

Labour Markets and Wages in Australia: 2012

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Abstract

During 2012 the labour market continued to show considerable diversity in outcomes for different labour market groups. Employment growth was slower and the number of employees searching for full-time work rose alongside falling participation rates compared with the previous year. Overall the employment situation for men was not looking as strong as for women, although women continued to exhibit higher levels of labour underutilisation. Earnings indicators suggest increased wages in low paid sectors, although this was coming off a low base and may be indicative of catch-up for slow growth in recent years. The relative value of the minimum wage is now at its lowest level in six years, suggesting some evidence of growing earnings inequality. Recent debates in the mass media about labour productivity and industrial relations regulation appear to have limited grounding in national accounting and labour market data.

Keywords: Hours of work, minimum wages, gender pay gap, underutilisation, multifactor productivity, labour productivity

Introduction

In this article we review data on Australia's labour markets for 2012 and find that labour markets continued to show considerable diversity in outcome for different labour market groups. Drawing mainly on official employment and earnings statistics we find that employment data show that growth was slower and the number of employees searching for full-time work rose alongside falling participation rates compared with the previous year. Earnings indicators suggest that there were increases in wages in low paid sectors, although the relative value of the minimum wage is now at its lowest level in six years, suggesting some evidence of growing earnings inequality. We also consider recent debates in the mass media about concerns relating to labour productivity appear to have limited grounding in national accounting and labour market data.

Macroeconomic Context 2012

The operation of Australian labour markets is embedded within the context of the demand for and supply of goods and services within the economy more generally. Selected macroeconomic indicators for 2012, as shown in Table 1 below, suggest that specific areas of Australia's economic environment have changed considerably since 2011. Annual growth in Gross Domestic Product (GDP) to June 2012 was considerably higher than at the same time in 2011 and areas of considerable upturn included motor vehicle sales and dwelling unit approvals. In contrast, business investment levels were relatively stable and retail turnover declined compared with 2011 levels. In addition to the indicators in Table 1, it should be noted that until the final two weeks of 2012 the Commonwealth government maintained a public commitment to a budget surplus in 2013 and political considerations might be expected to constrain public expenditure for the foreseeable future. Further, the implications of international economic events remained difficult to predict. Subdued prices for Australia's export commodities, particularly falls in the prices of coking coal and iron ore (Reserve Bank of Australia 2012a), together with continued uncertainty in European financial markets have occurred alongside stabilising growth in the United States and China (Reserve

Bank of Australia 2012b). The range of contrasting economic data was sufficient for the Reserve Bank to keep interest rates at 3.25 per cent at the Board meeting in November 2012, despite widespread expectations that rates would be reduced in an effort to stimulate demand. By December 2012 it was felt that further easing in monetary policy was required and the cash rate was further reduced to 3.0 per cent. The mixed outcomes evident in these key macroeconomic indicators are reflected in labour markets, with strongly contrasting outcomes for different industries and groups of employees.

Table 1: Selected macroeconomic indicators 2011-2012

GDP growth	June quarter 2012	Year to June 2012	June quarter 2011	Year to June 2011
% change ^(a)	0.8	3.8	1.2	1.4
Consumer Price Index ^(b)	June – Sep Quarter 2012	Year to Sep 2012	June – Sep Quarter 2011	Year to Sep 2011
% change	1.4	2.0	0.6	3.5
RBA cash rate % ^(c)	December 2012	October 2012	June 2012	May 2012
	3.0	3.25	3.5	3.75
Retail Turnover % Change (volume) ^(d)	June to Sept 2012	March to June 2012	Dec 2011 to March 2012	Sept to Dec 2011
	-0.1	1.4	1.8	0.4
Motor vehicle sales % change ^(e)	Month to Sep 2012	Year to Sep 2012	Month to Sep 2011	Year to Sep 2011
	4.7	14.4	1.1	4.4
Dwelling unit building approvals % change ^(f)	Month to Sep 2012	Year to Sep 2012	Month to Sep 2011	Year to Sep 2011
	5.2	12.4	-13.6	-12.0
Business investment % change ^(g)	Year to June 2012	Year to March 2012	Year to Dec 2011	Year to Sep 2011
	22.0	21.9	20.3	25.1

Sources: (a) Chain volume measure, seasonally adjusted, ABS (2012a) Catalogue 5206.0; (b) ABS (2012b) Catalogue 6401.0; (c) Selected rates, Reserve Bank of Australia (2012b); (d) Seasonally adjusted, ABS (2012c) Catalogue 8501.0; (e) Seasonally adjusted, ABS (2012d) Catalogue 9314.0 (f) Seasonally adjusted, ABS (2012 e) Catalogue 8731.0; (g) Melbourne Institute (2012).

