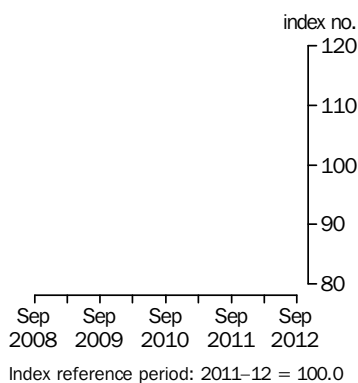


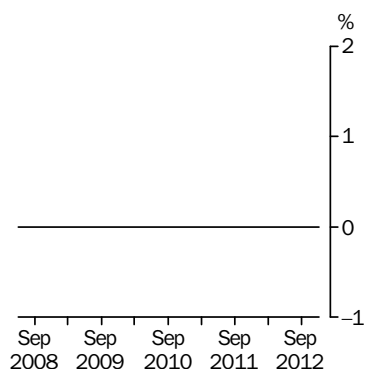
# **PRODUCER PRICE INDEXES** AUSTRALIA

EMBARGO: 11.30AM (CANBERRA TIME) FRI 2 NOV 2012

## Stage of Production Final demand



## Stage of Production Final demand Quarterly % change



## KEY FIGURES

STAGE OF PRODUCTION	Jun Qtr 12 to Sep Qtr 12 % change	Sep Qtr 11 to Sep Qtr 12 % change
<b>Final demand (excl. exports)</b>		
Domestic		
Imports		
<b>Intermediate demand</b>		
Domestic		
Imports		
<b>Preliminary demand</b>		
Domestic		
Imports		

## KEY POINTS

### FINAL DEMAND (EXCL. EXPORTS)

### INTERMEDIATE DEMAND

### PRELIMINARY DEMAND

## INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070.

## NOTES

### FORTHCOMING ISSUES

#### ISSUE (Quarter)

#### RELEASE DATE

December 2012	1 February 2013
March 2013	3 May 2013
June 2013	2 August 2013
September 2013	1 November 2013

### CHANGES IN THIS ISSUE

The ABS has introduced a number of changes as a result of the Review of the Producer and International Trade Price Indexes. These changes were announced in the *Information Paper: Implementation of the Review of the Producer and International Trade Price Indexes, 2012* (cat. no. 6427.0.55.005), published by the ABS on 28 September 2012. See page 3 for details of the changes.

### CHANGES IN FUTURE ISSUES

As a result of the Review of the Producer and International Trade Price indexes, the ABS will discontinue a number of price indexes, effective from the September quarter 2013 release of this publication. See page 4 for details of the changes.

### ROUNDING

Any discrepancies between totals and sums of components are due to rounding.

### DATA REFERENCES

Data referenced in the Key Points and Commentary are available from the tables shown in this publication, or in the corresponding tables of this publication on the ABS website <<http://www.abs.gov.au>>.

### ABBREVIATIONS

ABS	Australian Bureau of Statistics
ANZSIC	Australian and New Zealand Standard Industrial Classification
c.i.f.	cost, insurance and freight
f.o.b.	free on board
mfg	manufacturing
n.e.c.	not elsewhere classified
SOP	Stage of Production

Brian Pink  
Australian Statistician

## CHANGES IN THIS ISSUE

### CHANGES IN THIS ISSUE

The ABS has introduced a number of changes as a result of the Review of the Producer and International Trade Price Indexes. These changes were announced in the *Information Paper: Implementation of the Review of the Producer and International Trade Price Indexes, 2012* (cat. no. 6427.0.55.005), published by the ABS on 28 September 2012. These changes are:

- the introduction of the *Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006* (cat. no. 1292.0) for the Stage of Production (SOP) indexes. Appendix 1 of this publication contains correspondences between the old (ANZSIC 1993) and new (ANZSIC 2006) SOP series currently released in this publication, as well as details of the SOP series that have been discontinued and new series;
- the reweighting of the suite of producer price indexes – new weighting patterns are published in the *Information Paper: Producer Price Indexes Weighting Patterns, 2012* (cat. no. 6427.0.55.006) and are available electronically on the ABS website <<http://www.abs.gov.au>>;
- changes to index titles and table numbering;
- changes to release dates – the release of this publication has been delayed by nine working days. The Forthcoming Issues section above has been updated to reflect this change;
- re-referencing – all index numbers are now calculated on a new index reference period of 2011–12 = 100.0. Period-to-period percentage changes may differ slightly to those previously published due to rounding and the re-referencing. These differences do not constitute a revision. Appendix 2 of this publication contains examples of the calculations required to convert time series from previous index reference periods to the new 2011–12 = 100.0 index reference period (and vice versa). Conversion factors are available electronically from the downloads tab of the publication; and
- the publication of new series: ANZSIC 2006 Group 440 – Accommodation (series ID: A4406608F) and ANZSIC 2006 Group 451 – Cafes, restaurants and takeaway food services (series ID: A4406633J), both within Table 20 – Output of the Accommodation and food services industries; and ANZSIC 2006 Group 697 – Veterinary services (series ID: A4406512L) within Table 24 – Output of the Professional, scientific and technical services industries.

## CHANGES IN FUTURE ISSUES

### CHANGES IN FUTURE ISSUES

The following time series will be discontinued as a result of the Review of the Producer and International Trade Price indexes. This will take effect from the September quarter 2013 release of this publication. The series to be discontinued are:

- the time series for Asphalt supplied (series ID: A2314821C) and Asphalt placed (series ID: A2314822F), presented in Table 19 of this publication will be discontinued as a result of the 2011 review from the September quarter 2013. These indexes are a component of the published time series ANSZIC 2006 Class 3101 Road and bridge construction (Table 15). The time series for ANZSIC 2006 Class 3101 Road and bridge construction is unaffected by the discontinuation of the series for Asphalt supplied and placed;
- the time series for Open cut mining (series IDs: A2314310A, A2314311C and A2314312F)) and Underground mining (series IDs: A2314376T, A2314377V and A2314378W), (Table 11) will be discontinued and combined into one time series for ANZSIC 2006 Group 060 Coal mining – Input to the Coal mining industry from the September quarter 2013;
- the time series for Metallic input to the Fabricated metal product manufacturing industry, presented in Table 15 of this publication, which includes time series for; Iron and steel (series ID: A2312240V), Aluminium (series ID: A2313776K), Copper and brass (series ID: A2313779T) and Zinc (series ID: A2313782F) will be discontinued from the September quarter 2013. These indexes are a component of the published time series for Input to the Fabricated metal product manufacturing industry (series ID: A2312225W), Table 15 of this publication. The time series for Input to the Fabricated metal product manufacturing industry is unaffected by the discontinuation of the series for Metallic input to the Fabricated metal product manufacturing industry; and
- the time series for Copper input to the Other electrical equipment manufacturing industry, presented in Table 16 of this publication, (series IDs: A2314268J, A2314269K, A2314270V, A2314289V, A2314290C, A2314291F, A2314301X, A2314302A and A2314303C) will be discontinued from the September quarter 2013.

## INTRODUCTION OF CARBON PRICING

### INTRODUCTION OF CARBON PRICING

On 1 July 2012, the Australian Government introduced a \$23 per tonne carbon price on greenhouse emissions, to be paid directly by Australia's largest greenhouse gas emitting companies, together with compensation and incentive packages. Carbon pricing changes the relative prices of high and low emission-intensive goods. The extent that any carbon costs translate into general increases in prices depends on a range of factors. Carbon pricing will be occurring at the same time as normal variations in prices are occurring driven by productivity, the terms of trade or changing preferences. The extent to which businesses pass on the carbon price will depend on their consideration of issues such as operating costs, margins, and other economic factors such as degree of competition.

The ABS released the *Information Paper: Recording emissions reduction schemes in ABS statistics* (cat. no. 5257.0.55.001) on 30 July 2012. This information paper summarises the nature of emissions permits measures introduced under the Clean Energy Act 2011, and how the ABS expects to include estimates of various carbon credit schemes in economic and environment statistics, commencing with the September quarter 2012.

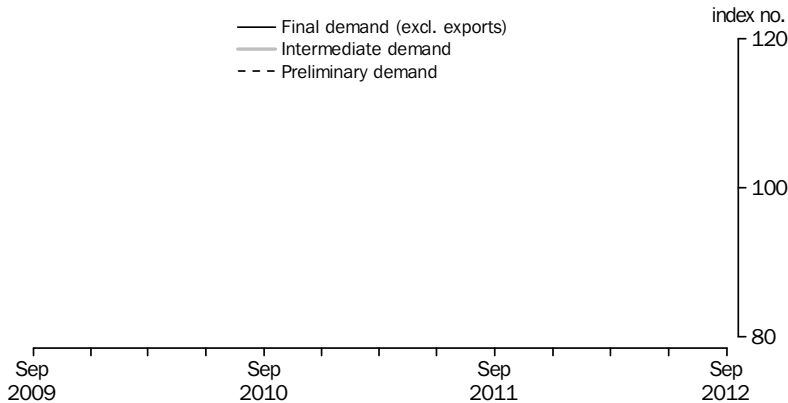
The ABS will not be able to quantify the impact of carbon pricing, compensation or other government incentives and will not be producing estimates of price change exclusive of the carbon price or measuring the impact of the carbon price. Any changes in the prices charged by companies for their outputs, paid by companies for their inputs or paid by consumers, will be reflected in the suite of price indexes compiled and published by the ABS. Further information on the expected impacts of the introduction of carbon pricing is available in the publication *Strong Growth, Low Pollution – Modelling a Carbon Price* (The Treasury, 2011).

STAGE OF PRODUCTION COMMENTARY

STAGE OF PRODUCTION  
(SOP) OVERVIEW

Commentary to go here.

COMPARISON OF SOP INDEXES (a)



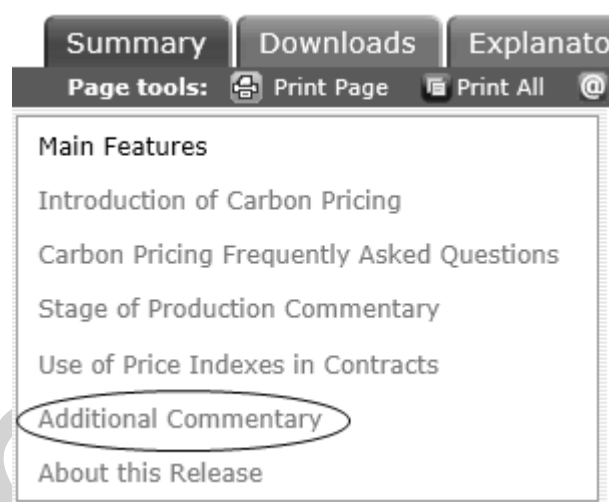
(a) Index reference period: 2011–12 = 100.0

### WHERE TO FIND ADDITIONAL COMMENTARY

Additional commentary for Producer Price Indexes is available in the entry for *Producer Price Indexes, Australia* (cat. no. 6427.0) on the ABS website <<http://www.abs.gov.au>>.

