

Economic Outlook

Overview

After a slow recovery from recession, real GDP growth in the New Zealand economy picked up over 2012, reaching 2.5%, the strongest annual average rate since March 2008. Looking forward, the economy is forecast to grow at an average pace of 2.5% per year over the five years to March 2017 (Figure 1.1).

Growth outlook influenced by supportive and constraining factors

The growth outlook reflects the net impact of a number of supporting and constraining influences. On the supportive side are the Canterbury rebuild, a high terms of trade, low interest rates and less risk-averse households and firms.

An elevated exchange rate will act as a constraining force on growth as well as working against a rebalancing of growth towards exports. In the near term, the recent drought will also restrain growth as agricultural output is

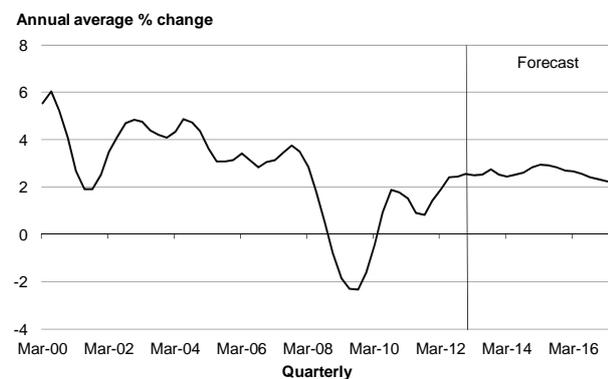
lowered, but it is expected to rebound later as weather conditions return to normal. The forecast reduction in the fiscal deficit will lean against demand growth and reduce pressure on resources, supporting lower interest rates.

These influences on the outlook for the economy are the same as in the *Half Year Economic and Fiscal Update*, with the exception of the drought that developed in early 2013.

Several global factors will impact in different ways...

The trading partner growth outlook is similar to that presented in the *Half Year Update*, strengthening slightly over the forecast period from 3.4% in 2013 to 3.9% in 2017. Around this outlook, risks have become more even as a result of policy action to reduce the prospects of downside risks eventuating, but on balance they remain skewed towards weaker growth.

Figure 1.1 – Real GDP growth



Sources: Statistics New Zealand, the Treasury

Global demand is expected to push export prices higher, leading to an increase in the goods terms of trade over the forecast horizon. This is a key impetus for income growth and growth in the nominal economy, supporting tax revenues.

In contrast, global monetary policy settings are acting to hold the New Zealand dollar (NZD) at current high levels. The exchange rate is assumed to remain high until around 2015, before depreciating somewhat. This will constrain non-commodity export growth, including services exports.

The drought will reduce economic activity in the 2013 calendar year, with an estimated negative impact on real GDP growth of 0.7 percentage points. However, there are risks that the impact could be greater if the drought has a larger effect on agricultural output. The impact on nominal GDP is expected to be broadly similar to the 0.7 percentage point real impact in the 2013 calendar year, equivalent to around \$1.5 billion.

...while the Canterbury rebuild is a significant driver of GDP growth...

The Canterbury rebuild is expected to provide significant impetus to growth over the forecast horizon, chiefly through additional residential and business investment, but also through related consumption spending. The rebuild will also contribute to an improvement in the labour market, with the unemployment rate falling to 5.2% by 2017. It is expected a significant proportion of the residential rebuild will be completed by 2017, but levels of investment should remain high beyond this as the commercial rebuild continues and there is a more widespread pick up in activity.

...as low interest rates and household behaviour also impact on output growth

Interest rates are expected to remain supportive of growth over most of the forecast horizon. Ninety-day interest rates are expected to begin increasing from record low levels in mid-2014 as inflationary pressures rise in the economy. Inflation is expected to rise to the middle of the 1% to 3% target band in the March 2014 year as the Canterbury rebuild ramps up and spare capacity is used up in the economy.

Households are now assumed to be broadly comfortable with their financial position, given the amount of debt reduction (as a share of income) undertaken over recent years. This, combined with some moderation in risk aversion, is expected to see the household saving rate remain broadly stable over the forecast period. This results in stronger consumption growth than in the 2012 and 2013 March years, as household spending grows more in line with income growth.

The mix of the high NZD and strong domestic demand growth contributes to a widening of the annual current account deficit, from 5.0% of GDP in the December 2012 quarter to 6.5% in the March 2017 quarter.