Employment Outcomes - Australia 2012

As shown in Table 2, across the labour force, aggregate employment statistics indicate a growth in full-time employment, steady rates of part-time employment and a decline of 0.6 per cent in the participation rate. However, disaggregated estimates show contrasting changes in labour force status for males and females. Growth in male full-time employment of 0.6 per cent is only half the rate of growth in female full-time employment at 1.2 per cent and the relatively small number of males in part-time employment declined while the number of female part-timers continued to grow. Thus the number of males looking for full-time work increased by just over 10 per cent in the year to October 2012, compared with an increase in the number of females of 1.2 per cent. This was despite a relatively higher drop in the participation rate among males. These overall patterns of employment occurred despite some shifts away from female and part-time employment in specific industries, noted later with reference to Table 4.

Table 2: Selected Indicators of Labour Force Status: October 2011 –October 2012 Australia

Month/year	Employed full-time '000	Employed part-time '000	Employed total '000	Unemployment - looking for full-time work	Unemployment rate (pt and ft) percentage points	Participation rate percentage points
Males						
Oct-11	5212.6	1013.0	6225.6	266.3	5.1	72.2
Oct -12	5245.5	1000.5	6246.0	293.2	5.4	71.7
% change Oct 11-12	0.6	-1.2	0.3	10.1	0.3	-0.7
Females						
Oct -11	2832.8	2386.4	5219.3	184.4	5.3	59.0
Oct -12	2866.0	2401.2	5267.1	186.7	5.3	58.8
% change Oct 11-12	1.2	0.6	0.9	1.2	0.0	-0.3
Persons						
Oct -11	8045.4	3399.5	11444.9	450.7	5.2	65.5
Oct -12	8111.5	3401.7	11513.2	479.9	5.4	65.1
% change Oct 11-12	0.8	0.1	0.6	6.5	0.2	-0.6

Source: ABS (2012f; 2012g) Catalogue 6202.0 trend series.

National rates of unemployment of 5.4 per cent for males and 5.3 per cent for females conceal large differences in unemployment rates within specific States. These range from a low of 3.9 per cent for males in Western Australia to a high of 6.8 per cent for males and females in Tasmania (Table 3). Female unemployment rates compare favourably with male rates in the ACT, NSW and South Australia, while male unemployment is relatively lower in Western Australia and, to a lesser extent, in Victoria and the Northern Territory. Perhaps surprisingly, the resource rich State of Queensland has relatively high rates of overall unemployment and comparable rates of unemployment among males and females.

Table 3: Unemployment rates by State, age and sex, October 2012

	Male unemployment rate %	Female unemployment rate %	Persons unemployment rate %
New South Wales	5.4	4.8	5.1
Victoria	5.4	5.6	5.5
Queensland	6.3	6.2	6.2
South Australia	6.0	5.3	5.7
Western Australia	3.9	4.7	4.3
Tasmania	6.8	6.8	6.8
Northern Territory	4.4	4.7	4.5
ACT	4.5	3.6	4.1
15 – 24 year olds Australia	14.5	13.4	14.0
Total	5.4	5.3	5.4

Source: ABS (2012f; 2012g) Catalogue 6202.0 trend series

Table 4 shows the number of males and females employed in major industry divisions at August 2012 and the shift between full-time and part-time employment for males and females within each industry since August 2011. It provides some insights into the relatively subdued rates of growth in male full-time employment noted above in Table 2. While the mining industry had an increase of almost 20 per cent in the size of its largely male workforce, its relatively small total employment numbers mean that this failed to translate into large favourable employment

outcomes for the workforce generally. Similarly, an employment growth rate of almost 15 per cent in the Information media and telecommunications industry failed to translate into major employment gains at an aggregate level. In contrast, declining overall employment occurred in industries which employ large numbers of full-time males, including: Construction and Transport, postal and warehousing. These industries also experienced a shift away from female part-time employment. The decline in construction employment occurred despite strong growth in dwelling approvals and indicates a decline in non-residential construction (Reserve Bank of Australia 2012b). There were also disproportionate reductions in male full-time employment in Wholesale trade, Professional, scientific and technical services and Other services. In contrast, while Public administration and safety also experienced a relatively large decline in employment numbers of almost 6.6 per cent, this occurred alongside a shift toward male full-time employment in the industry. In a context of predicted further constraints on public expenditure, this may signal a future decline in part-time employment, especially among females.

Table 4: Employment by industry and sex (August 2012) and shifts between full-time and part-time employment by industry and sex (August 2011 to August 2012)

