



Research Report 3/2013

Manufacturing industry profile

RSRT & Minimum Wages Research Team, Tribunal Services Branch—Fair Work Commission

February 2013

The contents of this report are the responsibility of the researchers and the research has been conducted without the involvement of members of the Fair Work Commission.

ISBN 978-0-9874935-3-8

© Commonwealth of Australia 2013

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, all other rights are reserved. Requests and inquiries concerning reproduction and rights should be addressed to:

Diana Lloyd, Manager, Media and Communications

GPO Box 1994

Melbourne VIC 3001

Phone: 03 8661 7680

Email: Diana.Lloyd@fwc.gov.au

All research undertaken by the Fair Work Commission for the Annual Wage Review 2012–2013 has been agreed by the Research Group. The Research Group comprises a Chair from the RSRT & Minimum Wages Research Team, Tribunal Services Branch of the Fair Work Commission, and representatives nominated by:

- Australian Chamber of Commerce and Industry (ACCI);
- Australian Industry Group (Ai Group);
- Australian Council of Social Services (ACOSS);
- Australian Council of Trade Unions (ACTU);
- Australian Government; and
- state and territory governments.

A draft of the report was circulated to the Research Group prior to finalisation. The RSRT & Minimum Wages Research Team would like to thank the Research Group for its comments.

Table of Contents

1	Industry Overview	1
1.1	Economic indicators.....	1
1.2	Earnings.....	2
2	Industry structure and performance	3
2.1	Industry structure.....	3
2.2	Income and cost structure.....	7
2.3	Industry performance.....	10
3	Labour market structure and trends	12
3.1	Industry workforce.....	12
3.2	Labour market trends.....	15
4	Earnings and wage instruments	21
4.1	Earnings.....	21
4.2	Wage instruments and bargaining.....	23
5	Forms and conditions of employment	25
6	References	26

List of Tables

Table 1.1: Contribution of Manufacturing to the Australian economy, 2011–12	1
Table 1.2: Average hourly cash earnings of full-time non-managerial adult employees in Manufacturing, by subdivision, August 2008, May 2010 and May 2012	2
Table 2.1: Industry value added by Manufacturing subdivisions, 2008–09 to 2010–11	3
Table 2.2: Wages and salaries by business size, 2008–09 to 2010–11	4
Table 2.3: Sales and service income by business size, 2008–09 to 2010–11.....	4
Table 2.4: Industry value added by business size, 2008–09 to 2010–11	5
Table 2.5: Industry gross value added by Manufacturing, by state/territory, 2011–12	5
Table 3.1: Employed persons by gender and employment status, November 2012	12
Table 3.2: Employed persons by age, November 2012	12
Table 3.3: Composition of employed persons by subdivision, November 2012	13
Table 3.4: Employed persons by major occupational group, November 2012	14
Table 3.5: Persons previously employed in Manufacturing, November 2012.....	18
Table 3.6: Persons underemployed in Manufacturing, November 2012.....	18
Table 3.7: Average annual growth rates of labour and multifactor productivity, 2003–04 to 2011–12.....	18
Table 4.1: Average weekly earnings, November 2012	21
Table 4.2: Method of setting pay, May 2012	23
Table 5.1: Employment type by gender, November 2011	25
Table 5.2: Forms of employment by gender, November 2011	25
Table 5.3: Employees with and without paid leave, November 2011	25

List of Figures

Figure 2.1: Exports by industry subdivision, 2010 to 2012	6
Figure 2.2: Imports by industry subdivision, 2010 to 2012.....	6
Figure 2.3: Wages and salaries as percentage of total expenses, by subdivision, 2008–09 to 2010–11	7
Figure 2.4: Profit margins by subdivision, 2008–09 to 2010–11	8
Figure 2.5: Wages share of total factor income, June 2008 to June 2012.....	9
Figure 2.6: Profit and gross mixed share of total factor income, June 2008 to June 2012.....	9
Figure 2.7: Sales and company gross operating profits in Manufacturing, annual percentage change, September 2008 to September 2012	10
Figure 2.8: Growth in real output, annual percentage change, September 2008 to September 2012	10
Figure 2.9: Manufacturing inventories, annual percentage change, September 2008 to September 2012	11
Figure 3.1: Duration of employment with current employer/business in Manufacturing, February 2012	14
Figure 3.2: Employed persons by level of educational attainment, May 2012.....	15
Figure 3.3: Persons employed in Manufacturing and Manufacturing employment as a proportion of total employment, November 2008 to November 2012	15
Figure 3.4a: Persons employed in Manufacturing by subdivision, November 2008 to November 2012	16
Figure 3.4b: Persons employed in Manufacturing by subdivision, November 2008 to November 2012	16
Figure 3.4c: Persons employed in Manufacturing by subdivision, November 2008 to November 2012	17
Figure 3.4d: Persons employed in Manufacturing by subdivision, November 2008 to November 2012	17
Figure 3.5a: Projected employment growth in Manufacturing by subdivision, five years to 2016–17	19
Figure 3.5b: Projected employment growth in Manufacturing by subdivision, five years to 2016–17	19
Figure 3.5c: Projected employment growth in Manufacturing by subdivision, five years to 2016–17	20
Figure 4.1: Distribution of hourly total cash earnings (\$1 intervals), adult employees, May 2010.....	21
Figure 4.2: Rate of growth in total hourly rates of pay excluding bonuses, December 2008 to December 2012	22
Figure 4.3: Average weekly ordinary time earnings of full-time adult employees, November 2008 to November 2012	22
Figure 4.4: Average weekly total cash earnings by method of setting pay, May 2012	23
Figure 4.5: Distribution of hourly total cash earnings (\$1 intervals) for award-reliant adult employees, May 2010.....	24

Figure 4.6: Average annualised wage increases for federal enterprise agreements certified in the quarter, September 2008 to September 201224

1 Industry Overview

1.1 Economic indicators

Table 1.1: Contribution of Manufacturing to the Australian economy, 2011–12

	Manufacturing	Percentage of total
Gross value added (\$m)	108 678	7.9
Sales (\$m)	362 386	16.0
Employment ('000s)	954	8.4
Actual hours worked per week ('000s)	36 053	9.3
Wages and salaries (\$m)	56 226	8.9
Gross fixed capital formation (\$m)	21 117	5.2
Net capital stock (\$m)	180 718	4.1
R&D expenditure (\$m)	4760	26.6

Note: Gross value added is expressed in original and real terms, from chain volume estimates. Sales (\$m) is the sum of quarterly estimates from September 2011 to June 2012. Sales is expressed in real terms from chain volume estimates. Employment and actual hours worked per week figures are averaged over the four quarters from August 2011 to May 2012. Actual hours worked per week is expressed in original terms. Wages and salaries (\$m) data are collected from the *Australian System of National Accounts* and are expressed in original and nominal terms, from current price estimates. Gross fixed capital formation and net capital stock is expressed in original and real terms, from chain volume estimates. The reference period for the R&D expenditure estimate is for the 2010–11 financial year.

Source: ABS, *Australian System of National Accounts, 2011–12*, Catalogue No. 5204.0; ABS, *Business Indicators, Australia, Sep 2012*, Catalogue No. 5676.0; ABS, *Labour Force, Australia, Detailed, Quarterly, Nov 2012*, Catalogue No. 6291.0.55.003; ABS, *Research and Experimental Development, Businesses, Australia, 2010–11*, Catalogue No. 8104.0.

1.2 Earnings

Table 1.2: Average hourly cash earnings of full-time non-managerial adult employees in Manufacturing, by subdivision, August 2008, May 2010 and May 2012

Industry subdivision/group	2008	2010	2012
Food product manufacturing	24.70	27.20	28.00
Beverage and tobacco product manufacturing	30.80	31.40	34.70
Textile, leather, clothing and footwear manufacturing	20.00	23.40	22.60
Wood product manufacturing	23.50	23.20	25.20
Pulp, paper and converted paper product manufacturing	32.60	37.00	36.30
Printing (including the reproduction of recorded media)	25.30	27.60	26.70
Petroleum and coal product manufacturing	38.00	–	–
Basic chemical and chemical product manufacturing	36.20	41.70	45.10
Polymer product and rubber product manufacturing	26.10	25.30	33.10
Non-metallic mineral product manufacturing	27.90	28.60	32.40
Primary metal and metal product manufacturing	37.50	38.40	42.40
Fabricated metal product manufacturing	26.10	27.50	29.10
Transport equipment manufacturing	29.80	29.60	33.30
Machinery and equipment manufacturing	27.40	31.00	34.20
Furniture and other manufacturing	21.40	20.10	19.60
Manufacturing	27.70	29.50	31.60
All Industries	30.10	32.20	34.70

Note: Average hourly cash earnings are not published for Petroleum and coal product manufacturing in 2010 and 2012 but are included in industry total and all industries.

Source: ABS, *Employee Earnings and Hours, Australia, various*, Catalogue No. 6306.0.

2 Industry structure and performance

2.1 Industry structure

Table 2.1: Industry value added by Manufacturing subdivisions, 2008–09 to 2010–11

	2008–09		2009–10		2010–11	
	Value added (\$m)	% of industry value added	Value added (\$m)	% of industry value added	Value added (\$m)	% of industry value added
Food product manufacturing	16 441	15.8	17 104	17.5	17 754	17.5
Beverage and tobacco product manufacturing	5899	5.7	6182	6.3	6561	6.5
Textile, leather, clothing and footwear manufacturing	2848	2.7	2867	2.9	2807	2.8
Wood product manufacturing	4203	4.0	4211	4.3	4105	4.0
Pulp, paper and converted paper product manufacturing	2769	2.7	2633	2.7	2966	2.9
Printing (including the reproduction of recorded media)	4393	4.2	4090	4.2	4075	4.0
Petroleum and coal product manufacturing	1011	1.0	1572	1.6	1797	1.8
Basic chemical and chemical product manufacturing	8291	8.0	8386	8.6	8766	8.6
Polymer product and rubber product manufacturing	5011	4.8	5390	5.5	4881	4.8
Non-metallic mineral product manufacturing	5786	5.6	5441	5.6	5437	5.4
Primary metal and metal product manufacturing	12 190	11.7	7968	8.1	9528	9.4
Fabricated metal product manufacturing	11 636	11.2	10 577	10.8	10 683	10.5
Transport equipment manufacturing	9034	8.7	8448	8.6	8745	8.6
Machinery and equipment manufacturing	11 805	11.4	10 575	10.8	10 696	10.5
Furniture and other manufacturing	2608	2.5	2495	2.5	2632	2.6
Manufacturing	103 925	100.0	97 940	100.0	101 434	100.0

Source: ABS, *Australian Industry, 2010–11*, Catalogue No. 8155.0.

Table 2.2: Wages and salaries by business size, 2008–09 to 2010–11

	Percentage of industry total		
	2008–09	2009–10	2010–11
Manufacturing			
Small	17.9	17.8	19.2
Medium	30.2	30.8	29.5
Large	51.9	51.4	51.3
Total selected industries			
Small	29.5	31.4	29.5
Medium	28.3	26.7	27.7
Large	42.1	41.9	42.8

Note: Small businesses employ fewer than 20 persons, medium businesses employ between 20 to 199 persons and large businesses employ 200 or more persons. Total selected industries excludes Financial and insurance services.

Source: ABS, *Australian Industry, 2010–11*, Catalogue No. 8155.0.

