



# Overseas Trade Indexes (Prices): March 2011 quarter (provisional)

Embargoed until 10:45am - 01 June 2011

# **Highlights**

- The merchandise terms of trade rose 0.9 percent.
- Merchandise export prices rose 6.3 percent.
- Merchandise import prices rose 5.4 percent.
- The services terms of trade fell 0.9 percent.
- Services export prices rose 1.7 percent.
- Services import prices rose 2.6 percent.



Geoff Bascand

Government Statistician

**1 June 2011** ISSN 1178-0339

# Commentary

#### Merchandise

#### Terms of trade

The merchandise terms of trade rose 0.9 percent in the March 2011 quarter, due to export prices (up 6.3 percent) rising more than import prices (up 5.4 percent). This is the sixth consecutive quarterly rise, and the terms of trade are now at the highest level since the March 1974 quarter. The latest rise follows rises of 0.8 percent in the December 2010 quarter and 3.0 percent in the September 2010 quarter.

The latest quarterly rise in the merchandise terms of trade means that in the March 2011 quarter, 0.9 percent more merchandise imports could be funded by a fixed quantity of merchandise imports than the December 2010 quarter.

The merchandise terms of trade increased 6.8 percent from the March 2010 quarter to the March 2011 quarter (ie. in the year to the March 2011 quarter). The latest annual increase compares with a 0.1 percent increase in the year to the March 2010 quarter and a 4.9 percent decrease in the year to the March 2009 quarter.

## **Export prices**

Merchandise export prices rose 6.3 percent in the March 2011 quarter, following a 0.5 percent rise in the December 2010 quarter and a 0.1 percent fall in the September 2010 quarter.

Exchange rates published by the Reserve Bank are used to value exports. The Reserve Bank trade weighted index (TWI) fell 0.8 percent in the March 2011 quarter. The New Zealand dollar depreciated against all of our five major trading partners' currencies.

The March 2011 quarter movement in export prices was influenced by:

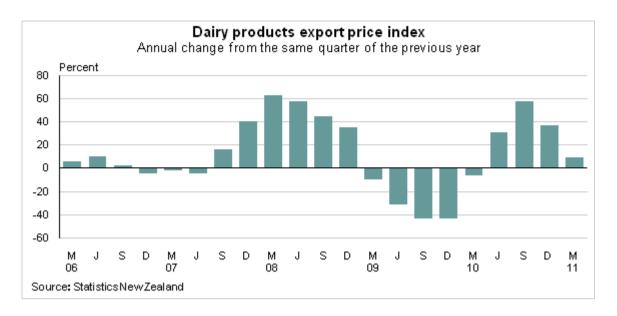
- dairy (up 5.5 percent)
- meat (up 10.0 percent)
- non-food manufactured goods (up 4.3 percent)
- petroleum and petroleum products (up 18.6 percent).

In the year to the March 2011 quarter, export prices increased 10.8 percent, compared with an 8.2 percent decrease in the year to the March 2010 quarter and a 7.0 percent increase in the year to the March 2009 quarter.

#### **Dairy prices**

Dairy prices (up 5.5 percent) made a significant upward contribution to export prices in the March 2011 quarter. The latest rise compares with an 8.8 percent fall in the December 2010 quarter and a 7.1 percent rise in the September 2010 quarter. Prices for milk powder (up 5.9 percent) and butter (up 9.5 percent) were the main contributors to the latest rise.

In the year to the March 2011 quarter, dairy prices increased 9.3 percent, compared with decreases of 6.4 percent and 9.4 percent in the years to the March 2010 and March 2009 quarters, respectively.

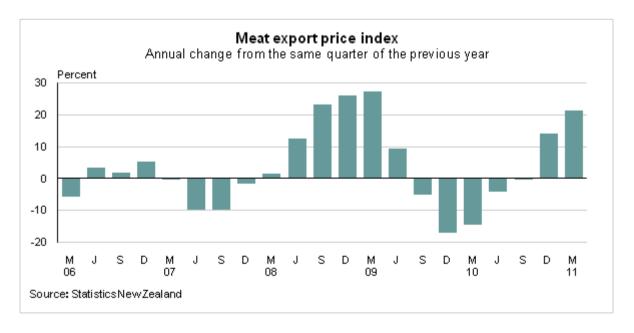


#### Meat

Meat prices rose 10.0 percent in the March 2011 quarter, following rises of 5.0 percent and 0.5 percent in the December 2010 and September 2010 quarters, respectively. The rise in meat prices was influenced by:

- lamb (up 9.8 percent)
- beef and veal (up 12.0 percent).

In the year to the March 2011 quarter, meat prices increased 21.3 percent, compared with a 14.7 percent decrease in the year to the March 2010 quarter and a 27.3 percent increase in the year to the March 2009 quarter.

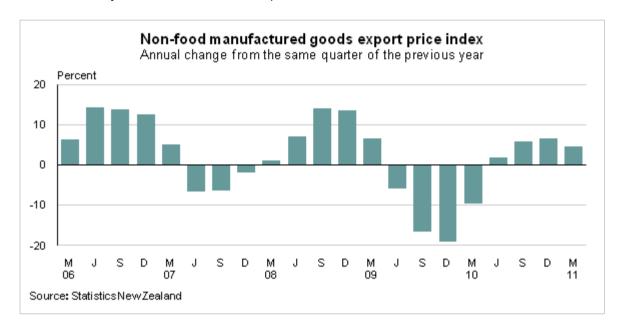


# Non-food manufactured goods

Non-food manufactured goods prices rose 4.3 percent in the March 2011 quarter, following a 0.1 percent rise in the December 2010 quarter and a 1.7 percent fall in the September 2010 quarter. The main contributions came from:

- aluminium (up 4.6 percent)
- casein (up 2.7 percent).

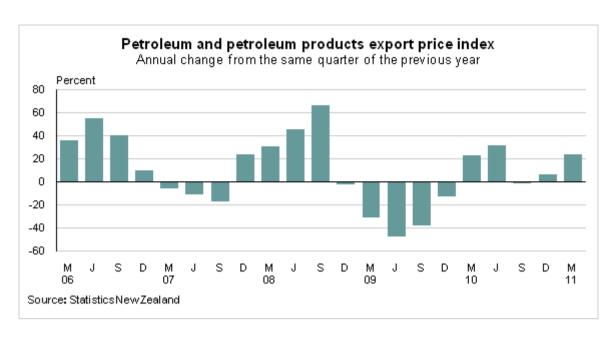
In the year to the March 2011 quarter, non-food manufactured goods increased 4.7 percent, compared with a 9.6 percent decrease in the year to the March 2010 quarter and a 6.5 percent increase in the year to the March 2009 quarter.



#### Petroleum and petroleum products

Petroleum and petroleum product prices rose 18.6 percent in the March 2011 quarter, following a 3.7 percent rise in the December 2010 quarter and a 4.0 percent fall in the September 2010 quarter. The rise in the latest quarter was influenced by higher export prices for crude oil.

In the year to the March 2011 quarter, petroleum and petroleum products increased 23.8 percent. The latest annual increase compares with a 23.3 percent increase in the year to the March 2010 quarter and a 31.1 percent decrease in the year to the March 2009 quarter.



### Import prices

Merchandise import prices rose 5.4 percent in the March 2011 quarter, compared with falls of 0.2 percent in the December 2010 quarter and 3.0 percent in the September 2010 quarter. Petroleum and petroleum products contributed half of the overall increase. Excluding petroleum and petroleum products, import prices rose 2.7 percent in the March 2011 quarter.

New Zealand Customs Service (NZCS) exchange rates are used to value imports. The NZCS trade weighted index (TWI) of the New Zealand dollar fell 1.1 percent in the March 2011 quarter, following a 0.9 percent rise in the December 2010 quarter. In the latest quarter, the New Zealand dollar depreciated against four of our five major trading partners' currencies.

The rise in import prices was influenced by:

- petroleum and petroleum products (up 20.3 percent)
- food and beverages (up 4.7 percent)
- non-fuel crude materials (up 9.9 percent)
- electrical machinery and apparatus (up 2.1 percent).

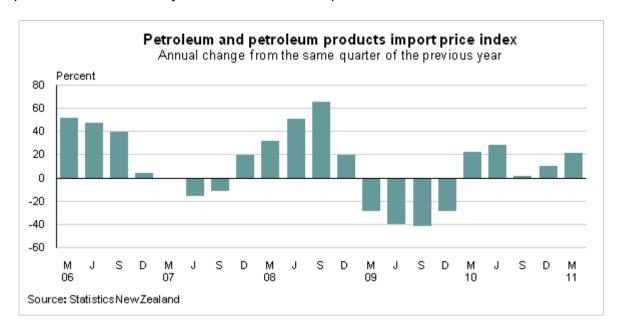
In the year to the March 2011 quarter, import prices increased 3.8 percent, compared with an 8.2 percent decrease in the year to the March 2010 quarter and a 12.6 percent increase in the year to the March 2009 quarter.

#### Petroleum and petroleum products

The most significant upward contribution to import prices came from petroleum and petroleum products, which rose 20.3 percent in the March 2011 quarter. The latest rise follows a 3.9 percent rise in the December 2010 quarter and a 7.0 percent fall in the September 2010 quarter. Crude oil (up 21.6 percent) had a significant impact on the rise in petroleum and petroleum product prices in the March 2011 quarter.

Excluding petroleum and petroleum products, import prices rose 2.7 percent in the March 2011 quarter.

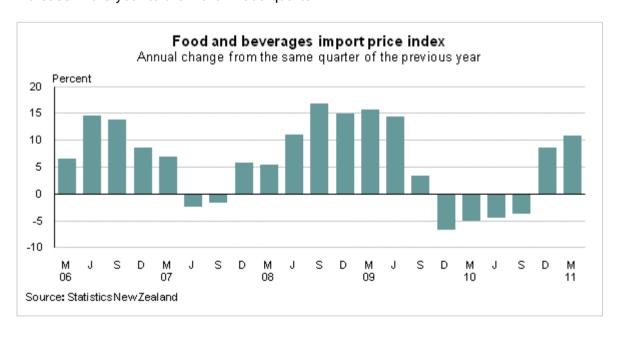
In the year to the March 2011 quarter, petroleum and petroleum products increased 21.5 percent, compared with a 22.2 percent increase in the year to the March 2010 quarter and a 28.6 percent decrease in the year to the March 2009 quarter.



