Gross Domestic Product: December 2013 quarter

Embargoed until 10:45am – 20 March 2014

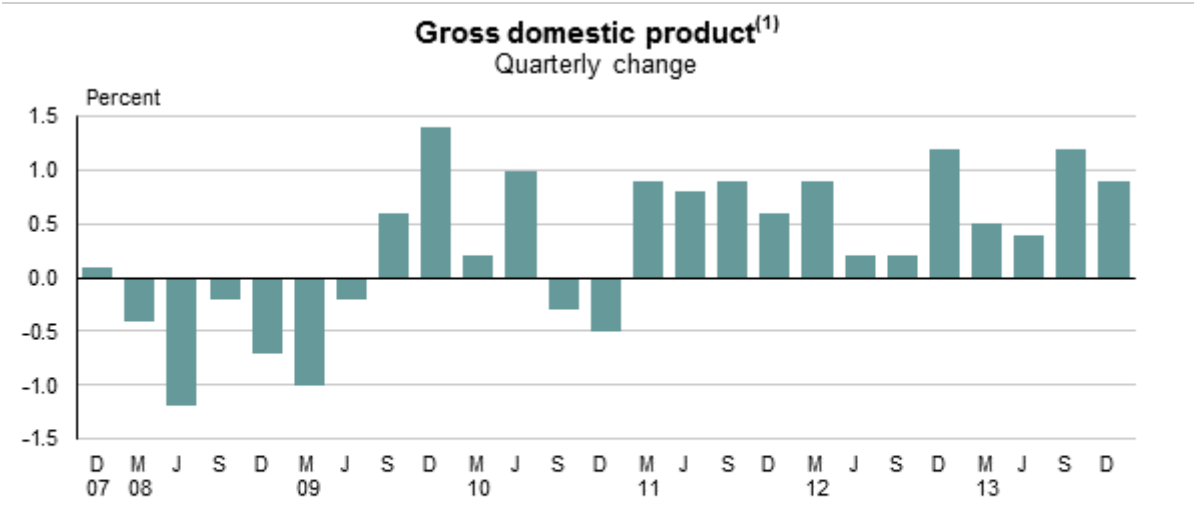
Key facts

Gross domestic product (GDP):

- Economic activity increased 0.9 percent in the December 2013 quarter.
- Manufacturing (up 2.1 percent) and wholesale trade (up 3.2 percent) were the main drivers this quarter.
- Business services (down 2.1 percent) and agriculture, forestry, and fishing (down 2.0 percent) partly offset the growth.
- Economic activity for the year ended December 2013 was up 2.7 percent.

Expenditure on gross domestic product:

- The expenditure measure of GDP was up 0.6 percent in the December 2013 quarter.
- Household consumption expenditure (up 1.3 percent) and exports (up 3.1 percent) were the main drivers of this rise.
- Inventories were run down by $18 million, due to manufacturing inventories being run down.
- Investment was up by 0.4 percent, driven by an increase in plant, machinery, and equipment.
- For the year ended December 2013, expenditure on GDP was up 2.5 percent.



1. Seasonally adjusted chain-volume series expressed in 1995/96 prices.

Source: Statistics New Zealand

Liz MacPherson
Government Statistician

20 March 2014
ISSN 1178-0290

Commentary

- New Zealand economy grows by 0.9 percent
- Expenditure on GDP – main movements
- Real gross national disposable income rises
- Dairy exports rise, despite production falls
- Machinery investment strong
- Construction investment a mixed bag
- Durables drive household consumption

New Zealand economy grows by 0.9 percent

Gross domestic product (GDP) was up 0.9 percent in the December 2013 quarter, following a revised 1.2 percent rise in the September quarter.

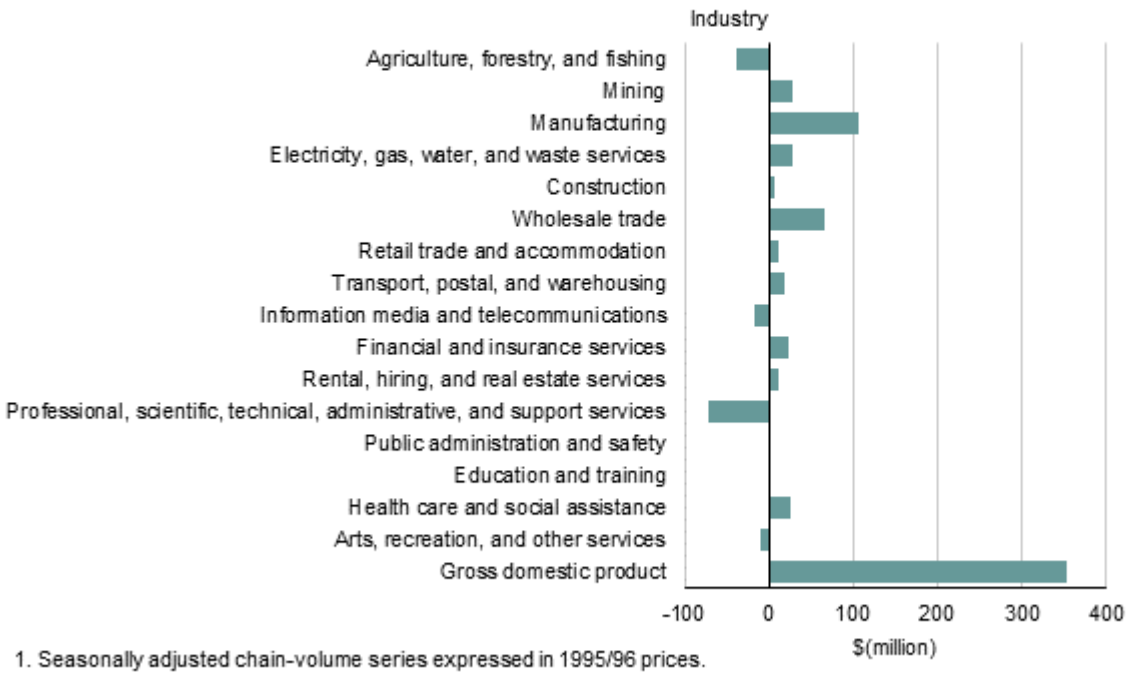
The main movements by industry were:

- manufacturing (up 2.1 percent), driven by increased activity in food, beverage, and tobacco manufacturing
- wholesale trade (up 3.2 percent), due to increased machinery and equipment wholesaling
- business services (down 2.1 percent), as architectural and engineering services fell for the first time since the June quarter 2012
- agriculture, forestry, and fishing (down 2.0 percent), mainly driven by a fall in dairy and livestock production.