Table 1.1 – Economic forecasts¹

(Annual average % change, March years)	2012 Actual	2013 Estimate	2014 Forecast	2015 Forecast	2016 Forecast	2017 Forecast
Private consumption	2.4	1.9	2.8	2.8	2.5	2.0
Public consumption	1.8	0.4	0.2	0.1	0.6	0.6
Total consumption	2.3	1.6	2.2	2.2	2.1	1.7
Residential investment	-10.6	16.8	29.2	21.0	11.8	2.4
Market investment	8.7	7.9	14.8	6.3	1.9	0.3
Non-market investment	-14.8	-14.2	-0.4	2.4	2.4	2.4
Total investment	2.3	8.0	19.7	9.6	4.1	0.9
Stock change ²	0.5	-0.7	0.1	-0.2	0.0	0.0
Gross national expenditure	3.2	2.1	6.1	3.9	2.6	1.5
Exports	2.5	2.6	-2.8	2.6	2.3	2.6
Imports	6.2	-0.5	7.6	6.2	3.1	1.3
GDP (expenditure measure)	2.2	2.9	2.4	2.7	2.6	2.2
GDP (production measure)	1.9	2.5	2.4	3.0	2.6	2.2
Real GDP per capita	1.0	1.7	1.4	2.0	1.7	1.3
Nominal GDP (expenditure measure)	3.8	2.7	6.4	4.6	4.3	3.9
GDP deflator	1.6	-0.2	3.9	1.9	1.6	1.6
Output gap (% deviation, March quarter) ³	-1.4	-0.8	-0.3	0.1	0.2	0.1
Employment	1.4	-0.5	1.5	2.7	1.4	1.2
Unemployment rate ⁴	6.7	6.9	6.0	5.9	5.5	5.2
Participation rate ⁵	68.7	67.4	68.1	68.6	68.5	68.3
Nominal wages ⁶	3.8	2.0	2.8	2.2	2.8	3.3
CPI inflation ⁷	1.6	0.9	1.9	2.0	2.0	2.2
Terms of trade ⁸	1.2	-6.6	10.0	0.9	1.2	1.0
Current account balance						
\$billion	-9.1	-10.1	-10.9	-12.3	-14.3	-16.6
% of GDP	-4.4	-4.8	-4.8	-5.2	-5.8	-6.5
Net international investment position						
% of GDP	-70.7	-71.9	-72.4	-74.5	-77.2	-80.9
TWI ⁹	72.5	75.9	77.0	76.1	73.5	69.2
90-day bank bill rate ⁹	2.7	2.7	2.7	3.6	4.3	4.8
10-year bond rate ⁹	4.0	3.7	4.2	4.6	4.9	5.2

Notes:

- 1 Forecasts finalised 18 April 2013
- 2 Contribution to GDP growth
- 3 Estimated as the percentage difference between actual real GDP and potential real GDP
- 4 Percent of the labour force, March quarter, seasonally adjusted
- 5 Percent of the working-age population, March quarter, seasonally adjusted
- 6 Quarterly Employment Survey, average ordinary-time hourly earnings, annual percentage change
- 7 Annual percentage change, actual for 2013
- 8 System of National Accounts (SNA) and merchandise basis, annual average percentage change
- 9 Average for the March quarter, actual for 2013

Longer time series for these variables are provided on page 127.

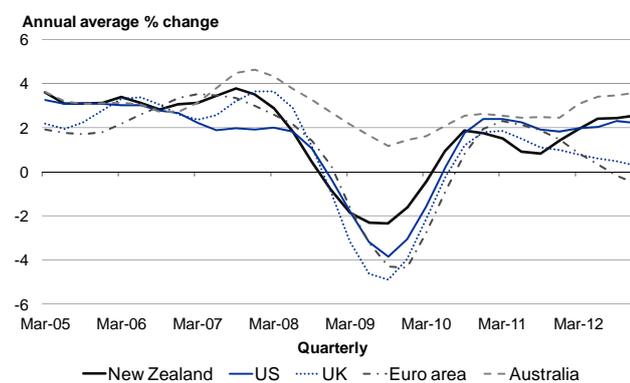
Recent Economic Developments

Economic growth picked up pace at the end of 2012...

After a period of weak growth in the middle of 2012, New Zealand's real GDP rose 1.5% in the December 2012 quarter. Growth was broad-based across industries, with the forestry and logging sector performing well, in part owing to good harvesting conditions and robust demand from China. Construction activity also accelerated, as the Canterbury rebuild began to get underway in earnest. However, while real GDP growth was strong in the quarter, nominal GDP growth continued to be low, declining for the third time in four quarters, as the terms of trade fell further and pricing pressures remained weak in the economy.

The strong December quarter real GDP growth contributed to a solid 2012 year overall for the economy. Real production GDP rose 2.5% in the year to 2012, the strongest annual average growth rate since March 2008 and faster than many other developed economies (Figure 1.2). Despite solid growth in real GDP, employment growth has been weak and the unemployment rate remains elevated. The recent performance of the labour market is discussed in more detail in the box "Recent Labour Market Conditions" (page 21).

Figure 1.2 – Real GDP growth rates



Sources: Statistics New Zealand, Haver Analytics

...with indicators pointing to ongoing strength in early 2013...