The additional commentary includes:

- Mining industries producer price indexes
  - Input to the Coal mining industry
- Manufacturing industries producer price indexes
  - Input to the Manufacturing industries
  - Output of the Manufacturing industries
- Construction industries producer price indexes
  - Input to the House construction industry
  - Output of the Construction industries
- Services industries producer price indexes
  - Output of the Services industries



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#### CONSTRUCTION INDUSTRIES PRODUCER PRICE INDEXES

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*continued*

#### SERVICES INDUSTRIES PRODUCER PRICE INDEXES

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- 21** Output of the Transport, postal and warehousing industries, group and class index numbers
- 22** Output of the Information media and telecommunications industries, group and class index numbers
- 23** Output of the Rental, hiring and real estate services industries, subdivision, group and class index numbers
- 24** Output of the Professional, scientific and technical services industries, group and class index numbers
- 25** Output of the Administrative and support services industries, group and class index numbers
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## STAGE OF PRODUCTION(a)(b): Index numbers by stage and source

<i>Period</i>	PRELIMINARY DEMAND			INTERMEDIATE DEMAND			FINAL DEMAND(c)		
	<i>Domestic</i>	<i>Imports</i>	<i>Total</i>	<i>Domestic</i>	<i>Imports</i>	<i>Total</i>	<i>Domestic</i>	<i>Imports</i>	<i>Total</i>
.....									
<b>2008–09</b>									
<b>2009–10</b>									
<b>2010–11</b>									
<b>2011–12</b>									
<b>2007</b>									
December									
<b>2008</b>									
March									
June									
September									
December									
<b>2009</b>									
March									
June									
September									
December									
<b>2010</b>									
March									
June									
September									
December									
<b>2011</b>									
March									
June									
September									
December									
<b>2012</b>									
March									
June									
September									
.....									

(a) Compiled on an ANZSIC 2006 basis.

(c) Excluding exports.

(b) Index reference period: 2011–12 = 100.0.

## STAGE OF PRODUCTION(a)(b): Percentage changes by stage and source

	PRELIMINARY DEMAND			INTERMEDIATE DEMAND			FINAL DEMAND(c)		
<i>Period</i>	<i>Domestic</i>	<i>Imports</i>	<i>Total</i>	<i>Domestic</i>	<i>Imports</i>	<i>Total</i>	<i>Domestic</i>	<i>Imports</i>	<i>Total</i>

## PERCENTAGE CHANGE FROM PREVIOUS YEAR

2008–09  
2009–10  
2010–11  
2011–12

## PERCENTAGE CHANGE FROM PREVIOUS QUARTER

2008  
March  
June  
September  
December  
2009  
March  
June  
September  
December  
2010  
March  
June  
September  
December  
2011  
March  
June  
September  
December  
2012  
March  
June  
September

## PERCENTAGE CHANGE FROM CORRESPONDING QUARTER OF PREVIOUS YEAR

2008  
March  
June  
September  
December  
2009  
March  
June  
September  
December  
2010  
March  
June  
September  
December  
2011  
March  
June  
September  
December  
2012  
March  
June  
September

(a) Compiled on an ANZSIC 2006 basis.

(c) Excluding exports.

(b) Index reference period: 2011–12 = 100.0.

# STAGE OF PRODUCTION(a)(b): Final demand by source and destination – excluding exports – index numbers

Period	DOMESTIC(c)			IMPORTS			TOTAL(c)		
	Consumer	Capital	Total	Consumer	Capital	Total	Consumer	Capital	Total
<b>2008–09</b>									
<b>2009–10</b>									
<b>2010–11</b>									
<b>2011–12</b>									
<b>2007</b>									
December									
<b>2008</b>									
March									
June									
September									
December									
<b>2009</b>									
March									
June									
September									
December									
<b>2010</b>									
March									
June									
September									
December									
<b>2011</b>									
March									
June									
September									
December									
<b>2012</b>									
March									
June									
September									

(a) Compiled on an ANZSIC 2006 basis.

(b) Index reference period: 2011–12 = 100.0.

(c) Excluding exports.

# STAGE OF PRODUCTION(a)(b): Final demand by source and destination – excluding exports – percentage changes

	DOMESTIC(c)			IMPORTS			TOTAL(c)		
Period	Consumer	Capital	Total	Consumer	Capital	Total	Consumer	Capital	Total

## PERCENTAGE CHANGE FROM PREVIOUS YEAR

2008–09  
2009–10  
2010–11  
2011–12

## PERCENTAGE CHANGE FROM PREVIOUS QUARTER

### 2008

March  
June  
September  
December

### 2009

March  
June  
September  
December

### 2010

March  
June  
September  
December

### 2011

March  
June  
September  
December

### 2012

March  
June  
September

## PERCENTAGE CHANGE FROM CORRESPONDING QUARTER OF PREVIOUS YEAR

### 2008

March  
June  
September  
December

### 2009

March  
June  
September  
December

### 2010

March  
June  
September  
December

### 2011

March  
June  
September  
December

### 2012

March  
June  
September

(a) Compiled on an ANZSIC 2006 basis.

(c) Excluding exports.

(b) Index reference period: 2011–12 = 100.0.

# STAGE OF PRODUCTION(a): Contribution to Final demand index by industry and source – index points

		DOMESTIC(b)			IMPORTS			TOTAL(b)		
		Jun Qtr	Sep Qtr	Change	Jun Qtr	Sep Qtr	Change	Jun Qtr	Sep Qtr	Change
Selected ANZSIC 2006 Codes		2012	2012		2012	2012		2012	2012	
014, 016	Sheep, beef cattle and grain farming; and dairy cattle farming				..	..	..			
011–013, 015, 017–019	Other agriculture(c)				..	..	..			
041	Fishing				..	..	..			
111	Meat and meat product mfg				..	..	..			
112	Seafood processing									
113	Dairy product mfg									
114	Fruit and vegetable processing									
115	Oil and fat mfg	..	..	..						
116	Grain mill and cereal product mfg				..	..	..			
117	Bakery product mfg				..	..	..			
118	Sugar and confectionery mfg									
119	Other food product mfg									
121	Beverage mfg									
122	Cigarette and tobacco product mfg									
131	Textile mfg									
132	Leather tanning, fur dressing and leather product mfg	..	..	..						
133	Textile product mfg									
134	Knitting product mfg									
1351	Clothing mfg									
1352	Footwear mfg									
149	Other wood product mfg				..	..	..			
151	Pulp, paper and paperboard mfg				..	..	..			
152	Converted paper product mfg									
161	Printing and printing support services									
1701	Petroleum refining and petroleum fuel mfg									
182	Basic polymer mfg	..	..	..						
184	Pharmaceutical and medicinal product mfg									
185	Cleaning compound and toiletry preparation mfg									
189	Other basic chemical product mfg									
191	Polymer product mfg									
192	Natural rubber product mfg									
212	Basic ferrous metal product mfg	..	..	..						
214	Basic non-ferrous metal product mfg	..	..	..						
223	Metal container mfg				..	..	..			
229	Other fabricated metal product mfg									
231	Motor vehicle and motor vehicle part mfg									
239	Other transport equipment mfg									
241	Professional and scientific equipment mfg									
242	Computer and electronic equipment mfg									
243	Electrical equipment mfg									
244	Domestic appliance mfg									
245	Pump, compressor, heating and ventilation equipment mfg									
246	Specialised machinery and equipment mfg									
249	Other machinery and equipment mfg									
25	Furniture and other mfg									

.. not applicable

(a) Index reference period: 2011–12 = 100.0.

(b) Excluding exports.

(c) Nursery and floriculture production; mushroom and vegetable growing; fruit and tree nut growing; other crop growing; poultry farming; deer farming; and other livestock farming.

Note: Index points will not sum to the total, due to incomplete coverage of the economy.

# STAGE OF PRODUCTION(a): Contribution to Final demand index by industry and source

## – index points *continued*

		DOMESTIC(b)			IMPORTS			TOTAL(b)		
		Jun Qtr	Sep Qtr	Change	Jun Qtr	Sep Qtr	Change	Jun Qtr	Sep Qtr	Change
Selected ANZSIC 2006 Codes		2012	2012		2012	2012		2012	2012	
26–28	Electricity supply; gas supply; and water supply, sewerage and drainage services				..	..	..			
30	Building construction				..	..	..			
3101	Road and bridge construction				..	..	..			
440	Accommodation				..	..	..			
451	Cafes, restaurants and takeaway food services				..	..	..			
461	Road freight transport				..	..	..			
471	Rail freight transport				..	..	..			
481	Water freight transport				..	..	..			
541	Newspaper, periodical, book and directory publishing				..	..	..			
592	Data processing, web hosting and electronic information storage services				..	..	..			
672	Real estate services				..	..	..			
692	Architectural, engineering and technical services				..	..	..			
693	Legal and accounting services				..	..	..			
697	Veterinary services				..	..	..			
700	Computer system design and related services				..	..	..			

### Total

.. not applicable

(a) Index reference period: 2011–12 = 100.0.

(b) Excluding exports.

Note: Index points will not sum to the total, due to incomplete coverage of the economy.

# STAGE OF PRODUCTION(a)(b): Contribution to Domestic Final demand index by industry and destination – index points

		CONSUMER			CAPITAL			TOTAL		
		Jun Qtr	Sep Qtr	Change	Jun Qtr	Sep Qtr	Change	Jun Qtr	Sep Qtr	Change
Selected ANZSIC 2006 Codes		2012	2012		2012	2012		2012	2012	
014, 016	Sheep, beef cattle and grain farming; and dairy cattle farming				..	..	..			
011–013, 015, 017–019	Other agriculture(c)									
041	Fishing				..	..	..			
111	Meat and meat product mfg				..	..	..			
112	Seafood processing				..	..	..			
113	Dairy product mfg				..	..	..			
114	Fruit and vegetable processing				..	..	..			
116	Grain mill and cereal product mfg				..	..	..			
117	Bakery product mfg				..	..	..			
118	Sugar and confectionery mfg				..	..	..			
119	Other food product mfg				..	..	..			
121	Beverage mfg				..	..	..			
122	Cigarette and tobacco product mfg				..	..	..			
131	Textile mfg				..	..	..			
133	Textile product mfg				..	..	..			
134	Knitting product mfg				..	..	..			
1351	Clothing mfg				..	..	..			
1352	Footwear mfg				..	..	..			
149	Other wood product mfg				..	..	..			
151	Pulp, paper and paperboard mfg				..	..	..			
152	Converted paper product mfg				..	..	..			
161	Printing and printing support services				..	..	..			
1701	Petroleum refining and petroleum fuel mfg				..	..	..			
184	Pharmaceutical and medicinal product mfg				..	..	..			
185	Cleaning compound and toiletry preparation mfg				..	..	..			
189	Other basic chemical product mfg				..	..	..			
191	Polymer product mfg				..	..	..			
192	Natural rubber product mfg				..	..	..			
223	Metal container mfg	..	..	..						
229	Other fabricated metal product mfg	..	..	..						
231	Motor vehicle and motor vehicle part mfg									
239	Other transport equipment mfg									
241	Professional and scientific equipment mfg	..	..	..						
242	Computer and electronic equipment mfg									
243	Electrical equipment mfg									
244	Domestic appliance mfg									
245	Pump, compressor, heating and ventilation equipment mfg	..	..	..						
246	Specialised machinery and equipment mfg	..	..	..						
249	Other machinery and equipment mfg	..	..	..						
25	Furniture and other mfg									

.. not applicable

(a) Index reference period: 2011–12 = 100.0.

(b) Excluding exports.

(c) Nursery and floriculture production; mushroom and vegetable growing; fruit and tree nut growing; other crop growing; poultry farming; deer farming; and other livestock farming.

Note: Index points will not sum to the total, due to incomplete coverage of the economy.