	Employed Aug 2012 (‘000)	Male Change full-time (%point)	Change part-time (%point)	Employed Aug 2012 (‘000)	Female Change full-time (%point)	Change part-time (%point)	Total Change in number employees % Aug 11 - 12
Agriculture forestry and fishing	225.93	-0.73	-0.54	98.25	-0.31	1.57	3.57
Mining	233.72	0.20	1.30	36.89	0.63	-2.13	19.76
Manufacturing	713.43	0.15	0.46	248.66	-1.20	0.59	1.74
Electricity, gas, water and waste services	112.52	1.33	0.61	36.51	-0.09	-1.84	5.19
Construction	852.69	2.37	-1.65	109.70	-0.73	0.01	-6.73
Wholesale trade	273.69	-3.54	1.67	147.37	0.85	1.02	3.52
Retail trade	505.58	-1.41	-0.82	692.27	-0.27	2.51	-1.81
Accommodation and food services	352.95	2.14	0.04	424.82	-2.36	0.18	-0.31
Transport, postal and warehousing	437.37	0.14	0.32	115.38	0.36	-0.82	-5.27
Information media and telecommunications	135.67	0.44	1.48	99.17	-4.03	2.11	14.90
Finance and insurance services	203.85	2.67	0.41	217.21	-2.73	-0.34	-2.33
Rental, hiring and real estate services	107.30	0.59	0.14	95.90	0.15	-0.88	4.77
Professional, scientific and technical services	515.46	-1.76	0.01	400.28	1.47	0.29	4.34
Administrative and support services	195.43	2.36	-1.15	200.63	-0.84	-0.36	-2.74
Public administration and safety	377.61	1.99	-0.67	308.32	-0.01	-1.31	-6.59
Education and training	282.49	-0.17	0.51	622.05	0.71	-1.05	4.34
Health care and social assistance	290.72	-0.13	-0.18	1076.17	0.63	-0.33	3.33
Arts and recreation services	116.99	-0.83	4.45	98.40	0.20	-3.82	3.35
Other services	250.45	-3.38	1.17	190.07	2.04	0.17	-1.97
Total Industry	6183.85	-0.07	-0.04	5218.05	-0.03	0.14	0.50

Source: ABS (2012f; 2012g) Catalogue 6202, original series.

The loss of male full-time employment in specific industries is consistent with Australian and international literature suggesting that there men have disproportionately borne reduced employment opportunities following the global financial crisis in 2008, sometimes referred to as a ‘mancession’ (Hoynes, Miller and Schaller 2012; Moskos 2012). Internationally, however, the immediate adverse effects on male employment seem to now be flowing on to specific feminised areas of employment which are particularly affected by reductions in public expenditure (Elson 2012). The Australian data in Table 4 can be read as supporting both sets of analyses. There are clear areas of relatively

large reductions in male full-time employment and others of reductions in female full-time and part-time employment.

Labour underutilisation refers to the extent to which available labour is underutilised through either unemployment or underemployment (willing and available to work additional hours) (ABS 2012h). The estimates in Table 5 are based on the percentage of males and females in the labour force who wish to work more hours. Labour underutilisation (Table 5) remains at relatively high levels, and still exceeds pre-GFC rates. Underutilisation among females has been hovering just below 15 per cent since 2009 and exists alongside comparatively stable estimates for the average hours worked by female part-timers. The favourable indicators of labour force status for females noted in Table 1 appear to be coupled with relatively high levels of labour underutilisation among the large proportion of the labour force that is female and employed part-time. This contributes to an ongoing pattern of female labour force participants being underutilised rather than officially unemployed.

Table 5: Labour Underutilisation – labour force participants seeking more work (5) August 2004 – 2012

	All persons %	Males %	Females %
August 2007	10.7	8.6	13.1
August 2008	10.3	8.2	12.8
August 2009	13.9	12.6	15.3
August 2010	12.3	10.5	14.5
August 2011	12.2	10.3	14.5
August 2012	12.5	10.5	14.8

Source: ABS (2012f; 2012g) Catalogue 6202.0, trend series.

Wages Outcomes – Australia 2012

Changes in average weekly earnings of persons employed full-time

Table 6 shows the change in average weekly ordinary time earnings (AWOTE) and average weekly total earnings (AWTE) for full-time employees by industry between May 2011 and May 2012. The AWOTE and AWTE of males increased by 3.3 per cent and 4.2 per cent, respectively. The corresponding change for women was 3.4 per cent in both series. Despite subdued growth in employment (see Table 4), earnings growth was highest for males in Transport, postal and warehousing (change in AWTE of 13.4 per cent). Other areas of earnings growth for men occurred in industries with reductions in full-time employment numbers such as Wholesale trade (change in AWTE of 8.7 per cent), Professional scientific and technical services (4.4 per cent), Education and training (4.8 per cent) and Other services (6.3 per cent). Similarly, areas of subdued growth in female employment exhibited relatively strong growth in earnings with relevant industries including Wholesale trade (10.4 per cent), Rental, hiring and real estate (5.1 per cent) and Professional, scientific and technical services (5.8 per cent). The contrasting movements in employment and average earnings may reflect compositional changes in the workforce which is discussed below with reference to Table 8.