Indicators point to continuing growth in early 2013. Higher business confidence points to increased activity, which should translate into additional business investment. Consumer confidence has also picked up in 2013, suggesting ongoing consumption growth, although some moderation is expected from the surge in private consumption seen in the December quarter. Other indicators, such as the Performance of Manufacturing Index (PMI) and Performance of Services Index (PSI), point to a recovery in the manufacturing sector and continuation of growth in the service sector respectively.

...but drought will provide some offset

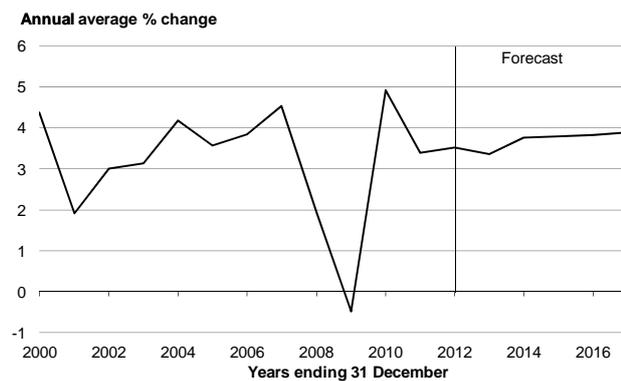
The impact of the drought will provide some offset to the positive growth suggested by forward-looking indicators. The drought will lower agricultural output, particularly in the dairy sector, as well as have other impacts throughout the economy. The impacts of the drought are discussed in more detail in the box "Economic Impacts of the Drought" (page 17).

International Economic Outlook

Global growth steady, while downside risks recede

As the global financial crisis clearly illustrated, global economic conditions are an important force impacting on the New Zealand economy. The trading partner growth outlook is similar to that underpinning forecasts in the *Half Year Update*. New Zealand's main trading partners, weighted by export share, are expected to grow 3.4% in the 2013 calendar year. This is slightly slower than 2012, primarily owing to slower Australian growth as mining investment moderates (Table 1.2). Trading partner growth is then expected to pick up to just below 4.0% by 2017 (Figure 1.3).

Figure 1.3 – Top-16 trading partner growth



Sources: IMF, Haver Analytics, the Treasury

While the central outlook for trading partner growth remains broadly unchanged from the *Half Year Update*, the risks to the outlook have become more balanced. Policy actions by central banks, including the willingness

of the European Central Bank to purchase government bonds, additional quantitative easing in the US and additional monetary easing in Japan, have all contributed to a reduction in extreme downside risks. There are also upside risks to the outlook, some of which are associated with the impacts of increased monetary easing in Japan and the US, but also a stronger-than-expected cyclical rebound in global demand.

However, risks are still slightly skewed to the downside. The euro area remains weak, with the region's activity expected to contract again in 2013. The bailout of Cyprus in March shows policy-makers are still only "managing through" the crisis, while the underlying issues of high government debt and a lack of competitiveness in the peripheral economies remain. Other downside risks include a greater-than-expected impact on growth from the automatic government spending cuts in the US, as well as a large housing market correction in China. More detail on the risks to the global outlook can be found in the Risks and Scenarios chapter.

Table 1.2 – Trading partner growth (calendar years)

	2013 weights	2012 Actual	2013 Forecast	2014 Forecast	2015 Forecast	2016 Forecast	2017 Forecast
Australia	27%	3.6	2.7	2.9	3.0	3.0	3.0
China	17%	7.8	8.0	7.6	7.3	7.0	7.0
United States	11%	2.2	1.7	2.4	2.5	2.5	2.5
Japan	9%	2.0	1.0	1.4	1.1	1.0	1.0
Euro area	8%	-0.5	-0.4	1.0	1.2	1.3	1.4
United Kingdom	4%	0.3	0.7	1.4	1.8	2.0	2.0
Canada	2%	1.8	1.6	2.3	2.4	2.5	2.5
Other Asia*	23%	3.8	4.3	4.7	5.0	5.0	5.0
Trading Partner Growth (TPG)	100%	3.5	3.4	3.8	3.8	3.8	3.9
TPG - Consensus (April 2013)		3.5	3.5	3.9	4.1	4.1	4.0
TPG - IMF WEO (April 2013)		3.5	3.5	4.1	4.2	4.3	4.4

* South Korea, Taiwan, Hong Kong, Singapore, Malaysia, Indonesia, Thailand, Philippines, India

Sources: IMF, Haver Analytics, Consensus Economics, the Treasury

New Zealand Economic Outlook

Moderate growth in New Zealand's economy expected to continue...

Overall, real GDP growth in the New Zealand economy is expected to be similar to the forecasts presented in the *Half Year Update* in December, averaging 2.5% per year, a little above the Treasury's estimate of potential growth over the forecast period. However, the profile of growth is slightly different to the *Half Year Update*, owing to a stronger-than-expected exchange rate, lower-than-expected pricing pressures, revisions to previous data and, most notably, the impact of the drought on the agricultural and related industries.