## Food and beverages

Food and beverages (up 4.7 percent) made the second-most significant upward contribution to import prices in the March 2011 quarter. The latest rise follows a 4.8 percent rise in the December 2010 quarter and a 3.2 percent fall in the September 2010 quarter. The rise in food and beverage prices was influenced by sugar and sugar preparations (up 13.9 percent).

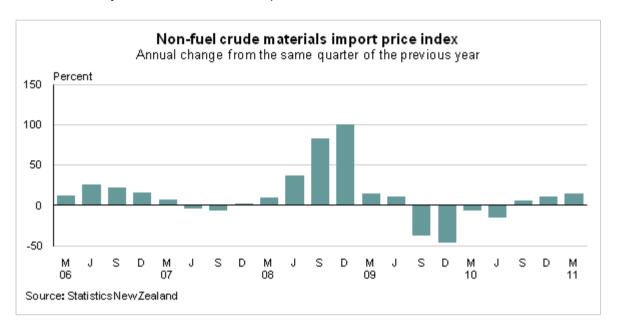
In the year to the March 2011 quarter, food and beverage prices increased 10.8 percent, compared with a 5.0 percent decrease in the year to the March 2010 quarter and a 15.6 percent increase in the year to the March 2009 quarter.



#### Non-fuel crude materials

Non-fuel crude material prices rose 9.9 percent in the March 2011 quarter, following a 3.6 percent rise in the December 2010 quarter and an 8.2 percent fall in the September 2010 quarter. Prices for aluminium oxide and calcium phosphate were the main contributors to the latest rise.

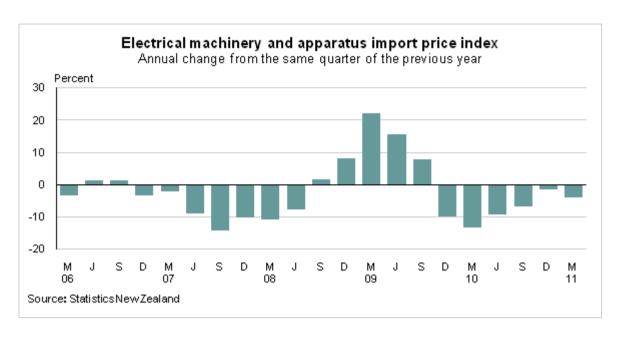
In the year to the March 2011 quarter, non-fuel crude materials increased 15.0 percent, compared with a 6.2 percent decrease in the year to the March 2010 quarter and a 14.3 percent increase in the year to the March 2009 quarter.



## **Electrical machinery and apparatus**

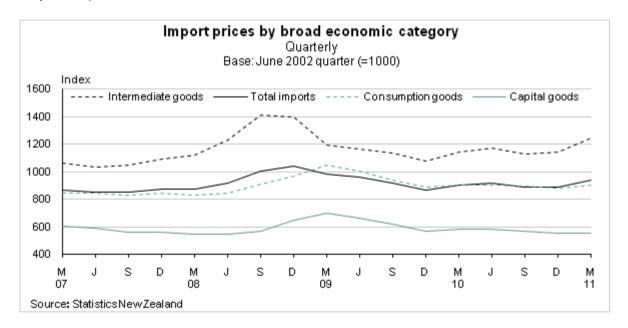
Electrical machinery and apparatus prices rose 2.1 percent in the March 2011 quarter, following falls of 4.9 percent and 0.9 percent in the December 2010 and September 2010 quarters, respectively.

In the year to the March 2011 quarter, electrical machinery and apparatus decreased 4.1 percent, compared with a 13.4 percent decrease in the year to the March 2010 quarter and a 22.1 percent increase in the year to the March 2009 quarter.



## Imports by broad economic category

In the March 2011 quarter, all of the three broad economic categories showed price increases: intermediate goods (up 9.0 percent), capital goods (up 0.3 percent), and consumption goods (up 2.3 percent).



Intermediate goods prices rose 9.0 percent in the March 2011 quarter, following a 1.6 percent rise in the December 2010 quarter and a 4.0 percent fall in the September 2010 quarter. Rises in primary fuels and lubricants prices (up 21.6 percent) had a significant impact on intermediate goods prices in the latest quarter.

In the year to the March 2011 quarter, intermediate goods prices increased 9.3 percent, compared with a 4.6 percent decrease in the year to the March 2010 quarter and a 6.6 percent increase in the year to the March 2009 quarter.

Capital goods prices rose 0.3 percent in the March 2011 quarter, compared with falls of 3.2 percent and 2.2 percent in the December 2010 quarter and September 2010 quarters, respectively. Higher prices for transport equipment (up 1.5 percent) contributed to the latest rise.

In the year to the March 2011 quarter, capital goods prices decreased 5.0 percent, following a 17.0 percent decrease in the year to the March 2010 quarter and a 28.2 percent increase in the year to the March 2009 quarter.

Consumption goods prices rose 2.3 percent in the March 2011 quarter, compared with falls of 1.8 percent and 1.1 percent in the December 2010 and September 2010 quarters, respectively. The most significant contributions came from:

- semi-durable goods (up 5.4 percent)
- processed foods and beverages (up 1.9 percent).

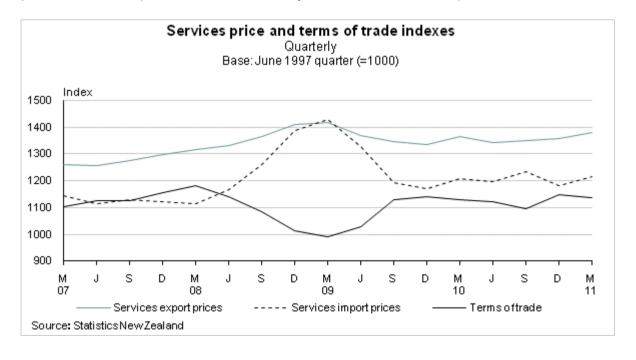
In the year to the March 2011 quarter, consumption goods prices decreased 0.3 percent, following a 13.7 percent decrease in the year to the March 2010 quarter and a 25.6 percent increase in the year to the March 2009 quarter.

## **Services**

## Terms of trade

The terms of trade for services fell 0.9 percent in the March 2011 quarter, due to export prices (up 1.7 percent) rising less than import prices (up 2.6 percent).

In the year to the March 2011 quarter, the terms of trade for services increased 0.7 percent. The latest annual increase compares with a 13.9 percent increase in the year to the March 2010 quarter and a 16.0 percent decrease in the year to the March 2009 quarter.



## **Export prices**

Services export prices rose 1.7 percent in the March 2011 quarter. The latest rise follows rises of 0.5 percent in the December 2010 quarter and 0.7 percent in the September 2010 quarter. The rise in services export prices was influenced by:

- travel (up 1.9 percent, with the sub-index of personal travel being the main contributor)
- transportation (up 2.8 percent, reflecting higher prices for air transportation).

In the year to the March 2011 quarter, services export prices increased 1.2 percent, compared with a 3.7 percent decrease and a 7.7 percent increase in the years to the March 2010 and March 2009 quarters, respectively.

#### Import prices

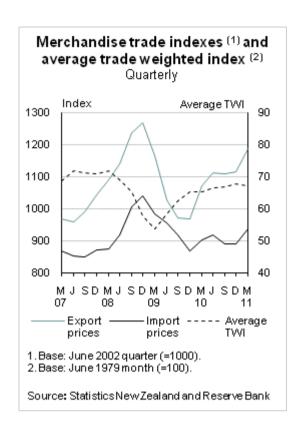
Services import prices rose 2.6 percent in the March 2011 quarter. The latest rise compares with a 4.1 percent fall in the December 2010 quarter and a 3.1 percent rise in the September 2010 quarter. Travel (up 3.8 percent) and transportation (up 2.3 percent) had a significant impact on services import prices.

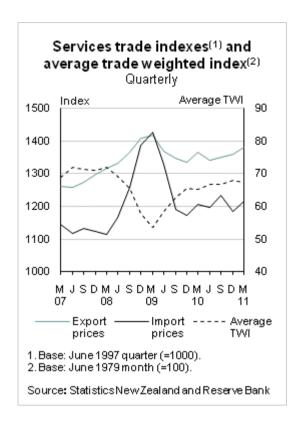
In the year to the March 2011 quarter, services import prices increased 0.6 percent, compared with a 15.5 percent decrease in the year to the March 2010 quarter and a 28.3 percent increase in the year to the March 2009 quarter.

## **Exchange rate movements**

According to the exchange rates published by the Reserve Bank of New Zealand, the TWI of the New Zealand dollar fell 0.8 percent in the March 2011 quarter, following a 1.4 percent rise in the December 2010 quarter. In the March 2011 quarter, the New Zealand dollar depreciated against all of our five major trading partners' currencies. The greatest depreciations were against the Australian dollar (down 1.9 percent), the British pound (down 1.5 percent), and the euro (down 0.7 percent).

Exchange rates used in calculating merchandise import values differ from the weekly exchange rates used in calculating merchandise export values. Import values are converted from foreign currencies, using exchange rates set by the NZCS every two weeks. These exchange rates are prepared 11 days before the effective date and are then applied for two weeks. Therefore, there is a lag of 11 to 25 days between the exchange rates used by the NZCS and the exchange rates the Reserve Bank publishes. See the technical notes for more information.





For the March 2011 quarter, the NZCS TWI fell 1.1 percent, with the New Zealand dollar falling against four of our five major trading partners' currencies.

A depreciation of the New Zealand dollar has an upward influence on both import and export prices in New Zealand dollars. The impact on the terms of trade depends on the relative mix of exports and imports for each currency.