Table 2.3: Sales and service income by business size, 2008–09 to 2010–11

	Percentage of industry total		
	2008–09	2009–10	2010–11
Manufacturing			
Small	14.3	14.2	15.2
Medium	23.6	29.9	27.6
Large	62.1	55.9	57.2
Total selected industries			
Small	31.9	33.6	31.9
Medium	24.8	24.4	25.4
Large	43.3	42.0	42.7

Note: Small businesses employ fewer than 20 persons, medium businesses employ between 20 to 199 persons and large businesses employ 200 or more persons. Total selected industries excludes Financial and insurance services.

Source: ABS, *Australian Industry, 2010–11*, Catalogue No. 8155.0.

Table 2.4: Industry value added by business size, 2008–09 to 2010–11

	Percentage of industry total		
	2008–09	2009–10	2010–11
Manufacturing			
Small	20.8	18.9	20.3
Medium	27.1	29.0	27.9
Large	52.1	52.1	51.8
Total selected industries			
Small	34.0	35.2	33.7
Medium	23.6	22.5	23.4
Large	42.5	42.3	42.9

Note: Small businesses employ fewer than 20 persons, medium businesses employ between 20 to 199 persons and large businesses employ 200 or more persons. Total selected industries excludes Financial and insurance services.

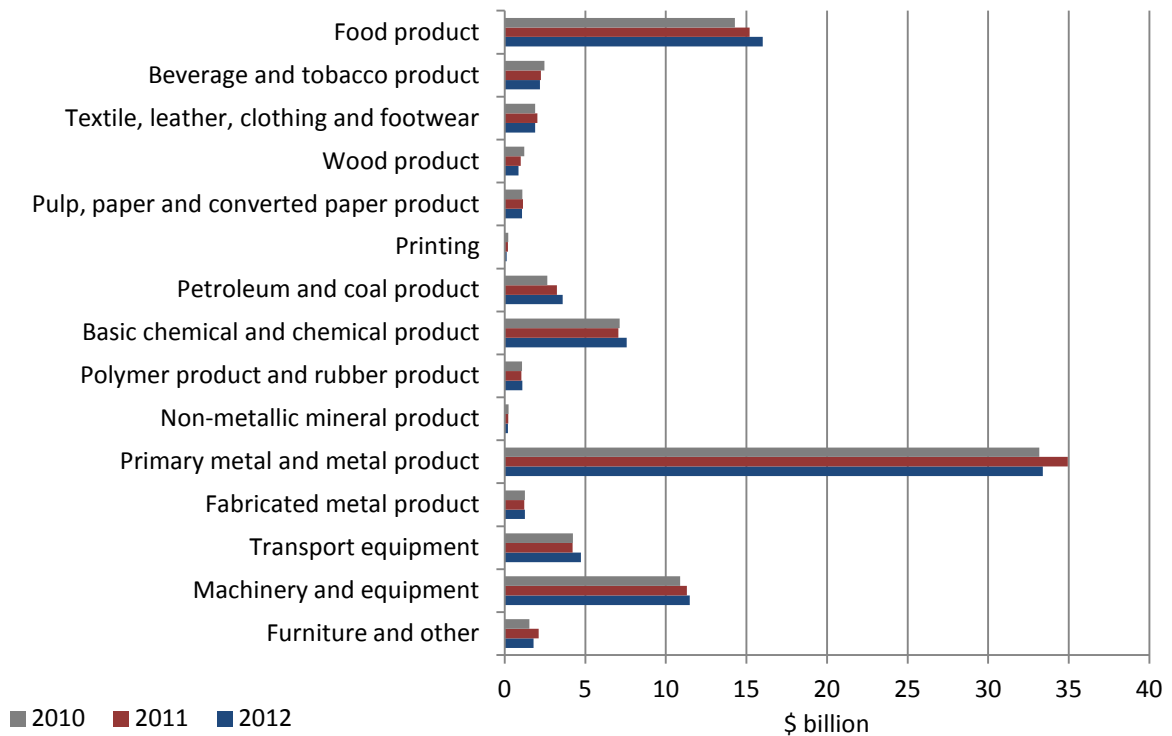
Source: ABS, *Australian Industry, 2010–11*, Catalogue No. 8155.0.

Table 2.5: Industry gross value added by Manufacturing, by state/territory, 2011–12

	Percentage of national Manufacturing value added	Percentage of Manufacturing value added by state/territory
New South Wales	32.4	8.4
Victoria	25.1	9.1
Queensland	19.8	8.0
South Australia	7.9	10.0
Western Australia	11.5	5.4
Tasmania	1.9	8.7
Northern Territory	1.1	7.0
Australian Capital Territory	0.4	1.4
Australia	100.0	7.9

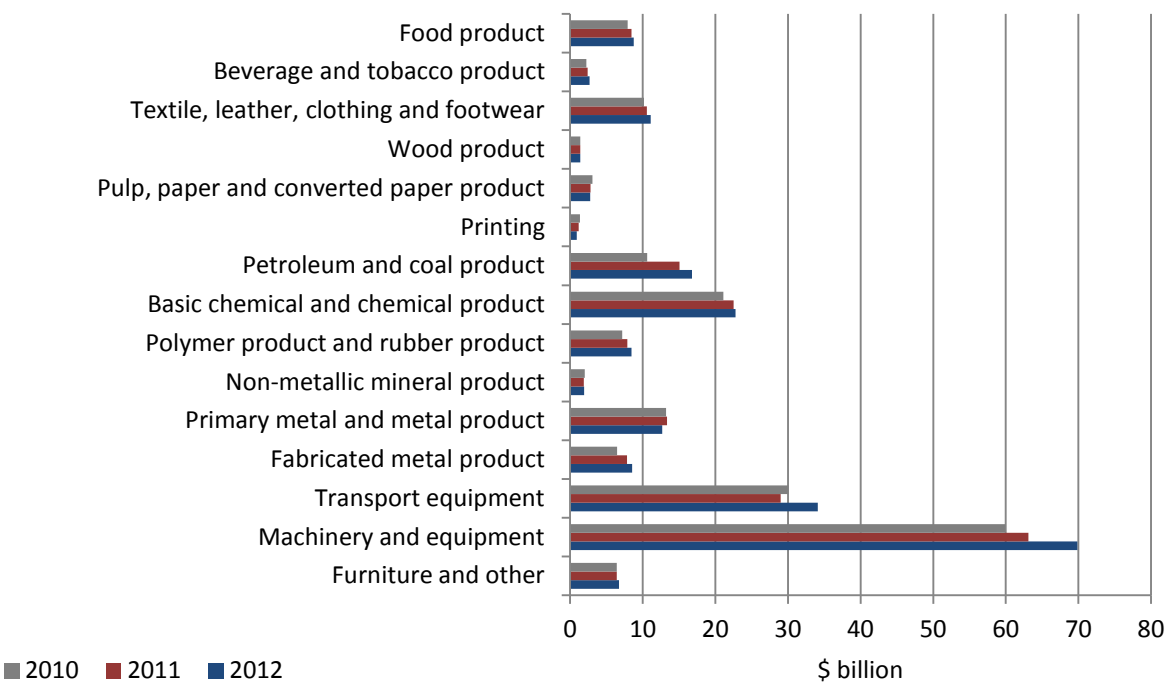
Source: ABS, *Australian National Accounts: State Accounts, 2011–12*, Catalogue No. 5220.0.

Figure 2.1: Exports by industry subdivision, 2010 to 2012



Source: ABS, *International Trade in Goods and Services, Australia, Dec 2012*, Catalogue No. 5368.0.

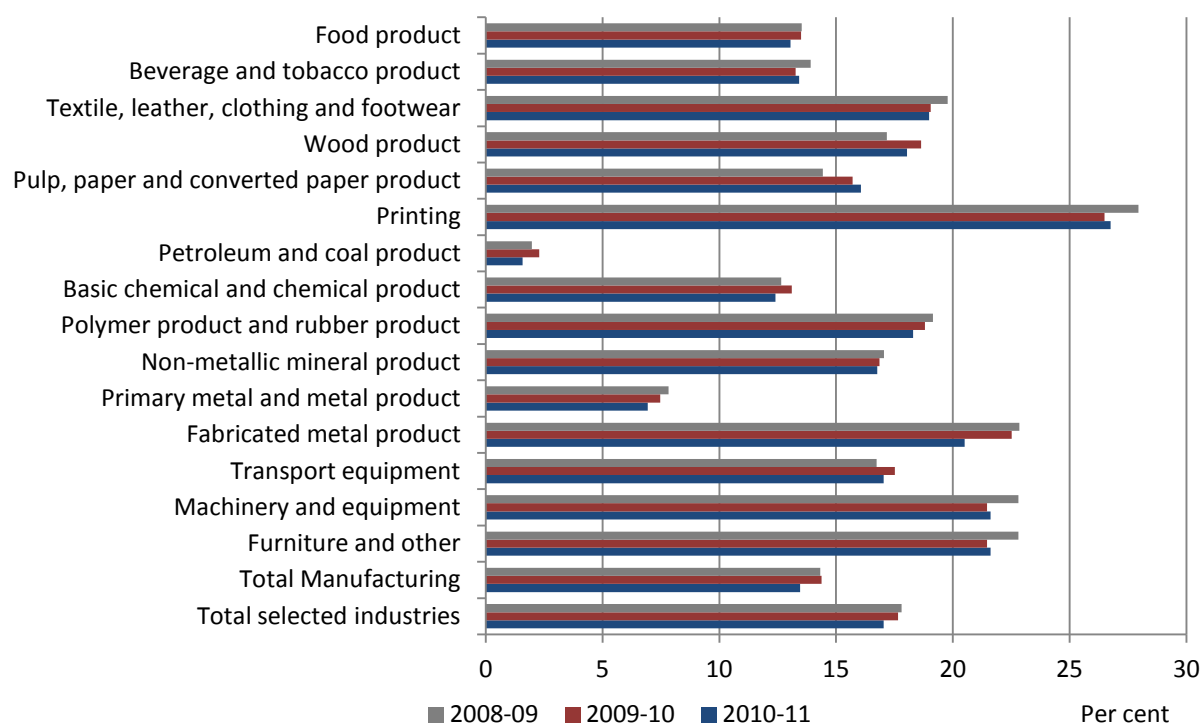
Figure 2.2: Imports by industry subdivision, 2010 to 2012



Source: ABS, *International Trade in Goods and Services, Australia, Dec 2012*, Catalogue No. 5368.0.