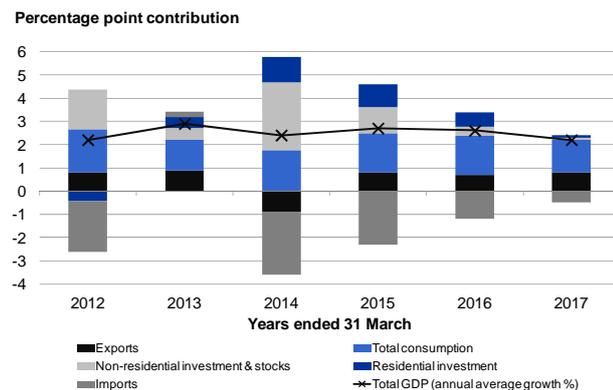
Real production GDP growth is forecast to be 2.5% and 2.4% in the years ending March 2013 and March 2014 respectively, compared with 2.3% and 2.9% forecast in the *Half Year Update*. The March 2014 year growth rate is lower than in the *Half Year Update* primarily because of the impact of the drought on the economy.

Nevertheless, growth in the March 2015 year and beyond is expected to pick up as business and residential investment rise, in part driven by the Canterbury rebuild, as well as the recovery from the drought. Growing consumption, as incomes improve, also plays a part. Net exports are expected to be a drag on growth from 2013 to 2016 (March years), as a higher NZD impacts on export and import demand. Imports also grow owing to demand arising from the Canterbury rebuild. After this, net exports are forecast to provide a positive contribution as international demand continues to grow and the NZD depreciates. Figure 1.4 shows the main contributions to expenditure GDP growth.

...as private consumption continues growing solidly...

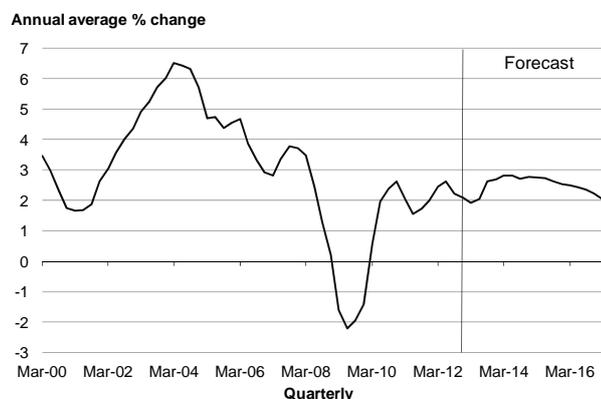
Private consumption is expected to make a solid contribution to GDP growth over the forecast period. Private consumption growth is expected to pick up over 2013 and 2014 as consumer confidence remains elevated and incomes rise. Annual real private consumption growth is forecast to peak at 2.8% in the 2014 and 2015 March years, before moderating to 2.0% in the March 2017 year (Figure 1.5). The other main driver of the increase in consumption over the forecast period is the pick up in residential investment, especially with the Canterbury rebuild, resulting in additional durables consumption. It is expected that the recent rise in house prices will have less effect on consumption than in the previous cycle, as households have become more

Figure 1.4 – Composition of Expenditure GDP growth



Sources: Statistics New Zealand, the Treasury

Figure 1.5 – Private consumption



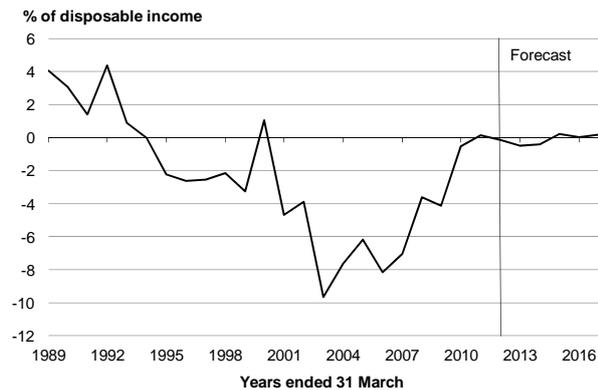
Sources: Statistics New Zealand, the Treasury

cautious. As a result, consumption generally grows with income, with only a small scope for housing equity withdrawal as a means of funding additional spending. The Government’s signalled changes to ACC levies are expected to result in additional modest increases in consumption, focused mainly towards the end of the forecast period. More details on signalled changes to ACC levies can be found in the Fiscal Outlook chapter on page 35.

...while the household saving rate remains steady

Household saving as a percentage of disposable income is expected to remain broadly in balance across the forecast period, as it has been for the past few years (Figure 1.6). This represents a shift in behaviour from much of the past two decades and its continuation will be an important factor influencing demand in the economy. Household saving is around 10 percentage points higher than its low a decade ago.