	Exchange rates for March 2011 quarter New Zealand Customs Service											
USA UK Australia Japan EU weigh (NZ\$:US\$) (NZ\$:pound) (NZ\$:A\$) (NZ\$:yen) (NZ\$:euro) inde												
Change from Dec 2010 guarter (%)	-0.5	-0.4	-2.9	-0.2	0.7	-1.1						

# Updates to previously published material

The overseas merchandise trade indexes are provisional for one quarter to allow for receipt and editing of late and amended trade documentation.

December 2010	December 2010 quarter merchandise overseas trade indexes (prices)										
	Export price index	Import price index	Terms of trade index								
Series ref: OTPQ SEO1E95 SIO1I95 S											
	Published on 28 Feb	oruary 2011									
Provisional Dec 2010 qtr	1115	889	1254								
Published on 1 June 2011											
Final Dec 2010 qtr 1118 890 1256											

The import and export merchandise series in this release are calculated from the same data as used in the <u>Overseas Merchandise Trade</u>: <u>April 2011</u> monthly release published on 30 May 2011. Updates published after this date will be included in subsequent overseas trade indexes (prices) releases.

For technical information contact: Selena Eaqub or Litia Tapu Wellington 04 931 4600 Email: info@stats.govt.nz

## Next release ...

Overseas Trade Indexes (Prices): June 2011 quarter (provisional) and Overseas Trade Indexes (Volumes): June 2011 quarter (provisional) will both be released on 1 September 2011.

# **Technical notes**

# **Definitions**

capital goods	Produced assets used repeatedly or continuously (for longer than one year) in industrial production processes. Examples are machinery, trucks, and aircraft.
consumption goods	Goods used (without further transformation in industrial production processes) by households, government, or non-profit institutions serving households.  – durables have an expected usage of three years or more, eg appliances, furniture.  – semi-durables have an expected usage of one or two years, eg linen, shoes, toys.  – non-durables have an expected usage of less than a year, eg soap, yarns, books.
fob	Free on board (the value of goods at New Zealand ports before export, which includes the cost of the goods plus the cost (including loading charges) of putting them on a vessel or aircraft).
government services (exports)	Includes sales of capital assets excluding land, estimated expenditure of foreign embassies in New Zealand, the portion of the government's international aid spent in New Zealand, and the government's receipts from immigration fees.
government services (imports)	The operational expenses of New Zealand's embassies overseas and the costs of the New Zealand defence forces stationed overseas.
intermediate goods	Goods used up or transformed in industrial production processes.
merchandise trade	Exports or imports of goods that increase or decrease the stock of material resources in New Zealand. Includes goods leased for a year or more.
other services	Services other than transportation, travel, and government services. Examples are insurance, royalties and licence fees, banking and financial services, computer and information services, telecommunications, and personal, cultural, and recreational services.
re-exports	Exported goods that were earlier imported into New Zealand and include less than 50 percent New Zealand content by value.
transportation	The international carriage of goods and passengers. Includes freight, airfares, port services, and stevedoring.
travel (exports)	The expenditure of overseas visitors while travelling in New Zealand, and the expenditure by international students in New Zealand.
travel (imports)	The expenditure of New Zealanders while travelling overseas.
vfd	Value for duty (the value of imports before insurance and freight costs are added).
overseas terms of trade	The overseas terms of trade index measures the changing volume of merchandise imports that can be funded by a fixed volume of New Zealand's merchandise exports.

# What the price indexes measure

These indexes are numerical series that indicate how a set of prices has changed between time periods. Each index measures changes in the level of prices rather than the actual prices. It is the change between two index numbers that is important. An individual index number has no meaning.

The overseas merchandise trade price indexes measure changes in the price levels of imports and exports of merchandise trade to and from New Zealand, on both a quarterly and an annual basis. The overseas services trade indexes measure changes in price levels of services to and from New Zealand on a quarterly basis.

Price and volume measurement relates to the decomposition of transaction values in current prices into their price and volume components. In principle, the price components should include changes arising solely from price changes, while all other changes (relating to quantity, quality, and compositional changes) should be included in the volume components. The aim is to estimate which changes in aggregates are due to price movements, and which to volume changes.

# Time of recording

The merchandise price indexes in this release are calculated from the same data as that used in the <u>Overseas Merchandise Trade: April 2011</u> information release published on 30 May 2011. Updates published after these dates are not included.

Overseas merchandise trade statistics are provisional for the three most recent months, which means the statistics are subject to amendment in the three months following initial publication.

Merchandise price indexes are provisional for one quarter, to allow for the inclusion of late data and amendments to the merchandise trade source data. Merchandise figures in this release that relate to the December 2010 quarter are based on later data than that which was available for the previous overseas trade indexes release (for the December 2010 quarter), published on 1 March 2011.

The price indexes for services are final figures (unlike the merchandise series, which are first published as provisional figures). The services indexes are revised only for significant errors. An exception is when lagged prices are used in new indexes and are later replaced by current prices. Revisions are notified by an R beside the revised number in the release table.

## Source of information – merchandise trade

Value and quantity data used for calculating the merchandise price indexes are derived from Statistics New Zealand's overseas merchandise trade statistics, which are in turn processed from export and import entry documents lodged with New Zealand Customs Service (NZCS) by exporters, importers, and their agents.

Data is classified using the Harmonised System (HS) classification for processing NZCS entries and publishing overseas trade statistics. There are over 18,600 10-digit items in the HS classification.

HS 10-digit item-by-country unit values are derived from Statistics NZ's overseas trade statistics. Quarterly item-by-country unit values are calculated by dividing the total value of an HS item

exported or imported during the quarter by the total quantity of the item exported or imported during the quarter. These unit values are then extensively edited, with outliers removed before being used in trade index calculations.

For basic, homogeneous commodities not subject to ongoing quality change, unit values provide suitable indicators of price change. However, unit values do not provide good indicators of price change for heterogeneous goods such as elaborately transformed goods, technically complex goods, or goods subject to rapid quality change. Unit values have been selectively supplemented with prices collected directly from importers and exporters, and by international price indexes.

## **Directly surveyed prices**

Prices are collected directly from importers and exporters for selected goods that are regularly imported or exported in the same form to the same or similar specification. These items may not have a specified unit of quantity, or may fall under an HS code with a heterogeneous description.

Directly surveyed prices are collected from importers and exporters via the existing Commodity Price Survey used for the producers price index.

Directly surveyed prices were first collected in the June 2002 quarter, so they contribute to movements for the September 2002 and subsequent quarters.

The process of adding to the pool of directly surveyed prices is an ongoing one and is part of the overseas merchandise trade index quality assurance programme.

## International price indexes

International price indexes are used selectively as a proxy to measure price change faced by importers for goods that are irregularly imported (for example, public transport equipment), imported to one-off specifications (for example, telephonic and telegraphic apparatus), and technically complex goods subject to rapid quality change (for example, computer equipment).

The following table lists the areas of the HS classification where international price indexes have been used, and the type of index selected as a proxy for change in prices faced by New Zealand importers. Most use has been made of the US producer price index (PPI), with some use of the US HS export price index (EPI). In both cases, monthly international price index numbers have been converted to quarterly index numbers and then exchange-rate adjusted using the NZCS rates of exchange. The following table lists the main goods for which international price indexes are currently used in the import indexes.

Goods using in	ternational price indexes	
HS chapter	Goods	International price index
	Mechanical machinery	
	Printing machinery	US producer price index
84	Computer equipment	US producer price index
	Computer and office equipment, parts, and accessories	US producer price index
	Electrical machinery	
85	Telephonic and telegraphic apparatus	US HS export price index
	Cellular phones	US producer price index
	Radio-telephonic parts	US HS export price index
86	Railway equipment	US producer price index
87	Vehicles other than railway equipment	Minor use of US HS export price index
88	Aircraft	US producer price index
89	Ships	US producer price index

The US PPI indexes used for computer equipment, parts, and accessories are compiled using hedonic quality adjustment techniques designed to remove the effect of quality improvements and isolate pure price change. The US PPI indexes for computer equipment, parts, and accessories used in the imports price index are lagged one quarter, to reflect a potential delay from the time new technology is available domestically in the US to the time it is imported into New Zealand. The US computer indexes used in the merchandise imports price index, and the one-quarter lag, are both broadly in line with the approach that has been used for some time for quarterly constant price imports in gross domestic product.

# Adjustment to unit values for imported cars

The calculation of price movements for the main HS 10-digit item codes for cars differs from the unit value calculation used for other items in the overseas trade indexes. The used-car codes have previous June quarter and current quarter unit values calculated for each year of manufacture, and the new car codes have unit values calculated for each of the main makes of car recorded under the codes. Movements in these unit values are weighted by the value of cars imported, for each year of manufacture (used cars) and make of car (new cars), to give Paasche, Laspeyres and Fisher indexes at the HS 10-digit item by country level.

The method was introduced in the June 2002 quarter, to reduce the effect of new frontal impact standards on the age distribution of used-car imports. The new standards reduced the number of pre-1996 used cars being imported.

The dollar value of the car items treated in this way accounted for 8.9 percent of the total dollar value of imports in the year to June 2003.

# **Imputation**

Explicitly priced items are defined as those items displaying reliable unit-value behaviour, those items for which prices are collected directly from importers or exporters, and those items for which international price indexes are used as price indicators. Remaining items have imputed to them price movements of items that are more reliable indicators of a similar type. As Fisher Ideal indexes are calculated at the country grouping level (for the European Union (EU) and the 'Rest of World' (ZZ)), and the HS 10-digit item level for all countries, imputation occurs at up to four levels, as shown in the following table.

Imputation proce	dures			
Type of index	First level	Second level	Third level	Fourth level
HS10 country grouping (EU, ZZ)	Remainder of index			
HS10 item	HS10 country grouping (EU, ZZ	Remainder of index		
HS2 chapter	HS10 country grouping (EU, ZZ)	HS10 item	Remainder of index	
Standard or broad economic category (BEC) index	HS10 country grouping (EU, ZZ) index	HS10 item	HS chapter or part chapter	Remainder of index

<sup>&#</sup>x27;Base annual imputation rates' represent the dollar value, in the previous June year of the index's imputed items, as a percentage of the index's total dollar value for the previous June year. For the March 2011 quarter, there was a base annual imputation rate of 19.3 percent for exports and 37.3 percent for imports.