2.2 Income and cost structure

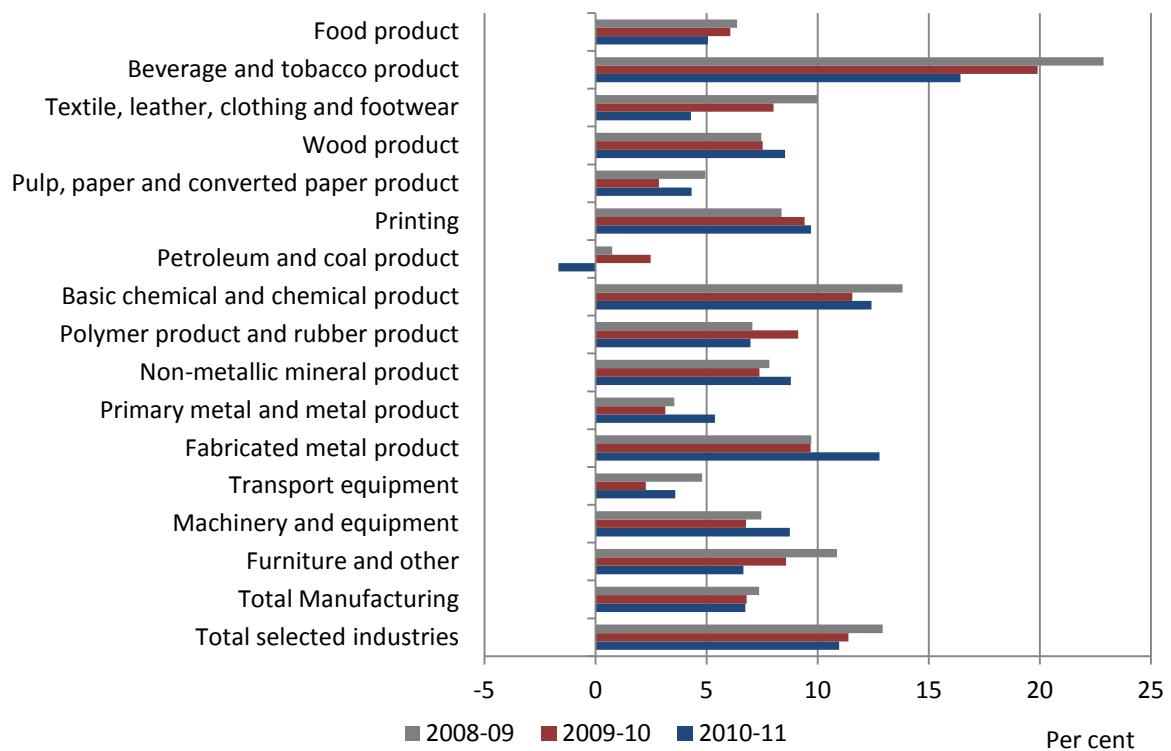
Figure 2.3: Wages and salaries as percentage of total expenses, by subdivision, 2008–09 to 2010–11



Note: Total selected industries excludes Financial and insurance services.

Source: ABS, *Australian Industry, 2010–11*, Catalogue No. 8155.0.

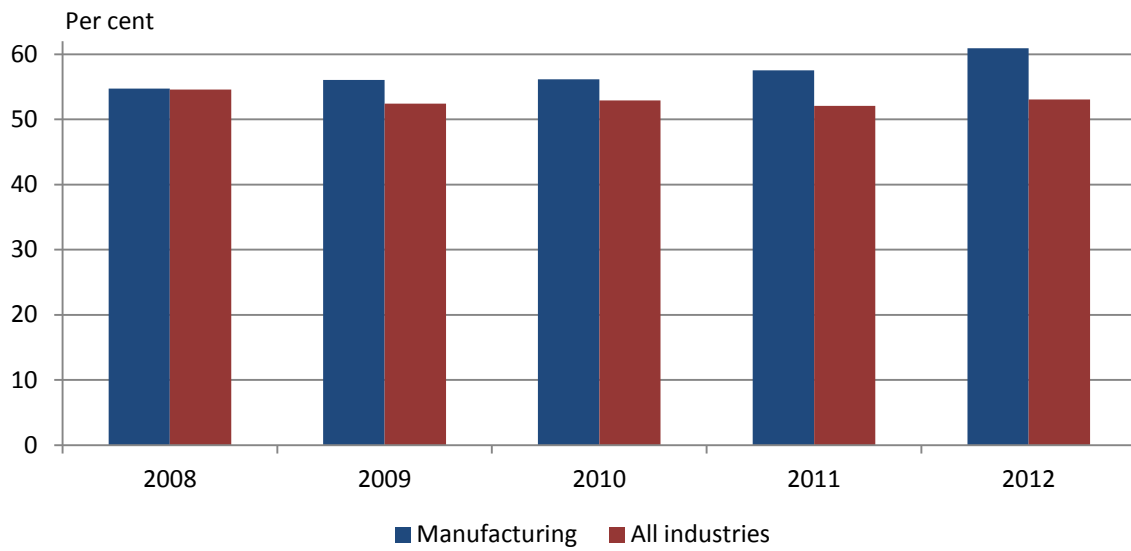
Figure 2.4: Profit margins by subdivision, 2008–09 to 2010–11



Note: Profit margins are calculated as the percentage of sales and service income available as operating profit before tax. Total selected industries excludes Financial and insurance services. Estimates of operating profit before tax in Wood product manufacturing in 2009–10 and 2010–11; Petroleum and coal product manufacturing in 2010–11; Polymer product and rubber product manufacturing in 2010–11; Primary metal and metal product manufacturing in 2009–10; Transport equipment manufacturing in 2008–09, 2009–10 and 2010–11 and Furniture and other manufacturing in 2008–09 have a relatively large standard error of between 25 and 50 per cent and should be interpreted with caution.

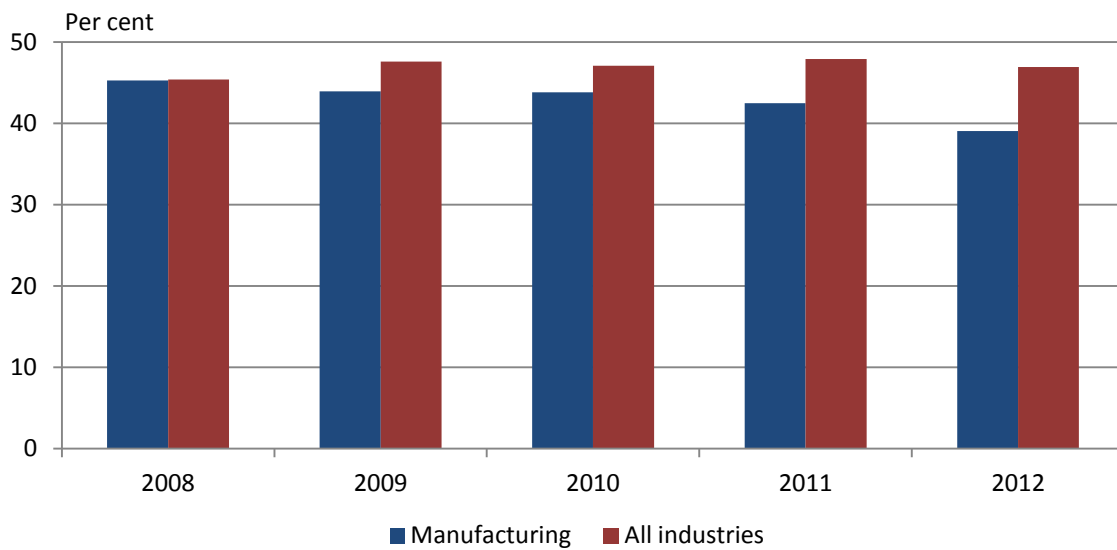
Source: ABS, *Australian Industry, 2010–11*, Catalogue No. 8155.0.

Figure 2.5: Wages share of total factor income, June 2008 to June 2012



Source: ABS, *Australian System of National Accounts, 2011–12*, Catalogue No. 5204.0.

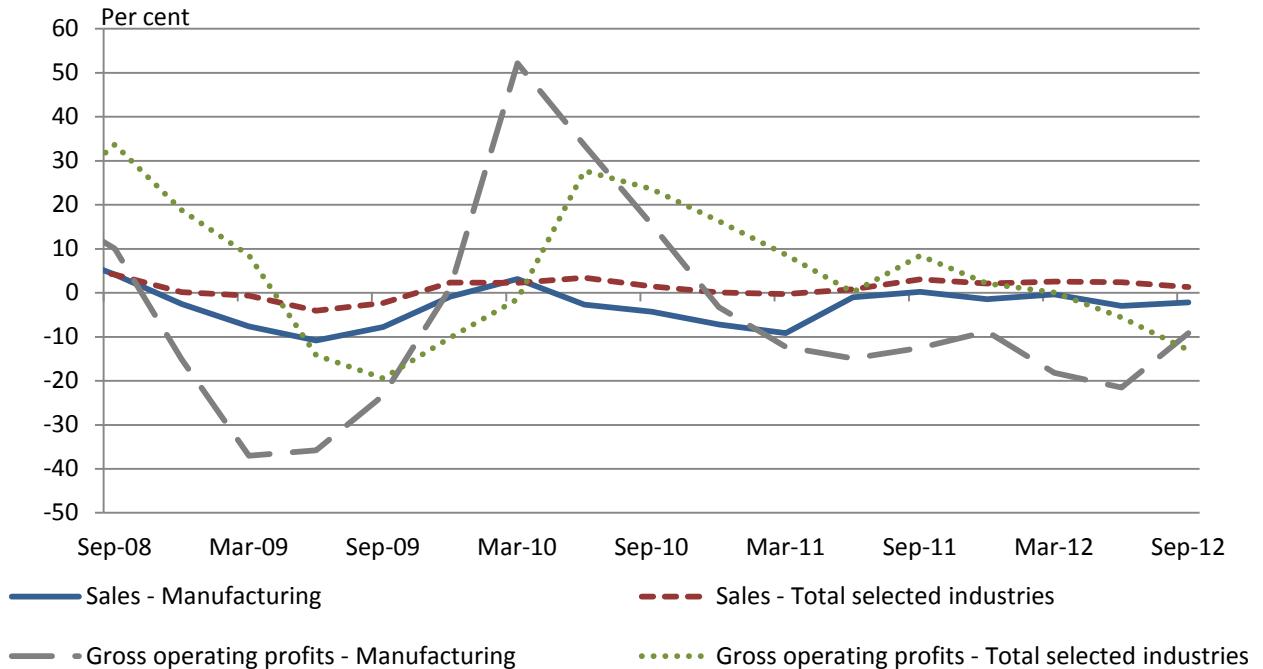
Figure 2.6: Profit and gross mixed share of total factor income, June 2008 to June 2012



Source: ABS, *Australian System of National Accounts, 2011–12*, Catalogue No. 5204.0.

2.3 Industry performance

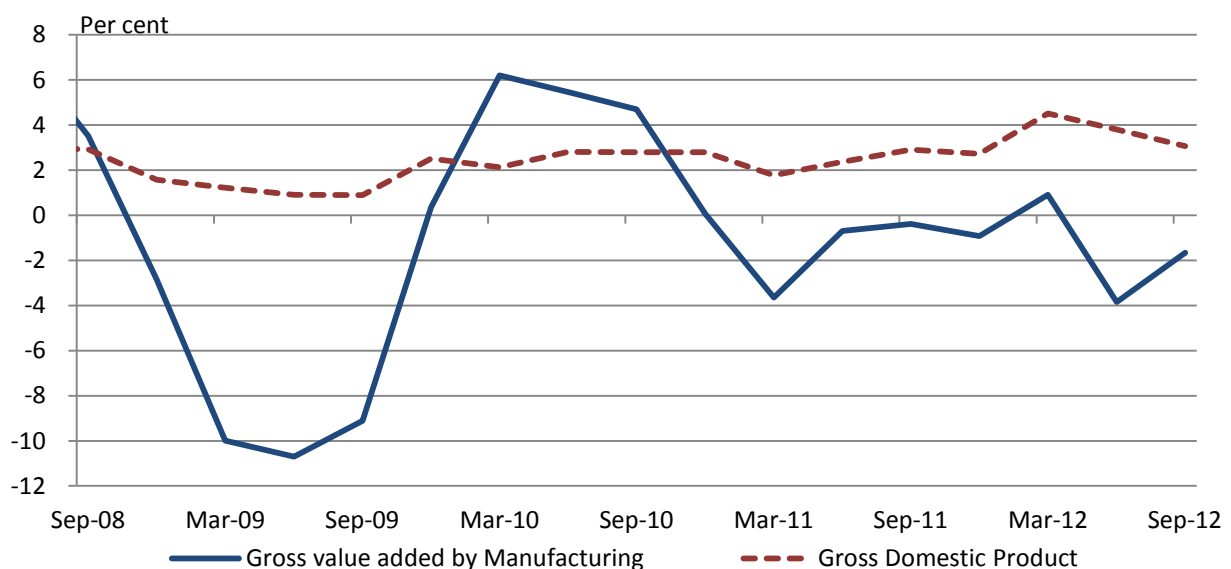
Figure 2.7: Sales and company gross operating profits in Manufacturing, annual percentage change, September 2008 to September 2012



Note: Sales of goods and services and gross operating profit estimates are not available for Education and training and Health care and social services, as well as Depository financial intermediation and Insurance superannuation funds subdivisions from Finance and insurance services. Sales is expressed in real terms, from chain volume estimates. Gross operating profits is expressed in nominal terms, from current price estimates.

