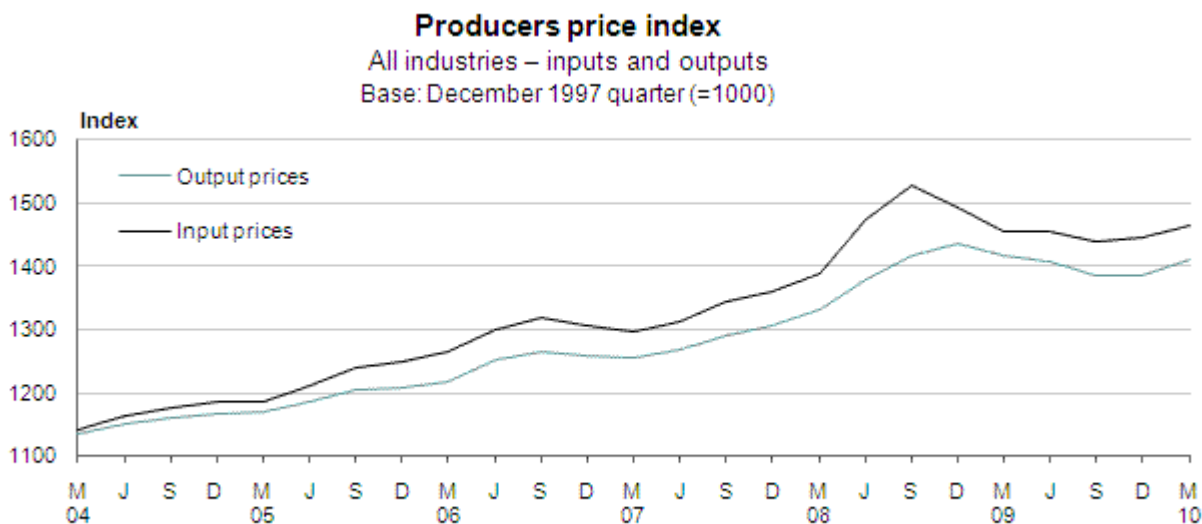


Embargoed until 10:45am – 18 May 2010

## Producers Price Index: March 2010 quarter

### Highlights

- The producers price index (PPI) outputs index rose 1.8 percent.
- Output prices for dairy product manufacturing rose 29.6 percent.
- Output prices fell 0.5 percent in the year to the March 2010 quarter.
- The PPI inputs index rose 1.3 percent.
- Input prices for electricity generation and supply rose 16.2 percent.
- Input prices rose 0.6 percent in the year to the March 2010 quarter.



Source: Statistics New Zealand

Geoff Bascand  
Government Statistician

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# Commentary

## Outputs

Output prices for all industries in the PPI rose 1.8 percent in the March 2010 quarter, following four consecutive quarterly falls.

The increase for the latest quarter compared with falls of 0.1 percent and 1.4 percent in the December and September 2009 quarters, respectively. The dairy product manufacturing index was the major contributor to the rise in the March 2010 quarter.

<b>Producers price index outputs</b>		
All industries		
Quarter	Percentage change from previous quarter	Percentage change from same quarter, previous year
Mar 2008	1.8	6.1
Jun 2008	3.5	8.5
Sep 2008	2.8	9.8
Dec 2008	1.4	9.9
Mar 2009	-1.4	6.5
Jun 2009	-0.7	2.1
Sep 2009	-1.4	-2.1
Dec 2009	-0.1	-3.6
Mar 2010	1.8	-0.5

The dairy product manufacturing index rose 29.6 percent in the March 2010 quarter, the largest since the series began in the June 1994 quarter. This follows a 5.4 percent rise in the December 2009 quarter, and a 10.9 percent fall in the September 2009 quarter. The increase in the latest quarter reflected higher prices for exported dairy products such as milk powder, cheese, and butter. In the year to the March 2010 quarter, the dairy product manufacturing index fell 2.5 percent. This compares with a 12.4 percent fall in the year to the March 2009 quarter, and a 50.4 percent rise in the year to the March 2008 quarter.

The wholesale trade index, the second largest contributor to the increase in output prices, rose 1.6 percent in the March 2010 quarter. This rise follows five consecutive quarterly falls since the December 2008 quarter, with 0.1 percent and 0.8 percent falls in the December and September 2009 quarters, respectively. The main contributor to the rise in the latest quarter came from the mineral, metal, and chemical wholesaling index, reflecting higher prices for petrol. Some offsetting impact to the overall rise in the wholesale trade index came from falls in the prices of machinery, jewellery, and other fabricated metal products.

On an annual basis, the wholesale trade index fell 0.4 percent in the year to the March 2010 quarter compared with rises of 2.3 percent and 8.9 percent in the years to the March 2009 and March 2008 quarters, respectively.

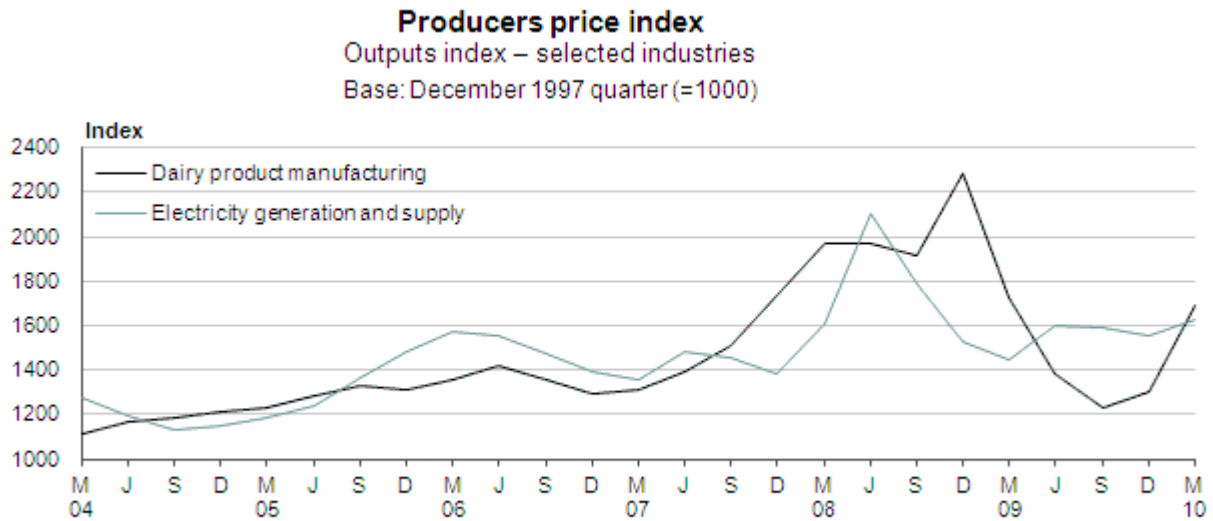
The electricity generation and supply index (up 4.8 percent) was the third major contributor to the rise in output prices in the March 2010 quarter. This follows falls of 2.3 percent in the December 2009 quarter and 1.0 percent in the September 2009 quarter. A sustained period of low lake levels, spot market conditions, and higher demand were the main reasons cited for the rise in electricity generation and supply prices.