Gross domestic product by industry[1]

Change from previous quarter

December 2013 quarter



1. Seasonally adjusted chain-volume series expressed in 1995/96 prices.

Source: Statistics New Zealand

Economic activity for the year ended December 2013 was up 2.7 percent.

Activity in the December 2013 quarter was 3.1 percent higher than in the December 2012 quarter.

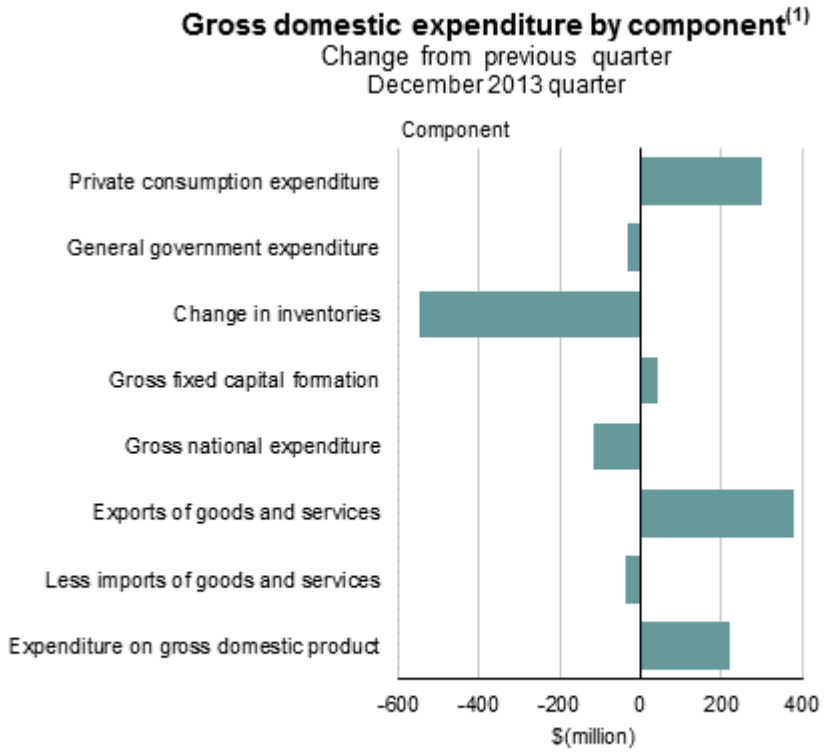
Expenditure on GDP – main movements

The expenditure measure of GDP rose 0.6 percent in the December 2013 quarter, following a revised 1.0 percent rise in the September 2013 quarter.

The expenditure and production measures of GDP are conceptually the same, but use different data sources, so can differ in practice. The production measure of GDP measures the volume of goods and services produced in the economy, while the expenditure measure shows how these goods and services were used. While the production-based and the expenditure-based measures are both official series, the production-based measure historically shows less volatility and is the preferred series for the quarter-on-quarter changes.

The main movements in the expenditure measure of GDP this quarter were:

- household consumption expenditure was up 1.3 percent, due to increased spending on durable goods and services
- investment was up 0.4 percent, with investment in plant, machinery, and equipment (up 7.5 percent) being the largest contributor
- inventories were run down $18 million, due to manufacturing inventories being run down
- exports of goods and services were up 3.1 percent. Dairy product exports were the main driver of this quarter's rise
- imports of goods and services were flat (up 0.2 percent).



1. Seasonally adjusted chain-volume series expressed in 1995/96 prices.

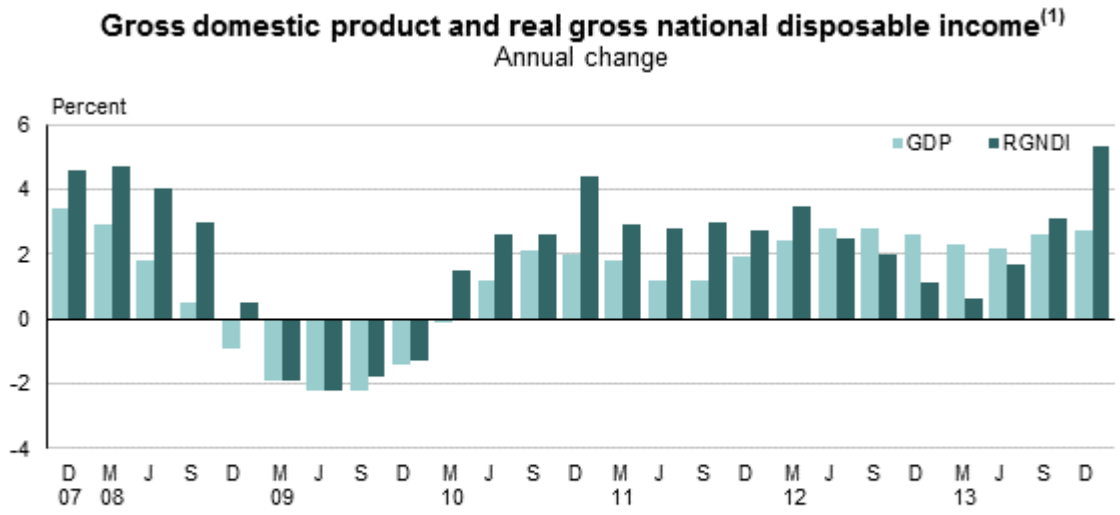
Source: Statistics New Zealand

Expenditure on GDP for the December 2013 year rose 2.5 percent.

Real gross national disposable income rises

Real gross national disposable income (RGNDI), which measures the real purchasing power of New Zealand's disposable income, rose 3.6 percent in the December 2013 quarter. RGNDI rose by more than GDP this quarter due to an increase in the terms of trade (see Overseas Trade Indexes (Prices): December 2013 quarter (provisional)). An increase in the terms of trade means more imports can be purchased with a fixed quantity of exports.

RGNDI increased 5.3 percent for the December 2013 year, compared with an increase in GDP of 2.7 percent over the same period. For more information about RGNDI, see Definitions.