## Source of information - services trade

Value data used in calculating the weights for the service indexes is derived from Statistics NZ's balance of payments data, which is in turn processed from various surveys operated by the Balance of Payments business unit. New weights were implemented in the September 2010 quarter, using balance of payments data for the year ended June 2010.

Pricing information used for calculating the indexes is obtained from Statistics NZ's Commodity Price Survey. The Commodity Price Survey collects prices for approximately 13,000 individual items. The prices are collected by postal survey from about 3,000 respondents and from international price indexes. Prices are generally collected each quarter, with the price on the 15th of the middle month of the quarter measured for domestic prices. Prices may be obtained quarterly or annually depending on the nature of the item. For the import services indexes, much of the pricing is from international price indexes. The collection of these prices (index numbers) depends on the frequency and timeliness of their publication. If they are published monthly, the middle month of the quarter is used; however, in some cases the prices are lagged a month or a quarter if the value for the relevant period is not available in time.

## **Basis of valuation**

The merchandise export indexes are calculated using New Zealand-dollar free on board (fob) values. Export fob values represent actual or estimated transaction prices of goods, including costs incurred in delivering goods on board ships and aircraft at New Zealand ports of export.

Values given in foreign currencies are converted by Statistics NZ into New Zealand dollars using weekly exchange rates when the statistics are compiled. This means that any hedging will generally not be reflected in the merchandise import and export price indexes.

The merchandise import indexes use New Zealand-dollar vfd values (the value of goods excluding the cost of freight and insurance). Prior to the September 2003 quarter, the merchandise import indexes used cif values, which represented the value of goods plus the insurance and freight costs associated with bringing the goods to New Zealand ports of entry. The vfd valuation for imports is recommended in the System of National Accounts 1993 and is used in the New Zealand national accounts.

Vfd values are converted from foreign currencies when import documents are processed by NZCS. The NZCS exchange rates are prepared 11 days prior to the effective date and are then applied for two weeks. Therefore, the exchange rate used in the imports prices will be 11 to 25 days old when it is used in imports documentation. This means that the NZCS exchange rate, and therefore the imports prices, will be slower to show the impact of changes in the exchange rate than the Reserve Bank rates and the export prices.

Merchandise import price indexes are not directly affected by changes in the rates of duty payable on imported goods, as vfd values do not include duty. Therefore, the phased reduction in tariffs that has occurred in recent years has not had a direct downward influence on the import price indexes.

The services price indexes use New Zealand-dollar values for both exports and imports. Exchange rates used in the calculation of the services indexes differ from those used for the merchandise indexes. Prices collected in foreign currencies are converted using the exchange rate supplied by Westpac Bank for the 15th day of the middle month of the quarter for the relevant currencies. The foreign currencies used in the services indexes are the US dollar, Australian dollar, Fijian dollar, Japanese yen, and the United Kingdom pound.

# Index coverage

The merchandise trade indexes include all commodities classified as merchandise trade, although the export indexes exclude re-exports, bunkering (re-fuelling the vessels), ships' stores and passengers' effects.

The System of National Accounts 1993 provides the conceptual base for the services indexes. It establishes the range of services that should be included in the indexes, and key practices, for example the treatment of insurance.

# Index type and calculation

## Merchandise trade

The merchandise index series are of the chain-linked Fisher Ideal type. The calculation of a Fisher Ideal index involves first calculating two indexes. One, the Laspeyres, is base-weighted and uses expenditures from an earlier period to weight price or volume movements. The other, the Paasche, is current-weighted and uses expenditures from a current period to weight price or volume movements. The Laspeyres and Paasche indexes are then averaged by calculating the geometric mean (that is, the square root) of the two indexes to give the Fisher Ideal index. In the majority of situations covered by index numbers, price and quantity changes are negatively

correlated. In such cases, Laspeyres indexes tend systematically to record greater increases than Paasche indexes, with the gap between them tending to widen over time.

The merchandise index series have a June quarter price reference period, and are linked to the index for the June quarter of each year. There are annual expenditure weight reference periods for both the Laspeyres (previous June year) and Paasche (year to each quarter) components of the index.

The price index methodology involves:

- calculating Laspeyres and Paasche price indexes for the current quarter on the previous June quarter
- 2. calculating Fisher Ideal price indexes for the current quarter on the previous June quarter (as the geometric mean, or square root, of the Laspeyres and Paasche price indexes calculated in step 1)
- 3. linking the Fisher Ideal price index for the current quarter (calculated in step 2) to the index for the previous June quarter, to provide a continuous quarterly time series.

The Laspeyres and Paasche volume indexes for the current quarter, based on the previous June quarter, are calculated by deflating the change in dollar value from the previous June quarter to the current quarter by the Paasche and Laspeyres price indexes, respectively (calculated in step 1 above). Steps 2 and 3 are repeated as above, using volume (rather than price) indexes.

The annual price indexes are calculated as volume index-weighted averages of the four component quarter price indexes, and the annual volume indexes as the simple average of the four component quarterly volume indexes.

Expenditure weights are assigned at the HS 10-digit item by country level. Item and index weights are not fixed. They vary from quarter to quarter and from year to year as the relative values of goods New Zealand exports and imports change.

#### Services trade

The services indexes are an annually chain-linked Laspeyres price index series. The weights are determined by the relative importance of services and businesses within the service industry. Information from various surveys, censuses and other sources is used to determine the weights.

# **Expression base**

The merchandise index series expression base is the quarter ended June 2002 (=1000). The merchandise terms of trade index expression base is the quarter ended June 2002 (=1000). The services price indexes expression base is the quarter ended June 1997 (=1000). The services terms of trade index expression base is the quarter ended June 1997 (=1000).

## Trend estimates - merchandise trade

Time series can be split into trend, seasonal, and irregular components. Seasonal adjustment removes the seasonal component, while trend estimation removes the seasonal and irregular components. Trend estimates reveal the underlying direction of movement in a series and are used to identify turning points.

The merchandise terms of trade trend series is calculated using X-12-ARIMA, which adjusts for outlying values and uses a centred moving average. The length of the centred moving average is selected automatically and can be 9, 13, or 23 months, depending on the relative variability of the irregular component compared with the trend. A long moving average has the effect of smoothing the trend series but slowing the response to underlying changes in growth rates, while a short moving average produces a trend series that is less smooth but quicker to identify turning points.

Trend estimates are recalculated each quarter. The use of new quarterly data means that previously published trend estimates are subject to revision. Revisions can be particularly large if an observation is treated as an outlier in one quarter, but is found to be part of the underlying trend as further observations are added to the series. Typically, only the estimates for the most recent quarters will be subject to substantial revisions.

# What the overseas terms of trade index measures

The overseas terms of trade index measures the changing volume of merchandise imports that can be funded by a fixed volume of New Zealand's merchandise exports.

## How the terms of trade are calculated

The merchandise terms of trade index is calculated as the ratio of the total export price index to the total import price index, and then presented on an expression base of the quarter ended June 2002 (=1000).

The services terms of trade index is calculated as the ratio of the total services export price index to the total services import price index, with the June 1997 quarter used as the expression base.

An index value above (or below) 1000 indicates that the terms of trade are more (or less) favourable than in the base period.

An increase in the terms of trade index indicates that the real purchasing power of exports has increased, while a decrease indicates a drop in the purchasing power of exports.

# Effect of exchange rate movements on terms of trade

A decline in the value of the New Zealand dollar has an upward influence on both export and import price levels, and a strengthening of the dollar has a downward impact on prices of both exports and imports. This means that any effect on the terms of trade in either case is likely to be minor and limited to situations where the New Zealand dollar has weakened or strengthened against a particular currency. It is also limited to where there is a significant imbalance in the values of exports and imports transacted in, or with prices determined by, that currency.

# **Broad economic categories (BEC)**

BEC categories are arranged, as far as practicable, to align with the System of National Accounts' three basic classes; namely capital goods, intermediate goods, and consumption goods. Commodities in BEC are categorised on the basis of their main end use. This means, for example, that all video recorders are treated as consumption goods even though some are used in business.

## Release of latest results

Merchandise provisional indexes are available within nine weeks of the end of the reference quarter. Final indexes are released within 22 weeks of the end of the reference quarter.

Only final data is released for the services indexes. This data is available at the same time as the provisional merchandise trade indexes.

## 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 gives both parties 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.

<u>Contract indexation: A Guide for Businesses</u> 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.

#### **Further information**

A wider range of index series than is presented in this release is available on Infoshare, Statistics NZ's free online database, or can be provided in other media on request. There are currently 57 export and 55 import merchandise index groupings. There are five export and five import service index groupings available on Infoshare.

For each of the merchandise trade price indexes, there are also related quarterly and annual volume indexes and dollar-value series available.

To access the overseas trade indexes (OTI) time series, go to <u>Infoshare</u> and choose: Subject category: **Imports and exports**, then choose: **Overseas Trade Indexes – Prices** 

More information about infoshare can be found on our website.

More detailed explanatory notes and a full list of available indexes and related dollar-value series are available on request.

Related information releases are:

- Overseas Trade Indexes (Volumes) ISSN 1178-0347
- Overseas Merchandise Trade ISSN 1178-0320
- Balance of Payments (Quarterly) ISSN 1178-0215
- Balance of Payments (Annual) ISSN 1178-0223

# Crown copyright©



This work is licensed under the Creative Commons Attribution 3.0 New Zealand licence. You are

free to copy, distribute, and adapt the work, as long as you attribute the work to Statistics NZ and abide by the other licence terms. Please note you may not use any departmental or governmental emblem, logo, or coat of arms in any way that infringes any provision of the <u>Flags</u>, <u>Emblems</u>, <u>and Names Protection Act 1981</u>. Use the wording 'Statistics New Zealand' in your attribution, not the Statistics NZ logo.