Table 6: Average weekly ordinary time earnings for full-time employees at May 2012 and changes in AWOTE and total full earnings between May 2011 and 2012; by industry and sex

	% Change May2011-May2012		Males AWOTE \$ at May 2012	% Change May2011-May2012		Females AWOTE \$ at May 2012	GWR May 2012 %
	Ordinary	Total		Ordinary	Total		
	Mining	7.7		6.8	2348.00		
Manufacturing	-0.2	0.6	1215.50	0.6	0.8	997.80	82.1
Electricity, gas, water and waste services	1.4	0.2	1556.10	1.2	0.5	1325.10	85.2
Construction	1.6	8.3	1390.60	3.6	6.0	1145.00	82.3
Wholesale trade	8.2	8.7	1451.00	10.7	10.4	1191.90	82.1
Retail trade	4.2	3.9	1004.30	1.4	1.7	919.20	91.5
Accommodation and food services	0.7	0.8	986.30	5.1	5.6	902.30	91.5
Transport, postal and warehousing	11.5	13.4	1407.90	3.1	3.2	1199.90	85.2
Information media and telecoms.	1.9	1.8	1707.40	2.4	2.6	1373.70	80.5
Finance and insurance	3.6	2.7	1893.70	3.5	3.4	1275.10	67.3
Rental, hiring and real estate	1.1	-0.8	1399.80	4.8	5.1	1052.40	75.2
Professional, scientific and technical services	3.9	4.4	1818.80	5.8	5.8	1325.30	72.9
Administrative and support services	-0.6	0.6	1244.60	2.3	1.7	1100.00	88.4
Public Admin and safety	4.4	4.3	1477.20	4.0	4.3	1358.20	91.9
Education and training	5.1	4.8	1558.20	4.3	4.3	1383.90	88.8
Health care and social assistance	0.3	-0.3	1593.80	-1.8	-2.1	1095.10	68.7
Arts and Rec. services	-2.2	-1.3	1243.20	1.4	1.8	1043.80	84.0
Other services	6.4	6.3	1132.40	3.8	3.1	976.90	86.3
Total Industry	3.3	4.2	1443.50	3.4	3.4	1189.60	82.4
Public Sector	3.1	-	1552.60	2.7	-	1348.60	86.9
Private Sector	3.0	-	1421.40	3.0	-	1123.50	79.0

Source: ABS (2012i) Catalogue 6302.0, tables 10 a, b, e and d, original series. Sector data from Tables 6 and 8 of Catalogue 6302.0

The final two rows of Table 6 show the change in average annual ordinary time earnings for full-time workers disaggregated by sector and sex. Between May 2011 and May 2012 the strongest growth was among male public sector employees (equal to 3.14 per cent) while female public sector employees, in contrast, exhibited the weakest growth. As before, there may be compositional effects here, particularly if recent job losses in Public administration and safety (Table 4) have been concentrated among skilled males and females.

Recent wage movements have not greatly affected the aggregate earnings relativities of men and women in the private and public sectors (Table 7). At May 2012 male private sector full-time employees earned 8.0 per cent less

than their public sector counterparts. Female private sector full-time employees earned 27.3 per cent less than male public sector employees. This group had the worst relative average wage outcomes of the four groups studied. Female public sector employees earned 12.9 per cent less than their male public sector counterparts.

Table 7: Wage Relativities of Adults Employed Full-Time by Sector and Sex; May 2006 to May 2012. (Benchmark – Males Employed Full-Time in the Public Sector)

	Private Sector		Public Sector	
	Males	Females	Males	Females
May-2006	89.8	73.5	100.0	87.3
May-2007	89.8	72.6	100.0	87.3
May-2008	91.9	74.9	100.0	87.9
May-2009	93.4	75.2	100.0	88.3
May-2010	93.0	73.5	100.0	87.9
May-2011	91.7	72.8	100.0	87.5
May-2012	92.0	72.7	100.0	87.1

Source: ABS (2012i) Catalogue 6302, Tables 6 and 9, Average Weekly Ordinary Time Earnings, Original series.

An alternative indicator for understanding movements in the cost of labour is the Wage Price Index, which is constructed from a representative sample of employee jobs (as opposed to workers) within a sample of employing organizations. It is designed to be a ‘pure’ measure of labour cost changes; that is, unaffected by changes in the composition of the workforce, hours worked or characteristics of employees. The Wage Price Index (WPI) focuses on hourly rates of pay but excludes various on-costs. Changes in the WPI indicate changes in wages rather than variations in more general labour costs.

Table 8 shows changes in the WPI between September 2011 and September 2012. Data for June 2011 to June 2012 are also reported thus allowing a degree of comparison with the May wage data presented in Table 6. The overall annual earnings growth is equal to 4.0 per cent. Industries with above average WPI for the year to September 2012 include Mining, Wholesale trade, Professional scientific and technical services and Public administration and safety. Slowest growth occurred in Retail trade (2.5 per cent) and Accommodation and food services (3.1 per cent). With the exception of Mining, these three other industries also experienced above average industry quarterly wage growth. Two other industries also experiencing above industry average quarterly wage growth between June and September 2012 were Health care and social assistance and Accommodation and food services. The observed wage movements in the Health care and social assistance sector are relatively difficult to reconcile with changes in AWOTE and AWTE reported in Table 6. In Health care and social assistance, for example, male AWTE fell by 0.3 per cent between May 2011 and May 2012. Amongst women the deterioration in earnings was even greater, equal to 2.1 per cent. In contrast, in the Accommodation and food services industry, growth in male AWTE between May 2011 and May 2012 was equal to 0.8 per cent, whilst for females the corresponding growth was equal to 5.6 per cent. In the case of the latter (Accommodation and food services) the growth in AWTE and WPI may reflect wage catch up pressures. Men in this sector are paid 36 per cent less than the all industry male average, whilst females in this sector receive 24 per cent less than the all industry female average. In the Health care and social assistance industry males are paid 10 per cent more than the all industry male average whilst females are paid 8 per cent less than the all industry female average. The above average movement in the Health care and social assistance industry WPI in the June to September quarter may reflect impact of the February 2012 Fair Work Australia decision on the Social and Community Sector equal remuneration case (FWAa, 2012). In that landmark and historic decision the tribunal

awarded significant wage increases to social and community service workers to be phased in from 1 December 2012 and to be fully phased in by 1 December 2018.