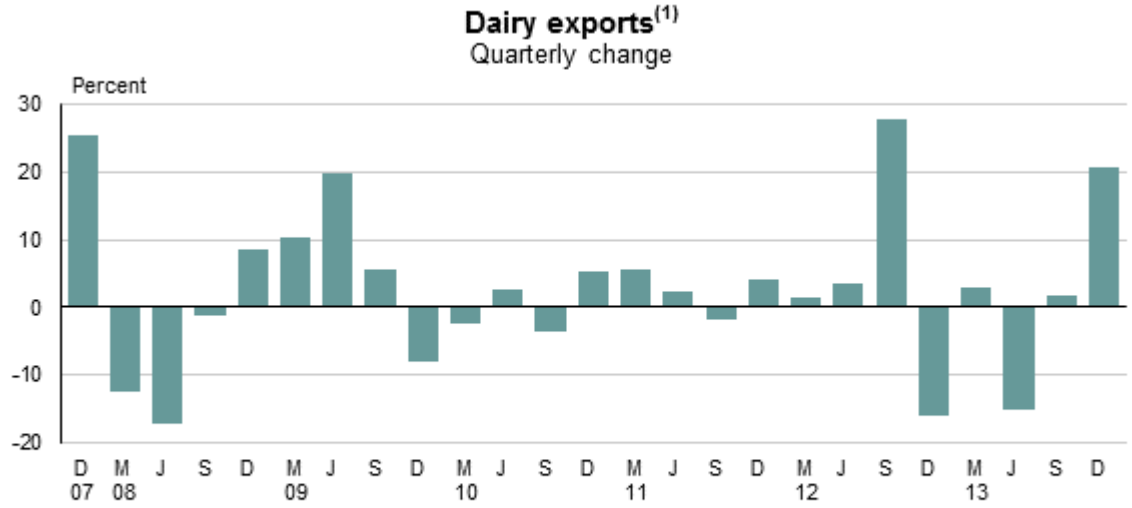


1. Actual chain-volume series expressed in 1995/96 prices.

Source: Statistics New Zealand

Dairy exports rise, despite production falls

Exports of dairy products increased 20.6 percent in the December 2013 quarter, following a 1.8 percent increase last quarter. In contrast, both dairy farming and dairy product manufacturing fell.



1. Seasonally adjusted chain-volume series expressed in 1995/96 prices.

Source: Statistics New Zealand

The increase in exports this quarter was sourced from a run down in inventories. These inventories were built up last quarter, as production bounced back from the drought that affected much of the country in the first half of 2013.

While dairy product manufacturing fell this quarter, the Economic Survey of Manufacturing: December 2013 quarter (ESM) reported a 15 percent increase in the volume of meat and dairy sales. This contrast is explained by differences in what is being measured: the ESM shows that more goods were sold this quarter, while GDP shows that fewer goods were produced, so inventories were run down to meet the increased sales.

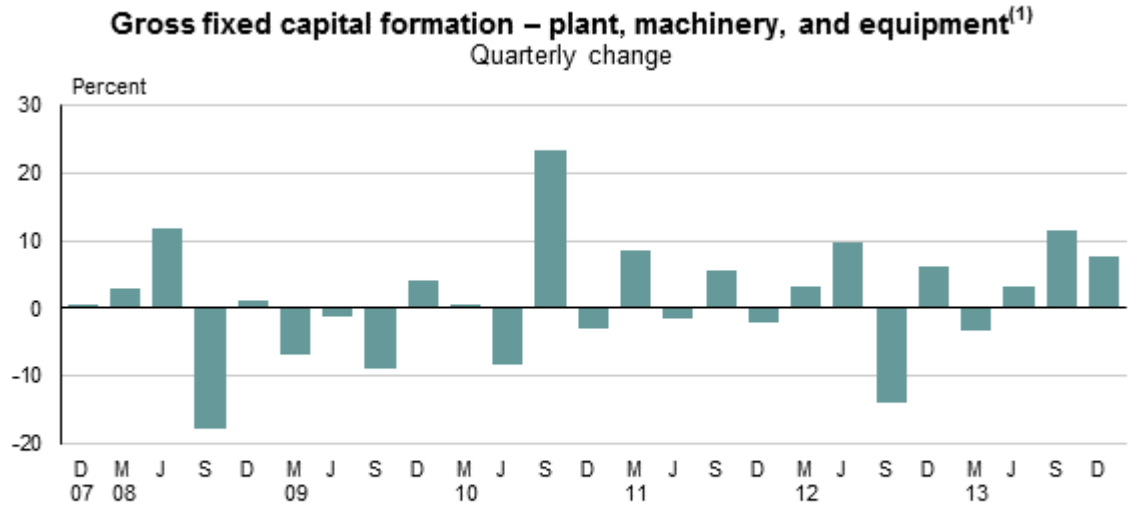
Despite the decline in dairy and meat manufacturing, activity in food, beverage, and tobacco manufacturing increased 2.5 percent overall. This increase was driven by other food manufacturing, and beverage and tobacco manufacturing. Combined with a 6.2 percent increase in transport equipment, machinery, and equipment manufacturing, this drove a 2.1 percent increase in total manufacturing. Total manufacturing activity is now at its highest level since March 2006.

1. Seasonally adjusted chain-volume series expressed in 1995/96 prices.

Source: Statistics New Zealand

Machinery investment strong

Plant, machinery, and equipment investment grew 7.5 percent this quarter and is now at its highest-ever level. This investment was sourced from domestic production, imports of goods, and inventories.



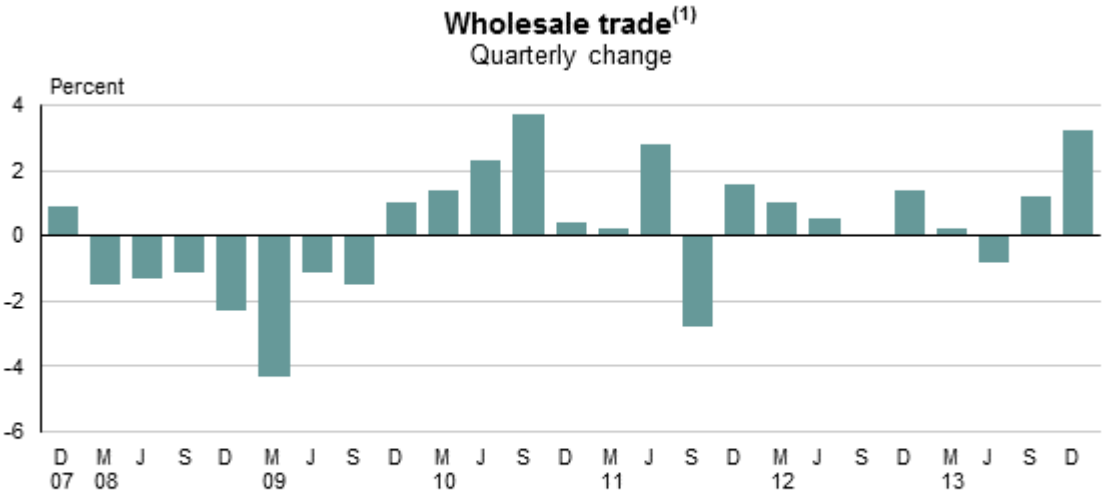
1. Seasonally adjusted chain-volume series expressed in 1995/96 prices.