On an annual basis, the electricity generation and supply index rose 12.5 percent in the year to the March 2010 quarter. This compares with a 10.1 percent fall in the year to the March 2009 quarter and an 18.7 percent rise in the year to the March 2008 quarter.

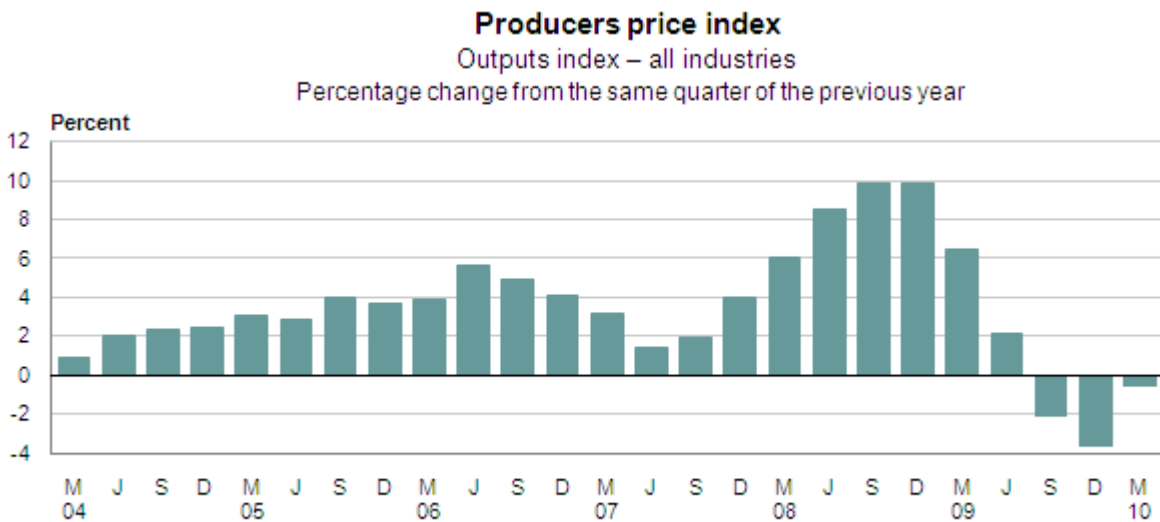
In the March 2009 quarter, the main offsetting contribution came from the finance index (down 4.2 percent). The financial intermediation charges index fell due to the New Zealand dollar interest rates for borrowing increasing slightly while the rates for lending decreased slightly. For more details, please see the end of the commentary and the 'pricing financial services' section in the Technical notes.

Together, the dairy product manufacturing, electricity generation and supply, and wholesale trade indexes contributed 68 percent of the overall 1.8 percent increase in the outputs index.

In the year to the March 2010 quarter, the PPI outputs index fell 0.5 percent, compared with rises of 6.5 percent in the year to the March 2009 quarter, and 6.1 percent in the year to the March 2008 quarter.



Source: Statistics New Zealand



Source: Statistics New Zealand

## Inputs

Input prices for all industries in the PPI rose 1.3 percent in the March 2010 quarter. This follows a rise of 0.4 percent in the December 2009 quarter, and a fall of 1.1 percent in the September 2009 quarter.

<b>Producers price index inputs</b>		
All industries		
Quarter	Percentage change from previous quarter	Percentage change from same quarter, previous year
Mar 2008	2.1	7.3
Jun 2008	6.0	12.3
Sep 2008	3.7	13.6
Dec 2008	-2.2	9.7
Mar 2009	-2.5	4.7
Jun 2009	0.0	-1.2
Sep 2009	-1.1	-5.8
Dec 2009	0.4	-3.2
Mar 2010	1.3	0.6

The electricity generation and supply index made the most significant upward contribution to the inputs index in the March 2010 quarter. The index rose 16.2 percent, following a 6.7 percent rise in the December 2009 quarter and an 8.2 percent fall in the September 2009 quarter. Respondents cited a sustained period of low lake levels, spot market conditions, and higher demand as the main reasons for the rise in electricity generation and supply prices.

On an annual basis, the electricity generation and supply index rose 25.7 percent in the year to the March 2010 quarter. This follows a 31.1 percent fall and a 40.7 percent rise in the years to the March 2009 and March 2008 quarters, respectively.

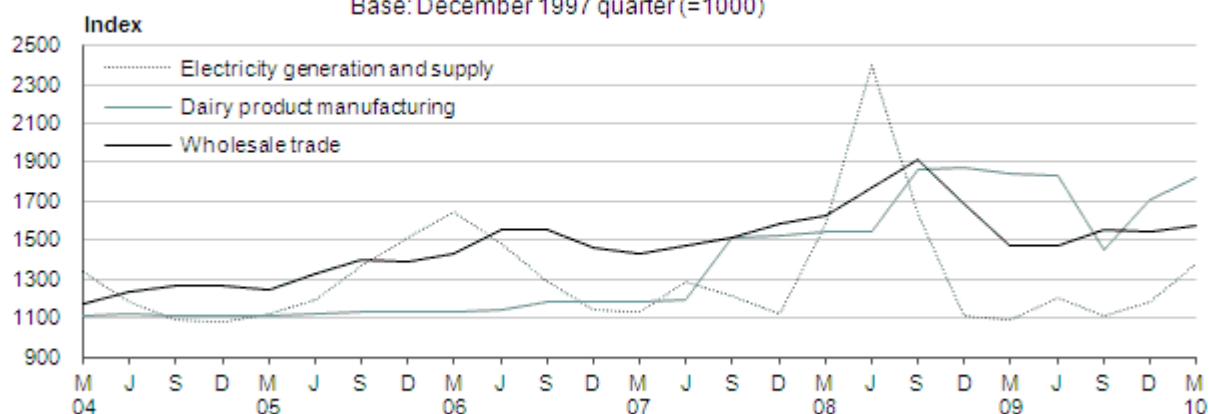
The dairy product manufacturing index (up 6.5 percent) made the second most significant upward contribution to the inputs index. This follows an 18.2 percent rise in the December 2009 quarter and a 20.9 percent fall in the September 2009 quarter. The rise in the latest quarter reflected an increase in the farm-gate milk price.