Figure 1.6 – Net household saving rate



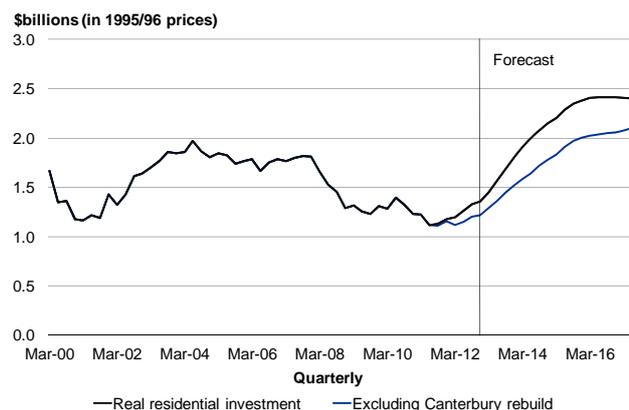
Sources: Statistics New Zealand, the Treasury

It is assumed that households are now broadly comfortable with the amount of debt reduction (as a share of income) undertaken over recent years given developments in their net worth, partly driven by house price developments, reduced uncertainty about future economic growth, and income prospects. However, households are expected to remain cautious in their spending habits, with increases in consumption coming from rises in income, rather than from running down assets or increasing debt further.

GDP growth to be boosted by residential investment from the Canterbury rebuild...

Residential investment remains a key driver of demand growth in these forecasts. A significant proportion of the growth in residential investment across the forecast period is driven by earthquake-related investment associated with the Canterbury rebuild. There are signs that the rebuild is about to ramp up significantly, with building consents and anecdotal evidence from the region suggesting that a number of the factors delaying progress thus far are diminishing. Annual real residential investment growth is expected to peak at almost 30% in the March 2014 year, as the Canterbury rebuild gets into full swing.

Figure 1.7 – Real residential investment



Sources: Statistics New Zealand, the Treasury

While the Canterbury rebuild is expected to make up a large proportion of the surge in residential investment over the forecast period, activity in the rest of the country is also expected to rise significantly, especially in the Auckland region. Figure 1.7 shows the level of real residential investment with and without the Canterbury rebuild. The drivers of the underlying growth include a catch up for past population growth, expected future population increases (including through migration), rising household incomes, low interest rates and some ongoing repairs of leaky homes.

Higher house prices, particularly in the Auckland region, are expected to encourage an increase in new home building, with signs of this already in dwelling consents data. This will help to moderate growth in house prices, but will take some time, with annual house price inflation forecast at around 7% in each of the March 2013 and 2014 quarters. The growth in residential investment begins to moderate after the March 2014 year, when the pace of the Canterbury rebuild reaches its peak.

...as well as strengthening market investment...

A pick up in market investment is also expected to be a strong driver of growth over the forecast period. While market investment has recovered somewhat following the global financial crisis, it is yet to exceed its pre-crisis peak (Figure 1.8). However, improved business confidence, low interest rates, a high exchange rate (making imported capital goods cheaper) and some catch up are all expected to result in stronger growth over 2013 and 2014. Later in the forecast period, higher interest rates and a lower exchange rate will see market investment growth moderate. The Canterbury rebuild is also expected to contribute to the increase in market investment.

Figure 1.8 – Real market investment



Sources: Statistics New Zealand, the Treasury

Investment Associated with the Canterbury Rebuild

Estimating the level of investment activity associated with the Canterbury rebuild is inherently difficult and subject to much uncertainty. To reflect this uncertainty, the Treasury estimates are rounded to the nearest \$5 billion. In this box the term investment relates to the gross fixed capital formation concept used in the compilation of GDP.

Estimates revised higher...

New information compiled by the Canterbury Earthquake Recovery Authority (CERA) has led the Treasury to revise its estimate of the total level of investment that relates to the Canterbury rebuild to \$40 billion from \$30 billion in the *Half Year Update* (Table 1.3). This investment will be spread across a number of years, including beyond 2017 and reflects both private sector and government spending.

Table 1.3 – Estimates of Canterbury earthquake rebuild investment (\$ billions, totals rounded to nearest \$5 billion)

	Residential	Commercial and social	Infrastructure	Total
<i>Half Year Update</i>	14	13	3	30
<i>Budget Update</i>	18	15	5	40

Sources: CERA, the Treasury

...but resource constraints mean the rebuild will extend beyond the forecast period

Resource constraints in the local and national economy mean that the amount of rebuild activity forecast to occur in the period to June 2017 is similar to the *Half Year Update*; a little under half of the recovery-related investment is forecast to occur during this period. The key implication of the revised estimate is either to extend the duration of the rebuild or increase the intensity of activity beyond 2017.