Source: Statistics New Zealand

Domestic production increased, with activity in transport equipment, machinery, and equipment manufacturing up 6.2 percent in the December 2013 quarter. Activity in this industry is at its highest level since March 2011. Imports of plant and machinery were up slightly, while inventories of these types of goods were run down.

Wholesale trade up

The increase in plant, machinery, and equipment investment was also reflected in increased wholesaling activity. Wholesale trade was up 3.2 percent, with machinery and equipment wholesaling one of the main contributors to the growth.

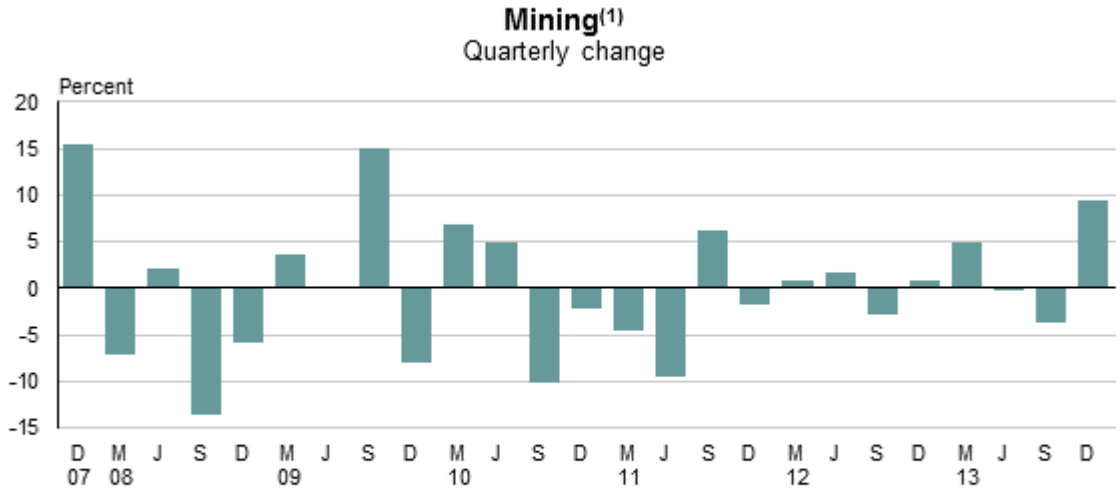


1. Seasonally adjusted chain-volume series expressed in 1995/96 prices.

Source: Statistics New Zealand

Intangible investment grows

Investment in intangible assets also grew this quarter, with increases in mining exploration and computer software. Mining production increased 9.5 percent, driven by oil and gas exploration.



1. Seasonally adjusted chain-volume series expressed in 1995/96 prices.

Source: Statistics New Zealand

Construction investment a mixed bag

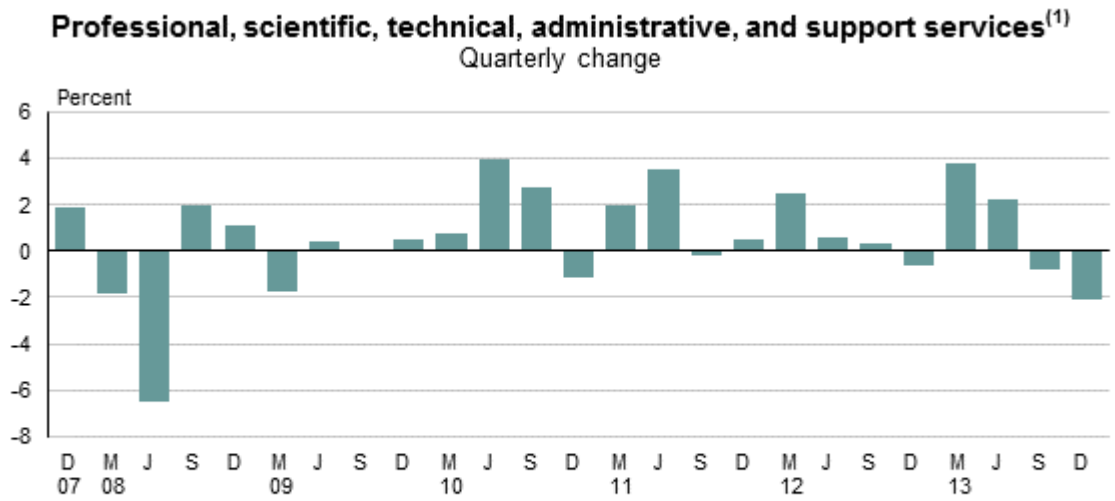
Investment in infrastructure increased 8.8 percent in the December 2013 quarter, and residential investment increased 0.1 percent. Meanwhile, investment in non-residential construction decreased 4.6 percent. The mixed investment picture was also reflected in a 0.4 percent increase in construction activity on the production measure of GDP.

The increase in investment in infrastructure follows a 28.8 percent fall in the September quarter and strong increases in earlier quarters. Levels of infrastructure investment can vary from quarter to quarter as large projects are started or completed.

The Value of Building Work Put in Place is a key input into our measure of residential and non-residential investment. Value of Building Work Put in Place: December 2013 quarter (which is in current prices) reported that seasonally adjusted non-residential building work in Canterbury fell 6.6 percent, compared with a 2.9 percent fall in the rest of New Zealand. All building activity was up 0.7 percent in Canterbury, compared with a 0.5 percent fall in the rest of the country.

Business services decreased

Business services decreased 2.1 percent in the December 2013 quarter. This was driven by professional, scientific, and technical services, which fell 3.0 percent, mostly due to architectural and engineering services. The professional, scientific, and technical services industry has been particularly strong over recent quarters. Despite the fall in the December quarter, this industry is still at near-record levels.