# Liability

While all care and diligence has been used in processing, analysing, and extracting data and information in this publication, Statistics NZ gives no warranty it is error free and will not be liable for any loss or damage suffered by the use directly, or indirectly, of the information in this publication.

# **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 information release 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.

1.01 Overseas trade price and terms of trade indexes 1.02 Overseas merchandise trade price and terms of trade indexes 2 Merchandise export price indexes Merchandise import price indexes 3 4.01 Merchandise imports by broad economic category, price indexes 4.02 Merchandise imports by broad economic category, price index percentage change from previous period 5 Overseas trade in services price indexes 6 Exchange rates, Reserve Bank of New Zealand

Table 1.01

Overseas trade price and terms of trade indexes

			Merchandise <sup>(1)</sup>			Services <sup>(2)</sup>	
		Exports price	Imports price	Terms of	Exports price	Imports price	Terms of
		index	index	trade index <sup>(3)</sup>	index	index	trade index <sup>(3)</sup>
Series	s ref: OTPQ	SEO1E95	SIO1I95	STTZZ5	SSE999	SS/999	SSTT999
Quart	er						
2006		926	866	1069	1213	1137	1067
	Jun	1018	928	1097	1247	1221	1021
	Sep	1010	941	1073	1252	1232	1016
	Dec	973	885	1100	1253	1180	1062
2007	Mar	970	869	1117	1261	1144	1102
	Jun	958	854	1122	1257	1116	1126
	Sep	990	852	1163	1274	1131	1126
	Dec	1045	873	1197	1297	1122	1156
2008	Mar	1091	875	1247	1315	1113	1181
	Jun	1140	918	1242	1332	1167	1141
	Sep	1238	1006	1230	1366	1259	1085
	Dec	1269	1041	1218	1409	1388	1015
2009	Mar	1168	985	1185	1416	1428	992
	Jun	1029	958	1074	1369	1329	1030
	Sep	973	920	1057	1348	1192	1131
	Dec	970	868	1118	1335	1171	1140
2010	Mar	1072	904	1186	1364	1207	1130
	Jun	1112	920	1210	1342	1196	1122
	Sep	1112	892	1246	1351	1233	1096
	Dec	1118	890	1256	1358	1183	1148
2011		1189 P	938 P	1267 P	1381	1214	1138
			Percentage c	hange from previo	us quarter <sup>(4)</sup>		
Quart	or						
2008		4.5	0.3	4.1	1.4	-0.8	2.2
2000	Jun	4.5	4.9	-0.4	1.3	4.9	-3.4
	Sep	8.6	9.6	-0.9	2.6	7.9	-4.9
	Dec	2.5	3.5	-1.0	3.1	10.2	-6.5
2009	Mar	-7.9	-5.4	-2.7	0.5	2.9	-2.3
	Jun	-11.9	-2.8	-9.4	-3.3	-6.9	3.8
	Sep	-5.4	-3.9	-1.6	-1.5	-10.3	9.8
	Dec	-0.3	-5.7	5.8	-1.0	-1.8	0.8
2010	Mar	10.5	4.2	6.1	2.2	3.1	-0.9
_0.0	Jun	3.7	1.7	2.0	-1.6	-0.9	-0.7
	Sep	-0.1	-3.0	3.0	0.7	3.1	-2.3
	Dec	0.5	-0.2	0.8	0.5	-4.1	4.8
2011		6.3 P	5.4 P	0.9 P	1.7	2.6	-0.9
		0.0 .	<b>3</b>	0.0 .			0.0
		Pe	ercentage change t	from same quarter	of previous year	(4)	
_			gege		or providence your		
Quart		7.0	40.0	4.0	77	00.0	40.0
2009		7.0	12.6	-4.9	7.7	28.3	-16.0
	Jun	-9.8	4.3	-13.5	2.8	13.9	-9.7
	Sep	-21.4	-8.5	-14.1	-1.3	-5.3	4.2
0010	Dec	-23.5	-16.7	-8.2	-5.3	-15.6	12.3
2010	Mar	-8.2	-8.2	0.1	-3.7	-15.5	13.9
	Jun	8.1	-4.0	12.6	-2.0	-10.0	8.9
	Sep	14.3	-3.1	17.9	0.2	3.4	-3.1
	Dec	15.2	2.6	12.3	1.7	1.0	0.7
2011	Mar	10.8 P	3.8 P	6.8 P	1.2	0.6	0.7

<sup>1.</sup> Base: Quarter ended June 2002 (=1000).

**Symbol:** P provisional

<sup>2.</sup> Base: Quarter ended June 1997 (=1000).

<sup>3.</sup> Index of the ratio of the exports price index to the imports price index. Effectively this measures the changing volume of imports that can be funded by a unit volume of exports.

<sup>4.</sup> Percentage changes are calculated on unrounded figures.

Table 1.02

Overseas merchandise trade price and terms of trade indexes

			Base:	Quarter ende	d June 2002 (=	1000)		Tr	end
		Exports price index	Percentage change from preceding period <sup>(1)</sup>	Imports price index	Percentage change from preceding period <sup>(1)</sup>	Terms of trade index <sup>(2)</sup>	Percentage change from preceding period <sup>(1)</sup>	Terms of trade index	Percentage change from preceding period <sup>(1)</sup>
Series	ref: OTPA	SEO1E95		SIO1I95		STTZZ5			
Year e	ended June								
1993	onaca cano	923	8.1	914	4.0	1010	4.1		
1994		884	-4.3	880	-3.7	1004	-0.6		
1995		873	-1.2	871	-1.0	1001	-0.3		
1996		854	-2.2	866	-0.7	986	-1.5		
1997		811	-5.0	831	-4.0	976	-1.0		
1998		828	2.2	856	3.0	968	-0.8		
1999		846	2.1	878	2.6	964	-0.4		
2000		908	7.3	940	7.1	966	0.2		
2001		1101	21.2	1072	14.0	1027	6.3		
2002		1061	-3.6	1028	-4.1	1032	0.6		
2003		917	-13.6	930	-9.6	986	-4.5		
2004		877	-4.3	839	-9.7	1045	6.0		
2005		897	2.2	825	-1.7	1088	4.1		
2006		942	5.0	870	5.5	1083	-0.5		
2007		977	3.7	887	2.0	1101	1.6		
2008		1069	9.5	880	-0.8	1216	10.4		
2009		1168	9.2	1000	13.7	1168	-3.9		
2010		1036	-11.3	903	-9.8	1148	-1.7		
Series	ref: OTPQ	SEO1E95		SIO1195		STTZZ5		STTZZ5T	
Quart									
2006	Mar	926	3.1	866	2.2	1069	0.9	1067	0.0
	Jun	1018	9.9	928	7.1	1097	2.6	1073	0.5
	Sep	1010	-0.8	941	1.5	1073	-2.2	1079	0.6
	Dec	973	-3.6	885	-6.0	1100	2.5	1097	1.7
2007	Mar	970	-0.3	869	-1.8	1117	1.6	1113	1.5
	Jun	958	-1.2	854	-1.7	1122	0.5	1129	1.4
	Sep	990	3.3	852	-0.3	1163	3.6	1158	2.6
	Dec	1045	5.5	873	2.5	1197	2.9	1204	3.9
2008	Mar	1091	4.5	875	0.3	1247	4.1	1238	2.8
	Jun	1140	4.5	918	4.9	1242	-0.4	1245	0.6
	Sep	1238	8.6	1006	9.6	1230	-0.9	1232	-1.0
	Dec	1269	2.5	1041	3.5	1218	-1.0	1221	-0.9
2009		1168	-7.9	985	-5.4	1185	-2.7	1169	-4.3
	Jun	1029	-11.9	958	-2.8	1074	-9.4	1088	-6.9
	Sep	973	-5.4	920	-3.9	1057	-1.6	1061	-2.5
	Dec	970	-0.3	868	-5.7	1118	5.8	1116	5.2
2010	Mar	1072	10.5	904	4.2	1186	6.1	1178	5.5
	Jun	1112	3.7	920	1.7	1210	2.0	1217	3.3
	Sep	1112	-0.1	892	-3.0	1246	3.0	1242	2.1
			0.5	000	-0.2	1256	0.8	1258	1.3
	Dec	1118	0.5 6.3 P	890	-0.2	1267 P	0.0	1230	1.5

<sup>1.</sup> Percentage changes are calculated on unrounded figures where available.

## Symbols:

P provisional

... not applicable

<sup>2.</sup> Index of the ratio of the exports price index to the imports price index. Effectively this measures the changing volume of merchandise imports that can be funded by a unit volume of merchandise exports.