A new method for measuring change in farm-gate milk prices was introduced in the December 2009 quarter. The method involves taking the most recently published figure for the forecast final milk payout (at the time the indexes are compiled, one month after the reference quarter), and showing movements in this figure on a quarterly basis.

The third most significant upward contribution came from the wholesale trade index (up 1.8 percent). This follows a fall of 0.9 percent in the December 2009 quarter, and a rise of 5.6 percent in the September 2009 quarter. This latest rise was driven by an increase in the price of imported crude oil in the mineral, metal, and chemical wholesaling sub-index.

The wholesale trade index rose 6.4 percent in the year to the March 2010 quarter. This follows an 8.9 percent fall and a 13.4 percent rise in the years to the March 2009 quarter and March 2008 quarter, respectively.

**Producers price index**  
 Inputs index – selected industries  
 Base: December 1997 quarter (=1000)



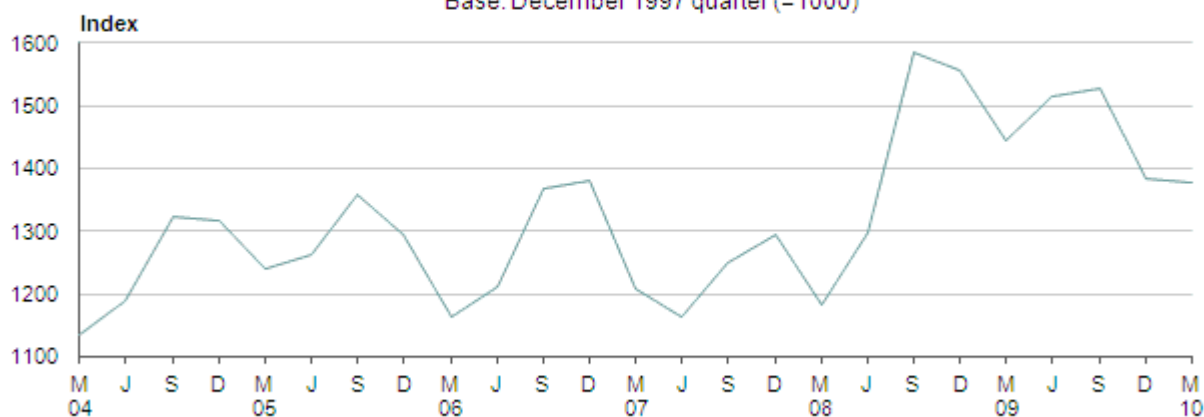
Source: Statistics New Zealand

The agriculture, forestry, and fishing index rose 1.2 percent in the March 2010 quarter, and made the fourth largest upward contribution to the inputs index. The main drivers for the latest quarterly rise were higher prices for sheep and deer livestock, and an increase in fuel prices. Four of the seven sub-indexes are based on input types from the farm expenses price index. The complete suite of sub-indexes within the farm expenses price index are published in the March quarter of each year only. These are available as supplementary tables in this release.

The meat and meat product manufacturing index (down 0.6 percent) made the largest downward contribution to the inputs index. The latest quarterly fall follows a fall of 9.3 percent in the December 2009 quarter and a rise of 0.7 percent in the September 2009 quarter. The latest fall reflects lower prices for sheep livestock.

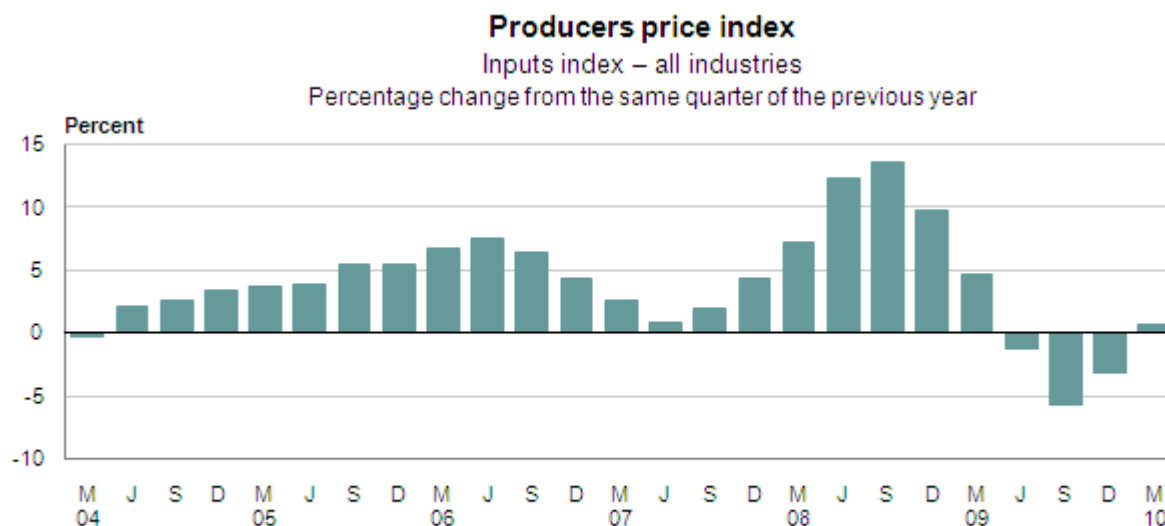
The meat and meat product manufacturing index fell 4.7 percent in the year to the March 2010 quarter. This annual fall follows a rise of 21.9 percent in the year to the March 2009 quarter, and a fall of 2.0 percent in the year to the March 2008 quarter.