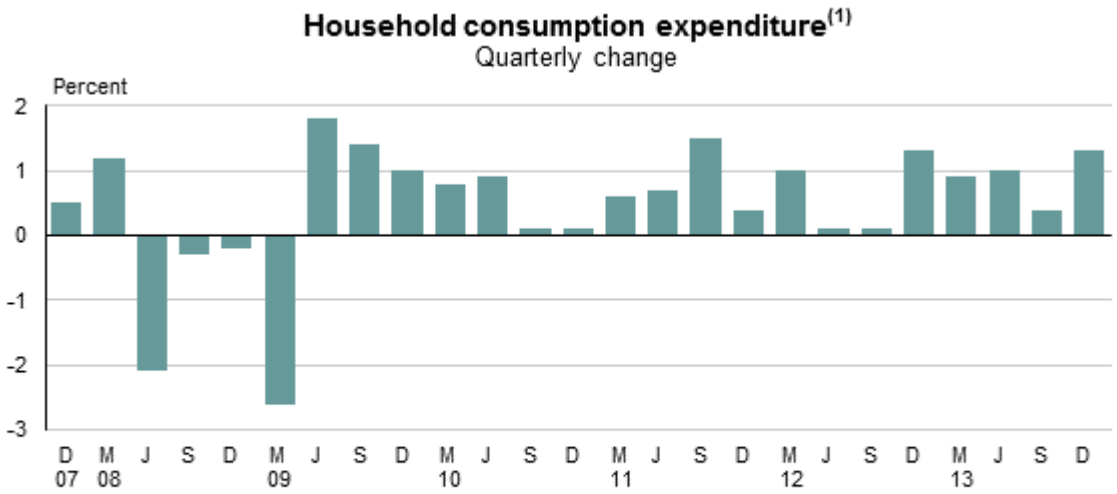


1. Seasonally adjusted chain-volume series expressed in 1995/96 prices.

Source: Statistics New Zealand

Durables drive household consumption

Household final consumption expenditure (HCE) increased 1.3 percent in the December 2013 quarter, compared with an increase of 0.4 percent in the September 2013 quarter. Within HCE, spending on durable goods contributed most to the latest increase.



1. Seasonally adjusted chain-volume series expressed in 1995/96 prices.

Source: Statistics New Zealand

Durable goods increased 2.6 percent, due to increased spending on clothing and audio-visual equipment (such as televisions). Household spending on durable goods has risen for six consecutive quarters since June 2012. It grew 7.4 percent in the December 2013 year, which is the highest annual increase since June 2005. The increase in spending on durable goods is also reflected in increased retailing activity on the production measure of GDP.

The volume of spending on services increased 1.2 percent this quarter, due to higher spending on housing and gambling. Spending on air transport services, and vehicle servicing and repairs, was also up.

Household spending on non-durable goods was almost flat, with an increase of 0.2 percent this quarter. This increase was partly due to higher consumption of electricity. The increase was partly offset by lower household spending on groceries.

Spending by overseas visitors in New Zealand was down 2.5 percent this quarter, while New Zealand residents overseas increased their volume of spending by 2.0 percent.

For more detailed data see the Excel tables in the 'Downloads' box.

Definitions

About gross domestic product

Gross domestic product (GDP) is New Zealand's official measure of economic growth.

Three different approaches can be taken to calculate GDP – the production approach, the expenditure approach, and the income approach. The production and expenditure approaches are used to calculate New Zealand's GDP on a quarterly basis. The production approach is available on a chain-volume basis, while the expenditure approach is on a chain-volume basis, and in current prices. Chain-volume estimates have the effect of price change (inflation) removed from them.

The **production approach** to GDP measures the total value of goods and services produced in New Zealand, after deducting the cost of goods and services used in the production process. This is also known as the value-added approach.

The **expenditure approach** to GDP (also known as GDE) measures the final purchases of goods and services produced in the New Zealand domestic territory. Exports are added to domestic consumption, as they represent goods and services produced in New Zealand, while imports are subtracted. Imports represent goods and services produced by other economies.

Conceptually, both the production-based and expenditure-based GDP series should produce the same growth rates, because what is produced by an economy should equal what is used. However, as each series uses independent data and estimation techniques, some differences between the alternative measures arise. The expenditure-based series has historically shown more quarterly volatility and is more likely to be subject to timing and valuation problems. For these reasons, the production-based measure is the preferred measure for quarter-on-quarter and annual changes.

More definitions

Broad industry groups: in tables 3, 4, 5, 6, 25, and 26, industry groups are combined to form the following broad groupings, based on the Australian and New Zealand Standard Industrial Classification 2006 (ANZSIC06):

- primary industries (agriculture, forestry, and fishing; mining)
- goods-producing industries (manufacturing; electricity, gas, water, and waste services; construction)
- service industries (wholesale trade; retail, accommodation, and restaurants; transport, storage, and warehousing; finance and insurance services; rental, hiring, and real estate services; professional, scientific, technical, administration, and support services; public administration and safety; education and training; health care and social assistance; arts, recreation, and other services).

As well as these industrial groupings, there is an 'unallocated' category. This category includes taxes on production and imports (import duties, GST, and taxes on capital transactions) that are not allocated to industries.

Business investment: measures the investment of producers in land improvements; non-residential building; other construction; transport equipment; plant, machinery, and equipment; and intangibles (mining exploration and computer software).

Chain-volume series expressed in 1995/96 prices: The series in this release are chain-linked and expressed in the average prices of the 1995/96 year. They are best described as annually reweighted, chained Laspeyres volume indexes. Series are expressed in 1995/96 dollars rather than as index numbers, since this has the advantage of showing the relative size of each component. For more information on chain-volume series, see 'Constructing a chain-volume series' in the data quality section of this release.

Change in inventories: Change in the value of inventories of raw materials, work-in-progress, and finished goods, over a given period. The change is measured in the appropriate prices in the market at the time additions and withdrawals are made. The correct valuation of the change in inventories requires continually updated data on the quantities of individual commodities held in stock together with appropriate prices. As this data is rarely available, the usual practice is to revalue stocks at the end of the period. This is the best estimate of the physical change in stocks during a given period.

Durable goods: are goods that are not consumed in one use (eg appliances and electronic goods).

Gross fixed capital formation: Outlays of producers on durable fixed assets, such as buildings, motor vehicles, plant and machinery, hydro-electric construction, roading, and improvements to land. 'Gross' indicates that consumption of fixed capital is not deducted from the value of the outlays.