Table 2

Merchandise export price indexes

Base: Quarter ended June 2002 (=1000)

		All pastoral and dairy products				Figh and	ind Food and		Non-fuel	Non-food			
			Meat. w	ool and by-r	oroducts		Fish and fish	Food and	Forestry	crude	manufa	actures	Total
		Dairy products <sup>(1)</sup>	Meat <sup>(1)</sup>	Wool <sup>(2)</sup>	Total <sup>(3)</sup>	Total <sup>(3)</sup>	prepara- tions	bever- ages <sup>(4)</sup>	products <sup>(5)</sup>	mater- ials	Aluminium	Total <sup>(3)</sup>	exports <sup>(3)</sup>
Series	ref: OTP	SEA1AO1	SEA1AE1	SEA1BK1	SEA1BR1	SEA1BS1	SEA1AH1	SEA1BQ1	SEA1BJ1	SEA1BT1	SEA1BO1	SEA1BU1	SEA1E91
Year	ended June												
2007		954	903	802	863	902	899	949	901	865	1267	1019	977
2008		1389	916	790	889	1084	911	1117	885	867	1130	1019	1069
2009		1429	1106	842	1062	1192	1151	1249	979	951	1123	1091	1168
2010		1168	992	783	953	1042	989	1088	967	928	961	967	1036
Quart	tor												
2008		1546	898	790	880	1125	925	1156	879	872	1056	1027	1091
2000	Jun	1543	972	792	942	1171	961	1202	898	896	1210	1052	1140
	Sep	1658	1083	827	1039	1268	1063	1304	941	943	1330	1122	1238
	Dec	1749	1137	909	1103	1347	1176	1389	1044	1020	1250	1150	1269
2009	Mar	1401	1143	849	1090	1209	1240	1276	1042	979	987	1094	1168
2000	Jun	1063	1063	781	1021	1025	1136	1088	909	879	833	991	1029
	Sep	943	1028	733	979	942	1027	1005	906	858	890	937	973
	Dec	993	943	773	909	952	943	1003	905	870	896	931	970
2010		1311	976	792	939	1086	974	1131	1005	956	1026	989	1072
2010	Jun	1390	1019	824	982	1140	1008	1179	1053	1017	1024	1009	1112
	Sep	1489	1013	843	986	1170	1059	1207	1011	965	967	992	1112
	Dec	1358	1076	1038	1048	1164	1061	1207	1011	1002	1016	993	1118
2011		1433 P	1183 P	1163 P	1160 P	1245 P	1001 1087 P	1261 1268 P	1019 1062 P	1002 1090 P	1010 1062 P	1036 P	1189 P
2011	Mai	11001	11001	11001	11001	12101	1007 1	1200 1	1002 1	1000 1	1002 1	1000 1	1100 1
					Percen	tage change	e from prece	ding period	(6)				
Year	ended June												
2007		-2.5	-1.5	-0.4	-1.5	-0.7	-0.9	1.9	9.1	6.8	20.3	5.8	3.7
2008		45.6	1.4	-1.6	3.0	20.2	1.3	17.8	-1.8	0.2	-10.8	0.0	9.5
2009		2.8	20.7	6.6	19.5	10.0	26.4	11.8	10.7	9.7	-0.6	7.1	9.2
2010		-18.3	-10.3	-7.0	-10.3	-12.5	-14.1	-12.9	-1.2	-2.4	-14.4	-11.4	-11.3
Quart	ter												
2008		19.7	-0.3	-1.9	0.6	7.6	3.6	6.7	0.8	2.6	-2.8	1.4	4.5
	Jun	-0.2	8.2	0.3	7.1	4.1	3.9	4.0	2.2	2.8	14.5	2.4	4.5
	Sep	7.4	11.5	4.4	10.3	8.2	10.6	8.4	4.8	5.3	10.0	6.7	8.6
	Dec	5.5	4.9	9.9	6.1	6.3	10.7	6.5	11.0	8.1	-6.0	2.4	2.5
2009		-19.9	0.6	-6.6	-1.1	-10.3	5.4	-8.1	-0.2	-4.0	-21.0	-4.9	-7.9
	Jun	-24.1	-7.0	-8.1	-6.3	-15.2	-8.4	-14.8	-12.8	-10.3	-15.7	-9.4	-11.9
	Sep	-11.3	-3.3	-6.1	-4.2	-8.1	-9.6	-7.6	-0.3	-2.3	6.9	-5.4	-5.4
	Dec	5.3	-8.3	5.4	-7.1	1.1	-8.2	0.0	-0.1	1.4	0.7	-0.6	-0.3
2010		32.0	3.5	2.5	3.3	14.1	3.3	12.7	11.0	9.9	14.5	6.2	10.5
_0.0	Jun	6.1	4.5	3.9	4.6	5.0	3.5	4.2	4.8	6.3	-0.2	2.0	3.7
	Sep	7.1	0.5	2.4	0.4	2.6	5.0	2.4	-4.0	-5.1	-5.5	-1.7	-0.1
	Dec	-8.8	5.0	23.1	6.2	-0.6	0.2	-0.5	0.8	3.8	5.0	0.1	0.5
2011		5.5 P	10.0 P	12.0 P	10.7 P	7.0 P	2.5 P	5.6 P	4.2 P	8.8 P	4.6 P	4.3 P	6.3 P
		0.0 1		, <u>L.</u> 0 1		7.01	2.0 1	0.0 1	1.44 1	0.0 1	1.0 1	1.0 1	0.0 1

- 1. Is also a sub-index of the food and beverages index. Dairy excludes casein and caseinates.
- 2. Is also a sub-index of the non-fuel crude materials index.
- 3. Includes commodities not listed.
- 4. Includes all items in the fish and fish preparations index except live ornamental fish.
- 5. Includes items from both the non-fuel crude materials and non-food manufactures indexes.
- 6. Percentage changes are calculated on unrounded figures.

**Symbol:** P provisional

Table 3

Merchandise import price indexes

Base: Quarter ended June 2002 (=1000)

	F	Definalering	Nam firel			Non-f	food manufa	ctures			
	Food and bever- ages	Petroleum and petroleum products	Non-fuel crude mater- ials	Plastics and plastic articles	Textiles, clothing and footwear	Iron and steel <sup>(1)</sup>	Mech- anical machinery	machinery and apparatus	port equip- ment	Total <sup>(2)</sup>	Total imports <sup>(2)</sup>
Series ref: OTP	SIA1LF1	SIA1LL1	SIA1MF1	SIA1LO1	SIA1LV1	SIA1LW1	SIA1LY1	SIA1LZ1	SIA1MD1	SIA1MG1	SIA1191
Year ended June											
2007	968	1763	1037	1116	800	1395	549	662	847	800	887
2008	1018	2135	1146	1075	767	1384	472	591	819	755	880
2009	1172	2116	1766	1200	997	1982	558	657	910	879	1000
2010	1136	1832	1198	1097	872	1302	488	614	892	802	903

	Dec	1090	1711	1136	1053	830	1296	476	585	872	778	868
2010	Mar	1118	1877	1202	1108	871	1280	479	615	893	800	904
	Jun	1166	1961	1323	1157	880	1311	477	613	901	802	920
	Sep	1129	1824	1214	1069	886	1423	463	607	885	787	892
	Dec	1183	1895	1258	1068	871	1355	438	578	875	772	890
2011	Mar	1239 P	2280 P	1383 P	1139 P	937 P	1332 P	436 P	590 P	893 P	789 P	938 P
				Per	centage cha	ange from p	receding pe	eriod <sup>(4)</sup>				
Year	ended June											
2007		6.7	5.0	10.1	10.7	-4.4	15.4	-5.5	-3.3	1.5	0.9	2.0
2008		5.2	21.1	10.5	-3.7	-4.1	-0.8	-14.0	-10.8	-3.2	-5.6	-0.8
2009		15.2	-0.9	54.0	11.7	29.9	43.2	18.3	11.1	11.0	16.5	13.7
2010		-3.1	-13.4	-32.2	-8.6	-12.5	-34.3	-12.6	-6.4	-1.9	-8.8	-9.8
Quar	ter											
2008		0.1	8.3	6.9	1.1	1.7	0.9	-4.7	-3.5	-1.8	-1.5	0.3
	Jun	4.8	17.8	25.7	6.3	1.5	7.3	-1.0	0.6	-0.1	1.6	4.9
	Sep	6.4	21.0	30.5	8.0	11.4	26.1	5.9	3.3	2.8	6.8	9.6
	Dec	2.9	-22.2	14.5	3.8	15.3	20.5	18.1	7.8	9.0	10.3	3.5
2009	Mar	0.7	-35.6	-39.1	-9.9	10.2	-4.0	8.2	9.1	6.8	5.4	-5.4
	Jun	3.7	-1.0	21.9	-2.6	-6.5	-21.3	-5.1	-4.8	-3.0	-5.6	-2.8
	Sep	-3.9	17.4	-26.8	-4.0	-12.4	-21.3	-11.4	-3.7	-4.8	-6.9	-3.9
	Dec	-7.1	-4.2	-0.7	-2.1	-8.4	-1.9	-8.5	-10.0	-3.4	-6.2	-5.7
2010	Mar	2.5	9.7	5.8	5.2	4.9	-1.2	0.7	5.0	2.4	2.9	4.2
	Jun	4.3	4.5	10.0	4.5	1.0	2.4	-0.5	-0.3	0.8	0.2	1.7
	Sep	-3.2	-7.0	-8.2	-7.6	0.8	8.5	-2.8	-0.9	-1.7	-1.9	-3.0
	Dec	4.8	3.9	3.6	-0.1	-1.7	-4.8	-5.5	-4.9	-1.1	-1.9	-0.2
2011	Mar	4.7 P	20.3 P	9.9 P	6.6 P	7.6 P	-1.7 P	-0.4 P	2.1 P	2.0 P	2.2 P	5.4 P

<sup>1.</sup> Excludes manufactured articles of iron and steel.

**Symbol:** P provisional

Quarter<sup>(3)</sup> 2008 Mar

Jun Sep

Dec

Mar

Jun

Sep

<sup>2.</sup> Includes commodities not listed.

<sup>3.</sup> Quarterly index numbers are given as annual equivalents.

<sup>4.</sup> Percentage changes are calculated on unrounded figures.