STAGE OF PRODUCTION(a)(b): Contribution to Domestic Final demand index by  
industry and destination – index points *continued*

		CONSUMER			CAPITAL			TOTAL		
		Jun Qtr	Sep Qtr	Change	Jun Qtr	Sep Qtr	Change	Jun Qtr	Sep Qtr	Change
Selected ANZSIC 2006 Codes		2012	2012		2012	2012		2012	2012	
26–28	Electricity supply; gas supply; and water supply, sewerage and drainage services				..	..	..			
30	Building construction	..	..	..						
3101	Road and bridge construction	..	..	..						
440	Accommodation				..	..	..			
451	Cafes, restaurants and takeaway food services				..	..	..			
461	Road freight transport				..	..	..			
471	Rail freight transport				..	..	..			
481	Water freight transport				..	..	..			
541	Newspaper, periodical, book and directory publishing				..	..	..			
592	Data processing, web hosting and electronic information storage services	..	..	..						
672	Real estate services	..	..	..						
692	Architectural, engineering and technical services	..	..	..						
693	Legal and accounting services	..	..	..						
697	Veterinary services	..	..	..						
700	Computer system design and related services	..	..	..						

**Total**

.. not applicable

(a) Index reference period: 2011–12 = 100.0.

(b) Excluding exports.

Note: Index points will not sum to the total, due to incomplete coverage of the economy.

# STAGE OF PRODUCTION(a): Contribution to Imported Final demand index by industry and destination – index points

Selected ANZSIC 2006 Codes	CONSUMER			CAPITAL			TOTAL		
	Jun Qtr	Sep Qtr	Change	Jun Qtr	Sep Qtr	Change	Jun Qtr	Sep Qtr	Change
	2012	2012		2012	2012		2012	2012	
112	Seafood processing			..	..	..			
113	Dairy product mfg			..	..	..			
114	Fruit and vegetable processing			..	..	..			
115	Oil and fat mfg			..	..	..			
118	Sugar and confectionery mfg			..	..	..			
119	Other food product mfg			..	..	..			
121	Beverage mfg			..	..	..			
122	Cigarette and tobacco product mfg			..	..	..			
131	Textile mfg			..	..	..			
132	Leather tanning, fur dressing and leather product mfg			..	..	..			
133	Textile product mfg			..	..	..			
134	Knitting product mfg			..	..	..			
1351	Clothing mfg			..	..	..			
1352	Footwear mfg			..	..	..			
152	Converted paper product mfg			..	..	..			
161	Printing and printing support services			..	..	..			
1701	Petroleum refining and petroleum fuel mfg			..	..	..			
182	Basic polymer mfg			..	..	..			
184	Pharmaceutical and medicinal product mfg			..	..	..			
185	Cleaning compound and toiletry preparation mfg			..	..	..			
189	Other basic chemical product mfg			..	..	..			
191	Polymer product mfg			..	..	..			
192	Natural rubber product mfg			..	..	..			
212	Basic ferrous metal product mfg			..	..	..			
214	Basic non-ferrous metal product mfg			..	..	..			
229	Other fabricated metal product mfg			..	..	..			
231	Motor vehicle and motor vehicle part mfg								
239	Other transport equipment mfg								
241	Professional and scientific equipment mfg								
242	Computer and electronic equipment mfg								
243	Electrical equipment mfg								
244	Domestic appliance mfg								
245	Pump, compressor, heating and ventilation equipment mfg	..	..	..					
246	Specialised machinery and equipment mfg	..	..	..					
249	Other machinery and equipment mfg	..	..	..					
25	Furniture and other mfg								
<b>Total</b>									

.. not applicable

(a) Index reference period: 2011–12 = 100.0.

Note: Index points will not sum to the total, due to incomplete coverage of the economy.

# STAGE OF PRODUCTION(a): Contribution to Intermediate demand index by industry and source – index points

		DOMESTIC			IMPORTS			TOTAL		
		Jun Qtr	Sep Qtr	Change	Jun Qtr	Sep Qtr	Change	Jun Qtr	Sep Qtr	Change
Selected ANZSIC 2006 Codes		2012	2012		2012	2012		2012	2012	
014, 016	Sheep, beef cattle and grain farming; and dairy cattle farming				..	..	..			
011–013, 015, 017–019	Other agriculture(b)				..	..	..			
041	Fishing				..	..	..			
060	Coal mining				..	..	..			
070	Oil and gas extraction									
080	Metal ore mining									
09	Non-metallic mineral mining and quarrying									
111	Meat and meat product mfg				..	..	..			
112	Seafood processing									
113	Dairy product mfg									
114–115	Fruit and vegetable processing; oil and fat mfg									
116	Grain mill and cereal product mfg				..	..	..			
117	Bakery product mfg				..	..	..			
118	Sugar and confectionery mfg									
119	Other food product mfg									
121	Beverage mfg									
13	Textile, leather, clothing and footwear mfg									
141	Log sawmilling and timber dressing									
149	Other wood product mfg									
151	Pulp, paper and paperboard mfg									
152	Converted paper product mfg				..	..	..			
161	Printing and printing support services				..	..	..			
1701	Petroleum refining and petroleum fuel mfg									
182	Basic polymer mfg									
184	Pharmaceutical and medicinal product mfg									
185	Cleaning compound and toiletry preparation mfg									
189	Other basic chemical product mfg									
191	Polymer product mfg									
192	Natural rubber product mfg									
20	Non-metallic mineral product mfg									
212	Basic ferrous metal product mfg									
213	Basic non-ferrous metal mfg									
214	Basic non-ferrous metal product mfg									
222	Structural metal product mfg									
223	Metal container mfg									
229	Other fabricated metal product mfg									
231	Motor vehicle and motor vehicle part mfg									
239	Other transport equipment mfg									
241	Professional and scientific equipment mfg									
242	Computer and electronic equipment mfg									
243	Electrical equipment mfg									
244	Domestic appliance mfg									
245	Pump, compressor, heating and ventilation equipment mfg									
246	Specialised machinery and equipment mfg									
249	Other machinery and equipment mfg									
25	Furniture and other mfg				..	..	..			

.. not applicable

(a) Index reference period: 2011–12 = 100.0.

(b) Nursery and floriculture production; mushroom and vegetable growing; fruit and tree nut growing; other crop growing; poultry farming; deer farming; and other livestock farming.

Note: Index points will not sum to the total, due to incomplete coverage of the economy.

STAGE OF PRODUCTION(a): **Contribution to Intermediate demand index by industry and source – index points** *continued*

		DOMESTIC			IMPORTS			TOTAL		
		Jun Qtr	Sep Qtr	Change	Jun Qtr	Sep Qtr	Change	Jun Qtr	Sep Qtr	Change
Selected ANZSIC 2006 Codes		2012	2012		2012	2012		2012	2012	
26–28	Electricity supply; gas supply; and water supply, sewerage and drainage services				..	..	..			
440	Accommodation				..	..	..			
451	Cafes, restaurants and takeaway food services				..	..	..			
461	Road freight transport				..	..	..			
471	Rail freight transport				..	..	..			
481	Water freight transport				..	..	..			
530	Warehousing and storage services				..	..	..			
541	Newspaper, periodical, book and directory publishing				..	..	..			
592	Data processing, web hosting and electronic information storage services				..	..	..			
66	Rental and hiring services (except real estate)				..	..	..			
672	Real estate services				..	..	..			
692	Architectural, engineering and technical services				..	..	..			
693	Legal and accounting services				..	..	..			
695	Market research and statistical services				..	..	..			
697	Veterinary services				..	..	..			
700	Computer system design and related services				..	..	..			
721	Employment services				..	..	..			
729	Other administrative services				..	..	..			

**Total**

.. not applicable

(a) Index reference period: 2011–12 = 100.0.

Note: Index points will not sum to the total, due to incomplete coverage of the economy.

# STAGE OF PRODUCTION(a): Contribution to Preliminary demand index by industry and source – index points

		DOMESTIC			IMPORTS			TOTAL		
		Jun Qtr	Sep Qtr	Change	Jun Qtr	Sep Qtr	Change	Jun Qtr	Sep Qtr	Change
Selected ANZSIC 2006 Codes		2012	2012		2012	2012		2012	2012	
014, 016	Sheep, beef cattle and grain farming; and dairy cattle farming				..	..	..			
011–013, 015, 017–019	Other agriculture(b)				..	..	..			
030	Forestry and logging				..	..	..			
060	Coal mining				..	..	..			
070	Oil and gas extraction				..	..	..			
080	Metal ore mining				..	..	..			
099	Other non-metallic mineral mining and quarrying				..	..	..			
111	Meat and meat product mfg				..	..	..			
112	Seafood processing				..	..	..			
113	Dairy product mfg				..	..	..			
114–115	Fruit and vegetable processing; oil and fat mfg				..	..	..			
116	Grain mill and cereal food mfg				..	..	..			
117	Bakery product mfg				..	..	..			
118	Sugar and confectionery mfg				..	..	..			
119	Other food product mfg				..	..	..			
121	Beverage mfg				..	..	..			
13	Textile, leather, clothing and footwear mfg				..	..	..			
141	Log sawmilling and timber dressing				..	..	..			
149	Other wood product mfg				..	..	..			
151	Pulp, paper and paperboard mfg				..	..	..			
152	Converted paper product mfg				..	..	..			
161	Printing and printing support services				..	..	..			
1701	Petroleum refining and petroleum fuel mfg				..	..	..			
182	Basic polymer mfg				..	..	..			
184	Pharmaceutical and medicinal product mfg				..	..	..			
185	Cleaning compound and toiletry preparation mfg				..	..	..			
189	Other basic chemical product mfg				..	..	..			
191	Polymer product mfg				..	..	..			
192	Natural rubber product mfg				..	..	..			
20	Non-metallic mineral product mfg				..	..	..			
212	Basic ferrous metal product mfg				..	..	..			
213	Basic non-ferrous metal mfg				..	..	..			
214	Basic non-ferrous metal product mfg				..	..	..			
222	Structural metal product mfg				..	..	..			
223	Metal container mfg				..	..	..			
229	Other fabricated metal product mfg				..	..	..			
231	Motor vehicle and motor vehicle part mfg				..	..	..			
239	Other transport equipment mfg				..	..	..			
241	Professional and scientific equipment mfg				..	..	..			
242	Computer and electronic equipment mfg				..	..	..			
243	Electrical equipment mfg				..	..	..			
244	Domestic appliance mfg				..	..	..			
245	Pump, compressor, heating and ventilation equipment mfg				..	..	..			
246	Specialised machinery and equipment mfg				..	..	..			
249	Other machinery and equipment mfg				..	..	..			

.. not applicable

(a) Index reference period: 2011–12 = 100.0.

(b) Nursery and floriculture production; mushroom and vegetable growing; fruit and tree nut growing; other crop growing; poultry farming; deer farming; and other livestock farming.

Note: Index points will not sum to the total, due to incomplete coverage of the economy.