Gross national disposable income (GNDI): is the income received (less income payable) by New Zealand residents, from both domestic and overseas sources, after taking account of income redistribution by way of international transfers, or gross national income (GNI) plus international transfers.

Household consumption expenditure (HCE): is an estimate of total expenditure by New Zealand resident households. It includes expenditure by New Zealand households overseas but does not include expenditure by overseas tourists in New Zealand.

Implicit price deflators: Tables 23 and 24 contain implicit price deflators (IPDs) for expenditure on GDP and its components. IPDs provide a broad measure of price change for total economic activity and each of the expenditure components.

Low-value imports: are imports of goods purchased directly by New Zealand households which have a value of less than $1,000. These are estimated separately as they are not captured in the administrative data used to measure imports of goods.

Non-durable goods: are goods that are either consumed immediately in one use or within three years.

Real gross national disposable income (RGNDI): measures the real purchasing power of national disposable income, taking into account changes in the terms of trade, and real gains from net investment and transfer income with the rest of the world. Effectively, it is a measure of the volume of goods and services New Zealand residents have command over. For more information on calculating RGNDI, please refer to 'Calculating real gross national disposable income' in the data quality section of this release.

Services: products other than tangible goods. Services result from production activity that changes the conditions of the consuming units, or makes the exchange of products or financial assets possible.

Value added: income formed in the production process. Value added equals output minus intermediate consumption. Value added is the income available to reward the production factors involved.

Related links

Upcoming releases

Gross Domestic Product: March 2014 quarter will be released on 19 June 2014.

Subscribe to information releases, including this one, by completing the online subscription form.

The release calendar lists all our upcoming information releases by date of release.

Recent releases

The quarterly production measure of GDP has been reconciled to balanced annuals data from National Accounts (Industry Benchmarks): Year ended March 2011. For more information about the reconciliation process, see Revisions.

The quarterly expenditure measure of GDP has been reconciled to annual data from National Accounts (Income and Expenditure): Year ended March 2013.

Past releases

Gross Domestic Product – information releases has links to past releases.

Related information

National accounts provide an annual measure of economic aggregates in the New Zealand economy.

Data quality

Period-specific information
This section contains information that has changed since the last release.

- Reference period

General information
This section contains information that does not change between releases.

- Data source
- Incorporating annual data
- The System of National Accounts
- Australian and New Zealand Standard Industrial Classification 2006
- Constructing a chain-volume series
- Revisions resulting from chain-linking
- Calculating real gross national disposable income
- Calculating implicit price deflators
- Revisions policy
- Interpreting the data
- Confidentiality and accessing the data
- More information

Period-specific information

Reference period

Information for this release was collected for the period October–December 2013.

General information

Data source

Quarterly Gross Domestic Product: Sources and Methods (third edition) presents the sources and methods used in compiling quarterly GDP.

Incorporating annual data

National Accounts (Industry Benchmarks): Year ended March 2011 was released on 21 November 2013. As annual data has a wider range of data sources, it is more complete. We reconciled the quarterly estimates of industries in GDP and the components of gross domestic expenditure (GDE) to annual estimates to ensure we show the most robust picture of economic activity.

We incorporated annual benchmarks for the production measure of GDP up to the year ended March 2011, and to the year ended March 2013 for GDE.

See National Accounts (Income and Expenditure): Year ended March 2013 for more information.

The System of National Accounts

The conceptual framework we use to compile New Zealand's national accounts and GDP is based on the System of National Accounts 1993 (SNA93). The SNA93 is jointly published by the United Nations, the Commission of the European Communities, the International Monetary Fund, the Organisation for Economic Co-operation and Development, and the World Bank.

The latest SNA is for 2008 (SNA08). New Zealand will introduce SNA08 into the New Zealand accounts at the end of 2014.

Australian and New Zealand Standard Industrial Classification 2006

The production measure of GDP is presented by industry. The industry classification we use for GDP is the Australian and New Zealand Standard Industrial Classification 2006 (ANZSIC06).

See ANZSIC 2006 – industry classification for more information about implementing ANZSIC06.

Gross Domestic Product: December 2011 quarter was the last GDP release to use ANZSIC96.

Constructing a chain-volume series

We constructed the chain-volume measures of GDP and GDE by:

(a) compiling a Laspeyres volume index of the component in question, using the previous year's prices as weights; then

(b) chaining the sequence of annual movements to produce a continuous time series.

This procedure is used at different levels within the accounts. For example, GDP is compiled by weighting together the individual industry value-added components to produce a Laspeyres volume index for each quarter, and then linking the resulting indexes to produce the GDP time series. Each industry component, such as transport, postal, and warehousing, is also a chained-volume series. At the lowest level, the 'elemental series' are not chained and are either single series in their own right or fixed-weight series comprising many components. Chaining is not adopted, either because the details needed for annual weights are not available, or relative price changes are not significant.

Note that chain-volume series are not additive (ie the chain-volume series for an aggregate will not equal the sum of the values of its components). See Chain volume measures in national accounts for a full explanation of the concepts and procedures used to compile chain-volume series.

Usually, the industry 'elemental series' estimates that make up the production-based GDP are calculated by extrapolating value added using indicator series that represent the quantities of output produced. The technique known as double deflation, by which volume value added is calculated as the difference between volume outputs and inputs, is not widely used. Double deflation on an annual basis is currently used for these industries: agriculture; electricity and water transport; owner-occupied dwellings; health care and social assistance; education and training; professional, scientific, and technical services; administration and support services; arts and recreation services; and other services.

Revisions resulting from chain-linking

One of the key benefits of adopting chain-volume measures in place of fixed-weight series is that the relative weights of the component series are more up-to-date. This reduces the likelihood of introducing biases in the volume measures, which would otherwise become progressively unrepresentative as relative prices change. The disadvantage is that the annual reweighting introduces another cause for revision.

Reweighting is part of the annual revisions cycle and is usually timed to coincide with the introduction of other new annual data from the current price GDP accounts. See the 'Incorporating annual data' section above.

The current price annual accounts provide the detailed component series needed for weighting the production-based series of GDP. There is usually a two-year time lag before these detailed series are available. The latest year for which up-to-date weights were used for the production-based series is for the year ended 31 March 2011, and all subsequent quarters use these weights.

Current price data for GDE components are timelier. As a result, the latest year for which up-to-date weights were used for the GDE series is for the year ended 31 March 2013. All subsequent quarters use these weights.