Table 4.01

# Merchandise imports by broad economic category

Price indexes

Base: Quarter ended June 2002 (=1000)

		Capital good	s				Inter	mediate god	ods			
	Capital goods	Transport equip-			beverages or industry		al supplies sewhere	Fuels and	lubricants	Parts an	f capital	
	(not transport	ment, indus-	Total	mainly id		spe	cified	Primary	Proces- sed (not	equip	transport ment	Total <sup>(1)</sup>
	equip- ment)	trial		Primary	Pro- cessed	Primary	Pro- cessed	,	motor spirit)	Transport equipment	Total <sup>(1)</sup>	
	BEC(41)	BEC(521)		BEC(111)	BEC(121)	BEC(21)	BEC(22)	BEC(31)	BEC(322)	BEC(53)		
Series ref: OTPQ	SIB1PA1	SIB1PB1	SIB1PC1	SIB1PD1	SIB1PE1	SIB1PG1	SIB1PH1	SIB1PJ1	SIB1PK1	SIB1PN1	SIB1PO1	SIB1PP1
Quarter												
2007 Mar	525	903	607	987	1075	826	1057	1611	1886	821	755	1060
Jun	506	886	587	1058	1047	876	1030	1619	1904	801	702	1033
Sep	483	869	564	1101	1052	898	1017	1807	2047	807	685	1050
Dec	476	888	562	1323	1102	1011	1034	2001	2180	819	698	1094
2008 Mar	462	887	548	1488	1131	1145	1051	2153	2377	787	665	1121
Jun	457	895	545	1610	1239	1813	1116	2536	2883	810	680	1230
Sep	476	951	570	1770	1372	3077	1250	3055	3480	918	727	1409
Dec	539	1079	645	2058	1398	4090	1364	2166	3087	1056	843	1396
2009 Mar	587	1173	702	1834	1377	1552	1300	1389	2187	1155	920	1195
Jun	552	1151	666	1501	1362	2819	1218	1398	1802	1090	889	1164
Sep	512	1071	618	1468	1329	1481	1134	1725	1996	969	797	1134
Dec	465	1003	566	1244	1323	1392	1055	1649	1997	917	749	1074
2010 Mar	480	1036	583	1187	1408	1425	1109	1801	2069	945	776	1140
Jun	478	1077	584	1174	1555	1726	1138	1860	2234	926	768	1171
Sep	466	1071	571	1183	1419	1571	1101	1736	2124	924	758	1124
Dec	450	1049	553	1374	1438	1588	1122	1817	2231	880	732	1143
2011 Mar	449 P	1065 P	554 P	1562 P	1620 P	1727 P	1186 P	2209 P	2482 P	931 P	744 P	1246 P
			Consum	ption goods						•		
	Food & b	everages,	С	onsumer go	ods		Passenger	Motor	Total			
	mainly f	or house-	not e	Isewhere sp	ecified	Total <sup>(1)</sup>	motor	spirit	imports <sup>(1)</sup>			
		sumption	Durable	Semi-	Non-		cars					
		Processed		durable	durable					•		
	BEC(112)	BEC(122)	BEC(61)	BEC(62)	BEC(63)		BEC(51)	BEC(321)		-		
Series ref: OTPQ	SIB1PQ1	SIB1PR1	SIB1PU1	SIB1PV1	SIB1PW1	SIB1PY1	SIB1PZ1	SIB1QA1	SIA1191	-		
Quarter												
2007 Mar	071	ററേ	601	902	0/16	015	022	1561	960			

				Consum	plion goods				<b>1</b>	
		Food & b	everages,	_				Passenger	Motor	Total
		mainly fo	or house-	not elsewhere specified		Total <sup>(1)</sup>	motor	spirit	imports <sup>(1)</sup>	
		hold con	sumption	Durable	Semi-	Non-		cars		
		Primary	Processed		durable	durable				
		BEC(112)	BEC(122)	BEC(61)	BEC(62)	BEC(63)		BEC(51)	BEC(321)	
Series	ref: OTPQ	SIB1PQ1	SIB1PR1	SIB1PU1	SIB1PV1	SIB1PW1	SIB1PY1	SIB1PZ1	SIB1QA1	SIA1191
Quart	er									
2007	Mar	871	960	684	802	946	845	822	1561	869
	Jun	896	958	690	772	962	842	797	1741	854
	Sep	904	965	652	768	955	833	784	1881	852
	Dec	905	1003	655	762	963	842	828	1898	873
2008	Mar	904	990	630	777	938	832	802	2069	875
	Jun	921	1038	619	792	953	848	796	2347	918
	Sep	972	1121	668	862	995	907	788	2846	1006
	Dec	1095	1151	709	984	1032	969	824	2516	1041
2009	Mar	1157	1199	764	1093	1101	1045	839	1540	985
	Jun	1099	1203	745	1018	1050	1002	823	1704	958
	Sep	1051	1145	688	926	990	937	812	1860	920
	Dec	1016	1103	644	861	955	891	819	1746	868
2010	Mar	1053	1116	636	897	947	902	828	1964	904
	Jun	1070	1130	631	878	970	906	821	2088	920
	Sep	1015	1101	621	885	960	896	807	1882	892
	Dec	1042	1123	587	860	940	879	811	1885	890
2011	Mar	1056 P	1145 P	588 P	907 P	941 P	900 P	832 P	2295 P	938 P

<sup>1.</sup> Includes commodities not listed.

**Symbol:** P provisional

Table 4.02

# Merchandise imports by broad economic category

Price index percentage change from previous period (1) Base: Quarter ended June 2002 (=1000)

		(	Capital good	s	Intermediate goods								
		Capital goods Transport equip-			Food and beverages		Industrial supplies not elsewhere		Fuels and lubricants		Parts and acces- sories of capital		
		(not transport	ment, indus- trial	Total	mainly for industry		specified		Primary	Proces- sed (not	goods and transport equipment		Total <sup>(2)</sup>
		equip- ment)			Primary	cessed	Primary	Pro- cessed	Filliary	motor spirit)	Transport equipment	Total <sup>(2)</sup>	
		BEC(41)	BEC(521)		BEC(111)	BEC(121)	BEC(21)	BEC(22)	BEC(31)	BEC(322)	BEC(53)		
Series	ref: OTPQ	SIB1PA1	SIB1PB1	SIB1PC1	SIB1PD1	SIB1PE1	SIB1PG1	SIB1PH1	SIB1PJ1	SIB1PK1	SIB1PN1	SIB1PO1	SIB1PP1
Quart	er												
2007	Mar	-4.2	-1.9	-3.6	1.0	0.2	-6.0	-1.9	0.4	-6.1	-3.1	-1.8	-1.6
	Jun	-3.7	-1.9	-3.3	7.1	-2.7	6.0	-2.6	0.5	0.9	-2.4	-7.0	-2.5
	Sep	-4.5	-1.9	-3.9	4.1	0.5	2.5	-1.3	11.6	7.5	0.7	-2.4	1.6
	Dec	-1.3	2.2	-0.5	20.1	4.7	12.6	1.6	10.8	6.5	1.5	1.9	4.2
2008	Mar	-3.1	-0.1	-2.5	12.5	2.7	13.3	1.7	7.6	9.1	-4.0	-4.8	2.5
	Jun	-1.0	0.9	-0.6	8.2	9.5	58.3	6.2	17.8	21.3	3.0	2.2	9.8
	Sep	4.2	6.3	4.7	10.0	10.7	69.7	12.0	20.5	20.7	13.3	7.0	14.5
	Dec	13.2	13.5	13.2	16.3	1.9	32.9	9.1	-29.1	-11.3	15.0	15.8	-0.9
2009	Mar	8.9	8.7	8.8	-10.9	-1.5	-62.1	-4.7	-35.9	-29.1	9.3	9.1	-14.4
	Jun	-6.1	-1.9	-5.2	-18.2	-1.1	81.6	-6.3	0.7	-17.6	-5.6	-3.3	-2.6
	Sep	-7.2	-6.9	-7.2	-2.2	-2.4	-47.4	-6.9	23.4	10.8	-11.1	-10.4	-2.6
	Dec	-9.1	-6.4	-8.5	-15.2	-0.5	-6.1	-6.9	-4.4	0.0	-5.4	-6.0	-5.2
2010	Mar	3.0	3.3	3.1	-4.6	6.5	2.4	5.1	9.2	3.6	3.1	3.5	6.1
	Jun	-0.4	4.0	0.1	-1.1	10.4	21.2	2.6	3.3	7.9	-2.0	-1.0	2.7
	Sep	-2.5	-0.5	-2.2	8.0	-8.8	-9.0	-3.3	-6.7	-4.9	-0.2	-1.3	-4.0
	Dec	-3.5	-2.1	-3.2	16.1	1.4	1.1	1.9	4.6	5.0	-4.8	-3.4	1.6
2011	Mar	-0.1 P	1.5 P	0.3 P	13.7 P	12.7 P	8.7 P	5.7 P	21.6 P	11.3 P	5.7 P	1.7 P	9.0 P

				Consum	otion goods					
	Food & beverages,			С	onsumer go	ods		Passenger	Motor	Total
		mainly for house-		not e	Isewhere sp	ecified	Total <sup>(2)</sup>	motor	spirit	imports <sup>(2)</sup>
		hold con:	sumption	Durable	Semi-	Non-		cars		
		Primary	Processed		durable	durable				
		BEC(112)	BEC(122)	BEC(61)	BEC(62)	BEC(63)		BEC(51)	BEC(321)	
Series	s ref: OTPQ	SIB1PQ1	SIB1PR1	SIB1PU1	SIB1PV1	SIB1PW1	SIB1PY1	SIB1PZ1	SIB1QA1	SIA1191
Quart	er									
2007	Mar	-1.1	0.2	-2.1	2.1	-2.1	-0.8	-1.8	-1.1	-1.8
	Jun	2.9	-0.2	0.9	-3.7	1.6	-0.4	-3.0	11.6	-1.7
	Sep	0.9	8.0	-5.5	-0.5	-0.7	-1.0	-1.6	8.0	-0.3
	Dec	0.1	3.9	0.4	-0.7	8.0	1.0	5.6	0.9	2.5
2008	Mar	-0.1	-1.2	-3.8	1.9	-2.5	-1.2	-3.1	9.0	0.3
	Jun	1.8	4.8	-1.8	2.0	1.6	1.9	-0.8	13.4	4.9
	Sep	5.6	8.0	8.0	8.7	4.4	7.0	-1.0	21.3	9.6
	Dec	12.7	2.7	6.1	14.2	3.7	6.8	4.6	-11.6	3.5
2009	Mar	5.6	4.2	7.7	11.2	6.7	7.9	1.8	-38.8	-5.4
	Jun	-5.0	0.3	-2.5	-6.9	-4.6	-4.1	-1.9	10.7	-2.8
	Sep	-4.4	-4.9	-7.6	-9.0	-5.7	-6.5	-1.4	9.2	-3.9
	Dec	-3.3	-3.6	-6.4	-7.0	-3.6	-5.0	0.9	-6.1	-5.7
2010	Mar	3.6	1.2	-1.3	4.3	-0.8	1.3	1.0	12.5	4.2
	Jun	1.6	1.3	-0.8	-2.2	2.4	0.4	-0.8	6.3	1.7
	Sep	-5.1	-2.6	-1.5	8.0	-1.0	-1.1	-1.7	-9.9	-3.0
	Dec	2.6	2.0	-5.5	-2.8	-2.1	-1.8	0.4	0.2	-0.2
2011	Mar	1.4 P	1.9 P	0.1 P	5.4 P	0.1 P	2.3 P	2.7 P	21.8 P	5.4 P

<sup>1.</sup> Percentage changes are calculated on unrounded figures.