# STAGE OF PRODUCTION(a): Contribution to Preliminary demand index by industry and source – index points *continued*

		DOMESTIC			IMPORTS			TOTAL		
		Jun Qtr	Sep Qtr	Change	Jun Qtr	Sep Qtr	Change	Jun Qtr	Sep Qtr	Change
Selected ANZSIC 2006 Codes		2012	2012		2012	2012		2012	2012	
26–28	Electricity supply; gas supply; and water supply, sewerage and drainage services				..	..	..			
440	Accommodation				..	..	..			
451	Cafes, restaurants and takeaway food services				..	..	..			
461	Road freight transport				..	..	..			
471	Rail freight transport				..	..	..			
481	Water freight transport				..	..	..			
530	Warehousing and storage services				..	..	..			
541	Newspaper, periodical, book and directory publishing				..	..	..			
592	Data processing, web hosting and electronic information storage services				..	..	..			
66	Rental and hiring services (except real estate)				..	..	..			
672	Real estate services				..	..	..			
692	Architectural, engineering and technical services				..	..	..			
693	Legal and accounting services				..	..	..			
695	Market research and statistical services				..	..	..			
697	Veterinary services				..	..	..			
700	Computer system design and related services				..	..	..			
721	Employment services				..	..	..			
729	Other administrative services				..	..	..			

## Total

.. not applicable

(a) Index reference period: 2011–12 = 100.0.

Note: Index points will not sum to the total, due to incomplete coverage of the economy.

## EXPLANATORY NOTES

### INTRODUCTION

**1** This publication and associated time series spreadsheets and data cubes available on the ABS website <<http://www.abs.gov.au>>, contain a range of producer price indexes. Economy-wide indexes are presented within a Stage of Production (SOP) framework in this publication. Additional indexes relating to all products (goods or services) that are used or produced by establishments classified to specific industries (selected Mining, Manufacturing, Construction and Services industries) are available on the ABS website <<http://www.abs.gov.au>>.

**2** The complete suite of producer price indexes are calculated on a index reference period of 2011–12 = 100.0. Prior to the September quarter 2012, indexes were referenced to one of three different index reference periods (1989–90 = 100.0, 1998–99 = 100.0, 2001–02 = 100.0) making it difficult for users to compare index series. Re-referencing all indexes to the same period was implemented in the September quarter 2012. This simplifies comparison of price movements between indexes. As a result of this change, period-to-period percentage changes may differ slightly to those previously published due to rounding. These differences do not constitute a revision.

### DEVELOPMENTS

**3** Recommendations arising from the 2011 Review of the producer and international trade price indexes were implemented in the September quarter 2012. The outcomes of this review are recorded in the *Information Paper: Outcome of the Review of the Producer and International Trade Price Indexes, 2012* (cat. no. 6427.0.55.004). Major changes are summarised below:

- The index structures have been updated to represent industries rather than products primary to industries. This aligns with the principal purpose of the producer price indexes, which is to measure inflation by industry to support the compilation of the Australian National Accounts and Balance of Payments.
- The SOP indexes will be presented using the Australian and New Zealand Standard Industrial Classification, 2006 edition (ANZSIC 2006). This brings them in line with the industry specific indexes.
- The suite of producer price indexes was re-weighted using data derived from the *Australian National Accounts: Input–Output Tables – Electronic Publication, 2007–08 Final* (cat. no. 5209.0.55.001).
- All index numbers are calculated on the index reference period 2011–12 = 100.0.

### GENERAL

#### Industry versus product

**4** From the September quarter 2012 producer price indexes relate to all products that are used or produced by establishments classified, according to ANZSIC 2006, to a specific industry, including secondary production. Prior to the September quarter 2012, producer price indexes related to produced products primary to a specific industry. Primary products are defined as products which are strictly classified to a particular industry, as defined by the Australian and New Zealand Standard Industrial Classification, 2006 edition (ANZSIC 2006). The production of products outside these strict industry classifications are considered as secondary production.

#### Gross versus net

**5** Producer price indexes are compiled on a gross industry basis. This means that the scope of the indexes includes all transactions occurring within an industry and between that industry and other industries. This approach aligns with the principal purpose of the producer price indexes, which is to support the compilation of the Australian National Accounts and Balance of Payments.

#### Output and input

**6** Producer price indexes are constructed as either output or input measures. The output producer price indexes relate to products produced by establishments classified to a specific industry. The input producer price indexes relate to products used by establishments classified to specific industries.

## EXPLANATORY NOTES *continued*

### Valuation basis

**7** The valuation basis for the transactions covered by an output index is basic prices, defined as the amount received by the producer exclusive of any taxes on products and transport and trade margins (i.e. the pricing point is ex-factory, ex-farm, ex-service provider, etc.).

**8** The valuation basis for the transactions covered by an input index is purchasers' prices, defined as the amount paid by the purchaser inclusive of any non-deductible taxes on products and transport and trade margins (i.e. the prices recorded in the index should be those relating to products 'delivered into store', 'delivered on site', etc.).

**9** In reality, industry practice may mean that it is sometimes necessary to diverge from the conceptually ideal price in order to obtain actual transaction prices. For example, although the conceptually ideal price for the Output of the Manufacturing industries price indexes is ex-factory, in cases where costs such as handling and distribution are built into the manufacturer's selling price, they will be included in the index.

**10** Similarly, for input indexes such as the Input to the House construction industry price index, which has a conceptually ideal price of delivered on site, it has sometimes been necessary to use the nearest actual transaction price available, e.g. prices of products supplied and fixed.

**11** The Goods and Services Tax (GST) is excluded from all the prices recorded in the current producer price indexes because, in the main, it is deductible on business-to-business transactions. In the case of Services industries output indexes relating to business-to-household transactions, the GST is also excluded because the conceptually ideal price is basic prices (i.e. exclusive of product taxes).

### Products and weights

**12** The indexes are base weighted indexes of the Laspeyres form i.e. proportional weights for each of the components are fixed in some specified earlier period. The list of products and the weights are updated periodically to ensure they remain representative of the activities of products providers in the Australian economy. Index series compiled using updated weights are linked to earlier series to maintain a continuous series. Upper level weights are derived from the *Australian National Accounts: Input-Output Tables – Electronic Publication, 2007-08 Final* (cat. no. 5209.0.55.001) as well as other ABS and industry sources.

### Price measurement

**13** The main sources of ongoing price data are samples of business establishments. These can be buyers or sellers, dependent on whether the price is contributing to an input or an output price index. Practical considerations such as the relative degree of concentration of buyers, and of sellers, and the implications for sample size and cost will be taken into account when determining samples.

**14** The main pricing methodology is specification pricing, under which a manageable sample of precisely specified products is selected, in consultation with each reporting establishment, for repeat pricing. In specifying the products, care is taken to ensure that they are fully defined in terms of all the characteristics which influence their transaction prices. As such, all the relevant technical characteristics need to be described (e.g. make, model, and features) along with the unit of sale, type of packaging, conditions of sale (e.g. delivered, payment within 30 days), etc.

**15** When the quality or the specifications of a product being priced change over time, adjustments are made to the reported prices so that the index captures only pure price change. That is, any element of price change attributable to a change in quality is accounted for and removed wherever possible. If there is an increase (decrease) in the quality of a product, the price is adjusted downwards (upwards) to reflect the value of the quality change to the provider of the product. This technique is known as pricing to constant quality.



## EXPLANATORY NOTES *continued*

### *Price measurement continued*

**16** Another important consideration in establishing and maintaining price collections is to ensure that the prices reported are actual market transaction prices. That is, they must reflect the actual prices received (or paid) after taking into account all discounts applied to the transactions whether they be volume discounts, settlement discounts or competitive price cutting discounts which are likely to fluctuate with market conditions.

**17** Any rebates also need to be considered. The collection of nominal list prices, or book prices, is unlikely to yield reliable price indexes and could result in quite misleading results if fluctuations in transaction prices are not captured. The ABS therefore asks provider business establishments to report details of the discounts they offer so that actual transaction prices can be calculated.

**18** Specification pricing is not feasible in cases where the products are unique and not reproduced over time, e.g. the output of the Construction industries indexes and many customised business services. As a result, alternative pricing techniques need to be used, which sometimes require a compromise. Some of the approaches adopted include the use of model pricing, collecting unit values for reasonably homogeneous components of a product, input pricing and collecting charge-out rates (e.g. for a legal service).

**19** Where prices of products are expected to move in a similar way, many of the directly priced products are taken to be representative of similarly classified products which are not directly priced. The main advantages of this are more effective use of ABS resources and a reduced burden on business establishments to provide the ABS with price information.

### *Classifications*

**20** From the September quarter 2012, all producer price indexes have been constructed in accordance with the *Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 edition* (cat. no. 1292.0). Prior to the September quarter 2012, the SOP series (Tables 1–10) were on an ANZSIC 1993 basis, while the other producer price indexes relating to products primary to specific industries were based on ANZSIC 2006. Further information on the latest industrial classification can be found in the *Information Paper: Update on ANZSIC 2006 Implementation for Producer and International Trade Price Indexes, Australia, 2009* (cat. no. 6427.0.55.002).

### STAGE OF PRODUCTION PRODUCER PRICE INDEXES *Introduction*

**21** Tables 1–10 present producer price indexes for the supply of products to the Australian economy in the SOP framework. The indexes cover both domestically produced and imported products, individually and aggregated. The SOP indexes are compiled from data used in the industry classification indexes, the international trade indexes and some additional data collections. The indexes are calculated on the index reference period 2011–12 = 100.0.

**22** A detailed technical explanation of the SOP concept is contained in the *Information Paper: Producer Price Index Developments, 1999* (cat. no. 6422.0). It should be noted that the experimental index numbers shown in that information paper are not comparable with current published figures which are more up to date in terms of their coverage, reference period weights and index reference period.

**23** SOP indexes are useful for analysing inflation in the Australian economy or, more specifically, for studying how price change for inputs used to produce final products is passed through to the price of those final products. Final products are those that are ready to be sold for immediate consumption, capital formation or export.

### *Pricing basis*

**24** In concept the valuation of transactions in the SOP indexes is basic prices (see paragraphs 7–11). However, the use of component series from existing ABS price collections in some cases results in the valuation diverging from this ideal.

## EXPLANATORY NOTES *continued*

### THE STAGE OF PRODUCTION CONCEPT

#### Overview

**25** Under the SOP concept flows of products are categorised according to their economic destination on a sequential basis along the production chain. The basis for the categorisation is the *Australian National Accounts: Input–Output Tables – Electronic Publication, 2007–08 Final* (cat. no. 5209.0.55.001). In simple terms, transactions (flows of products) are placed in one of three stages, namely:

- Preliminary demand – Products consumed as inputs into the production of Intermediate demand.
- Intermediate demand – Products consumed as inputs into the production of Final demand.
- Final demand – Products consumed as Final demand, with no further processing.

**26** Within this framework, the flows can broadly be regarded as preliminary demand products feeding into the production of intermediate demand products which in turn feed into the production of final demand products.



**27** SOP indexes are constructed on a gross industry basis in line with the concept supported by the principal purpose of the producer price indexes. SOP indexes minimise the multiple counting issues inherent in gross industry indexes by segmenting the economy into stages and measuring the price changes of transactions undertaken with the next stage of production. The stages cannot be aggregated, however a summary headline measure of general inflation is provided for each stage.

**28** It should be noted that the indexes for each of the stages are all representative of a single (simultaneous) point in time which allows for analyses of price change within the stages as products flow through. This is useful since price changes for earlier stages of production may be indicators of future price changes for the later stages of production.