When the weights are updated, this procedure results in revisions to all periods beyond the latest year for which detailed series are available (currently 2010/11 for the production-based measure and 2012/13 for the expenditure-based measure).

Calculating real gross national disposable income

RGNDI is calculated as follows:

chain-volume measure of **gross domestic product** (production-based measure)
plus a terms of trade effect (trading gain/loss)
equals real gross domestic income
plus real value of total net investment income
equals real gross national income
plus real value of total net transfers
equals real gross national disposable income

where the terms of trade effect is defined as:
current price exports deflated by an imports implicit price index
less chain-volume measure of exports

and the real value of total net investment income equals:
investment income credits
less investment income debits
all deflated by an imports implicit price index

and the real value of total net transfers equals:
transfers credits
less transfers debits
all deflated by an imports implicit price index.

A per capita measure is simply the series in question divided by the projected population of New Zealand. From the March 1991 quarter onwards, we used the 'estimated resident population of New Zealand'. This is defined as New Zealand residents currently in New Zealand plus those temporarily overseas. Overseas tourists visiting New Zealand are excluded.

Calculating implicit price deflators

We calculate implicit price deflators (IPDs) by dividing the seasonally adjusted current price quarterly series by the equivalent chain-volume series. This provides a broad estimate of price change between the base period and any other period. Significant compositional changes may result in the IPDs being a less precise estimate of price change. This problem is more likely to occur in the gross national expenditure and expenditure on GDP aggregates. This is because both measures include the change in inventories item, which is highly subject to compositional changes, including a change in sign.

Revisions policy

We may revise previously published series each quarter. The frequency and cause of these revisions are listed below.

- **Quarterly –** more data becoming available for the latest quarters, which is used to replace existing estimates. Revisions to quarterly data (eg revisions to the Balance of Payments or Retail Trade Survey), which will be incorporated as soon as possible to maintain consistency between published macroeconomic statistics.
- **Annual –** introduction of annual data after the release of the latest annual national accounts; annual updating of the weights used to link component series to totals and subsequent chaining (see 'Revisions resulting from chain-linking' above).
- **Irregular –** for example, methodological changes. Note that as far as possible, revisions of this nature are incorporated to coincide with the annual cycle of revisions outlined above or are discussed in a separate paper ahead of the changes.

Each of the above causes for revision, and/or the addition of a new point in the actual quarterly series, can alter seasonal factors and may lead to a revision in the seasonally adjusted series.

Interpreting the data

Annual percentage changes

When using annual percentage changes, care should be taken to ensure the measures used are correctly understood. Annual measures are calculated by summing the actual series for a four-quarter period. Unless otherwise stated, the annual percentage change is the most recent four-quarter period compared with the previous four-quarter period.

Direct and indirect seasonal adjustment

The level at which a series is seasonally adjusted is important, since it has the potential to affect its quality. The individual component series of the main economic variables can be seasonally adjusted and then summed to derive totals. This is called an indirect seasonal adjustment. Alternatively, the main economic variables can be seasonally adjusted at the total level, independently of the seasonal adjustment of their components. The adjustment of the total of an aggregate series is called a direct seasonal adjustment. The indirect approach has the advantage of retaining additivity, but this applies only to the current price series. While the

indirect approach conceptually also provides additivity for volume series, additivity is lost by chain-linking.

The direct approach will often give better results if the component series show similar seasonal patterns. At the most detailed level, the irregular factor may be large compared with the seasonal factor and therefore may make it difficult to perform a proper seasonal adjustment. In a small country like New Zealand, irregular events can have a strong impact on particular data. However, if the component series show the same seasonal pattern, aggregation often reduces the impact of the irregular factors in the component series. This is relevant for New Zealand, where seasonal fluctuations in the primary industries affect economic series.

We analysed both direct and indirect approaches for the two quarterly GDP aggregates, the production and expenditure on GDP. We prefer to use the direct approach because the resulting series are smoother and more stable.

The residual between the seasonally adjusted components and the aggregates is referred to as the balancing item. The balancing item will often show significant seasonal variations. This is expected, as it captures the undetected seasonality in the component series.

The level at which seasonal adjustment is applied to quarterly GDP series may differ from other Statistics NZ surveys (eg the Economic Survey of Manufacturing and the Wholesale Trade Survey). These may contribute to differences in the aggregate seasonally adjusted series.

Explanation of the seasonally adjusted balancing item

Seasonal adjustment removes seasonal variation from a statistical series. By removing seasonal effects from GDP, we can better understand the underlying economic activity. Examples of seasonal variation in economic activity are milking and lambing seasons, Christmas shopping, and peak periods for visitors to New Zealand.

The seasonal adjustment balancing item is the difference between directly seasonally adjusting total GDP and seasonally adjusting each component of GDP and adding them together. Directly seasonally adjusting total GDP is the preferred method. The seasonal adjustment balancing item does not contribute to GDP and therefore should not be interpreted as an economic variable. It should also not be interpreted as a margin of error for the headline measure of GDP, as over the course of a year it balances out to zero.

We seasonally adjust quarterly GDP in line with international best practice.

Confidentiality and accessing the data

Data collected and information contained in this publication must conform to the provisions of the Statistics Act 1975. This requires that published information maintains the confidentiality of individual respondents.

More information

See more information about the quarterly gross domestic product.

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

Our information releases are delivered electronically by third parties. Delivery may be delayed by circumstances outside our control. Statistics NZ does not accept responsibility for any such delay.

Crown copyright©

Revisions

- Revisions to GDP
- Revisions to expenditure on GDP

We incorporated several revisions into GDP for the December 2013 quarter. Details of these revisions are discussed below.

Revisions to GDP

- Agriculture was revised, due to the incorporation of new benchmarks from the Agriculture Production Statistics: June 2013 (provisional) release and updated input data.
- Manufacturing was revised, due to revisions incorporated in the Economic Survey of Manufacturing: December 2013 quarter release. The revision affects the September 2013 quarter GDP.
- Updated source data for the September 2013 quarter resulted in revisions to fishing; electricity, gas, water, and waste services; information media and telecommunications; financial and insurance services; and rental, hiring, and real estate services.
- Retail trade and accommodation, and public administration and safety were revised due to a correction in the chaining for these industries.
- Arts, recreation, and other services was revised due to a system issue which affected only quarterly value added for the March year 1995. The quarterly series was not previously being correctly benchmarked to the annual series for the March 1995 year. This has now been corrected.