**Producers price index**  
 Inputs index – meat and meat product manufacturing  
 Base: December 1997 quarter (=1000)



Source: Statistics New Zealand

Input prices for all industries rose 0.6 percent in the year to the March 2010 quarter. This follows rises of 4.7 percent in the year to the March 2009 quarter, and 7.3 percent in the year to the March 2008 quarter.

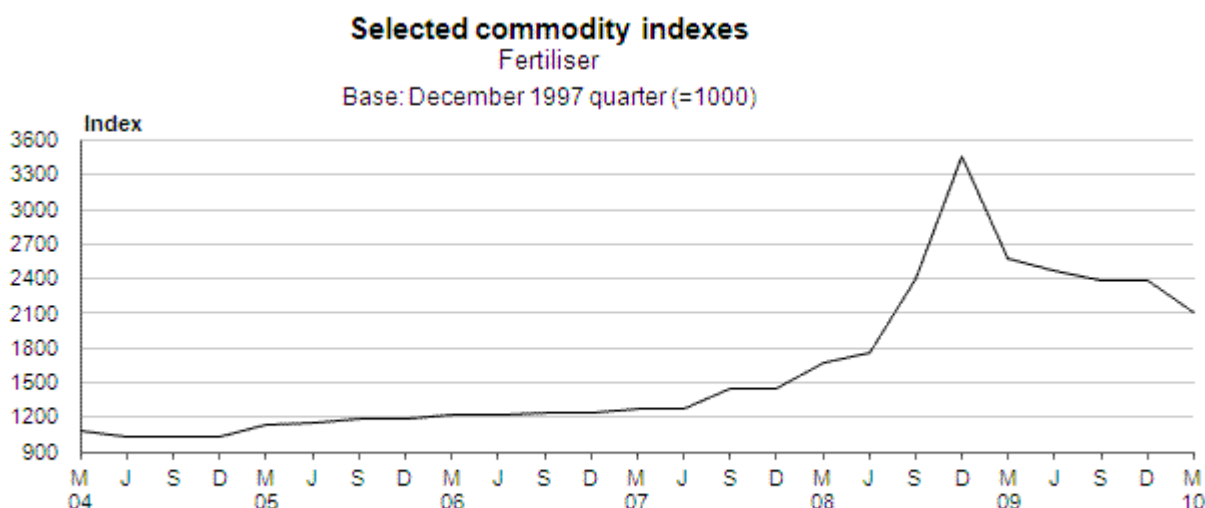


Source: Statistics New Zealand

## Commodities

In the March 2010 quarter, the New Zealand dollar depreciated against four out of five major trading partner currencies, especially the US dollar (down 6.2 percent), and the Japanese yen (down 5.7 percent) adding upward pressure to prices.

Fertilisers (down 11.8 percent) recorded the fifth consecutive quarterly fall, including 0.2 percent and 3.7 percent falls in the December and September 2009 quarters, respectively. The latest quarterly fall reflected lower prices for phosphatic fertilisers (due to lower suppliers' prices). On an annual basis, the fertiliser index fell 18.4 percent in the year to the March 2010 quarter, after rising 54.6 percent in the year to the March 2009 quarter.



Source: Statistics New Zealand

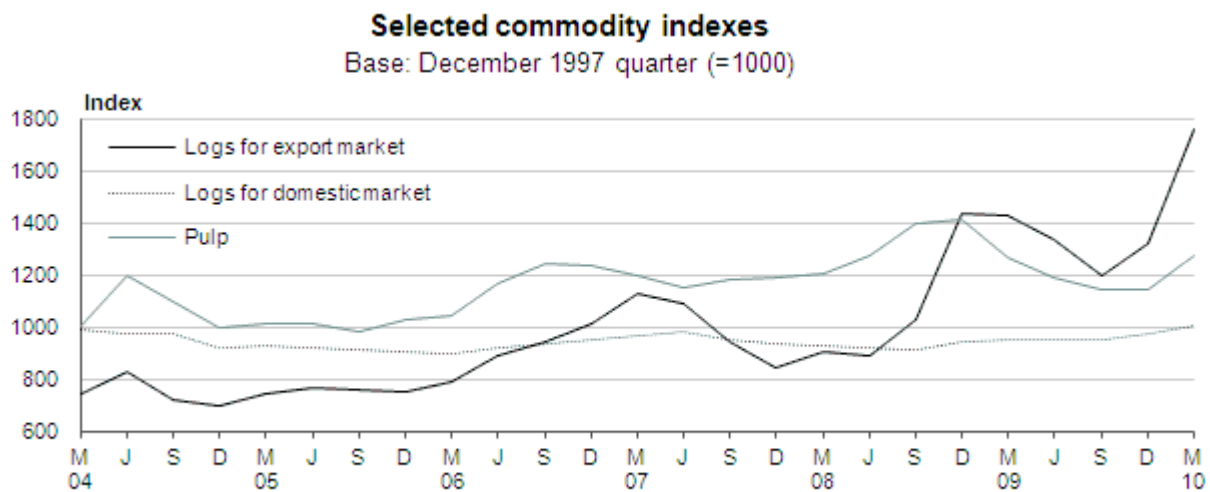
The processed meat: beef index rose 10.1 percent in the March 2010 quarter, in contrast with a 13.2 percent fall in the December 2009 quarter. The latest quarterly rise reflected higher prices for boneless beef exports. On an annual basis, the processed meat: beef index fell 10.9 percent

in the year to the March 2010 quarter, and rose 21.5 percent in the year to the March 2009 quarter.

The logs for export market index rose 33.1 percent in the latest quarter, following a 10.3 percent rise in the December 2009 quarter and a 10.2 percent fall in the September 2009 quarter. Export log prices in the latest quarter were driven by higher overseas demand and the weaker New Zealand dollar. On an annual basis, the logs for export market index recorded rises of 23.1 percent in the year to the March 2010 quarter, and 58.2 percent in the year to the March 2009 quarter.

The logs for domestic market index rose 3.5 percent in the March 2010 quarter, following a 2.3 percent rise in the December 2009 quarter and a 0.1 percent fall in the September 2009 quarter. On an annual basis, the logs for domestic market index recorded rises of 5.5 percent in the year to the March 2010 quarter, and 3.0 percent in the year to the March 2009 quarter.