Symbol: P provisional

<sup>2.</sup> Includes commodities not listed.

Table 5

Overseas trade in services price indexes

Base: June 1997 quarter (=1000)

		Services exports					Services imports					
		Transportation	Travel	Other services	Government services	Total exports	Transportation	Travel	Other services	Government services	Total imports	
Series	s ref: OTPQ	SSEA99	SSEB99	SSEC99	SSED99	SSE999	SSIA99	SSIB99	SSIC99	SSID99	SS1999	
					Price	indexes						
Quart	er											
2006		986	1322	1122	1223	1213	1083	1191	1127	1243	1137	
	Jun	1087	1336	1143	1226	1247	1125	1331	1200	1383	1221	
	Sep	1087	1344	1144	1231	1252	1155	1330	1200	1375	1232	
	Dec	1068	1356	1140	1234	1253	1087	1268	1178	1300	1180	
2007	Mar	1051	1380	1133	1235	1261	1043	1230	1156	1245	1144	
	Jun	1033	1383	1128	1232	1257	1016	1204	1127	1212	1116	
	Sep	1066	1386	1138	1625	1274	1011	1237	1146	1230	1131	
	Dec	1071	1425	1138	1628	1297	999	1224	1145	1208	1122	
2008	Mar	1114	1437	1136	1634	1315	1005	1195	1143	1180	1113	
	Jun	1143	1449	1150	1638	1332	1046	1277	1177	1267	1167	
	Sep	1232	1456	1186	1639	1366	1172	1361	1234	1376	1259	
	Dec	1342	1468	1229	1638	1409	1332	1463	1347	1690	1388	
2009	Mar	1312	1485	1250	1635	1416	1314	1559	1397	1790	1428	
	Jun	1175	1477	1213	1638	1369	1206	1451	1323	1572	1329	
	Sep	1105	1484	1181	1641	1348	968	1360	1261	1432	1192	
	Dec	1063	1499	1133	1645	1335	983	1308	1233	1340	1171	
2010	Mar	1127	1518	1147	1648	1364	1006	1357	1268	1412	1207	
20.0	Jun	1068	1508	1138	1644	1342	1021	1324	1250	1367	1196	
	Sep	1111	1507	1136	1646	1351	1068	1365	1270	1424	1233	
	Dec	1053	1556	1117	1656	1358	1022	1303	1232	1325	1183	
2011	Mar	1082	1585	1116	1775	1381	1045	1353	1251	1366	1214	
				Perce	ntage change	from previ	ous quarter					
Quart	er											
2006	Mar	-0.4	1.3	0.9	-1.2	0.9	0.4	2.8	1.7	1.7	1.6	
	Jun	10.2	1.1	1.9	0.2	2.8	3.9	11.8	6.5	11.3	7.4	
	Sep	0.0	0.6	0.1	0.4	0.4	2.7	-0.1	0.0	-0.6	0.9	
	Dec	-1.7	0.9	-0.3	0.2	0.1	-5.9	-4.7	-1.8	-5.5	-4.2	
2007	Mar	-1.6	1.8	-0.6	0.1	0.6	-4.0	-3.0	-1.9	-4.2	-3.1	
	Jun	-1.7	0.2	-0.4	-0.2	-0.3	-2.6	-2.1	-2.5	-2.7	-2.4	
	Sep	3.2	0.2	0.9	31.9	1.4	-0.5	2.7	1.7	1.5	1.3	
	Dec	0.5	2.8	0.0	0.2	1.8	-1.2	-1.1	-0.1	-1.8	-0.8	
2008	Mar	4.0	8.0	-0.2	0.4	1.4	0.6	-2.4	-0.2	-2.3	-0.8	
	Jun	2.6	8.0	1.2	0.2	1.3	4.1	6.9	3.0	7.4	4.9	
	Sep	7.8	0.5	3.1	0.1	2.6	12.0	6.6	4.8	8.6	7.9	
	Dec	8.9	0.8	3.6	-0.1	3.1	13.7	7.5	9.2	22.8	10.2	
2009	Mar	-2.2	1.2	1.7	-0.2	0.5	-1.4	6.6	3.7	5.9	2.9	
	Jun	-10.4	-0.5	-3.0	0.2	-3.3	-8.2	-6.9	-5.3	-12.2	-6.9	
	Sep	-6.0	0.5	-2.6	0.2	-1.5	-19.7	-6.3	-4.7	-8.9	-10.3	
	Dec	-3.8	1.0	-4.1	0.2	-1.0	1.5	-3.8	-2.2	-6.4	-1.8	
2010	Mar	6.0	1.3	1.2	0.2	2.2	2.3	3.7	2.8	5.4	3.1	
	Jun	-5.2	-0.7	-0.8	-0.2	-1.6	1.5	-2.4	-1.4	-3.2	-0.9	
	Sep	4.0	-0.1	-0.2	0.1	0.7	4.6	3.1	1.6	4.2	3.1	
	Dec	-5.2	3.3	-1.7	0.6	0.5	-4.3	-4.5	-3.0	-7.0	-4.1	
2011		2.8	1.9	-0.1	7.2	1.7	2.3	3.8	1.5	3.1	2.6	

Table 6 **Exchange Rates**<sup>(1)</sup>

Reserve Bank of New Zealand

			Trade				
		USA	UK	Australia	Japan	European Union	weighted
		\$NZ:\$US	\$NZ:pound	\$NZ:\$AU	\$NZ:yen	\$NZ:euro	index <sup>(2)</sup>
Series	ref: EXRQ	SGB	SGA	SGI	SGE	SGK	STW
Quart			<u> </u>		<u>I</u>		
2006		0.6658	0.3796	0.8994	77.77	0.5531	68.3
2000	Jun	0.6236	0.3419	0.8364	71.43	0.4966	62.8
	Sep	0.6348	0.3387	0.8389	73.79	0.4981	63.6
	Dec	0.6737	0.3516	0.8747	79.28	0.5223	67.1
2007	Mar	0.7203	0.3671	0.8835	83.52	0.5223	68.8
2007	Jun	0.7851	0.3957	0.8794	86.38	0.5404	72.0
		0.7438	0.3680	0.8774	87.74	0.5413	72.0
	Sep Dec	0.7438	0.3735	0.8591	86.37	0.5274	71.3 71.0
2008	Mar	0.7904	0.3995	0.8720	83.22	0.5274	71.0 71.9
2006	Jun	0.7759	0.3937	0.8228	81.09	0.4964	69.2
	Sep	0.7134	0.3767	0.8034	76.76	0.4740	65.5
2000	Dec	0.5786	0.3675	0.8576	55.88	0.4392 0.4083	57.8 52.7
2009	Mar	0.5328	0.3710	0.8024	49.82		53.7
	Jun	0.6024	0.3889	0.7938	58.66	0.4422	58.4
	Sep	0.6738	0.4106	0.8089	63.08	0.4712	62.6
2040	Dec	0.7285	0.4458	0.8010	65.33	0.4929	65.5
2010	Mar	0.7094	0.4542	0.7846	64.32	0.5121	65.3
	Jun	0.7015	0.4700	0.7936	64.61	0.5509	66.7
	Sep	0.7175	0.4630	0.7948	61.59	0.5560	66.9
0044	Dec	0.7577	0.4792	0.7675	62.58	0.5576	67.8
2011	Mar	0.7561	0.4719	0.7530	62.23	0.5535	67.2
			Percentage of	change from previ	ous quarter <sup>(3)</sup>		
Quart	er						
2006	Mar	-4.2	-4.4	-3.6	-4.5	-5.3	-4.4
	Jun	-6.3	-9.9	-7.0	-8.2	-10.2	-8.1
	Sep	1.8	-1.0	0.3	3.3	0.3	1.2
	Dec	6.1	3.8	4.3	7.4	4.9	5.5
2007	Mar	6.9	4.4	1.0	5.3	1.5	2.6
	Jun	9.0	7.8	-0.5	3.4	2.0	4.7
	Sep	-5.3	-7.0	-0.2	1.6	0.2	-1.0
	Dec	2.7	1.5	-2.1	-1.6	-2.6	-0.4
2008	Mar	3.5	7.0	1.5	-3.7	0.0	1.3
	Jun	-1.8	-1.5	-5.6	-2.6	-5.9	-3.7
	Sep	-8.0	-4.3	-2.4	-5.3	-4.5	-5.4
	Dec	-18.9	-2.4	6.7	-27.2	-7.3	-11.8
2009	Mar	-7.9	1.0	-6.4	-10.9	-7.0	-7.0
	Jun	13.1	4.8	-1.1	17.7	8.3	8.7
	Sep	11.9	5.6	1.9	7.5	6.6	7.2
	Dec	8.1	8.6	-1.0	3.6	4.6	4.6
2010	Mar	-2.6	1.9	-2.0	-1.5	3.9	-0.3
	Jun	-1.1	3.5	1.1	0.5	7.6	2.2
	Sep	2.3	-1.5	0.1	-4.7	0.9	0.2
	Dec	5.6	3.5	-3.4	1.6	0.3	1.4
2011	Mar	-0.2	-1.5	-1.9	-0.6	-0.7	-0.8

<sup>1.</sup> Published by the Reserve Bank of New Zealand.

Source: Reserve Bank of New Zealand

<sup>2.</sup> Base: June 1979 (=100).

<sup>3.</sup> Percentage changes are calculated on unrounded figures.