the slowing in wages growth. The continuing decline in the household savings ratio is a signal that household final consumption expenditure is growing faster than household gross disposable income.⁹⁸

⁹⁴ OECD, [How does Australia compare? Employment Outlook 2018](#), OECD, Paris, July 2018.

⁹⁵ ABS, *Labour Force*, op. cit., Table 22. The underemployment ratio is the proportion of employed persons that are underemployed.

⁹⁶ ABS, *Characteristics of Employment*, op. cit.

⁹⁷ OECD, [Employment Outlook 2018](#), op. cit., p. 28.

⁹⁸ ABS, *Australian National Accounts: National Income, Expenditure and Product*, op. cit.

Despite signs of weakness in growth in household incomes, there are some tentative signs from ABS survey data that wage growth has begun to rebound slightly in the second half of 2018.

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