#### Transaction flow approach

**29** It is important to note that the compilation of the ABS producer price indexes within the SOP framework is not structured around the products that are transacted. Internationally, some statistical agencies who make use of the SOP concept will allocate each product to a particular stage. The ABS makes no attempt to place individual products into a single stage of production as this would be very challenging due to a number of factors. For example, products such as wheat, wool and iron ore are exported in large volumes as well as being further processed within the domestic market. There are obviously many conflicting arguments for the allocation of such products to a single stage within the SOP framework.

**30** The ABS has adopted a transaction flow approach for partitioning the flow of individual products into the different production stages. Under this approach the stage of production in which a transaction is placed is determined by where the product is consumed. For example, exported wheat and domestically used wheat are treated as different products for index construction purposes. Exported wheat is treated as a Final demand product while wheat to be processed domestically to make flour is considered to be a Preliminary demand product. Similarly, a product such as energy can appear within all three stages.

## EXPLANATORY NOTES *continued*

### Scope and coverage

**31** As the main focus is on domestic inflation, exports are excluded from the headline SOP series 'Final demand', as presented in the key figures on the front page and in tables 1–6 of this publication. Index series for Final demand *including* exports are available in table 10 of this publication.

**32** Import transactions are included within the framework, recognising that they represent an important potential source of inflationary pressure.

**33** In concept, the SOP indexes are intended to incorporate all flows of products within the economy. However, while goods are reasonably well represented, there are shortfalls in the coverage of many Services industries, including the major 'margin' services of retail and wholesale. This is a direct consequence of the limited coverage of the Services industries in the producer price indexes.

**34** The increase in the importance of the Services industries to the Australian economy and the inherent difficulty in measuring price changes for many of these services have contributed to this shortfall in coverage. The expansion of Services industries price indexes coverage is a key objective for the ABS and consultation with users has helped to determine the priorities for the ABS Services Producer Price Indexes Development program which aims to progressively improve the coverage in these areas.

### Products and weights

**35** The products included in the stages, for both domestic supply and imports are given proportional weights that reflect the values of product flows. The weights are derived from the *Australian National Accounts: Input–Output Tables – Electronic Publication, 2007–08 Final* (cat. no. 5209.0.55.001).

### Comparisons with the Consumer Price Index

**36** Final demand indexes are presented as a representation of the changes in price for consumed products however, users should be aware that these indexes are not directly comparable with the Consumer price index (CPI). The two indexes differ significantly in concept and coverage with the main differences as follows:

- the pricing basis for the SOP Final demand index is basic prices (see paragraphs 7–11) whereas the CPI measures changes in purchasers' prices, i.e. the actual retail prices paid by households for products, inclusive of non-deductible taxes on products, such as the GST, and any transport and trade margins;
- in terms of coverage the SOP Final demand index predominantly measures changes in the prices of goods, i.e. many services are currently excluded from the index (see paragraph 33), whereas the CPI covers a more complete range of goods and services; and
- the weighting pattern for the SOP Final demand index is derived from information taken from the *Australian National Accounts: Input–Output Tables – Electronic Publication, 2007–08 Final* (cat. no. 5209.0.55.001), whereas the CPI weighting pattern is derived from information taken from the *Household Expenditure Survey, Australia: Summary of Results, 2009–10* (cat. no. 6530.0).

## MANUFACTURING INDUSTRIES PRODUCER PRICE INDEXES

### Introduction

**37** The output of the Manufacturing industries producer price indexes relate to all products that are produced by establishments classified to a specific industry, whereas the input to the Manufacturing industries price indexes relate to all products used by establishments classified to a specific industry. They are important sources of data for the SOP indexes.

**38** The Manufacturing industries indexes are available on the ABS website <<http://www.abs.gov.au>>. Table 12 presents individual price indexes of Output of the Manufacturing industries as well as quarter-on-quarter and year-on-year percentage changes for the Output of the Manufacturing industries price indexes. Table 13 presents the Input to the Manufacturing industries price indexes as well as quarter-on-quarter and year-on-year percentage changes for the Input to the Manufacturing industries price indexes. Basic prices are used for output indexes and purchasers' prices for input

## EXPLANATORY NOTES *continued*

### *Introduction continued*

indexes (see paragraphs 7–11). Therefore, as far as possible, ex-factory prices are included in the output indexes. Delivered into factory prices are included in the input indexes.

**39** Table 16 presents price indexes of Copper input to the other electrical equipment manufacturing industry as well as quarter-on-quarter and year-on-year percentage changes for the indexes.

**40** From the September quarter 2012 onwards all Manufacturing output and input indexes have an index reference period of 2011–12 = 100.0.

### *Scope*

**41** Prior to the September quarter 2009, the Manufacturing industries indexes were constructed on a net sector basis with intra-sector transactions netted out. From the September quarter 2009, the Manufacturing industries indexes are constructed on a gross industry basis. The net and gross industry methods are more easily explained by way of an example. The transactions captured for a motor vehicle manufacturing GROSS industry index would include both the sales of the parts (including sales of parts to other business establishments in the same industry) and the sales of the finished cars – even though the price change of the parts would be included in the price change of the cars. On the other hand, a motor vehicle manufacturing NET industry index would measure only the price change of motor vehicles sold to other industries of the economy and would exclude the price change of the parts (sold to business establishments in the same industry) as a separate product.

### *Classification*

**42** From the September quarter 2009 onwards the output of the Manufacturing industries indexes (Table 12) measures changes in the prices of products that are classified to ANZSIC 2006 Manufacturing industries that are sold or transferred to domestic establishments within or outside the Manufacturing industries for further processing, intermediate use or used as capital equipment or exported.

**43** Similarly, the Output of the Manufacturing industries indexes for products classified to ANZSIC 2006 subdivisions and groups (Table 12) measures transactions within and outside the subdivision or group. Prior to the September quarter 2009 these series were constructed on a net sector basis. They excluded intermediate transactions in products classified to the ANZSIC 2006 subdivision that were sold or transferred within that subdivision or group for further processing.

**44** From the September quarter 2009 onwards the Input to the Manufacturing industries indexes (Table 13) measures changes in the prices of products used in ANZSIC 2006 Manufacturing industries that have been purchased or transferred in from domestic establishments within or outside the Manufacturing industries, or imported. Similarly, the Input to the Manufacturing industries indexes for subdivisions (Table 14) measure input purchases or transfers within and outside the subdivision.

### *Products and weights*

**45** The index structures and weighting patterns for the Manufacturing industries input and output ANZSIC 2006 division indexes are presented in the *Information Paper: Producer Price Indexes Weighting Patterns, 2012* (cat. no. 6427.0.55.006). Index structures and weighting patterns for the associated ANZSIC 2006 subdivisions and groups are available from the ABS website <<http://www.abs.gov.au>> as data cubes in that information paper.

## CONSTRUCTION INDUSTRIES PRODUCER PRICE INDEXES

### *Introduction*

**46** The Output of the Construction industries producer price indexes relates to outputs classified to ANZSIC 2006 Construction industries. The Input to the House construction industry index relates to products used by establishments classified to ANZSIC 2006 Class 3011 – House construction. These indexes are important sources of data for SOP Final demand.

## EXPLANATORY NOTES *continued*

### *Introduction continued*

**47** The Output of the Construction industries indexes is available on the ABS website <<http://www.abs.gov.au>>. Table 17 presents price indexes of the outputs from establishments classified to the Building construction subdivision and selected Construction industries classes. Table 18 presents the Input to the House construction industry price indexes as well as quarter-on-quarter and year-on-year percentage changes for each of the indexes. The valuation basis is basic prices for the output indexes and purchasers' prices for the input indexes (see paragraphs 7–11). Therefore, as far as possible, builders' selling prices are reflected in the output indexes, and delivered on site prices are reflected in the input indexes.

**48** Table 19 presents the price indexes for Asphalt supplied and placed for the weighted average of six capital cities. These indexes measure changes in the price of the supply, delivery and placement of selected grades of asphaltic concrete used in road construction in capital city statistical divisions. As far as possible, actual transaction prices are used in this index.

### *Scope*

**49** The Output of the Construction industries price indexes (Table 17) measures changes in prices of the outputs from selected Construction industries. Presented in this table is the ANZSIC 2006 Subdivision 30 – Building construction, which consists of three classes: Class 3011 – House construction, Class 3019 – Other residential building construction and Class 3020 – Non-residential building construction. Outputs from the Class 3101 – Road and bridge construction are also presented in this table.

**50** The Input to the House construction industry price indexes (Table 18) measures changes in prices of products used in house construction, where a house is defined as a detached building predominantly used for long-term residential purposes and consisting of only one dwelling unit. The scope of the index approximates the ANZSIC 2006 Class 3011 – House construction.

**51** The Input to the House construction index does not explicitly cover alterations, additions, renovations and repairs. It relates to the greater capital city statistical area for each state capital city.

### *Products and weights*

**52** ANZSIC 2006 class output indexes at the national level are aggregated to the relevant group and subdivision using weights derived primarily from values of the supply of new general construction products in Australia using the *Australian National Accounts: Input–Output Tables – Electronic Publication, 2007–08 Final* (cat. no. 5209.0.55.001). ANZSIC 2006 class indexes at the State and Territory level are aggregated to the national level using proportions based on the value of work done by State and Territory and by type of construction as measured by the *Building Activity, Australia* (cat. no. 8752.0) for the 2010 and 2011 calendar years. The indexes generally use prices for work undertaken in each capital city, as construction activity in the city is taken to represent the whole State or Territory. For Queensland, however, other residential building construction and non-residential building construction also use prices obtained for North Queensland.

**53** The products and weights for the price index of Input to the House construction industry were derived from reported quantities of each product used in selected representative houses in the three years ending 2002–03. The weighting pattern for each capital city index will reflect variations in prices for the cities as applied to an Australian average basket of house building materials, with some allowance for city specific building practices e.g. the differential use of steel and timber materials in Perth and Adelaide compared with the other capital cities. The weighting patterns for the price index of Input into the House construction industry are set out in Appendix 2 of the September quarter 2005 issue of this publication. Note that the weights shown are values based on the quantities of various materials used in house building over the three years ended 2002–03, valued at the September quarter 2005 prices.

## EXPLANATORY NOTES *continued*

### MINING INDUSTRY PRODUCER PRICE INDEXES

**54** The Mining industry indexes are available on the ABS website <<http://www.abs.gov.au>>. Table 11 presents Input to the Coal mining industry price indexes. The valuation basis of the index is purchasers' prices (see paragraphs 7–11) and, as far as possible, the prices included in the indexes are for products delivered to the mine site or to the primary storage area for a group of mines.

**55** The products included in the indexes reflect the value of materials used in the operation of open cut and underground coal mines in Australia during 1999–2000. The index structures and weighting patterns are available on request.

### SERVICES INDUSTRIES PRODUCER PRICE INDEXES

#### *Introduction*

**56** The output of selected Services industries indexes are available on the ABS website <<http://www.abs.gov.au>>. Tables 20–27 present index numbers for selected Services industries classified to the following ANZSIC 2006 divisions: Accommodation and food Services industries, Transport, postal and warehousing industries, Information media and telecommunications industries, Rental, hiring and real estate Services industries, Professional, scientific and technical services industries, Administrative and support services industries, Public administration and safety industries and Other services industries. The valuation basis for each index is basic prices (see paragraphs 7–11). Prices used in the indexes relate to the amount received by the service provider.