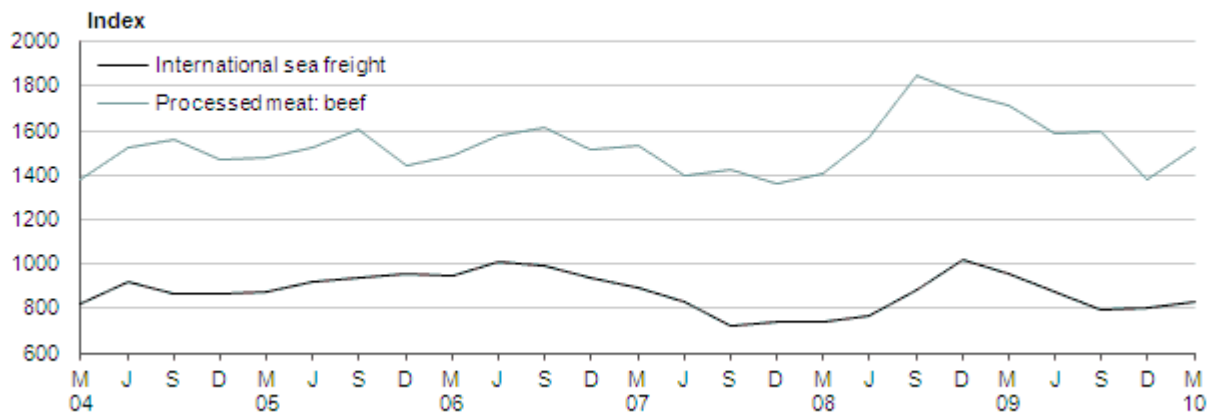
The pulp index rose 11.6 percent in the March 2010 quarter, following a 0.1 percent rise in the December 2009 quarter and a 4.4 fall in the September 2009 quarter. The latest quarterly rise was driven by higher international prices and the weaker New Zealand dollar. On an annual basis, the pulp index rose 0.2 percent in the year to the March 2010 quarter, and 5.0 percent in the year to the March 2009 quarter.



Source: Statistics New Zealand

The international sea freight index rose 3.4 percent in the March 2010 quarter (due to general rate increases and the exchange rate), compared with a 1.3 percent rise in the December 2009 quarter and a 9.3 percent fall in the September 2009 quarter. On an annual basis, the international sea freight index fell 13.6 percent in the year to the March 2010 quarter, and rose 29.6 percent in the year to the March 2009 quarter.

**Selected commodity indexes**  
 Base: December 1997 quarter (=1000)



Source: Statistics New Zealand

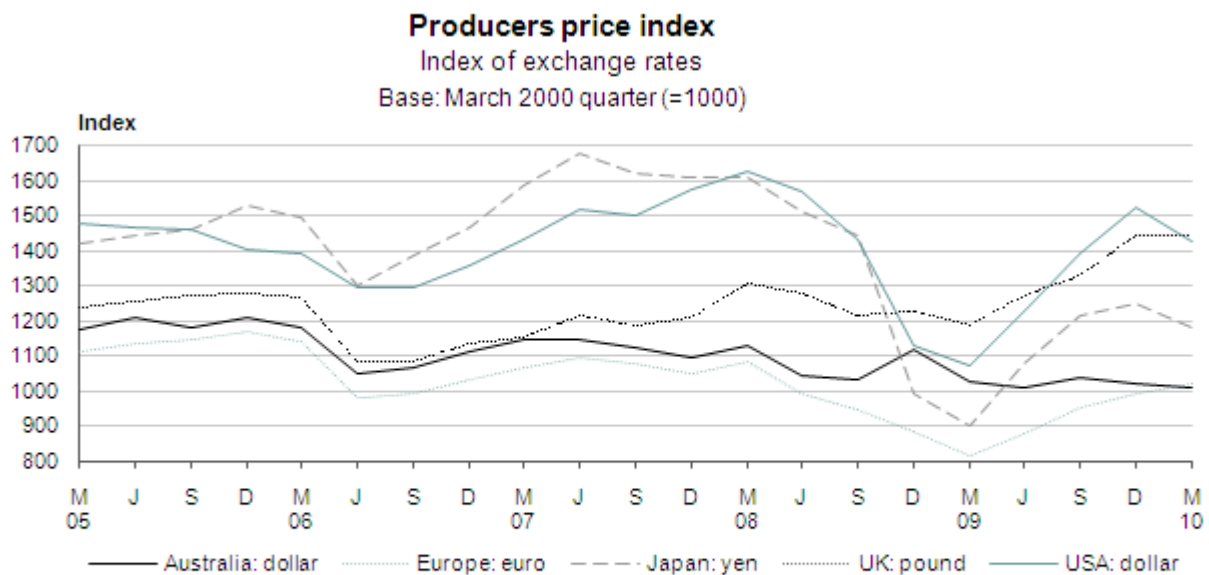
## Impact of exchange rates

When calculating the PPI, prices collected on the fifteenth day of the middle month in the quarter are generally used to represent the entire quarter. Prices collected for imported goods are often denominated in foreign currencies. These currencies are converted to New Zealand dollars using the exchange rate at the time of pricing.

In the March 2010 quarter, the New Zealand dollar depreciated against four key currencies of the country's five major trading partners, while appreciating against the euro. The table below shows changes in the value of the New Zealand dollar in foreign currency denominations from the December 2009 quarter to the March 2010 quarter.

<b>Exchange rates</b>					
Bank selling rates for NZ\$1.00					
	USA (NZ\$:US\$)	UK (NZ\$:pound)	Australia (NZ\$:AUS\$)	Japan (NZ\$:yen)	Europe (NZ\$:euro)
15 November 2009	0.7337	0.4396	0.7873	65.4053	0.4895
15 February 2010	0.6884	0.4387	0.7764	61.6633	0.5031
Percentage change	-6.2	-0.2	-1.4	-5.7	2.8

**Source:** Westpac Banking Corporation.



## Price index developments

Statistics NZ began work in 2004 on a progressive redevelopment of PPIs. This involves re-evaluating the items that are priced and the weights that are applied to them. The

remaining redeveloped output indexes have been implemented in the March 2010 quarter. These are:

- Services to transport and storage
- Water transport
- Rubber plastics, and other chemical manufacturing
- Other manufacturing
- Telecommunication services
- Cultural and recreational services
- Personal and other services.

For more information, please see the Technical notes.