Table 8: Change in Wage Price Index (Hourly rates of pay excluding bonuses) % by Industry (Public and Private Sectors combined)

	June 2011- June 2012	Sept 2011 – Sept 2012	June 2012 – Sept 2012
Mining	5.7	5.7	6.0
Manufacturing	4.1	4.0	0.9
Electricity, gas, water and waste services	4.2	4.9	1.8
Construction	4.6	4.0	1.2
Wholesale trade	5.2	5.8	1.7
Retail trade	2.9	2.5	1.0
Accommodation and food services	3.6	3.1	1.8
Transport, postal and warehousing	4.1	4.3	1.4
Information media and telecoms.	3.7	3.1	1.2
Finance and insurance	4.4	3.7	0.4
Rental, hiring and real estate	3.7	3.3	1.2
Professional, scientific and technical services	4.9	4.7	2.0
Administrative and support services	3.8	3.9	1.6
Public Admin and safety	3.8	4.4	1.8
Education and training	4.0	3.5	0.7
Health care and social assistance	2.8	3.6	1.8
Arts and Rec. services	3.8	3.8	1.5
Other services	4.0	3.5	1.9
Total Industry	4.0	4.0	1.3

Minimum Wages 2012

From 1 July 2012, Fair Work Australia (FWA) increased the minimum wage in modern awards by 2.9 per cent, well below the average growth in earnings for the year. For adult employees who are not covered by an award or agreement, the adult national minimum wage is now \$606.40 or \$15.96 per hour (FWA 2012b). In relative terms this means that an adult employee on minimum wages earns 42.0 per cent of the male AWOTE (Table 9). Since 2006 when the minimum wage/AWOTE relativity was equal to 47.2% the relative value of the minimum wage has declined and is now at its lowest level in recent decades. This provides further suggestion of markedly varied outcomes for different labour market groups.

Table 9: Ratio of Federal Minimum Wage to Male Average Weekly Ordinary Time Earnings, 2005 to 2012

	Male AWOTE (May 2012) \$	Min Wage (July 2012) \$	% change AWOTE	% change Min Wage	WPI (June) %	CPI (June) %	Ratio Minimum Wage (July) / AWOTE (May)
2006	1083.8	511.9	3.2	5.7	3.6	3.3	47.2
2007	1142.3	522.1	5.4	2.0	3.6	1.8	45.7
2008	1188.4	543.8	4.0	4.1	4	3.9	45.8
2009	1267.7	543.8	6.7	0.0	3.6	1.3	42.9
2010	1334.4	569.9	5.3	4.8	3.1	2.9	42.7
2011	1397.7	589.3	4.7	3.4	4	3.4	42.2
2012	1443.5	606.4	3.3	2.9	4	1.2	42.0

Source: (a) AWOTE data from ABS (2012i), original series and are adult males employed full-time at May of each year; (b) Federal minimum wage data from www.Fair Work.gov.au, annual wage reviews, various decisions. The increases apply from July in each year; (c) WPI data from ABS (2012j); (d) CPI data from ABS (2012b) (the relativities compare July federal minimum wage data with May AWOTE data for adult males employed full-time.

Labour markets, industrial relations and ‘the productivity debate’

Total national and industry productivity are, by definition, related to factors outside of the production per unit of labour input. When labour productivity is considered independently of other inputs, particularly capital, it is only partly affected by specific regulatory frameworks relevant to labour market operations and conditions of employment. Despite this, there has been significant public discussion of links between the *Fair Work Act 2009* and subdued national productivity levels in Australia (see for example Sloan 2012). We have included the following discussion with the goal of clarifying specific elements of the debate and evaluate whether changed in productivity are linked with Commonwealth legislation relevant to employment and working conditions.

Increasing a nation’s overall productivity has long been regarded as the only reliable means of ensuring long term increases in the standard of living (Zheng 2005 p.2). However, despite Australia’s relatively strong economy, and record high standard of living, Australia’s measured national productivity has declined since 2004 (ABS 2012k). One school of thought places the blame on the introduction of provisions under the *Fair Work Act 2009*, and claims that the legislation is associated with a lack of labour market flexibility that contributes to lower productivity (Bradley 2011; Westacott 2011; Sloan 2012). Others argue that falling productivity rates can be attributed to wider trends and developments in the economy, such as the need for innovation and declines in capital productivity (Productivity Commission 2011).