**57** The currently available Services industries indexes represent the results to date of a program to progressively extend the scope of the producer price indexes into the Services industries of the Australian economy. First results from the program were published in March 1999, by way of experimental indexes, in the *Information Paper: Producer Price Index Developments, 1999* (cat. no. 6422.0). Similarly, changes to the indexes published from the September quarter 2009 on the ANZSIC 2006 basis have been documented in the *Information Paper: Update on ANZSIC 2006 Implementation for Producer and International Trade Price Indexes, Australia, 2009* (cat. no. 6427.0.55.002). Expanded coverage and improved indexes will be progressively implemented through the Services Producer Price Indexes Development program.

#### *Scope*

**58** The output of the Services industries price indexes measures changes in prices of Services classified to selected ANZSIC 2006 industries. Selected output for these industries is provided in Tables 20–27. Note that some ANZSIC 2006 codes do not yet have established indexes, and thus are not represented within these tables.

#### *Products and weights*

**59** From the September quarter 2012, ANZSIC 2006 class indexes are aggregated to the relevant group, subdivision and division using weights derived from the *Australian National Accounts: Input–Output Tables – Electronic Publication, 2007–08 Final* (cat. no. 5209.0.55.001), in combination with data from other ABS surveys and industry sources. Prior to this weights for these indexes were derived from the *Australian National Accounts: Input–Output Tables – Electronic Publication, 2001–02* (cat. no. 5209.0.55.001).

#### *Price measurement*

**60** The development of the Services industries price collections has involved a wide range of diverse industries with different measurement challenges. Accordingly, extensive consultation with industry associations and individual business establishments has been undertaken to determine the most viable approach, on a case-by-case basis.

**61** Characteristics found within the Services industries of the Australian economy have complicated the task of price measurement.

**62** The tendency within many industries to provide unique, one-off services tailored to the needs of individual customers has posed difficulties in establishing continuity of pricing to constant quality.

## EXPLANATORY NOTES *continued*

### *Price measurement continued*

**63** The 'bundling' of a range of different component services within one transaction or contract has required investigation of the feasibility of 'unbundling', that is, obtaining separate prices for each component of the total service. Where this has not proven to be feasible, the whole service bundle has been priced.

**64** Provider business establishments are asked to report details of any discounts they offer so that actual transactions prices can be calculated. However, as discounts are sometimes negotiated between individual buyers and sellers in relation to particular transactions, identifying discounts has not always been straightforward.

**65** The deregulation of some Services industries leads to structural changes and more complex pricing practices. To deal with this, samples are continually updated to incorporate new businesses and pricing methodologies are reviewed over time.

### *Developments*

**66** It is planned to make available indexes for the majority of remaining ANZSIC 2006 classes within the Services industries after they have been developed from experimental to production status. At such time these new indexes would contribute to the broader SOP indexes in this publication and associated outputs available on the ABS website <<http://www.abs.gov.au>>.

### INDEX NUMBERS

**67** Index numbers for financial years are simple averages of the relevant quarterly index numbers.

**68** Indexes for the price index of Input to the House construction industry are presented separately for each of the six state capital cities. These city indexes measure price movements over time for each city. They do not measure differences in price levels between cities.

### ANALYSIS OF INDEX NUMBERS

**69** Care should be exercised when interpreting quarter-to-quarter movements in the indexes as short-term movements do not necessarily indicate changes in trend.

**70** Movements in indexes from one period to another can be expressed either as changes in 'index points' or as 'percentage changes'. The following example illustrates the method of calculating index points changes and percentage changes between any two periods:

SOP: Final demand index numbers

September quarter 2012                      xxx.x (see table 1)

less September quarter 2011                xxx.x (see table 1)

Change in index points                        x.x

Percentage change                               $x.x/xxx.x \times 100 = x.x\%$  (see table 2)

**71** Tables 5, 6 and 7 provide analyses of the index points contribution which ANZSIC 2006 groups make to the SOP Final demand indexes, in total, and then separately for domestic and imported products. For example, in table 5 petroleum refining contributed x.xx index points to the final demand index number of xxx.x for the September quarter 2012 and x.xx index points to the net change of x.x index points between the June 2012 and September 2012 quarters.

**72** Tables 8 and 9 analyse the contributions to the Intermediate demand and Preliminary demand index numbers, respectively.

## EXPLANATORY NOTES *continued*

### ANALYSIS OF INDEX NUMBERS *continued*

**73** Further information on price index developments in the ABS is presented in the following publications:

*Information Paper: Producer and International Trade Price Indexes; Concepts, Sources and Methods, 2006* (cat. no. 6429.0)

*Information Paper: Changes to Time Series Spreadsheets for Producer Price Indexes, Australia, Feb 2006* (cat. no. 6427.0.55.001)

*Information Paper: Update on ANZSIC 2006 Implementation for Producer and International Trade Price Indexes, Australia, 2009* (cat. no. 6427.0.55.002)

*Information Paper: Review of the Producer and International Trade Price Indexes, 2011* (cat. no. 6427.0.55.003)

*Information Paper: Outcome of the Review of the Producer and International Trade Price Indexes, 2012* (cat. no. 6427.0.55.004)

*Information Paper: Implementation of the Review of the Producer and International Trade Price Indexes, 2012* (cat. no. 6427.0.55.005)

*Information Paper: Producer Price Indexes Weighting Patterns, 2012* (cat. no. 6427.0.55.006)

*Information Paper: An Analytical Framework for Price Indexes in Australia, 1997* (cat. no. 6421.0)

*Information Paper: Producer Price Index Developments, 1999* (cat. no. 6422.0)

*Information Paper: Review of the Import Price Index and Export Price Index, Australia, 1999* (cat. no. 6424.0)

*Information Paper: Price Indexes and The New Tax System, 2000* (cat. no. 6425.0)

*Information Paper: The Introduction of Hedonics Price Indexes for Personal Computers, 2005* (cat. no. 6458.0)

*Information Paper: Changes to the Weights of the Price Indexes for the Output of the General Construction Industry, 2008* (cat. no. 6406.0)

*Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006, (Revision 1.0)* (cat. no. 1292.0)

*Information Paper: Update on ANZSIC 2006 Implementation, 2008* (cat. no. 1295.0.55.001)

**74** Users may also wish to refer to the following related publications, and other data products that are available free of charge from the ABS website.

*International Trade Price Indexes, Australia* (cat. no. 6457.0)

*Consumer Price Index, Australia* (cat. no. 6401.0)

*Wage Price Index, Australia* (cat. no. 6345.0)

*Australian National Accounts: Input–Output Tables* (cat. no. 5209.0)

*Balance of Payments and International Investment Position, Australia* (cat. no. 5302.0)

**75** Current publications and other products released by the ABS are listed on the ABS website <<http://www.abs.gov.au>>. The ABS also issues a daily *Release Advice* on the website which details products to be released in the week ahead.



# APPENDIX 1 STAGE OF PRODUCTION AND IMPLEMENTATION OF ANZSIC 2006

## INTRODUCTION

This appendix provides information on the changes to the SOP indexes as a result of updating the industrial classification from the 1993 edition to the 2006 edition of the Australian and New Zealand Standard Industrial Classification (ANZSIC).

## BACKGROUND

In 2002, the ABS and Statistics New Zealand commenced a review to maintain the currency and relevance of ANZSIC. The review found that since the release of the original classification in 1993 there had been significant changes in industrial and business activities in both Australia and New Zealand. The 2006 edition of ANZSIC was released in February 2006. An electronic version of the ANZSIC 2006 classification is available free of charge from the ABS website, titled *Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006* (cat. no. 1292.0).

The ABS introduced the Producer and International Trade Price indexes (excluding SOP) on an ANZSIC 2006 basis in the September quarter 2009 (see *Information Paper: Update on ANZSIC 2006 Implementation for Producer and International Trade Price Indexes, 2009* (cat. no. 6427.0.55.002)). An overview of the changes relating to the implementation of ANZSIC 2006 in the Producer and International Trade Price Indexes was also presented in the appendix of the March quarter 2009 issues of *Producer Price Indexes, Australia* (cat. no. 6427.0) and *International Trade Price Indexes, Australia* (cat. no. 6457.0). Correspondences between the old (ANZSIC 1993) and new (ANZSIC 2006) indexes are available via the 'Downloads' tab of the March quarter 2009 issues on the ABS website.

## CHANGES FROM THE SEPTEMBER QUARTER 2012

The SOP indexes are presented using the ANZSIC 2006 classification.

Major outcomes from the implementation of ANZSIC 2006 include:

- some restructuring and/or renaming of previous ANZSIC 1993 series;
- discontinuation of some series (see below);
- introduction of some new series;
- introduction of a new weight reference period; and
- a changed presentation and format of *Producer Price Indexes, Australia* (cat. no. 6427.0).

The discontinued series for the SOP, Stage 3: Final Commodities are:

- Other food manufacturing (group 217);
- Other wood, paper and paper product manufacturing (group 232–233);
- Printing and services to printing (group 241);
- Publishing (group 242);
- Recorded media manufacturing and publishing (group 243);
- Other chemical product manufacturing (group 254);
- Plastic product manufacturing (group 256);
- Iron and steel manufacturing (group 271);
- Sheet metal product manufacturing (group 275);
- Electrical equipment and appliance manufacturing (group 285);
- Industrial machinery and equipment manufacturing (group 286);
- Non-building construction (group 412);
- Services to transport (subdivision 66);
- Technical services (group 782); and
- Computer services (group 783).

The discontinued series for the SOP, Stage 2: Intermediate Commodities are:

- Services to agriculture; hunting and trapping (subdivision 02);
- Other food manufacturing (group 217);
- Printing and services to printing (group 241);
- Publishing (group 242);
- Other chemical product manufacturing (group 254);

# APPENDIX 1 STAGE OF PRODUCTION AND IMPLEMENTATION OF ANZSIC 2006 *continued*

CHANGES FROM THE  
SEPTEMBER QUARTER 2012  
*continued*

- Plastic product manufacturing (group 256);
- Iron and steel manufacturing (group 271);
- Structural metal product manufacturing (group 274);
- Sheet metal product manufacturing (group 275);
- Electrical equipment and appliance manufacturing (group 285);
- Industrial machinery and equipment manufacturing (group 286);
- Air and space transport (group 640);
- Other transport (group 650);
- Services to transport (group 670);
- Property operators and developers (group 771);
- Technical services (group 782); and
- Computer services (group 783).

The discontinued series for the SOP, Stage 1: Preliminary Commodities are:

- Services to agriculture; hunting and trapping (subdivision 02);
- Other food manufacturing (group 217);
- Printing and services to printing (group 241);
- Publishing (group 242);
- Other chemical product manufacturing (group 254);
- Plastic product manufacturing (group 256);
- Iron and steel manufacturing (group 271);
- Structural metal product manufacturing (group 274);
- Sheet metal product manufacturing (group 275);
- Electrical equipment and appliance manufacturing (group 285);
- Industrial machinery and equipment manufacturing (group 286);
- Air and space transport (group 640);
- Other transport (group 650);
- Services to transport (group 670);
- Property operators and developers (group 771);
- Technical services (group 782); and
- Computer services (group 783).

From the September quarter 2012, the ABS provides further clarification on the concept of the SOP indexes in the Explanatory Notes of the publication *Producer Price Indexes, Australia* (cat. no. 6427.0) and within an updated Producer and International Trade Price Indexes: Concepts, Sources and Methods publication, which will be released in early 2013. To aid in this clarification, the SOP indexes are renamed as follows:

- Stage 3 (Final) becomes Final demand - Products consumed as Final demand, with no further processing;
- Stage 2 (Intermediate) becomes Intermediate demand - Products consumed as inputs into the production of Final demand; and
- Stage 1 (Preliminary) becomes Preliminary demand - Products consumed as inputs into the production of Intermediate demand.