Source: ABS, *Business Indicators, Australia, Sep 2012*, Catalogue No. 5676.0.

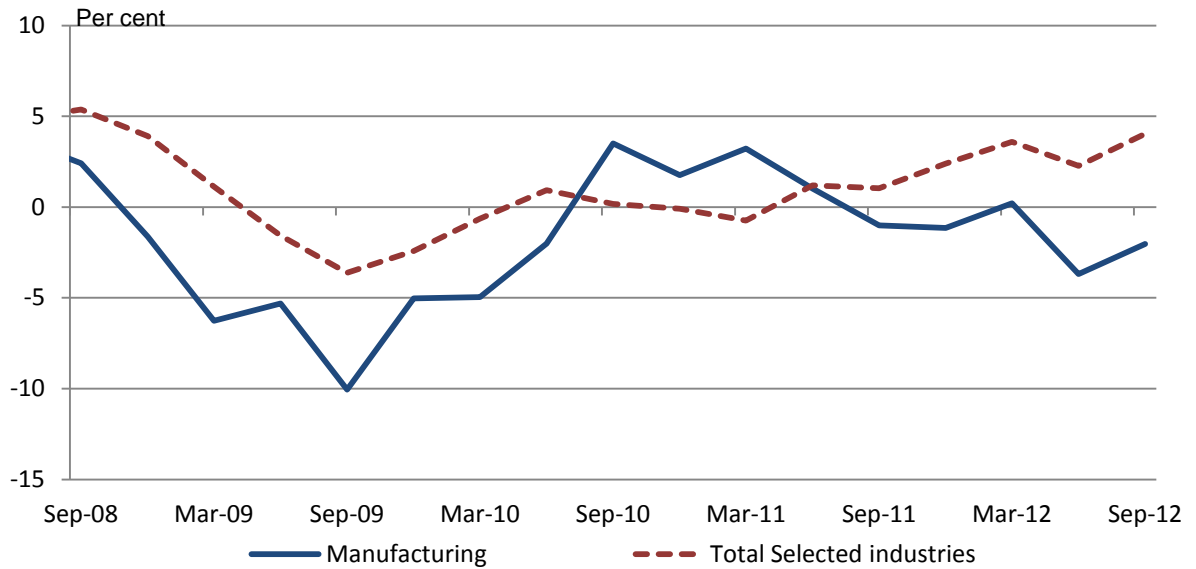
Figure 2.8: Growth in real output, annual percentage change, September 2008 to September 2012



Note: All data are expressed in real terms from chain volume estimates.

Source: ABS, *Australian National Accounts: National Income, Expenditure and Product, Sep 2012*, Catalogue No. 5206.0.

Figure 2.9: Manufacturing inventories, annual percentage change, September 2008 to September 2012



Note: All data are expressed in real terms from chain volume estimates. Data on inventories are collected for Mining, Manufacturing, Electricity, gas, water and waste services, Wholesale trade, Retail trade and Accommodation and food services.

Source: ABS, *Business Indicators, Australia, Sep 2012*, Catalogue No. 5676.0.

3 Labour market structure and trends

3.1 Industry workforce

Table 3.1: Employed persons by gender and employment status, November 2012

	Manufacturing		All industries
	No. ('000s)	Percentage of industry employment	Percentage of total employment
Men			
Full-time	669.2	68.8	45.7
Part-time	48.0	4.9	8.5
Women			
Full-time	162.2	16.7	24.9
Part-time	92.6	9.5	20.9
Total	972.2	100.0	100.0

Note: All data are expressed in original terms.

Source: ABS, *Labour Force, Australia, Detailed, Quarterly, Nov 2012*, Catalogue No. 6291.0.55.003.

Table 3.2: Employed persons by age, November 2012

Age (yrs)	Manufacturing		All industries
	No. ('000s)	Percentage of industry employment	Percentage of total employment
15–19	38	3.9	5.7
20–24	88	9.1	10.3
25–34	204	21.0	22.7
35–44	238	24.5	22.4
45–54	217	22.3	21.4
55–59	88	9.1	8.4
60–64	64	6.6	5.7
65 and over	33	3.4	3.4
Total	972	100.0	100.0

Note: All data are expressed in original terms. Estimates of the number of employees are rounded.

Source: ABS, *Labour Force, Australia, Detailed, Quarterly, Nov 2012*, Catalogue No. 6291.0.55.003.

Table 3.3: Composition of employed persons by subdivision, November 2012

Subdivision	Total employment		Percentage of total subdivision employment							
	No. ('000s)	%	Male		Female		Total		Total	
			FT	PT	FT	PT	Male	Female	FT	PT
Food product manufacturing	204.8	21.1	51.9	7.7	22.8	17.6	59.6	40.4	74.7	25.3
Beverage and tobacco product manufacturing	24.9	2.6	59.4	4.6	26.7	9.2	64.1	35.9	86.1	13.9
Textile, leather, clothing and footwear manufacturing	43.4	4.5	43.0	6.4	33.0	17.6	49.3	50.7	76.0	24.0
Wood product manufacturing	39.0	4.0	78.2	7.4	7.5	6.9	85.6	14.4	85.7	14.3
Pulp, paper and converted paper product manufacturing	14.5	1.5	78.8	2.5	9.8	9.0	81.3	18.7	88.6	11.4
Printing (including the reproduction of recorded media)	50.7	5.2	59.2	5.0	24.6	11.2	64.3	35.7	83.8	16.2
Petroleum and coal product manufacturing	10.1	1.0	81.5	0.0	15.7	2.8	81.5	18.5	97.2	2.8
Basic chemical and chemical product manufacturing	40.2	4.1	49.3	2.6	34.2	13.9	52.0	48.0	83.5	16.5
Polymer product and rubber product manufacturing	37.9	3.9	69.0	2.4	18.3	10.3	71.4	28.6	87.3	12.7
Non-metallic mineral product manufacturing	32.9	3.4	81.8	4.1	6.8	7.3	85.9	14.1	88.6	11.4
Primary metal and metal product manufacturing	80.7	8.3	89.4	1.1	6.7	2.8	90.5	9.5	96.1	3.9
Fabricated metal product manufacturing	47.2	4.9	85.3	6.0	5.9	2.8	91.3	8.7	91.2	8.8
Transport equipment manufacturing	83.6	8.6	81.9	6.4	9.0	2.7	88.3	11.7	90.9	9.1
Machinery and equipment manufacturing	112.2	11.5	77.5	3.4	14.1	5.0	80.9	19.1	91.5	8.5
Furniture and other manufacturing	54.5	5.6	80.6	3.4	8.6	7.4	84.0	16.0	89.2	10.8
Other Manufacturing	95.7	9.8	67.7	4.7	17.9	9.7	72.4	27.6	85.6	14.4
Total Manufacturing	972.2	100.0	68.8	4.9	16.7	9.5	73.8	26.2	85.5	14.5
All industries	11531.1		45.7	8.5	24.9	20.9	54.2	45.8	70.6	29.4

Note: All data are expressed in original terms. Other Manufacturing consists of all remaining employed persons not classified within a defined Manufacturing subdivision. FT = full-time, PT = part-time.

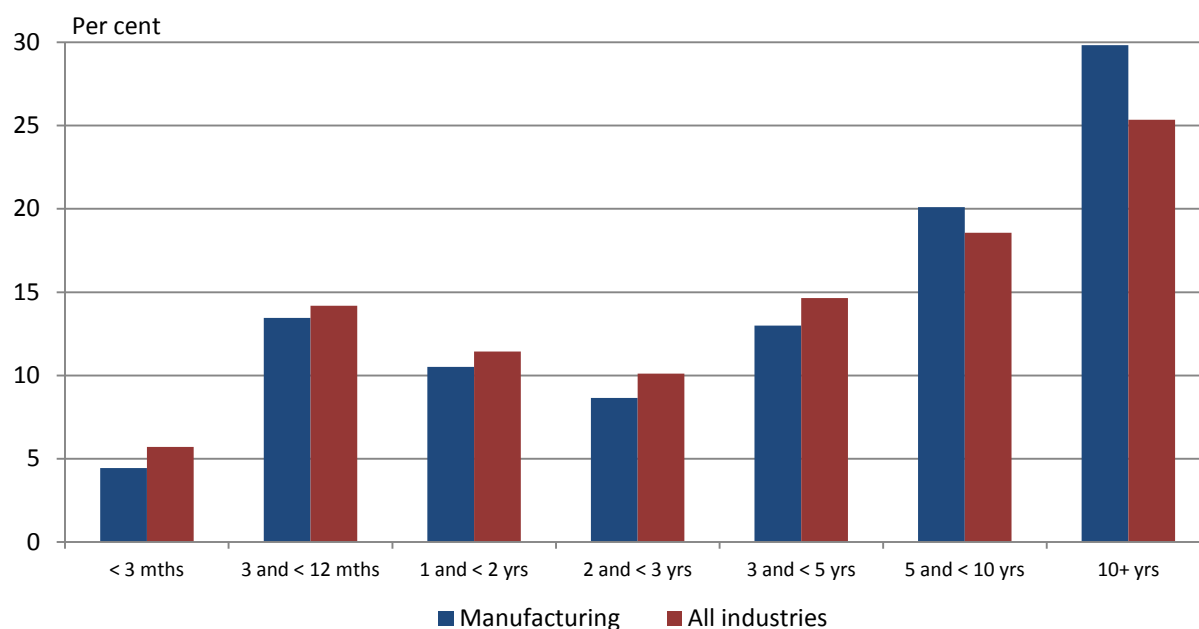
Source: ABS, *Labour Force, Australia, Detailed, Quarterly, Nov 2012*, Catalogue No. 6291.0.55.003.