On December 20th, 2011, the Workplace Relations Minister Bill Shorten announced a review of the *Fair Work Act 2009*; a move welcomed by many business leaders and organisations including Jennifer Westacott, the Chief Executive of the Business Council of Australia (BCA) (Westacott 2011). The BCA’s position had been outlined a month prior to the review of the *Fair Work Act*, in an article in *The Australian*, entitled ‘Four Ways in Which the Fair Work Act Is Reducing Productivity’ (Bradley, 2011). There has since been an ongoing debate linking relatively lower productivity estimates with the *Fair Work Act 2009*.

The assumed link between deregulated labour markets and the optimal allocation of resources within an economy is a major area of theoretical and policy debate and there have been authoritative analyses produced elsewhere (Borland 2012; Hancock 2012; Peetz 2012). There is little scope to canvas the issues in this short review of Australian labour markets in 2012. We point out, however, that even the most orthodox of introductory economics texts will remark that many markets can and do operate in a less than optimal manner and some forms of regulation may be required to achieve efficient and/or equitable outcomes (see for example McTaggart, Findlay and Parkin 2010). When additional factors such as labour market institutions and relative negotiating power are taken into account, the need for some regulatory regime becomes even more apparent. Another implicit assumption in recent discussions about productivity, that *WorkChoices 2006* represented labour market deregulation, is demonstrably not the case. While the *WorkChoices* legislation may have encouraged a decentralised approach to the negotiation of employment conditions, it also represented a detailed and comprehensive approach to regulating the actions of those involved in Australia’s labour markets. The legislation may have facilitated decentralisation but it was not a move toward deregulation (Dabscheck 2006).

Regardless of the implicit assumptions contained in the BCA's arguments and ongoing media commentary, the assertion remains that Australia's recent decline in productivity is linked to recent changes in the Commonwealth's legislative framework as it applies to regulating labour markets and conditions of employment. This argument largely neglects the nuances and challenges of estimating productivity and its contributory causes. The Australian Bureau of Statistics has defined productivity and noted the difficulty of its measurement in the following terms:

...the measurement of productivity is not straightforward. There are various complex issues involved in the measurement of output, input and other components used for deriving the MFP [multi factor productivity] estimates. In fact, the reliability of an aggregate MFP measure for the whole economy is determined by how well the aggregate output, capital and labour, and factor incomes are measured; these aggregates in turn depend on almost every aspect of the national accounts. (Zheng, 2005 page 5)

The ABS produces estimates of multifactor productivity, capital productivity and labour productivity for Australia. In producing partial estimates of productivity for labour and capital it notes that each measure includes effects from other factors. That is, the productivity of labour is not entirely separable from that of capital and other factors affecting production. Similarly, the productivity of capital is not entirely separable from that of labour and other factors.

Despite measurement challenges, the importance of links between productivity and improvement in living standards provide an imperative for measuring changes in productivity on an ongoing basis. Official estimates of Australia's labour, capital and multifactor productivity are provided in Table 10 below.

Table 10: Labour, Capital and Multifactor Productivity Indexes, Australia 2001 -2011

Year	Labour Productivity	Capital Productivity	Multifactor Productivity
June 2001	87.9	121.8	101.2
June 2002	91.8	122.4	104.0
June 2003	92.4	120.9	103.9
June 2004	94.9	119.8	105.1
June 2005	95.0	116.8	104.1
June 2006	96.2	113.1	103.4
June 2007	96.8	110.7	102.7
June 2008	97.6	107.4	101.9
June 2009	97.8	102.2	99.8
June 2010	100.0	100.0	100.0
June 2011	99.3	97.5	98.5

Source: ABS (2012k) 5204.0, Table 13

Note: Labour Productivity and Multifactor Productivity indexes refer to estimates using 'quality adjusted hours worked'

Given the challenges of separating labour and capital productivity, it is difficult to draw firm conclusions from the above table. However, it is possible to make some broad observations. Firstly, the changes in labour productivity following the introduction of the *WorkChoices 2006* legislation appear to be minor and smaller than the labour productivity estimates following the introduction of the *Fair Work Act 2009*. Secondly, the major shifts in productivity appear to be linked with variations in capital productivity, which has declined rapidly over the past decade. This partial productivity measure suggests that there are important factors unrelated to workplace legislation that are affecting the relationship between factor inputs and aggregate output in the Australian economy.

It is important to note, however, that yearly changes in multifactor productivity estimates are rarely viewed as definitive accounts of changes in the productivity of an economy. This is due to effects from temporary influences and the inclusion of underutilised inputs as measured inputs in the development of productivity estimates. Productivity is generally examined in cycles, with the Australian Bureau of Statistics identifying the last complete productivity being from 2003-04 to 2007-08. During this period, there was an annual decline in multifactor productivity of 0.3 per cent per annum (Productivity Commission, 2011, page 51; see also Taylor, Bradley, Dobbs, Thompson and Clifton 2012).