## **ANZSIC 2006 project update**

Work is currently underway to update the 1996 Australian and New Zealand Standard Industrial Classification (ANZSIC96) with the 2006 version for the PPI. We will provide quarterly updates on progress towards implementation, which will be for the March 2011 quarter in May 2011. For more detail, please see the ANZSIC06 information page [here](#).

## **Pricing financial services**

The output of the banking industry consists of services provided by banks and other financial intermediaries that are both explicitly and implicitly charged for. Pricing explicit services (such as, bank account fees) provided by financial intermediaries is relatively straightforward. However, pricing the intermediation services provided by financial institutions that are implicitly charged for is more problematic. Due to the complex nature of these services, there are some limitations in the approach taken to measure these services. For more information, please see the Technical notes.

For technical information contact:  
Lisa-Jane Thomsen or Suchindra Nanayakkara  
Wellington 04 931 4600  
**Email:** [info@stats.govt.nz](mailto:info@stats.govt.nz)

### ***Next release ...***

*Producers Price Index: June 2010 quarter will be released on 19 August 2010.*

## Technical notes

### Note about fuel in the PPI inputs indexes

Fuel is a component of all the PPI industry inputs indexes. For these indexes, there are variations in the types of fuel included, the source and frequency of price collection, and the timing of when price movements are shown. In a number of indexes, the current practice (in place for more than a decade) has been to 'lag' by one quarter the movements for diesel and heavy fuel oil. For example, diesel and heavy fuel oil price movements that actually occurred in the September 2008 quarter were shown in the PPI road transport inputs index for the December 2008 quarter. On the other hand, petrol and light fuel oil price movements used in the PPI road transport inputs index are not lagged. Price movements for petrol and light fuel oil that occur in a particular quarter are shown in the PPI road transport inputs index for that quarter.

Statistics NZ will review the practice of lagging diesel and heavy fuel oil prices by one quarter. If a decision is made to remove the one-quarter lag for diesel and heavy fuel oil price movements included in the PPI industry inputs indexes, the removal of the lag would be implemented at a time when fuel prices are relatively stable, so as not to cause undue disruption to the long-term level of the time series, or to the latest quarterly or annual movements.

The affected indexes are listed below:

- Mining – PPIQ.SNB
- Manufacturing – PPIQ.SNC
- Paper and paper product manufacturing – PPIQ.SNC08
- Printing, publishing, and recorded media – PPIQ.SNC09
- Non-metallic mineral product manufacturing – PPIQ.SNC12
- Transport and storage – PPIQ.SNI
- Road transport – PPIQ.SNI01
- Water transport – PPIQ.SNI03
- Air transport – PPIQ.SNI04
- Rail, other transport and storage services – PPIQ.SNI09
- Personal and other services – PPIQ.SNQ
- Paper, printing, and publishing – PPIQ.SNX08.

### Price index interpretation

Price indexes are used to measure the changes in the level of prices, not the actual level of the prices themselves. The producers price index (PPI) measures prices relating to the production sector of the economy. By comparison, the consumers price index measures prices relating to the household sector, and the labour cost index measures prices in the labour market.

The PPI is made up of two types of indexes: the outputs index, which measures changes in the prices received by producers; and the inputs index, which measures changes in the cost of production (excluding labour and capital costs). The farm expenses price index (FEPI) measures price changes specific to the inputs into the farming industry.

### PPI outputs index

The outputs index measures changes in prices received by producers.

The outputs index covers the prices of:

- primary products
- manufactured goods
- revenue from renting and leasing
- the provision of services
- capital work undertaken by own employees
- margins on goods purchased for resale.

The outputs index excludes:

- interest and dividends
- royalties and patent fees
- receipts from insurance claims
- government cash grants and subsidies
- goods and services tax (GST) and other indirect taxes.

These indexes are designed to measure price changes at a level corresponding to the prices received before the addition of commodity taxes or deduction of subsidies.

## **PPI inputs index**

The inputs index measures price changes in costs of production, excluding labour and depreciation costs.

The inputs index covers the prices of:

- materials
- fuels and electricity
- transport and communication
- commission and contract services
- rent and lease of land, buildings, vehicles and plant
- business services
- insurance premiums less claims.

The inputs index excludes:

- wages and salaries (measured in the labour cost index)
- capital expenditure/depreciation (measured in the capital goods price index)
- ACC levies, land tax, government licence fees, road user charges
- rates
- royalties, patent fees
- bad debts and donations.

GST is excluded when measuring input prices for 45 of the 47 industry input indexes. The assumption is made that those involved in activities in these industries are 'registered persons, or businesses' that provide 'taxable supply'. GST paid on intermediate consumption is recoverable under the GST credit offset system and therefore is effectively not part of the ultimate input price. Exceptions include the finance, and the ownership of owner-occupied dwellings indexes, which include some 'GST exempt' and non-recoverable GST activities. Interest costs are excluded because they are regarded as a cost of capital and not as a payment for goods or a service.

Government charges are excluded when they are used to raise tax revenue rather than the payment for goods or a service purchased from the government. This is consistent with the System of National Accounts.

## **Farm expenses price index**

The farm expenses price index (FEPI) measures price changes of fixed inputs of goods and services to the farming industry. It does not fully measure changes in the production costs of farming. This is because production costs are not solely dependent on price movements, but are also dependent on factors that affect productivity, such as technological advances, management efficiency and climate fluctuations.

Capital expenditure and depreciation are not covered. (For price indexes of capital expenditure, refer to the capital goods price index.)

The FEPI is now produced for the March quarter of each year only.

## **Coverage**

The indexes are calculated quarterly from price quotes, which are collected mainly by postal survey. Approximately 13,000 individual commodity items are surveyed from about 3,000 respondents. Prices are generally collected each quarter, according to those prevailing on the fifteenth of the middle month of the quarter being measured. Prices may be obtained monthly or annually, depending on the nature of the item.

## **Calculation**

The PPI and FEPI are Laspeyres base-weighted price index series. The weightings are determined by the relative importance of commodities and businesses within the industry or industry group. Information from various surveys and censuses and other sources is used to determine the weightings. Further information about this is available on request.

## **Data quality**

All care has been used in the surveying, processing, analysing, and extracting of data for the PPI. However, all data are subject to possible statistical uncertainty. These variations may result, for example, from uncertainty introduced during non-response imputation, reporting difficulties for respondents, or errors made during processing survey results.