Table 3.4: Employed persons by major occupational group, November 2012

	Manufacturing		All industries
	No. ('000s)	Percentage of employment in occupation	Percentage of total employment in occupation
Managers	134	13.8	12.5
Professionals	95	9.8	22.1
Technicians and trade workers	259	26.6	14.6
Community and personal service workers	7	0.7	9.7
Clerical and administrative workers	99	10.2	14.6
Sales workers	46	4.7	9.4
Machinery operators and drivers	135	13.9	6.8
Labourers	197	20.3	10.1
Total	972	100.0	100.0

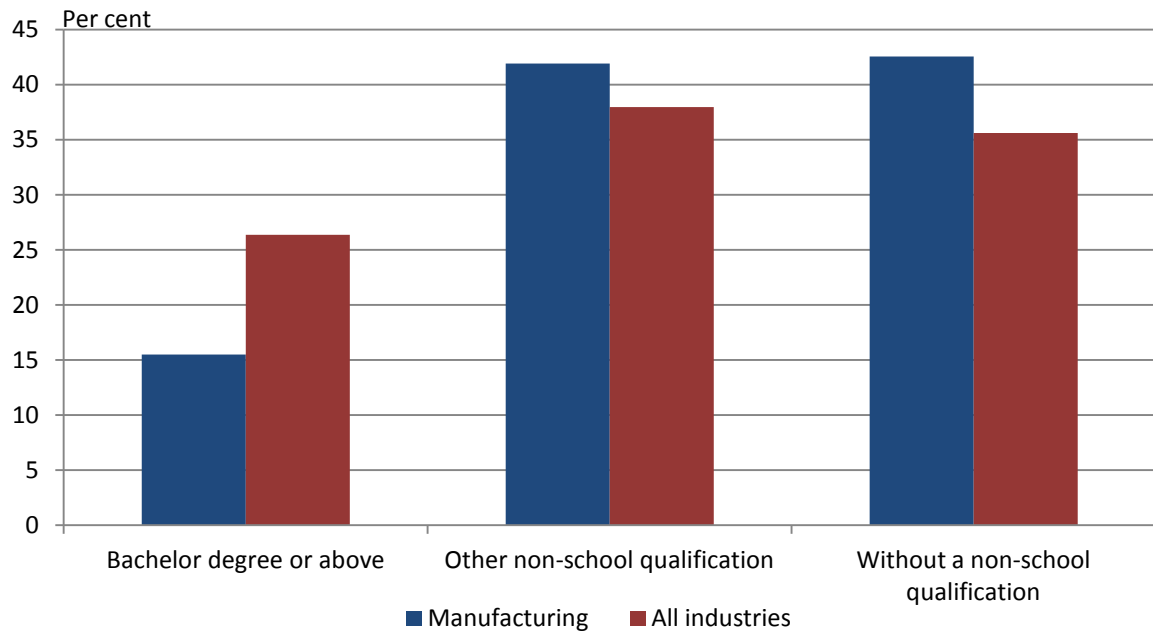
Note: All data are expressed in original terms. Estimates of the number of employees are rounded.

Source: ABS, *Labour Force, Australia, Detailed, Quarterly, Nov 2012*, Catalogue No. 6291.0.55.003.

Figure 3.1: Duration of employment with current employer/business in Manufacturing, February 2012

Source: ABS, *Labour Mobility, Australia, Feb 2012*, Catalogue No. 6209.0.

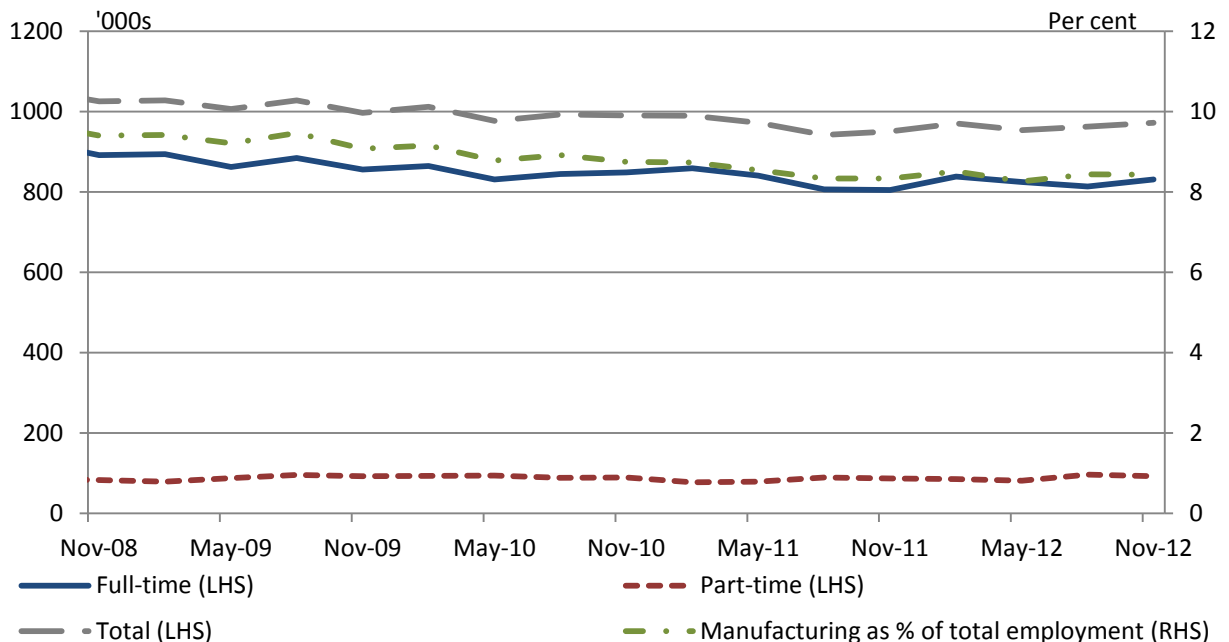
Figure 3.2: Employed persons by level of educational attainment, May 2012



Source: ABS, *Education and Work, Australia, May 2012*, Catalogue No. 6227.0.

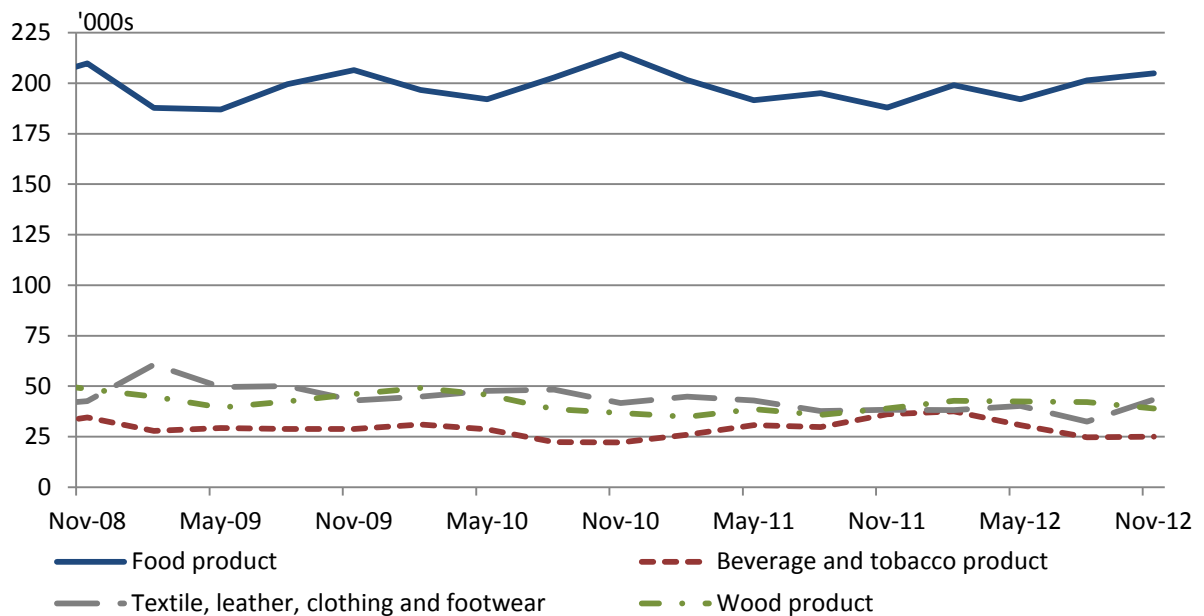
3.2 Labour market trends

Figure 3.3: Persons employed in Manufacturing and Manufacturing employment as a proportion of total employment, November 2008 to November 2012



Source: ABS, *Labour Force, Australia, Detailed, Quarterly, Nov 2012*, Catalogue No. 6291.0.55.003.

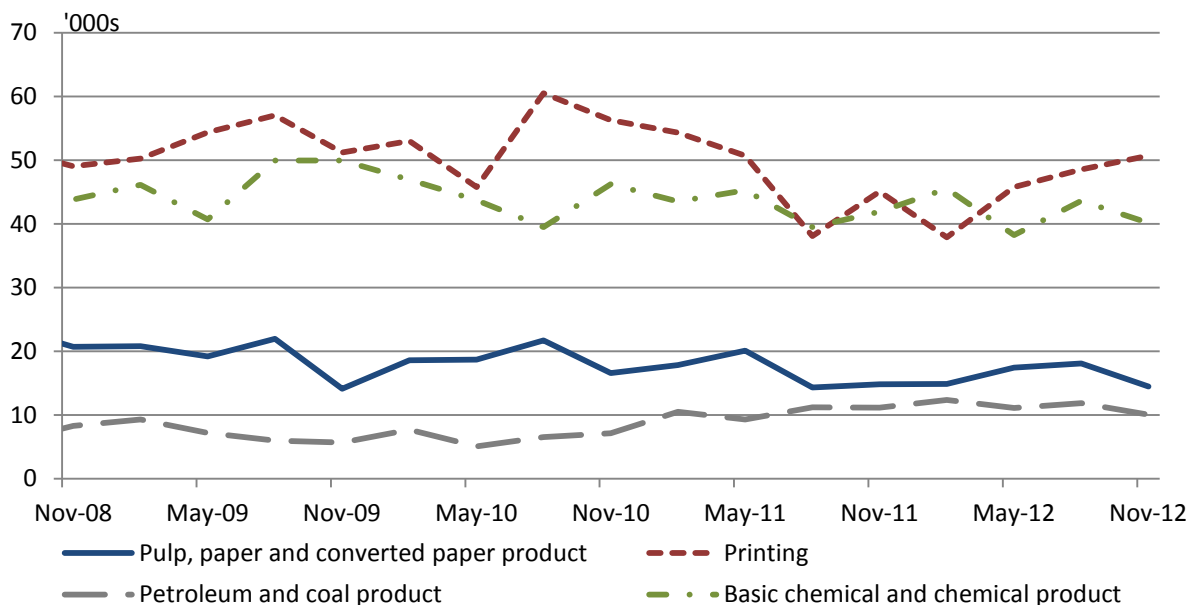
Figure 3.4a: Persons employed in Manufacturing by subdivision, November 2008 to November 2012



Note: All data are expressed in original terms.

Source: ABS, *Labour Force, Australia, Detailed, Quarterly, Nov 2012*, Catalogue No. 6291.0.55.003.

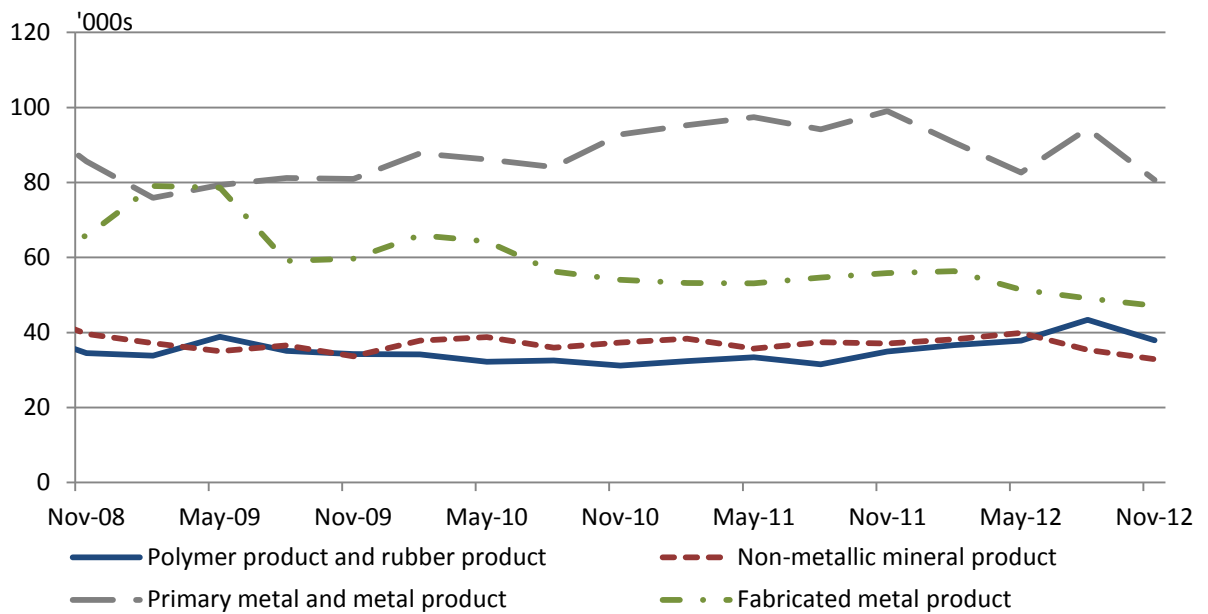
Figure 3.4b: Persons employed in Manufacturing by subdivision, November 2008 to November 2012



Note: All data are expressed in original terms.