Revisions to expenditure on GDP

Inventories

Revisions to the June 2013 and September 2013 quarters are the result of reconciling inventory changes with the rest of the economy. In recent quarters, there have been large build ups and run downs in inventories such as dairy products. When this occurs, timing and valuation issues make measuring change in inventories more difficult. This is one reason the production-based measure is the official measure of GDP.

Revisions to other inventories and transport equipment gross fixed capital formation (GFKF) in the March 2012, September 2012, and June 2013 quarters are the result of completed P-3K Orion systems upgrade work for the Royal New Zealand Air Force. Parts for the upgrades of five P-3K Orion aircraft were imported in the June 2011 quarter, and recorded as other inventories. A run down in other inventories and a corresponding increase in transport equipment GFKF are recorded in each quarter that work is completed on an aircraft.

Inventories have also been revised due to more comprehensive agriculture data (from June 2012), and due to updated input data from the Economic Survey of Manufacturing (September 2013). See Economic Survey of Manufacturing: December 2013 quarter.

Other expenditure components

- Household consumption expenditure was revised due to updated selected services survey data, tax data, and balance of payments data; and revisions from interpolation.
- Central government final consumption expenditure was revised due to interpolation.

- Gross fixed capital formation was revised due to correcting an issue which meant the October 2010 GST change was being incorrectly captured in the volume measure of residential buildings; correcting an issue that affected quarterly movements of residential buildings between 1994 and 2006; correcting an issue with the provisional estimate annual benchmarks for exploration in 2012 and 2013; and updated data for transfer costs.
- Exports and imports of goods and services were revised in the September 2013 quarter due to updated Overseas Trade and Balance of Payments data.

The following table shows the previously published and revised quarterly movements for GDP and expenditure on GDP.

Quarter	**Gross domestic product – percentage change from previous quarter**		**Expenditure on gross domestic product – percentage change from previous quarter**	
	Previously published	Revised	Previously published	Revised
June 2007	0.8	0.8	1.8	1.8
September 2007	0.7	0.7	0.7	0.7
December 2007	0.1	0.1	0.4	0.4
March 2007	0.4	-0.4	-0.3	-0.3
June 2008	-1.2	-1.2	-1.6	-1.6
September 2008	-0.2	-0.2	-0.4	-0.5
December 2008	-0.6	-0.7	-0.1	-0.1
March 2009	-1.0	-1.0	-0.2	-0.2
June 2009	-0.2	-0.2	1.3	1.3
September 2009	0.6	0.6	0.9	0.8
December 2009	1.5	1.4	0.6	0.6
March 2010	0.2	0.2	1.0	1.0
June 2010	1.0	1.0	0.3	0.4
September 2010	-0.3	-0.3	-1.3	-1.3
December 2010	-0.5	-0.5	-0.1	-0.2
March 2011	0.9	0.9	0.2	0.2
June 2011	0.8	0.8	1.0	1.1
September 2011	0.9	0.9	1.3	1.3
December 2011	0.7	0.6	0.8	0.7
March 2012	0.9	0.9	0.6	0.6
June 2012	0.2	0.2	0.3	0.4
September 2012	0.2	0.2	0.5	0.5
December 2012	1.3	1.2	1.2	1.1
March 2013	0.5	0.5	0.5	0.6
June 2013	0.3	0.4	0.2	0.1
September 2013	1.4	1.2	1.1	1.0

Contacts

For media enquiries contact:
Daniel Lensen
Wellington 04 931 4600
Email: info@stats.govt.nz

For technical information contact:
Sabine Hoellersberger or Matthew Collison
Wellington 04 931 4600
Email: info@stats.govt.nz

For general enquiries contact our Information Centre:
Phone: 0508 525 525 (toll free in New Zealand)
+64 4 931 4600 (outside New Zealand)
Email: info@stats.govt.nz

Subscription service:
Subscribe to information releases, including this one, by completing the online subscription form.

Correction notifications:
Subscribe to receive an email if a correction notice is published for Gross Domestic Product.
Unsubscribe to correction notifications for Gross Domestic Product.

Subscribe to all to receive an email if a correction notice is published for any of our information releases.
Unsubscribe to all if you change your mind.

Tables

The following tables are available in Excel format from the ‘Downloads’ box. If you have problems viewing the files, see opening files and PDFs.

1 Gross domestic product by industry – December 2013 quarter
2 Expenditure on gross domestic product – December 2013 quarter
3 Gross domestic product by industry – quarterly value
4 Gross domestic product by industry – quarterly percentage change
5 Gross domestic product by industry – annual value
6 Gross domestic product by industry – annual percentage change
7 Expenditure on gross domestic product – quarterly value
8 Expenditure on gross domestic product – quarterly percentage change
9 Expenditure on gross domestic product – annual value
10 Expenditure on gross domestic product – annual percentage change
11 Household consumption expenditure – quarterly value and percentage change
12 Household consumption expenditure – annual value and percentage change
13 Gross fixed capital formation – quarterly value and percentage change
14 Gross fixed capital formation – annual value and percentage change
15 Exports of goods and services – quarterly value and percentage change
16 Imports of goods and services – quarterly value and percentage change
17 Expenditure on gross domestic product current price – quarterly value
18 Expenditure on gross domestic product current price – quarterly percentage change
19 Expenditure on gross domestic product current price – annual value
20 Expenditure on gross domestic product current price – annual percentage change
21 Per capita measures – quarterly value and percentage change
22 Per capita measures – annual value and percentage change
23 Implicit price deflators – quarterly index values and percentage change
24 Implicit price deflators – annual index values and percentage change
25 Gross domestic product by industry – percentage change from same quarter of previous year
26 Gross domestic product by industry – year ended December value
27 Gross domestic product by industry – year ended December percentage change
28 Expenditure on gross domestic product – year ended December value and percentage change

Supplementary tables

These tables show a longer time series for expenditure on gross domestic product and gross domestic product by industry than is included in the December 2013 quarter tables. See the 'Downloads' box.

1 Expenditure on gross domestic product – annual value
2 Expenditure on gross domestic product components – quarterly value
3 Expenditure on gross domestic product components – quarterly percentage change
4 Gross domestic product by industry – annual value
5 Gross domestic product by industry – quarterly value
6 Gross domestic product by industry – quarterly percentage change

Access more data on Infoshare

Use Infoshare to access time-series data specific to your needs. For this release, select the following categories from the Infoshare homepage:

Subject category: **Economic indicators**
Group: **National Accounts – SNA 1993 – SND**