In addition to uncertainty around the amount of recovery-related investment that will occur, there is uncertainty over the timing and intensity of the rebuild. Key determinants of the rate of progress and the eventual peak of the rebuild include insurance settlements as well as the capacity and capability of the construction sector. These factors provide both upside and downside risks to our \$40 billion rebuild assumption, as well as the proportion of this that occurs by June 2017. Another risk to the forecasts is how much the Canterbury rebuild crowds out activity in other parts of the economy (for further discussion see the Risks and Scenarios chapter).

The Treasury's estimate of the level of investment required to repair or replace capital assets that were damaged or destroyed in the earthquakes is a major subset of total earthquake-related transactions. It captures the vast majority of the *additional* expenditure expected to be captured in the national accounts (GDP). Total transactions would include non-capital items (such as business interruption insurance), non-construction costs (such as residential red zone property purchases) and central government operating expenses resulting from the earthquakes. Factoring in these elements would lead to estimates higher than \$40 billion.

A discussion about the earthquake-related expenses incurred by the Government can be found in the Fiscal Outlook Chapter on page 33.

...while government consumption growth is expected to remain low

The combined impact of fiscal decisions in the 2013 and previous Budgets will see real government consumption rise only very modestly, averaging 0.4% per year over the forecast period, compared to around 4% for much of the 2000s. This sees government consumption as a share of real GDP fall towards the past decade's low of 16% (Figure 1.9). A lower share of government spending in the economy will free up resources enabling additional activity elsewhere, such as the Canterbury rebuild. It also allows interest rates and the exchange rate to remain lower than they would otherwise be. After allowing for both operating and capital spending and revenue developments, fiscal policy is forecast to be subtracting on average about 0.6% of GDP from demand per year in the economy between the 2013 and 2017 June years.¹

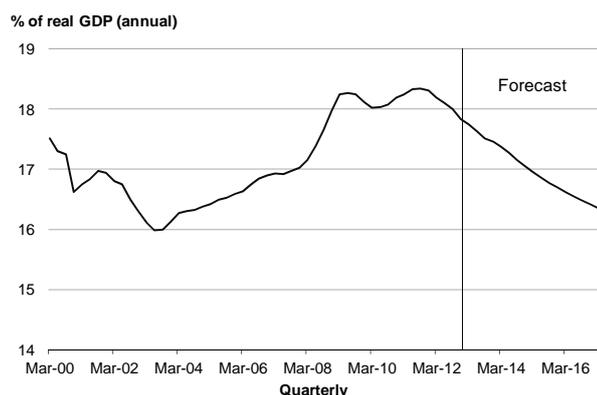
Net exports to provide negative contribution to growth...

Net exports are forecast to be a drag on real GDP growth across much of the forecast period. While positive export volumes growth is expected to return following the negative impact of the drought, import volume growth is expected to outstrip this, primarily as investment growth remains strong. Increased investment, chiefly on the business side, usually has a large import component. Net exports are expected to provide a positive contribution to growth again in the 2017 March year, as the pace of the Canterbury rebuild peaks. The exchange rate is also assumed to depreciate towards the end of the forecast horizon, making imports relatively more expensive and boosting demand for exports.

Goods export volumes are expected to fall in the near term, as the drought negatively impacts agricultural production in the 2013 and 2014 March years, but pick up thereafter. The impacts of the drought are examined in more detail in the box below. Services export growth is expected to remain low in the near term as the exchange rate remains elevated, making New Zealand a more expensive destination for tourists and foreign students.

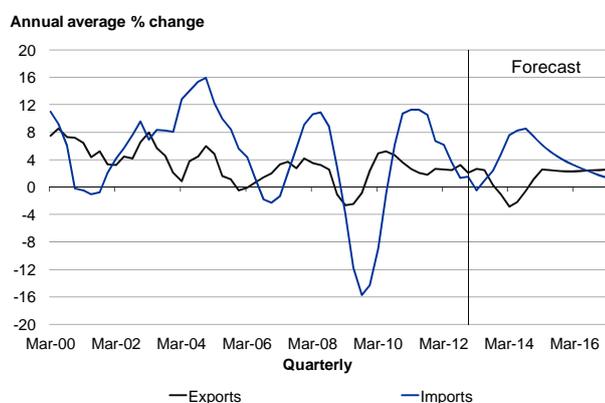
Over the longer term, both goods and services export volumes are expected to grow more strongly, largely driven by an assumed depreciation in the New Zealand dollar. Both are also expected to rise as global demand picks up, generating additional demand for New Zealand's goods and services. In addition, dairy and other commodity exports are likely to benefit from links with fast-growing Asian markets (Figure 1.10).

Figure 1.9 – Real government consumption



Sources: Statistics New Zealand, the Treasury

Figure 1.10 – Export and import volume growth



Sources: Statistics New Zealand, the Treasury

¹ For more details, see the *Additional Information* on the Treasury website www.treasury.govt.nz.

Economic Impacts of the Drought

Drought conditions affected much of the country during the late summer, particularly in the North Island. The return of rainfall to much of the country in April appears to have broken the drought, with soil moisture levels much higher now than a few months ago. Nonetheless, the drought will take a toll on the agricultural sector and the wider economy.