Source: ABS, *Labour Force, Australia, Detailed, Quarterly, Nov 2012*, Catalogue No. 6291.0.55.003.

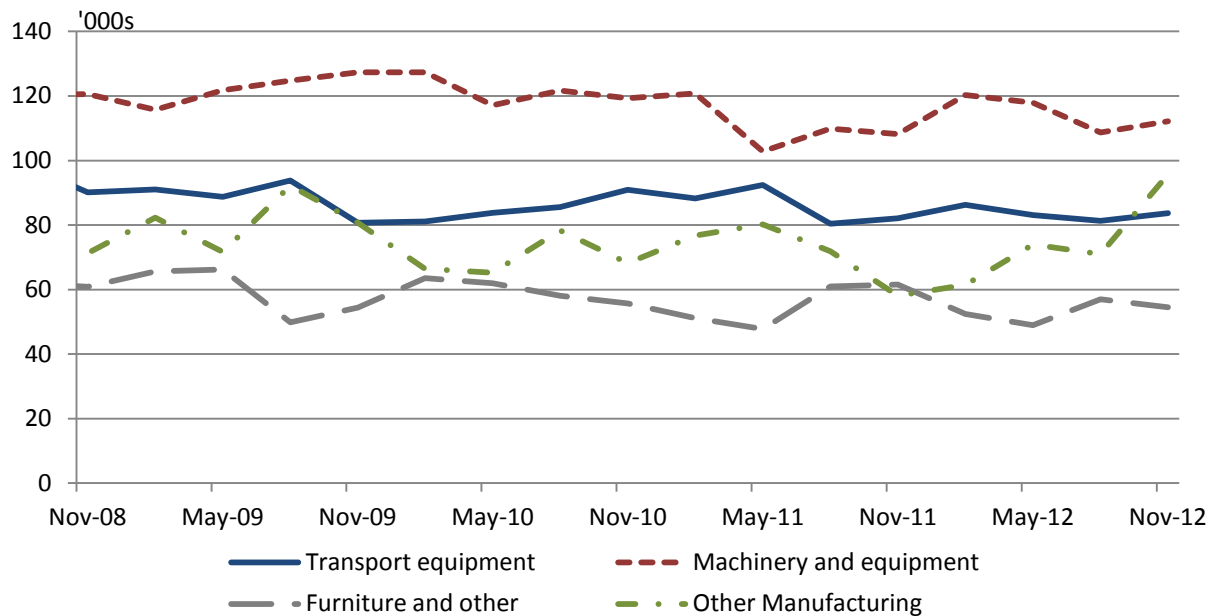
Figure 3.4c: Persons employed in Manufacturing by subdivision, November 2008 to November 2012



Note: All data are expressed in original terms.

Source: ABS, *Labour Force, Australia, Detailed, Quarterly, Nov 2012*, Catalogue No. 6291.0.55.003.

Figure 3.4d: Persons employed in Manufacturing by subdivision, November 2008 to November 2012



Note: All data are expressed in original terms. Other Manufacturing consists of all remaining employed persons who are not allocated to a Manufacturing subdivision.

Source: ABS, *Labour Force, Australia, Detailed, Quarterly, Nov 2012*, Catalogue No. 6291.0.55.003.

Table 3.5: Persons previously employed in Manufacturing, November 2012

	Manufacturing		All industries
	No. ('000s)	Percentage of industry previously employed	Percentage of total previously employed
Male	28.0	73.7	58.4
Female	10.0	26.3	41.6
Total	38.0	100.0	100.0

Note: All data are expressed in original terms. Persons previously employed cover unemployed persons who had worked for two weeks or more in the last two years in the industry.

Source: ABS, *Labour Force, Australia, Detailed, Quarterly, Nov 2012*, Catalogue No. 6291.0.55.003.

Table 3.6: Persons underemployed in Manufacturing, November 2012

	Manufacturing		All industries
	No. ('000s)	Percentage of industry underemployed	Percentage of total underemployed
Male	17.9	50.3	39.8
Female	17.7	49.7	60.2
Total	35.6	100.0	100.0

Note: All data are expressed in original terms.

Source: ABS, *Labour Force, Australia, Detailed, Quarterly, Nov 2012*, Catalogue No. 6291.0.55.003.

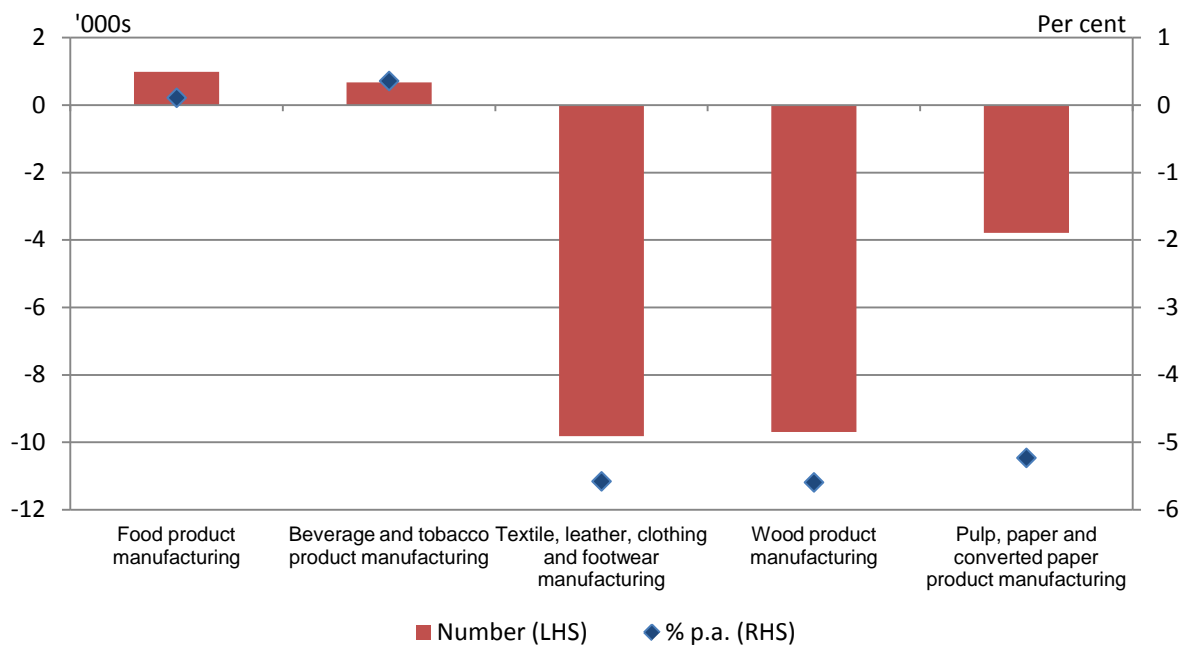
Table 3.7: Average annual growth rates of labour and multifactor productivity, 2003–04 to 2011–12

	Manufacturing		Total market sector	
	Labour productivity	Multifactor productivity	Labour productivity	Multifactor productivity
	%	%	%	%
2003–04 to 2007–08	0.8	-1.6	1.1	-0.6
2007–08 to 2011–12	1.3	-0.3	1.6	-0.6

Note: The 2007–08 to 2011–12 growth cycle is incomplete. Labour productivity measures the amount of output per unit of labour which is measured in terms of gross value added per hour worked. Multifactor productivity measures the ratio of growth in output to growth in two or more factor inputs and represents that part of the change in output that cannot be explained by changes in the inputs. Multifactor productivity, in this case, is based on the gross value added of capital and labour in production. The total market sector comprises all industries except for Public administration and safety, Education and training and Health care and social assistance.

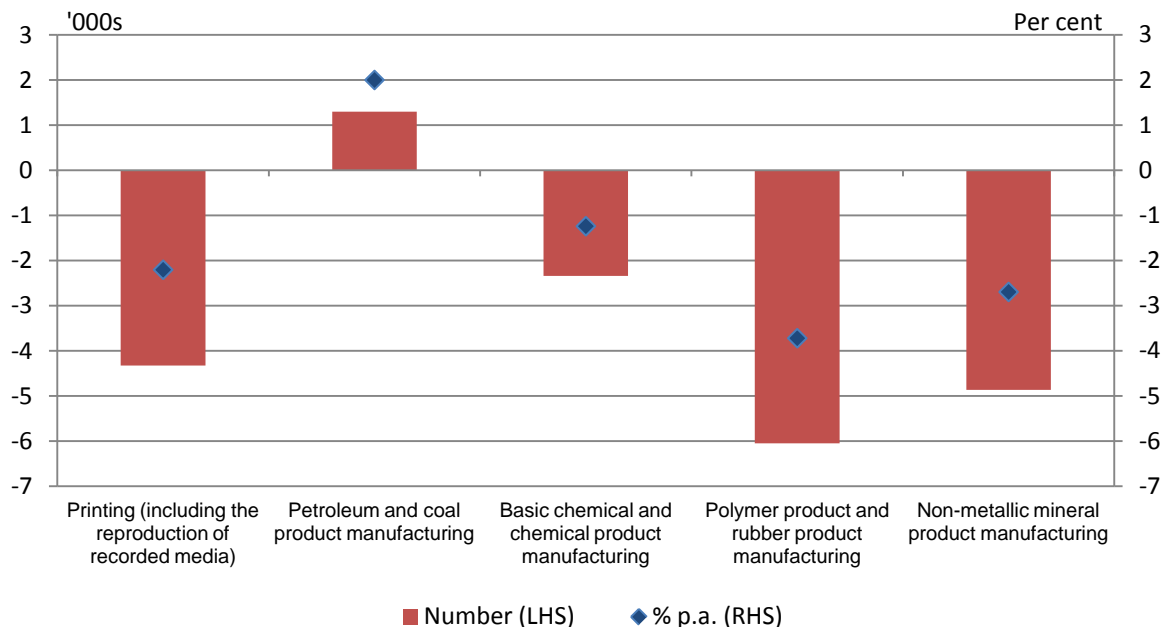
Source: ABS, *Estimates of Industry Multifactor Productivity, 2011–12*, Catalogue No. 5260.0.55.002.