Possible reasons underlying recent trends in capital productivity have been explored by Australia's Productivity Commission and are readily available in its annual report (Productivity Commission Annual Report 2010–11). The Commission estimated multi-factor productivity in the market sector industries of Australia and identified three industries that had a disproportionately large effect on aggregate productivity estimates: Agriculture, Mining and Electricity, gas, water and waste services (EGWW). It was noted that if these three industries were omitted from productivity estimates then the remainder of the market sector had productivity growth of 0.5 per cent per annual during the last productivity cycle. It was also noted that the three industries of Agriculture, Mining and EGWW had particular characteristics affecting their productivity during this period. Agriculture had faced an extended period of drought which had depressed output. EGWW had been through a period of substantial capital expansion coupled with low value added growth. Mining had also been through a period of substantial capital investment that had not yet resulted in proportional increases in production due to the long lead terms of the capital development projects. Additionally, mining is also affected by 'yield depletion' which means that during periods of high commodity prices it becomes viable to bring once marginal sites into production (Productivity Commission 2010/11, page 54-55). The Productivity Commission's report also emphasizes the need to consider industry level estimates of productivity and provides estimates of growth in MFP and the components used to develop the estimates, value added, labour and capital for 12 market sectors in Australia for 2008-09 and 2009-10. The sector based estimates demonstrate considerable variability between market industry sectors, suggesting that changes in productivity are not uniform and unlikely to be attributable to one dominating effect across the economy.

Few studies have found that the removal of labour regulations has entirely positive outcomes on productivity or other labour market outcomes. Various studies have indicated that regulatory change associated with reduced job security is linked with: a sharp decline in creative problem solving (Probst, Stewart, Gruys and Tierney 2007); adverse implications for employee performance (Reisel et al 2007); downward pressure on wages, falling standards of living, and the breakdown of family cohesion (Pocock et al). In short, extensive decentralisation of the labour market can have unintended negative consequences.

Finally, a focus on labour market regulation deflects attention from other important sources of potential productivity gains such as technological and procedural innovation. A 2011 joint report by the Australian Bureau of Statistics and the Productivity Commission identified a link between innovation (both in terms of goods and services, and operational processes) and productivity (Soames, Barker and Talgaswatta 2011). Perhaps it can be concluded that ongoing improvements in productivity require nuanced approaches to innovation with local application to specific contexts.

The measurement of productivity is a complex and long term project. The suggestion that major reforms to labour market regulation are required to address productivity concerns appears to lack substantial evidential underpinnings. In fact, proponents of changes to labour market regulations appear keen to dodge such an evidentiary burden:

The review must also not be limited by *any arbitrary threshold of evidence that companies are having difficulties* before it is accepted there are problems with the Act that need to be looked at. (Westacott 2011).

Westacott seems to be asserting that reform should proceed unfettered, without any evidence that employment regulations are causally linked with current productivity levels. However, existing analysis suggests that there are a number of contributory causes to Australia's productivity slump that are not directly related to the labour market. There is little evidence that it is specifically related to industrial relations legislation.

Conclusion

In our review of 2011 labour markets we noted that uncertainties in both international and domestic economic contexts had contributed to diverse outcomes across Australia's labour markets (Jefferson and Preston 2012). This is a situation that continued throughout 2012. Once again, full-time employment for men appears to be declining as a result of shifts toward part-time employment in Wholesale trade and Other services and continued declines in the Construction industry and Transport, postal and warehousing workforces. Despite less than favourable employment outcomes, however, there was relatively strong average earnings growth among Construction and for males in Transport, postal and warehousing. Despite women's relatively stable employment levels, labour underutilisation continues to be high and gender pay gaps remains persistent. The diverse outcomes, coupled with declining relatively between the federal minimum wage and male average earnings suggest a context of diverging outcomes for labour force participants both across the economy and within particular industries.. Arguments that Australia's mixed economic fortunes are directly related to the current labour market regulatory framework appear tenuous. We suggest that the diverse outcomes evident in Australia's labour market reflect complex causal factors related to the effects on different industries of exposure to international influences such as the value of Australia's currency and uneven demand for goods and services across the domestic economy.

References

Australian Bureau of Statistics (2012a) *Australian National Accounts: National Income, Expenditure and Product, September 2008*, Cat No. 5206.0., Canberra: ABS.

Australian Bureau of Statistics (2012b) *Consumer Price Index*, Cat No. 6401.0, Canberra: ABS.

Australian Bureau of Statistics (2012c) *Retail Trade Trends Australia October 2008*, Cat No. 8501.0, Canberra: ABS.

Australian Bureau of Statistics (2012d) *Sales of New Motor Vehicles, Australia, October 2008*, Cat No. 9314.0, Canberra: ABS.