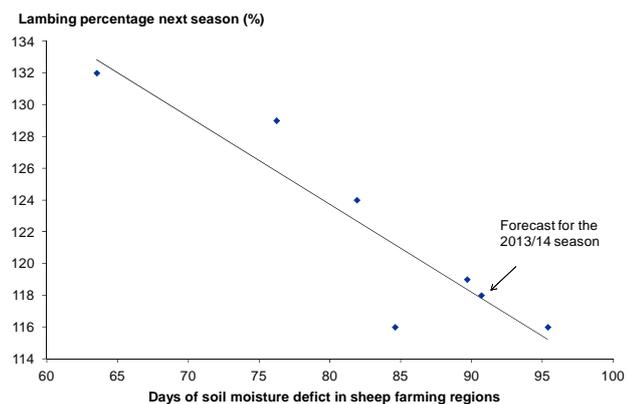
Drought will reduce real GDP in 2013...

The resumption of rainfall in April supports the assessment made when the forecasts were finalised that the impact of the drought will be largely contained to the 2013 calendar year. Compared to the situation if there was no drought, it is estimated that annual real GDP growth in 2013 will now be around 0.7 percentage points slower. There may be some follow-on impact on growth next year depending on the speed of the recovery from the drought. This estimate takes into account the expected direct impacts of lower agricultural production, including reduced dairy and meat production and earlier than usual slaughtering and processing. It also incorporates indirect multiplier effects throughout the economy in line with previous studies to capture the impact on all industries associated with dairy and meat production.

The dairy industry made a strong start to the 2012/13 season, with cumulative milk production running around 5% to 7% ahead of the previous year in January. However, pasture conditions deteriorated rapidly from January onwards, particularly in the North Island, and total milk production over the season as a whole is now likely to be around 1% to 2% down from last season. There is likely to be a lingering impact at the start of next season too.

Meanwhile, faced with reduced feed supply, farmers sent sheep and cattle to slaughter earlier than usual and therefore at lower carcass weights. It is expected that total lamb production will be around 3% lower in the 2012/13 year than if there was no drought, with a similar magnitude reduction in beef production. Given the strong negative relationship between lambing percentages and the extent of soil moisture deficit in the previous season, it is assumed that this season's dry conditions will result in a 10% reduction in the number of lambs born at the start of the 2013/14 season (Figure 1.11). However, given that the available feed will be shared amongst fewer animals, this may in turn lead to higher carcass weights next season, so it is uncertain how the drought will affect overall lamb production in the 2013/14 season.

Figure 1.11 – Soil moisture deficit vs. lambing percentages



Sources: NIWA, Ministry for Primary Industries, the Treasury

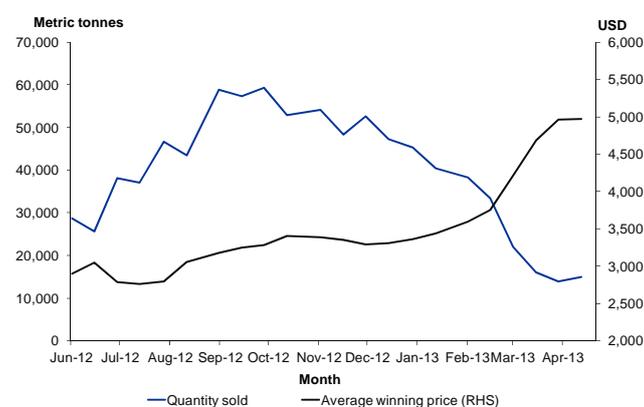
...and have a similar impact on nominal GDP

There are three main channels through which the drought's impact on prices in the economy will be felt. The first channel is the offsetting impact of higher dairy prices following the surge seen at Fonterra's fortnightly GlobalDairyTrade auctions in March and early April. This will provide a welcome offset to the reduction in dairy output and, providing it is reflected in payments to farmers, the incomes of those who have managed to maintain milk supply will be higher than would otherwise be the case.

However, the bulk of annual dairy production appears to have been sold earlier in the season at lower prices, and it is important to note that the recent high auction prices are only being achieved for low volumes at the tail-end of the season (Figure 1.12). Increased production costs for farmers to offset reduced pasture growth will also weigh on many farmers' profits and reduce the value-added contribution to GDP made by the dairy sector.

Moreover, part of the sharp pick up in dairy prices is likely to have been driven by tighter global supply (over and above that caused by drier conditions in New Zealand). The reduced milk production in New Zealand in recent months has limited the extent that the dairy industry can benefit from this spike in global prices, and it is expected dairy prices will fall back later this year as global supply returns to normal.