Figure 3.5a: Projected employment growth in Manufacturing by subdivision, five years to 2016–17



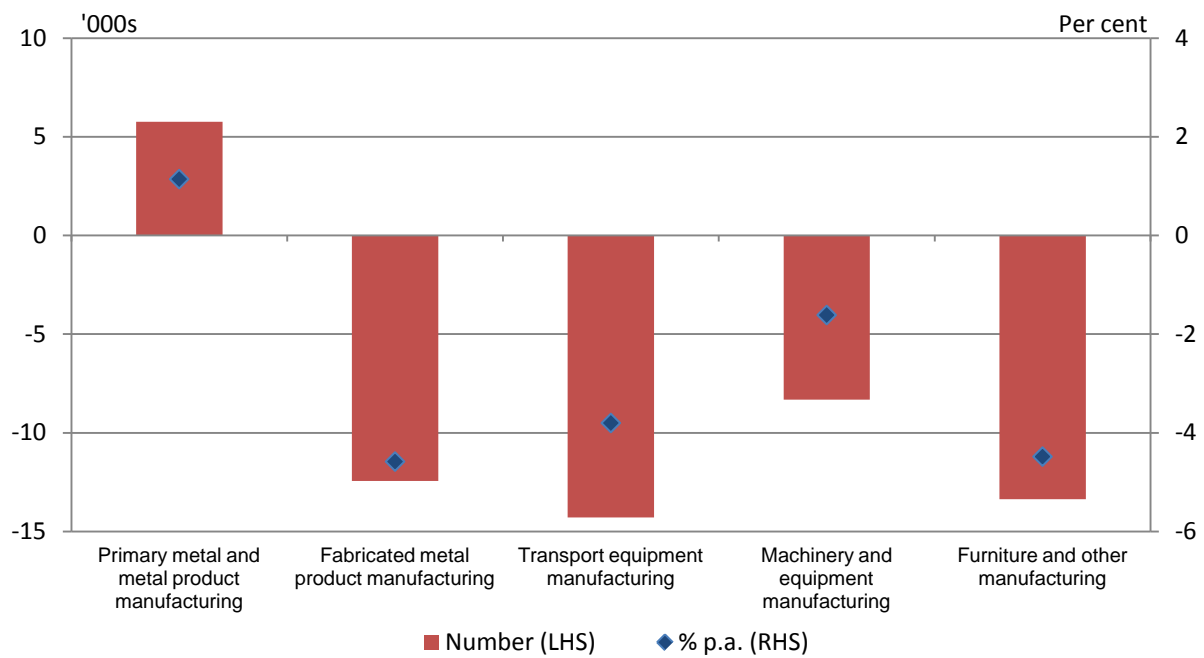
Source: DEEWR, *Employment Projections by Industry, Occupation and Regions, 2012*, <http://www.deewr.gov.au/LMIP/default.aspx?LMIP/Publications/IndustryEmploymentProjections>.

Figure 3.5b: Projected employment growth in Manufacturing by subdivision, five years to 2016–17



Source: DEEWR, *Employment Projections by Industry, Occupation and Regions, 2012*, <http://www.deewr.gov.au/LMIP/default.aspx?LMIP/Publications/IndustryEmploymentProjections>.

Figure 3.5c: Projected employment growth in Manufacturing by subdivision, five years to 2016–17



Source: DEEWR, *Employment Projections by Industry, Occupation and Regions, 2012*, <http://www.deewr.gov.au/LMIP/default.aspx?LMIP/Publications/IndustryEmploymentProjections>.

4 Earnings and wage instruments

4.1 Earnings

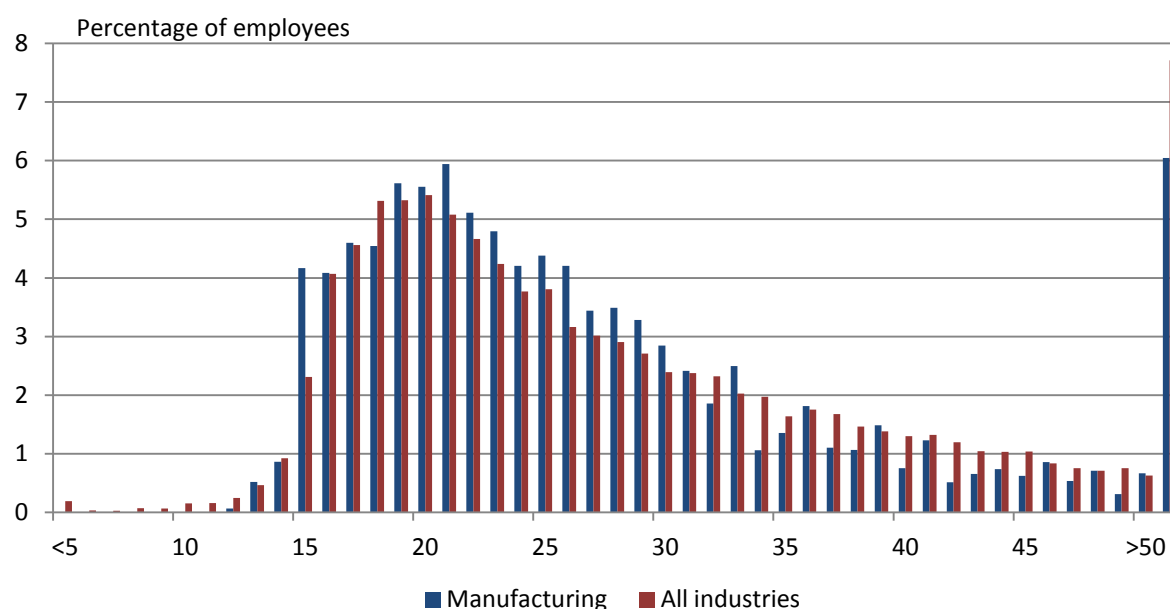
Table 4.1: Average weekly earnings, November 2012

	Manufacturing	All industries	Ratio of Manufacturing relative to all industries
	\$	\$	%
Average weekly earnings, all employees	1157.50	1081.30	107.0
Average weekly ordinary time earnings, full-time adult employees	1223.00	1396.00	87.6
Average weekly ordinary time earnings, full-time adult male employees	1265.60	1491.80	84.8
Average weekly ordinary time earnings, full-time adult female employees	1041.30	1230.10	84.7

Note: All data are expressed in original terms.

Source: ABS, *Average Weekly Earnings, Australia, Nov 2012*, Catalogue No. 6302.0.

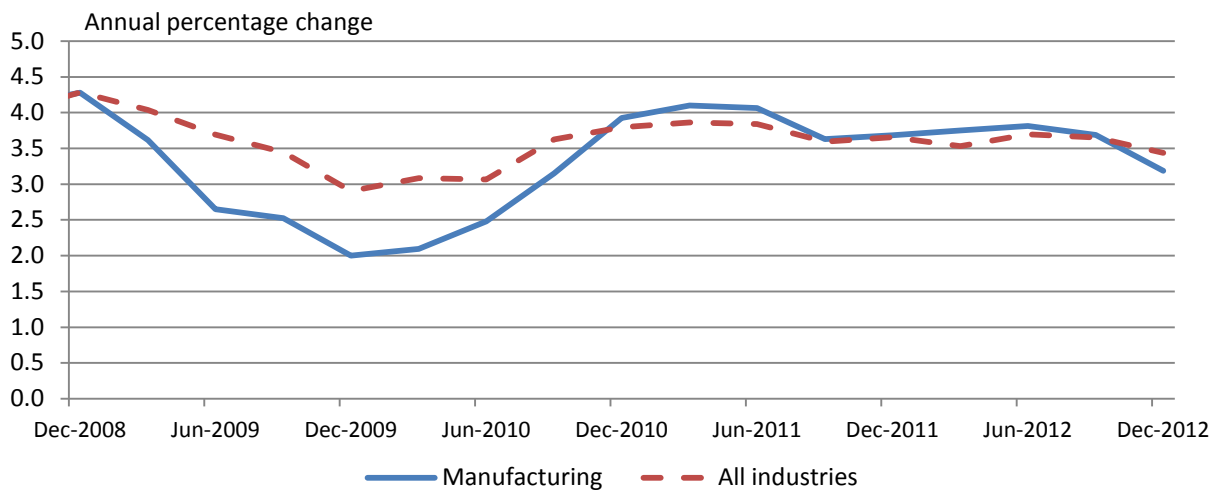
Figure 4.1: Distribution of hourly total cash earnings (\$1 intervals), adult employees, May 2010



Note: Earnings are presented using \$1 intervals (e.g. \$15 includes amounts over \$14 per hour and equal to or less than \$15 per hour).

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, May 2010*, Catalogue No. 6306.0.55.001.

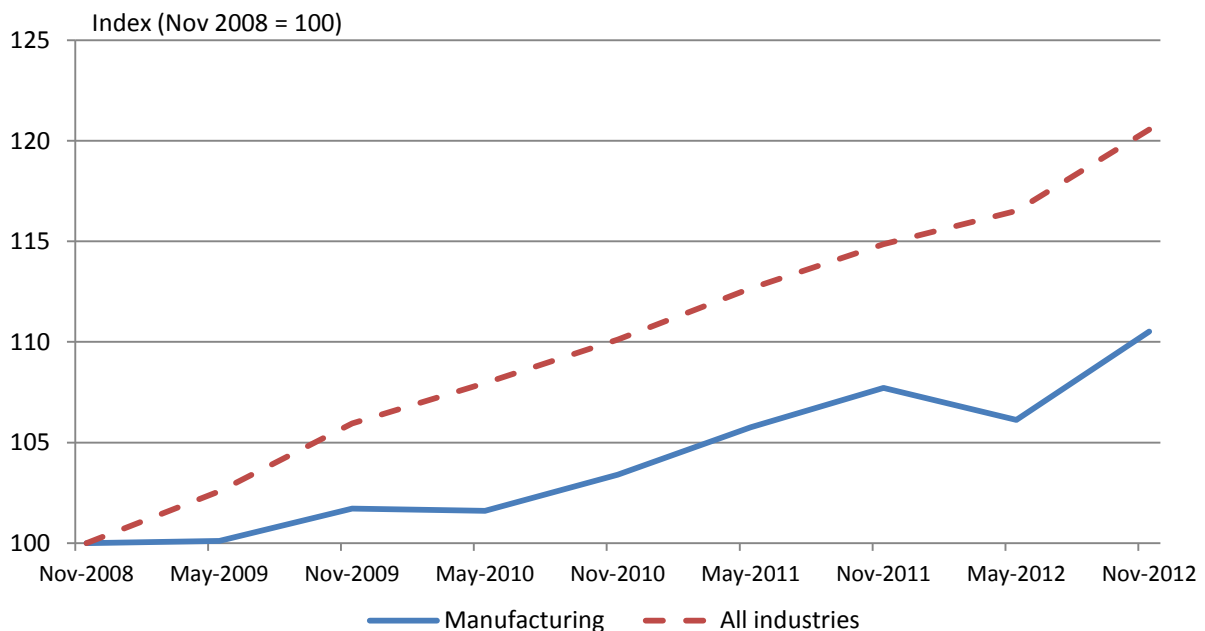
Figure 4.2: Rate of growth in total hourly rates of pay excluding bonuses, December 2008 to December 2012



Note: All data are expressed in original terms.

Source: ABS, *Wage Price Index, Australia, Dec 2012*, Catalogue No. 6345.0.

Figure 4.3: Average weekly ordinary time earnings of full-time adult employees, November 2008 to November 2012



Note: All data are expressed in original terms.

Source: ABS, *Average Weekly Earnings, Australia, Nov 2012*, Catalogue No. 6302.0.