- Australian Bureau of Statistics (2012e) *Building Approvals Australia September 2008*, Cat No. 8731.0, Canberra: ABS.
- Australian Bureau of Statistics (2012f) *Labour Force Australia*, Cat No. 6202.0, Canberra: ABS.
- Australian Bureau of Statistics (2012g) *Labour Force, Australia, Spreadsheets*. 6202.0.55.001. Canberra: ABS.
- Australian Bureau of Statistics (2012h) *Australian Labour Market Statistics*, Cat 6105.0, Canberra: ABS.
- Australian Bureau of Statistics (2012i) *Average Weekly Earnings Australia*, Cat No. 6302.0, Canberra: ABS.
- Australian Bureau of Statistics (2012j) *Wage Price Index Australia*, Cat No. 6345.0, Canberra: ABS.
- Australian Bureau of Statistics (2012k) *Australian System of National Accounts*, Cat. No 5204.0, Canberra: ABS.
- Borland J (2012) Industrial Relations Reform: Chasing a Pot of Gold at the End of the Rainbow? *The Australian Economic Review*, 45(3) 269–89.
- Bradley G (2011) ‘Four Ways in Which the Fair Work Act Is Reducing Productivity’, in *The Australian* 7 Nov 2011 <http://theaustralian.newspaperdirect.com/epaper/viewer.aspx> (Accessed 7 September 2012).
- Dabscheck B (2006) The contract regulation club. *Economic and Labour Relations Review* 16(2): 3-24.
- Elson D (2012) “Financial Crisis, Austerity and Gender Equity in the UK” Available at <http://w3.unisa.edu.au/hawkeinstitute/cwl/documents/Prof-Diane-Elson.pdf> (Accessed 13 December 2012).
- Fair Work Australia (2012a), *Equal Remuneration Case: Decision*. Print Number PR022012. <http://www.fwc.gov.au/decisionssigned/html/2012fwafb1000.htm> (accessed 8 Jan 2013).
- Fair Work Australia (2012b) “Annual Wage Review 2011 -12” Available at <http://www.fwa.gov.au/> (accessed 27 November 2012).
- Hancock K (2012) Enterprise Bargaining and Productivity. *Labour and Industry* 22(3) 289–302.
- Hoynes HW, Miller DL and Schaller, J (2012) ‘Who Suffers During Recessions?’ NBER Working Paper no. 17951, National Bureau of Economic Research (NBER), Cambridge, Massachusetts.
- Jefferson T and Preston A (2012) Labour Markets and Wages in Australia: 2011 *Journal of Industrial Relations*, 54(3):293-331.
- McTaggart D, Findlay C and Parkin M (2010) *Economics*, 6th ed. French’s Forrest, Australia: Pearson Australia.

Melbourne Institute for Applied Economic and Social Research (2012) 'Outlook for Australia', *Monthly Bulletin of Economic Trends*, Available at <http://melbourneinstitute.com/miaesr/publications/indicators/bulletin.html> (Accessed 27 November 2012).

Moskos M 2012. 'How Occupational Sex Segregation Shapes Low-skilled Men's Employment Opportunities in Australia.' *Labour and Industry*, 22 (4) 415–432.

Peetz, D. (2012) Does Industrial Relations Policy Affect Productivity? *Australian Bulletin of Labour* 38 (4): 268-292.

Pocock B, Elton J, Preston A, Charlesworth S, MacDonald F, Baird M, Cooper R, and Ellem B (2008) The impact of 'Work Choices' on women in low paid employment. *Journal of Industrial Relations* 50 (3): 475-488.

Probst T, Stewart S, Gruys M, Tierney B (2007) Productivity, counter productivity and creativity: The ups and downs of job insecurity. *Journal of Occupational and Organizational Psychology* 80(3):479-497.

Productivity Commission of Australia (2011) Annual Report 2010-11. Available at www.pc.gov.au/ (accessed 7 September 2012).

Reisel WD, Probst T, Swee-Lim C, Maloles C and König, C (2007) The effects of job insecurity on satisfaction and perceived organizational performance. *Journal of Leadership and Organizational Studies* 14 (2): 106-11.

Reserve Bank of Australia (2012a) Index of Commodity Prices. Available at <http://www.rba.gov.au/statistics/frequency/commodity-prices.html> (accessed 13 December 2012).

Reserve Bank of Australia (2012b) Statement by Glenn Stevens, Governor: Monetary Policy Decision. Available at <http://www.rba.gov.au/media-releases/2012/mr-12-33.html> (accessed 12 December 2012).

Sloan J (2012) IR club's recipe is no way to grow. *The Weekend Australian*, October 27-28: 15-16.

Soames L, Barker D and Talgaswatta T (2011) *Competition, Innovation and Productivity in Australian Businesses*, Cat. No. 1351.0.55.035, ABS: Canberra.

Taylor C, Bradley C, Dobbs R, Thompson F And Clifton D (2012) Beyond the boom: Australia's productivity imperative. McKinsey Global Institute Available at [accessed www.mckinsey.com/mgi](http://www.mckinsey.com/mgi) (Accessed 7 September 2012).

Westacott, J (2011) Review of the Fair Work Act. Available at <http://www.bca.com.au/Content/101922.aspx> (Accessed 7 September 2012).

Zheng S (2005) Research paper: *Estimating industry-level multifactor productivity for the market-sector industries in Australia: Methods and experimental results*, Cat. No. 1351.0.55.004, ABS: Canberra.