Tables 1, 2 and 3 below provide correspondences between the old (ANZSIC 1993) and new (ANZSIC 2006) SOP series currently released in *Producer Price Indexes, Australia* (cat. no. 6427.0). Discontinued and expected new series are also shown.

This Appendix provides information on the changes to the SOP indexes as a result of updating the industrial classification from the 1993 edition to the 2006 edition of the Australian and New Zealand Standard Industrial Classification (ANZSIC 2006).

## APPENDIX 1 STAGE OF PRODUCTION AND IMPLEMENTATION OF ANZSIC 2006 *continued*

TABLE 1 STAGE OF PRODUCTION, FINAL DEMAND, Australian and New Zealand Standard Industrial Classification (ANZSIC) 1993 to 2006 Correspondence Table

Table 5 of Producer Price Indexes, Australia (cat. no. 6427.0)				
ANZSIC 1993		ANZSIC 2006	Becomes	Status
012–013	Grain, sheep, beef and dairy cattle farming	014, 016	Sheep, beef cattle and grain farming; and dairy cattle farming	(a)
011, 014–016	Other agriculture	011–013, 015, 017–019	Other agriculture	(b)
04	Commercial fishing	041	Fishing	(b)
211	Meat and meat product manufacturing	111	Meat and meat product manufacturing	(a)
212	Dairy product manufacturing	113	Dairy product manufacturing	(a)
213	Fruit and vegetable processing	114	Fruit and vegetable processing	(a)
214	Oil and fat manufacturing	115	Oil and fat manufacturing	(a)
215	Flour mill and cereal food manufacturing	116	Grain mill and cereal product manufacturing	(a)
216	Bakery product manufacturing	117	Bakery product manufacturing	(a)
217	Other food manufacturing	Discontinued, split into 112, 118, 119, 121 (part)		
		112	Seafood processing	(c)
		118	Sugar and confectionery manufacturing	(c)
		119	Other food product manufacturing	(c)
218	Beverage and malt manufacturing	121	Beverage manufacturing	(b)
219	Tobacco product manufacturing	122	Cigarette and tobacco product manufacturing	(a)
221	Textile fibre, yarn and woven fabric manufacturing	131	Textile manufacturing	(a)
222	Textile product manufacturing	133	Textile product manufacturing	(a)
223	Knitting mills	134	Knitting product manufacturing	(a)
224	Clothing manufacturing	1351	Clothing manufacturing	(a)
225	Footwear manufacturing	1352	Footwear manufacturing	(a)
226	Leather and leather product manufacturing	132	Leather tanning, fur dressing and leather product manufacturing	(a)
232–233	Other wood, paper and paper product manufacturing	Discontinued, split into 149, 15		
		149	Other wood product manufacturing	(c)
		151	Pulp, paper and paperboard manufacturing	(c)
241	Printing and services to printing	Discontinued, split into 152, 161		
		152	Converted paper product manufacturing	(c)
		161	Printing and printing support services	(c)
242	Publishing	Discontinued, included in 541		
		541	Newspaper, periodical, book and directory publishing	(c)
243	Recorded media manufacturing and publishing	Discontinued		
251	Petroleum refining	1701	Petroleum refining and petroleum fuel manufacturing	(a)
253	Basic chemical manufacturing	182	Basic polymer manufacturing	(b)
254	Other chemical product manufacturing	Discontinued, split into 184, 185, 189, 191		
		184	Pharmaceutical and medicinal product manufacturing	(c)
		185	Cleaning compound and toiletry preparation manufacturing	(c)
		189	Other basic chemical product manufacturing	(c)
		191	Polymer product manufacturing	(c)
255	Rubber product manufacturing	192	Natural rubber product manufacturing	(b)
256	Plastic product manufacturing	Discontinued, included in 191 (part)		
		191	Polymer product manufacturing	(c)

**APPENDIX 1** STAGE OF PRODUCTION AND IMPLEMENTATION OF  
ANZSIC 2006 *continued*

271	Iron and steel manufacturing	Discontinued, included in 212 (part)	
		212	Basic ferrous metal product manufacturing (c)
273	Non-ferrous basic metal product manufacturing	214	Basic non-ferrous metal product manufacturing (a)
275	Sheet metal product manufacturing	Discontinued, included in 223 (part)	
		223	Metal container manufacturing (c)
276	Fabricated metal product manufacturing	229	Other fabricated metal product manufacturing (b)
281	Motor vehicle and part manufacturing	231	Motor vehicle and motor vehicle part manufacturing (b)
282	Other transport equipment manufacturing	239	Other transport equipment manufacturing (b)
283	Photographic and scientific equipment manufacturing	241	Professional and scientific equipment manufacturing (b)
284	Electronic equipment manufacturing	242	Computer and electronic equipment manufacturing (b)
285	Electrical equipment and appliance manufacturing	Discontinued, split into 243, 244	
		243	Electrical equipment manufacturing (c)
		244	Domestic appliance manufacturing (c)
286	Industrial machinery and equipment manufacturing	Discontinued, split into 245, 246, 249	
		245	Pump, compressor, heating and ventilation equipment manufacturing (c)
		246	Specialised machinery and equipment manufacturing (c)
		249	Other machinery and equipment manufacturing (c)
29	Other manufacturing	25	Furniture and other manufacturing (b)
36–37	Electricity, gas and water supply	26–28	Electricity supply; gas supply; and water supply, sewerage and drainage services (b)
411	Building construction	30	Building construction (a)
412	Non-building construction	Discontinued	
		3101	Road and bridge construction (c)
571	Accommodation	440	Accommodation (a)
		451	Cafes, restaurants and takeaway food services (c)
611	Road freight transport	461	Road freight transport (b)
620	Rail transport	471	Rail freight transport (b)
630–640	Water, air and space transport	481	Water freight transport (b)
66	Services to transport	Discontinued	
772	Real estate agents	672	Real estate services (b)
782	Technical services	Discontinued, included in 692 (part)	
		692	Architectural, engineering and technical services (c)
783	Computer services	Discontinued, split into 592, 700	
		592	Data processing, web hosting and electronic information storage services (c)
		700	Computer system design and related services (c)
784	Legal and accounting services	693	Legal and accounting services (b)
		697	Veterinary services (c)

Footnotes: (a) Series continuing. (b) Series continuing with compositional change. (c) New series.

## APPENDIX 1 STAGE OF PRODUCTION AND IMPLEMENTATION OF ANZSIC 2006 *continued*

TABLE 2 STAGE OF PRODUCTION, INTERMEDIATE DEMAND, Australian and New Zealand Standard Industrial Classification (ANZSIC) 1993 to 2006 Correspondence Table

Table 8 of Producer Price Indexes, Australia (cat. no. 6427.0)				
ANZSIC 1993		ANZSIC 2006	Becomes	Status
012–013	Grain, sheep, beef and dairy cattle farming	014, 016	Sheep, beef cattle and grain farming; and dairy cattle farming	(a)
011, 014–016	Other agriculture	011–013, 015, 017–019	Other agriculture	(b)
02	Services to agriculture; hunting and trapping	Discontinued, included in 04 (part)		
04	Commercial fishing	041	Fishing	(b)
110	Coal mining	060	Coal mining	(a)
120	Oil and gas extraction	070	Oil and gas extraction	(a)
131	Metal ore mining	080	Metal ore mining	(a)
14	Other mining	09	Non-metallic mineral mining and quarrying	(a)
211	Meat and meat product manufacturing	111	Meat and meat product manufacturing	(a)
212	Dairy product manufacturing	113	Dairy product manufacturing	(a)
213–214	Fruit and vegetable processing; oil and fat manufacturing	114–115	Fruit and vegetable processing; oil and fat manufacturing	(a)
215	Flour mill and cereal food manufacturing	116	Grain mill and cereal product manufacturing	(a)
216	Bakery product manufacturing	117	Bakery product manufacturing	(a)
217	Other food manufacturing	Discontinued, split into 112, 118, 119, 121 (part)		
		112	Seafood processing	(c)
		118	Sugar and confectionery manufacturing	(c)
		119	Other food product manufacturing	(c)
218	Beverage and malt manufacturing	121	Beverage manufacturing	(b)
22	Textile, clothing, footwear and leather manufacturing	13	Textile, leather, clothing and footwear manufacturing	(a)
231	Log sawmilling and timber dressing	141	Log sawmilling and timber dressing	(b)
232	Other wood product manufacturing	149	Other wood product manufacturing	(b)
233	Paper and paper product manufacturing	151	Pulp, paper and paperboard manufacturing	(b)
241	Printing and services to printing	Discontinued, split into 152, 161		
		152	Converted paper product manufacturing	(c)
		161	Printing and printing support services	(c)
242	Publishing	Discontinued, included in 541		
		541	Newspaper, periodical, book and directory publishing	(c)
251	Petroleum refining	1701	Petroleum refining and petroleum fuel manufacturing	(a)
253	Basic chemical manufacturing	182	Basic polymer manufacturing	(b)
254	Other chemical product manufacturing	Discontinued, split into 184, 185, 189, 191		
		184	Pharmaceutical and medicinal product manufacturing	(c)
		185	Cleaning compound and toiletry preparation manufacturing	(c)
		189	Other basic chemical product manufacturing	(c)
		191	Polymer product manufacturing	(c)
255	Rubber product manufacturing	192	Natural rubber product manufacturing	(b)
256	Plastic product manufacturing	Discontinued, included in 191 (part)		
		191	Polymer product manufacturing	(c)
26	Non-metallic mineral product manufacturing	20	Non-metallic mineral product manufacturing	(a)
271	Iron and steel manufacturing	Discontinued, included in 212 (part)		
		212	Basic ferrous metal product manufacturing	(c)

**APPENDIX 1 STAGE OF PRODUCTION AND IMPLEMENTATION OF ANZSIC 2006** *continued*

272	Basic non-ferrous metal manufacturing	213	Basic non-ferrous metal manufacturing	(a)
273	Non-ferrous basic metal product manufacturing	214	Basic non-ferrous metal product manufacturing	(a)
274	Structural metal product manufacturing	Discontinued, included in 222 (part)		
		222	Structural metal product manufacturing	(c)
275	Sheet metal product manufacturing	Discontinued, included in 223 (part)		
		223	Metal container manufacturing	(c)
276	Fabricated metal product manufacturing	229	Other fabricated metal product manufacturing	(b)
281	Motor vehicle and part manufacturing	231	Motor vehicle and motor vehicle part manufacturing	(b)
282	Other transport equipment manufacturing	239	Other transport equipment manufacturing	(b)
283	Photographic and scientific equipment manufacturing	241	Professional and scientific equipment manufacturing	(b)
284	Electronic equipment manufacturing	242	Computer and electronic equipment manufacturing	(b)
285	Electrical equipment and appliance manufacturing	Discontinued, split into 243, 244		
		243	Electrical equipment manufacturing	(c)
		244	Domestic appliance manufacturing	(c)
286	Industrial machinery and equipment manufacturing	Discontinued, split into 245, 246, 249		
		245	Pump, compressor, heating and ventilation equipment manufacturing	(c)
		246	Specialised machinery and equipment manufacturing	(c)
		249	Other machinery and equipment manufacturing	(c)
29	Other manufacturing	25	Furniture and other manufacturing	(b)
36-37	Electricity, gas and water supply	26-28	Electricity supply; gas supply; and water supply, sewerage and drainage services	(b)
571	Accommodation	440	Accommodation	(a)
		451	Cafes, restaurants and takeaway food services	(c)
611	Road freight transport	461	Road freight transport	(b)
620	Rail transport	471	Rail freight transport	(b)
630	Water transport	481	Water freight transport	(b)
640	Air and space transport	Discontinued		
650	Other transport	Discontinued		
66	Services to transport	Discontinued		
670	Storage	530	Warehousing and storage services	(a)
771	Property operators and developers	Discontinued		
772	Real estate agents	672	Real estate services	(b)
774	Machinery and equipment hiring and leasing	66	Rental and hiring services (except real estate)	(b)
782	Technical services	Discontinued, included in 692 (part)		
		692	Architectural, engineering and technical services	(c)
783	Computer services	Discontinued, split into 592, 700		
		592	Data processing, web hosting and electronic information storage services	(c)
		700	Computer system design and related services	(c)
784	Legal and accounting services	693	Legal and accounting services	(b)
785	Marketing and business management services	Discontinued, split into 692 (part), 695 (part), 696 (part)		
		692	Architectural, engineering and technical services	(c)
		695	Market research and statistical services	(c)
786	Other business services	Discontinued		
		721	Employment services	(c)
		729	Other administrative services	(c)
		697	Veterinary services	(c)

Footnotes: (a) Series continuing. (b) Series continuing with compositional change. (c) New series.