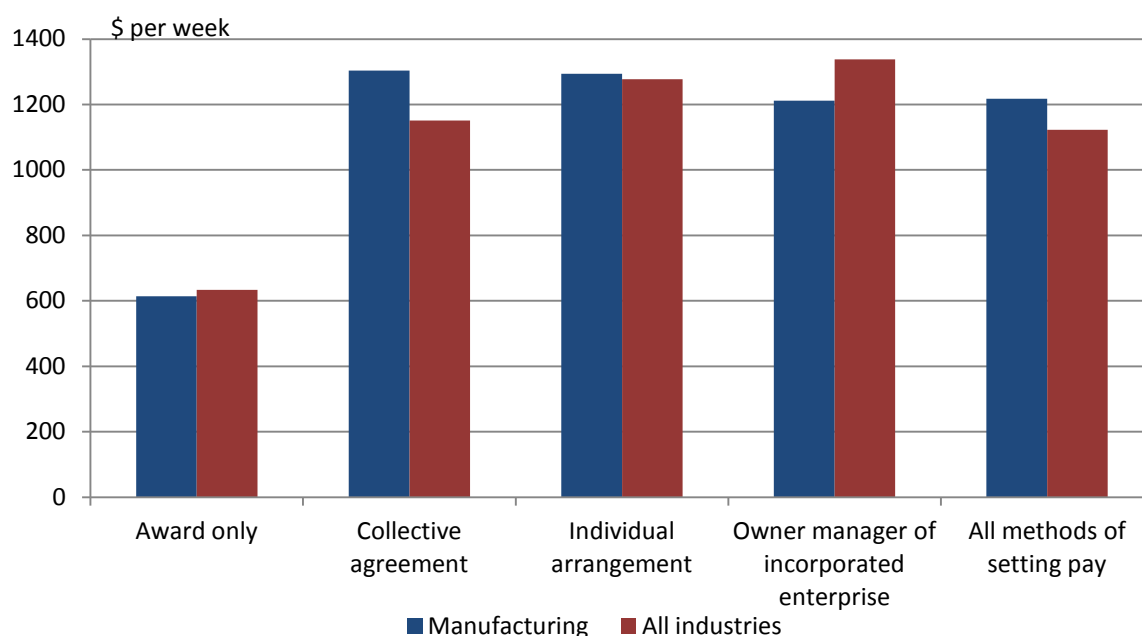
4.2 Wage instruments and bargaining

Table 4.2: Method of setting pay, May 2012

	Manufacturing	All industries
	%	%
Award only	11.3	16.1
Collective agreement	34.3	42.0
Individual arrangement	51.4	38.7
Owner manager of incorporated enterprise	2.9	3.3
All methods of setting pay	100.0	100.0

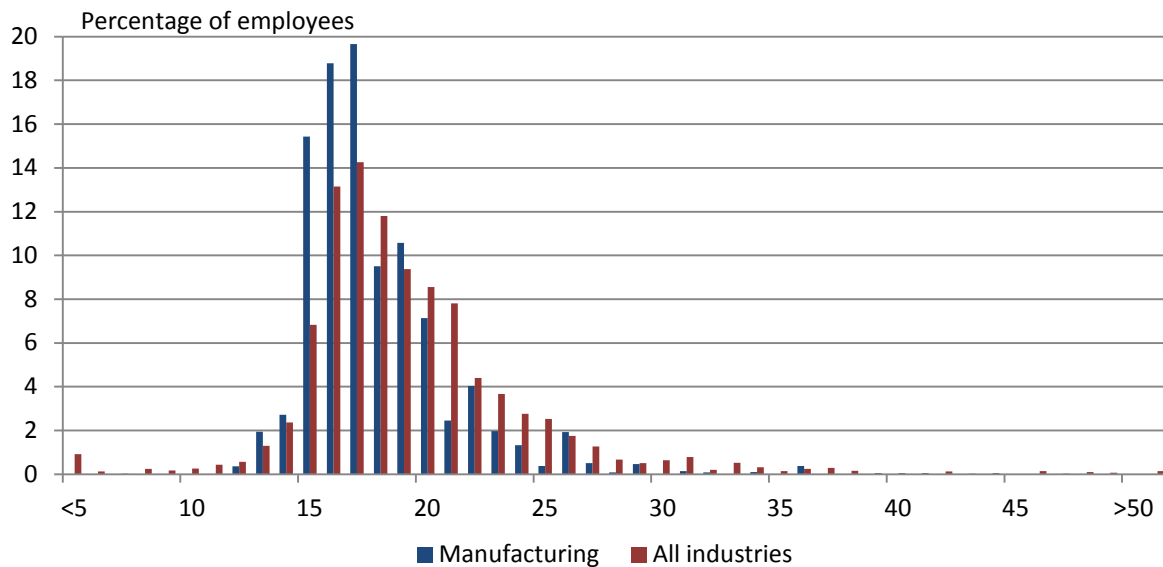
Source: ABS, *Employee Earnings and Hours, Australia, May 2012*, Catalogue No. 6306.0.

Figure 4.4: Average weekly total cash earnings by method of setting pay, May 2012



Source: ABS, *Employee Earnings and Hours, Australia, May 2012*, Catalogue No. 6306.0.

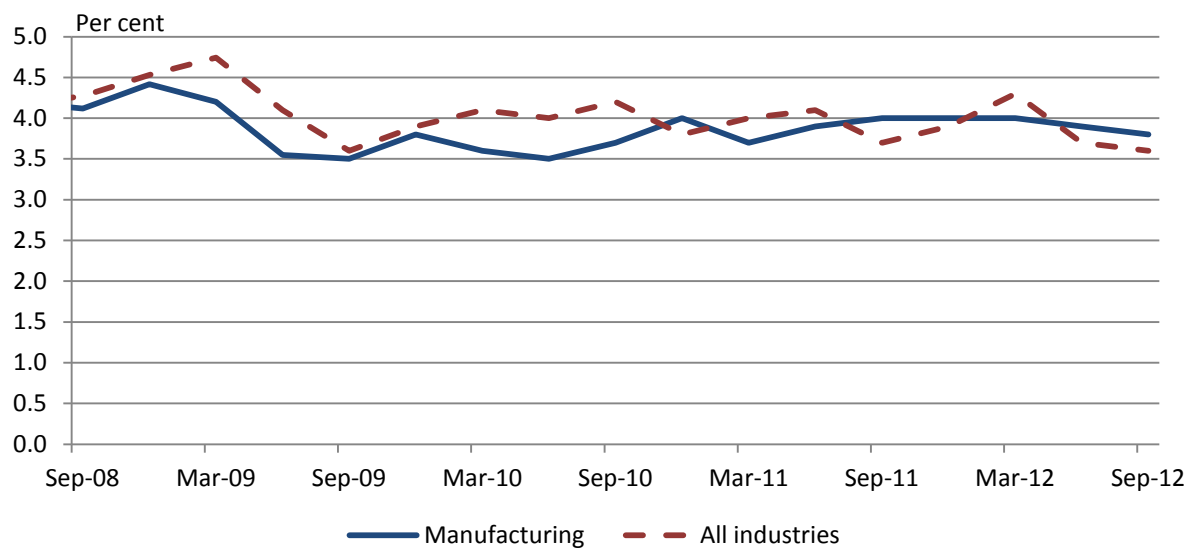
Figure 4.5: Distribution of hourly total cash earnings (\$1 intervals) for award-reliant adult employees, May 2010



Note: Earnings are presented using \$1 intervals (e.g. \$15 includes amounts over \$14 per hour and equal to or less than \$15 per hour).

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, May 2010*, Catalogue No. 6306.0.55.001.

Figure 4.6: Average annualised wage increases for federal enterprise agreements certified in the quarter, September 2008 to September 2012



Source: Department of Education, Employment and Workplace Relations, *Trends in Federal Enterprise Bargaining*, September 2012, <http://foi.deewr.gov.au/node/30419>.

5 Forms and conditions of employment

Table 5.1: Employment type by gender, November 2011

	Manufacturing			All industries		
	Men	Women	Persons	Men	Women	Persons
	%	%	%	%	%	%
Employees with paid leave entitlements	74.1	63.6	71.4	61.7	63.4	62.5
Employees without paid leave entitlements	13.4	19.1	14.9	16.6	23.8	19.9
OMIE	7.1	7.8	7.3	9.1	4.3	6.9
OMUE	5.3	9.5	6.4	12.6	8.5	10.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Note: OMIE = owner-manager of incorporated enterprise. OMUE = owner-manager of unincorporated enterprise. All data are expressed in original terms.

Source: ABS, *Australian Labour Market Statistics, Jul 2012*, Catalogue No. 6105.0.

Table 5.2: Forms of employment by gender, November 2011

	Manufacturing			All industries		
	Men	Women	Persons	Men	Women	Persons
	%	%	%	%	%	%
Employees	87.1	82.8	86.0	77.6	86.9	81.8
Independent contractors	4.8	3.2	4.4	12.0	5.4	9.0
Other business operators	8.1	13.9	9.6	10.4	7.7	9.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Forms of Employment, Nov 2011*, Catalogue No. 6359.0.

Table 5.3: Employees with and without paid leave, November 2011

	Full-time		Part-time		All employees	
	With paid leave	Without paid leave	With paid leave	Without paid leave	With paid leave	Without paid leave
	%	%	%	%	%	%
Manufacturing	90.3	9.7	38.6	61.4	83.1	16.9
All industries	89.5	10.5	46.4	53.6	76.3	23.7

Source: ABS, *Forms of Employment, Nov 2011*, Catalogue No. 6359.0.

6 References

- ABS, *Australian Industry, 2010–11*, Catalogue No. 8155.0.
- ABS, *Australian Labour Market Statistics, Jul 2012*, Catalogue No. 6105.0.
- ABS, *Australian National Accounts: National Income, Expenditure and Product, Sep 2012*, Catalogue No. 5206.
- ABS, *Australian National Accounts: State Accounts, 2011–12*, Catalogue No. 5220.0.
- ABS, *Australian System of National Accounts, 2011–12*, Catalogue No. 5204.0.
- ABS, *Average Weekly Earnings, Australia, Nov 2012*, Catalogue No. 6302.0.
- ABS, *Business Indicators, Australia, Sep 2012*, Catalogue No. 5676.0.
- ABS, *Education and Work, Australia, May 2011*, Catalogue No. 6227.0.
- ABS, *Employee Earnings and Hours, Australia, various*, Catalogue No. 6306.0.
- ABS, *Employee, Earnings and Hours, Expanded CURF, May 2010*, Catalogue No. 6306.0.55.001.
- ABS, *Estimates of Industry Multifactor Productivity, 2011–12*, Catalogue No. 5260.0.55.002.
- ABS, *Forms of Employment, Australia, Nov 2011*, Catalogue No. 6359.0.
- ABS, *International Trade in Goods and Services, Australia, Dec 2012*, Catalogue No. 5368.0.
- ABS, *Labour Force, Australia, Detailed, Quarterly, Nov 2012*, Catalogue No. 6291.0.55.003.
- ABS, *Research and Experimental Development, Businesses, Australia, 2010–11*, Catalogue No. 8104.0.
- ABS, *Wage Price Index, Australia, Dec 2012*, Catalogue No. 6345.0.
- Department of Education, Employment and Workplace Relations, *Trends in Federal Enterprise Bargaining*, September 2012, <http://foi.deewr.gov.au/node/30419>.
- Department of Education, Employment and Workplace Relations, *Employment Projections by Industry, Occupation and Regions, 2012*, <http://www.deewr.gov.au/LMIP/default.aspx?LMIP/Publications/IndustryEmploymentProjections>.