Statistics NZ adopts procedures to detect and minimise avoidable variation and eliminate errors, but they may still occur and they are not quantifiable. At higher levels of aggregations, much of the individual variability often cancels out. The PPI data have been checked for the published indexes, and also for underlying indexes, to identify any remaining uncertainty and detectable errors. These are corrected or re-estimated, where possible.

Ongoing work to redevelop, reweight, and enhance price indexes has the potential to change the underlying indexes. Accordingly, these data may be subject to revisions in the future.

## Industry classification

The PPI inputs and outputs indexes cover all the major market industry groups as defined by the Australian and New Zealand Standard Industrial Classification 1993 (ANZSIC). Index numbers for industry indexes based on this classification are available from the June 1994 quarter.

The all industries inputs index is made up of 47 industry indexes. Outputs indexes are not available for public administration and defence, education, health and community services, cultural and recreational services, and personal and other services industries, as reliable estimates of output prices have yet to be developed.

## Customised price indexes

Statistics NZ has a large number of unpublished sub-industry and representative commodity price indexes. These indexes are available at a small charge to cover dissemination costs.

## Price index development

The following is a detailed analysis of the output indexes affected by redevelopments that took place in the March 2010 quarter.

## Services to transport and storage

The PPI for services to transport and storage within the transport and storage industry has been redeveloped, and takes effect from the March 2010 quarter.

PPIQ.SUI09 – Rail, other transport, and storage services

Information used to redevelop this index is based on the Annual Enterprise Survey, Commodity Data Collection, and companies involved in the industry.

<b>Output Commodity Weights for Services to Transport and Storage</b>	
December 2009 quarter	
<b>Commodity</b>	<b>Weight (%)</b>
Road transport and freight forwarding	21.25
Services to water transport	20.31
Travel agents services	19.64
Other services to transport	13.79
Service to air transport	13.77
Storage (excluding ports storage)	11.24

The most significant change since the industry was last redeveloped in 1997 has been a decrease in travel agent services, and a general increase in all other services. This can be attributed to better quality information received and a subsequent better representation of this industry.

## Water transport

The PPI for water transport within the transport and storage industry has been redeveloped, and takes effect from the March 2010 quarter.

PPIQ.SUI03 – Water transport

Information used to redevelop this index is based on the Annual Enterprise Survey, Commodity Data Collection, and companies involved in the industry.

<b>Output Commodity Weights for Water Transport</b>	
December 2009 quarter	
<b>Commodity</b>	<b>Weight (%)</b>
Sea freight transport	70.86
Sea passenger transport	12.91
Tour operator services	12.00
Other water transport	4.23

The most significant change since the industry was last redeveloped in 1997 has been recognition of tour operator services on sea-based craft. This can be attributed to better quality information received and a subsequent better representation of this industry.

## Rubber, plastics, and other chemical manufacturing

The PPI for the rubber, plastics, and other chemical manufacturing industry has been redeveloped, and takes effect from the March 2010 quarter.

PPIQ.SUC11 – Rubber, plastics, and other chemical manufacturing

Information used to redevelop this index is based on the Annual Enterprise Survey, Commodity Data Collection, and companies involved in the industry.

<b>Output Commodity Weights for Rubber, Plastics, and Other Chemical Manufacturing</b>	
December 2009 quarter	
<b>Commodity</b>	<b>Weight (%)</b>
Plastic containers, crates and packaging accessories	11.71
Plastic pipes, hoses, and fittings	11.68
Paints and varnishes	11.56
Plastic tanks, ponds, and commodes	11.19
Plastic bags, film, and shrink-wrap	10.40
Cosmetics and toiletries	9.48
Tyres	5.20

Pharmaceutical products for humans	4.91
Pesticides	4.76
Other rubber, plastics, and other chemical manufacturing	19.12

The most significant change since the index was last redeveloped in 1997 has been the decrease in prices that are now feeding into the index. This is due to a number of companies taking their manufacturing offshore.

## Other manufacturing

The PPI for the other manufacturing industry has been redeveloped, and takes effect from the March 2010 quarter.

PPIQ.SUC17 – Other manufacturing

Information used to redevelop this index is based on the Annual Enterprise Survey, Commodity Data Collection, and companies involved in the industry.

<b>Output Commodity Weights for Other Manufacturing</b>	
December 2009 quarter	
<b>Commodity</b>	<b>Weight (%)</b>
Mattress and mattress support manufacturing	27.08
Wooden furniture, upholstered seats, and window coverings	23.62
Metal furniture, shelving, and storage structures	14.58
Jewellery and related articles	8.73
Prefabricated buildings not elsewhere classified	6.32
Game, toy, and sporting goods manufacturing	5.17
Other manufacturing not elsewhere classified	14.50

The most significant change since the index was last redeveloped in 1997 has been the increase in mattress and mattress support manufacturing as an industry output.

## Telecommunications

The PPI for the telecommunication services industry has been redeveloped, and takes effect from the March 2010 quarter.

PPIQ.SUJ – Communication services

Information used to redevelop this index is based on the Annual Enterprise Survey, Commodity Data Collection, and companies involved in the industry.

## Personal and other services

The PPI for personal and other services has been redeveloped, and takes effect from the March 2010 quarter.

PPIQ.SUQ – Personal and other services

Information used to redevelop this index is based on the Annual Enterprise Survey, Commodity Data Collection, and companies involved in the industry.

<b>Output Commodity Weights for Personal and Other Services</b>	
December 2009 quarter	
<b>Commodity</b>	<b>Weight (%)</b>
Waste disposal services	19.22
Hairdressing, and beauty salons	16.39
Services provided by businesses, employers, and professional organisations	13.64
Personal and household goods hiring not elsewhere classified	9.05
Private households employing staff	7.75
Funeral directors, crematoria, and cemeteries	6.25
Landscaping services	4.96
Gardening services	3.49
DVD and video rental	3.21
Other personal services	16.04

The most significant change since the index was last redeveloped in 1997 has been an increase in hairdressing and beauty salons, and waste disposal services.

## Cultural and recreational services

The PPI for Cultural and recreational services has been redeveloped, and takes effect from the March 2010 quarter.

PPIQ.SUP – Cultural and recreational services

Information used to redevelop this index is based on the Annual Enterprise Survey, Commodity Data Collection, and companies involved in the industry.