## APPENDIX 1 STAGE OF PRODUCTION AND IMPLEMENTATION OF ANZSIC 2006 *continued*

TABLE 3 STAGE OF PRODUCTION, PRELIMINARY DEMAND, Australian and New Zealand Standard Industrial Classification (ANZSIC) 1993 to 2006 Correspondence Table

Table 9 of Producer Price Indexes, Australia (cat. no. 6427.0)				
ANZSIC 1993		ANZSIC 2006	Becomes	Status
012–013	Grain, sheep, beef and dairy cattle farming	014, 016	Sheep, beef cattle and grain farming; and dairy cattle farming	(a)
011, 014–016	Other agriculture	011–013, 015, 017–019	Other agriculture	(b)
02	Services to agriculture; hunting and trapping	Discontinued		
030	Forestry and logging	030	Forestry and logging	(a)
110	Coal mining	060	Coal mining	(a)
120	Oil and gas extraction	070	Oil and gas extraction	(a)
131	Metal ore mining	080	Metal ore mining	(a)
14	Other mining	099	Other non-metallic mineral mining and quarrying	(a)
211	Meat and meat product manufacturing	111	Meat and meat product manufacturing	(a)
212	Dairy product manufacturing	113	Dairy product manufacturing	(a)
213–214	Fruit and vegetable processing; oil and fat manufacturing	114–115	Fruit and vegetable processing; oil and fat manufacturing	(a)
215	Flour mill and cereal food manufacturing	116	Grain mill and cereal product manufacturing	(a)
216	Bakery product manufacturing	117	Bakery product manufacturing	(a)
217	Other food manufacturing	Discontinued, split into 112, 118, 119, 121 (part)		
		112	Seafood processing	(c)
		118	Sugar and confectionery manufacturing	(c)
		119	Other food product manufacturing	(c)
218	Beverage and malt manufacturing	121	Beverage manufacturing	(b)
22	Textile, clothing, footwear and leather manufacturing	13	Textile, leather, clothing and footwear manufacturing	(a)
231	Log sawmilling and timber dressing	141	Log sawmilling and timber dressing	(b)
232	Other wood product manufacturing	149	Other wood product manufacturing	(b)
233	Paper and paper product manufacturing	151	Pulp, paper and paperboard manufacturing	(b)
241	Printing and services to printing	Discontinued, split into 152, 161		
		152	Converted paper product manufacturing	(c)
		161	Printing and printing support services	(c)
242	Publishing	Discontinued, included in 541		
		541	Newspaper, periodical, book and directory publishing	(c)
251	Petroleum refining	1701	Petroleum refining and petroleum fuel manufacturing	(a)
253	Basic chemical manufacturing	182	Basic polymer manufacturing	(b)
254	Other chemical product manufacturing	Discontinued, split into 184, 185, 189, 191		
		184	Pharmaceutical and medicinal product manufacturing	(c)
		185	Cleaning compound and toiletry preparation manufacturing	(c)
		189	Other basic chemical product manufacturing	(c)
		191	Polymer product manufacturing	(c)
255	Rubber product manufacturing	192	Natural rubber product manufacturing	(b)
256	Plastic product manufacturing	Discontinued, included in 191 (part)		
		191	Polymer product manufacturing	(c)
26	Non-metallic mineral product manufacturing	20	Non-metallic mineral product manufacturing	(a)
271	Iron and steel manufacturing	Discontinued, included in 212 (part)		

**APPENDIX 1** STAGE OF PRODUCTION AND IMPLEMENTATION OF  
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		212	Basic ferrous metal product manufacturing	(c)
272	Basic non-ferrous metal manufacturing	213	Basic non-ferrous metal manufacturing	(a)
273	Non-ferrous basic metal product manufacturing	214	Basic non-ferrous metal product manufacturing	(a)
274	Structural metal product manufacturing	Discontinued, included in 222 (part)		
		222	Structural metal product manufacturing	(c)
275	Sheet metal product manufacturing	Discontinued, included in 223 (part)		
		223	Metal container manufacturing	(c)
276	Fabricated metal product manufacturing	229	Other fabricated metal product manufacturing	(b)
281	Motor vehicle and part manufacturing	231	Motor vehicle and motor vehicle part manufacturing	(b)
282	Other transport equipment manufacturing	239	Other transport equipment manufacturing	(b)
283	Photographic and scientific equipment manufacturing	241	Professional and scientific equipment manufacturing	(b)
284	Electronic equipment manufacturing	242	Computer and electronic equipment manufacturing	(b)
285	Electrical equipment and appliance manufacturing	Discontinued, split into 243, 244		
		243	Electrical equipment manufacturing	(c)
		244	Domestic appliance manufacturing	(c)
286	Industrial machinery and equipment manufacturing	Discontinued, split into 245, 246, 249		
		245	Pump, compressor, heating and ventilation equipment manufacturing	(c)
		246	Specialised machinery and equipment manufacturing	(c)
		249	Other machinery and equipment manufacturing	(c)
36-37	Electricity, gas and water supply	26-28	Electricity supply; gas supply; and water supply, sewerage and drainage services	(b)
571	Accommodation	440	Accommodation	(a)
		451	Cafes, restaurants and takeaway food services	(c)
611	Road freight transport	461	Road freight transport	(b)
620	Rail transport	471	Rail freight transport	(b)
630	Water transport	481	Water freight transport	(b)
640	Air and space transport	Discontinued		
650	Other transport	Discontinued		
66	Services to transport	Discontinued		
670	Storage	530	Warehousing and storage services	(a)
771	Property operators and developers	Discontinued		
772	Real estate agents	672	Real estate services	(b)
774	Machinery and equipment hiring and leasing	66	Rental and hiring services (except real estate)	(b)
782	Technical services	Discontinued, included in 692 (part)		
		692	Architectural, engineering and technical services	(c)
783	Computer services	Discontinued, split into 592, 700		
		592	Data processing, web hosting and electronic information storage services	(c)
		700	Computer system design and related services	(c)
784	Legal and accounting services	693	Legal and accounting services	(b)
785	Marketing and business management services	Discontinued, split into 692 (part), 695 (part), 696 (part)		
		692	Architectural, engineering and technical services	(c)
		695	Market research and statistical services	(c)
786	Other business services	Discontinued		
		721	Employment services	(c)
		729	Other administrative services	(c)
		697	Veterinary services	(c)
Footnotes: (a) Series continuing. (b) Series continuing with compositional change. (c) New series.				



## APPENDIX 2 RE-REFERENCING OF PRODUCER PRICE INDEXES

### RE-REFERENCING OF PRODUCER PRICE INDEXES

From the September quarter 2012, the ABS harmonised the index reference periods for the Producer Price Indexes, including the Stage of Production indexes. These series are now presented on an index reference period of 2011–12 = 100.0

Conversion factors are available electronically from the downloads tab of the September quarter 2012 issue of this publication. This will enable users to convert previously published time series to the new index reference period or to convert index numbers on the new index reference period to the previous time series index reference period.

The following examples demonstrate the method used by the ABS to calculate the conversion factors to convert from the old (1998–99 = 100.0) to the new (2011–12 = 100.0) index reference period (and vice versa).

### CONVERTING AN OLD TIME SERIES TO THE NEW INDEX REFERENCE PERIOD

The conversion of time series from the old index reference periods to the new involves a rescaling of the index numbers. The conversion factors that should be applied to the index numbers are calculated by obtaining the ratio of the index numbers on the old (1998–99 = 100.0) to the new index reference period (2011–12 = 100.0).

Conversion factors are calculated using the four index numbers for the 2011–12 financial year.

For example, for the **Stage of Production Intermediate demand; total** an arithmetic conversion factor is obtained as follows:

- Rounded conversion factor (index reference period 1998–99 = 100.0) =  $100.0 / ((150.2 + 150.7 + 151.1 + 152.2) / 4) = 0.6620$
- Index number for June quarter 2012 = 152.2 (index reference period 1998–99 = 100.0)
- Index number for the June quarter 2012 (index reference period 2011–12 = 100.0) is  $152.2 \times 0.6620 = 100.8$

The factor may be used to convert any historical **Stage of Production Intermediate demand; total**, index numbers to the new index reference period. The formulae shown in the above example may be followed in respect of any specific time series for which index numbers have been published on the old index reference period.

### CONVERTING THE RE-REFERENCED SERIES BACK TO THE PREVIOUS INDEX REFERENCE PERIOD

The conversion of the series from the new index reference period to the old involves a rescaling of the index numbers. The rescaling factors are obtained by taking the inverse of the previously described scaling factor.

For example, for the **Stage of Production Intermediate demand; total**, the rescaling factor is obtained as follows:

- Rounded conversion factor (index reference period 1998–99 = 100.0) =  $((150.2 + 150.7 + 151.1 + 152.2) / 4) / 100.0 = 1.5105$
- Index number for the June quarter 2012 (index reference period 2011–12 = 100.0) is 100.8
- Index number for the June quarter 2012 (index reference period 1998–99 = 100.0) is  $100.8 \times 1.5105 = 152.2$

The factor may be used to convert any historical **Stage of Production Intermediate demand; total** index number on the new index reference period. The formulae shown in the above example may be followed in respect of any specific time series for which index numbers have been published on the new index reference period.

## **APPENDIX 2** RE-REFERENCING OF PRODUCER PRICE INDEXES *continued*

### ROUNDING

Index numbers and percentage changes are always published to one decimal place, with the percentage changes being calculated from the rounded index numbers. Index numbers for periods longer than a single quarter (e.g. for financial years) are calculated as the simple arithmetic average of the relevant rounded quarterly index numbers. The conversion factors described above are applied to the rounded index numbers.

A consequence of re-referencing price indexes can be that period-to-period percentage changes may differ slightly to those previously published due to rounding and the re-referencing. These differences do not constitute a revision.

Sample only

Sample only

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