<b>Output Commodity Weights for Cultural and Recreational Services</b>	
December 2009 quarter	
<b>Commodity</b>	<b>Weight (%)</b>
Subscriber television	16.10

Other gambling	9.05
Casino services	8.47
Film, radio, and TV specific advertising placement services	7.12
Advertisement placement services	8.97
Amusement placement services	6.50
Meals (cafes and restaurants)	6.08
Lottery services	4.06
Film and video distribution	2.66
Creative arts	2.43
Motion picture exhibition	2.39
Television programme production	2.12
Other cultural and recreational services	24.05

The most significant change since the index was last redeveloped in 1997 is that the index now includes market output from units classified as non-market.

For further information on the redevelopment, please contact Vanessa Turner at [info@stats.govt.nz](mailto:info@stats.govt.nz).

## Pricing financial services

The output of the banking sector can be broadly categorised in two ways. Firstly there are those explicit services provided by banks (and other financial intermediaries) that are explicitly charged for, such as bank account fees. Secondly, there is the general intermediation service provided by these businesses which is not explicitly charged for, but which is implicitly charged for through financial institutions lending money out at higher interest rates than they pay to depositors (or organisations from whom they borrow the funds).

Pricing the explicit services provided by financial intermediaries is relatively straightforward, and the PPI outputs index for the finance industry contains prices to represent this component of their output.

Pricing the intermediation services provided by financial institutions that are not explicitly charged for is more problematic. Within the PPI outputs index, the approach that is adopted is to determine the differential interest rate (referred to as a 'spread') between banks' lending activities (referred to as 'claims') compared with their borrowing activities (referred to as 'funding'), and apply this spread to an inflation-adjusted base period value of financial intermediation. The 'price' that is then derived can be thought of as the charge the banks implicitly make to intermediate sufficient funds needed to purchase a base period volume of goods/services. The claims and funding rates used in this calculation are sourced from the Reserve Bank of New Zealand (<http://www.rbnz.govt.nz/statistics/monfin/c10/data.html>), while the inflation adjustment is carried out using the all groups consumers price index. The Reserve Bank figures are subject to revision at times, if more complete information becomes available. Statistics NZ uses the latest available Reserve Bank figures at the time the PPI is compiled (one month after the reference quarter) and does not update the PPI if the Reserve Bank figures are subsequently revised. These revisions tend to be small.

One limitation of the above approach is that the weighted average interest rates on funding, sourced from the published information available from the Reserve Bank exclude foreign currency funding, which accounted for approximately 30 percent of total registered bank funding at December 2008. The Reserve Bank has reported that it is currently working with registered banks to collect this information. Statistics NZ will incorporate this additional information to increase the coverage of bank funding interest rates in the PPI when it becomes available.

If the level of the foreign currency funding interest rates were higher than the New Zealand dollar currency funding rates, then the existing calculated spread would be too high. While this would influence the level of the calculated 'price' of the implicit intermediation service, it is important to note that the PPI measures price movements rather than price levels. Thus the lack of coverage of foreign currency funding rates in the calculation of the spread would only manifest itself in the PPI if the relative movements of the foreign currency funding rates were significantly different from the relative movements of the New Zealand dollar funding rates. Statistics NZ has looked at indicative alternative sources of foreign currency funding rates, and decided to continue to publish the existing index (which does not include foreign currency funding rates) until reliable information on foreign currency funding rates becomes available.

It should also be noted that the New Zealand dollar funding costs exclude the impact of hedging, for example interest rate-swap costs incurred against fixed-rate claims. This is because the PPI is interested in the rates that were contracted to by the parties to financial intermediation transactions. The hedging arrangements, while they will impact on the bottom-line profit of the banks, are considered to be separate transactions.

## Index series available online

To access more data from the PPI series, go to [Infoshare](#) on the Statistics NZ website, and choose:

Subject category: **Economic indicators**,

Group: **Producers Price Index**

The time series can be downloaded in Excel or comma delimited format, where percentage movements can be calculated using the following formula:

$$\frac{(\text{Index number for later period} - \text{index number for earlier period})}{\text{index number for earlier period}} \times 100$$

More information about [Infoshare](#) can be found on our website.

## Contract indexation

Parties that engage in commercial contracts use a range of price indexes produced by Statistics NZ in their indexation clauses (also known as contract escalation clauses). An indexation clause provides both parties to a contract with an agreed procedure for adjusting an originally contracted price, to reflect changes in costs or prices during the life of the contract. [Contract indexation: A Guide for Businesses](#) provides information on the price indexes produced by Statistics NZ and issues relating to their use in indexation clauses. The guide also outlines some points to consider when preparing an indexation clause, and includes an example of the mechanics of a simple indexation formula.

## **More information**

For more information, follow the [link](#) from the Technical notes of this release on the Statistics NZ website.

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## **Timing**

Timed statistical releases are delivered using postal and electronic services provided by third parties. Delivery of these releases may be delayed by circumstances outside the control of Statistics NZ. Statistics NZ accepts no responsibility for any such delays.

## Tables

The following tables are printed with this Hot Off The Press and can also be downloaded from the Statistics New Zealand website in Excel format. If you do not have access to Excel, you may use the [Excel file viewer](#) to view, print, and export the contents of the file.

### ***Producers Price Index***

1. Producers Price Index, outputs – index numbers
2. Producers Price Index, inputs – index numbers
3. Producers Price Index, outputs, percentage change from previous quarter
4. Producers Price Index, inputs, percentage change from previous quarter
5. Producers Price Index, outputs – selected industries, percentage change from same quarter of previous year
6. Producers Price Index, inputs – selected industries, percentage change from same quarter of previous year
7. Producers Price Index, selected commodities – index numbers and percentage changes

### ***Farm Expenses Price Index***

- 1.01. Farm Expenses Price Index, all farms – index numbers
- 1.02. Farm Expenses Price Index, all farms, percentage change from previous quarter
- 1.03. Farm Expenses Price Index – all farms, percentage change from same quarter of the previous year
2. Farm Expenses Price Index, sheep and beef farms – index numbers
3. Farm Expenses Price Index, dairy farms – index numbers
4. Farm Expenses Price Index, horticultural farms – index numbers
5. Farm Expenses Price Index, cropping and other farms – index numbers