Figure 1.12 – Quantity and price of dairy products sold at bi-monthly GlobalDairyTrade auctions



Sources: GlobalDairyTrade, the Treasury

The second channel through which the drought will impact on prices is through lower meat prices. The drought-induced increase in stock slaughter earlier in the season than usual has seen beef and lamb prices fall by around 10% since the start of the year (although reduced supply may lead to higher prices next season).

Finally, in the face of reduced demand, the impact of the drought will limit price pressures from emerging in related sectors in the rest of the economy, such as the freight and wholesale industries. This would tend to reduce nominal GDP from what it would otherwise be.

On balance, the positive contribution from higher dairy prices is expected to be broadly offset by these other price movements. As a result, compared to a "no drought" situation, it is expected the impact of the drought on nominal GDP in the 2013 calendar year will be broadly similar to the 0.7 percentage point impact on real GDP outlined above (equivalent to around \$1.5 billion). However, greater uncertainty is associated with this estimate.

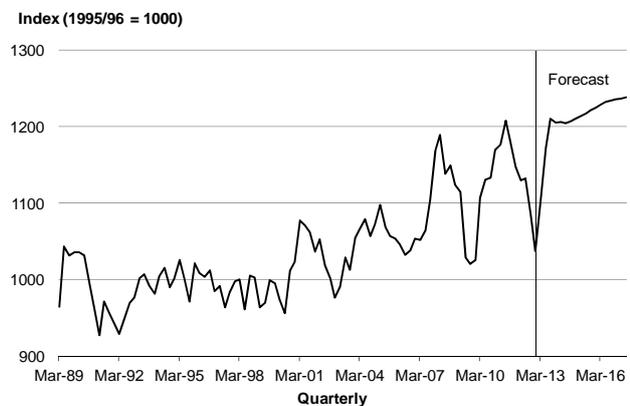
Climatic conditions, including the possibility of successive droughts, pose considerable uncertainty and ongoing risks. Such risks are discussed further in the Risks and Scenarios chapter.

...but increase in goods terms of trade will provide support to incomes

The goods terms of trade are expected to rebound significantly over 2013 and continue rising, providing support to incomes over the forecast horizon (Figure 1.13). The near-term rebound in the goods terms of trade is in part expected to be driven by the substantial increase in dairy prices thus far in 2013 following falls over 2012, as discussed in the drought box above.

Over the medium term, the goods terms of trade are expected to continue to strengthen, supported by a number of structural factors. Global demand for New Zealand's commodity exports is forecast to strengthen over time, resulting in commodity prices remaining at or near historical highs. Demand from China in particular for New Zealand dairy products is forecast to increase, as incomes and per capita consumption rise, supporting global prices. The higher goods terms of trade are also a key driver of nominal GDP growth in the economy over the forecast period.

Figure 1.13 – Goods terms of trade (SNA)



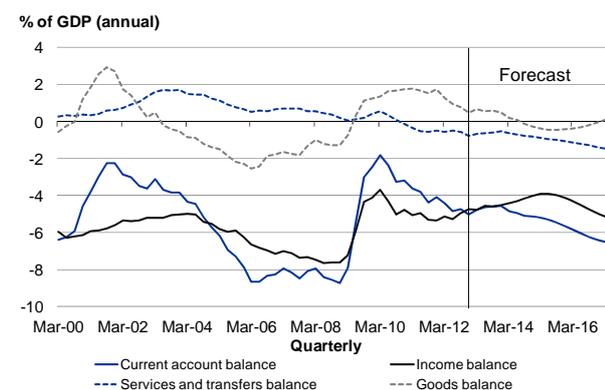
Sources: Statistics New Zealand, the Treasury

Higher goods import prices will provide some offset to the higher goods export prices. Rises in prices of consumer and intermediate goods imports are expected to be partly offset by the continuation of falls in prices of capital goods. West Texas Intermediate (WTI) oil market futures contracts, which form the basis for the oil price assumption, are pricing in a gradual decline in oil prices over the forecast period. WTI oil prices are assumed to fall to around \$85 per barrel in the June quarter of 2017, around 10% lower than their average in the March 2013 quarter.

The current account deficit widens...

The current account, which measures economic transactions between New Zealand residents and the rest of the world, comprises balances on imports and exports of goods and services, income flows and transfers. The annual current account deficit is expected to widen from 5.0% of GDP in the December 2012 quarter to 6.5% of GDP in the March 2017 quarter. The widening is expected to be driven by a widening of the deficit on services, a fall in the goods surplus and a further fall in the income balance (Figure 1.14).

Figure 1.14 – Current account balance



Sources: Statistics New Zealand, the Treasury

The goods balance is expected to remain reasonably strong in the near term, supported by the recent increases in commodity prices. However, further out, the balance will deteriorate, primarily owing to increased imports associated with the pick up in investment across the forecast period. The balance begins to recover at the end of the forecast period as investment growth slows and the depreciating exchange rate makes New Zealand goods more attractive overseas, supporting export volumes and receipts.

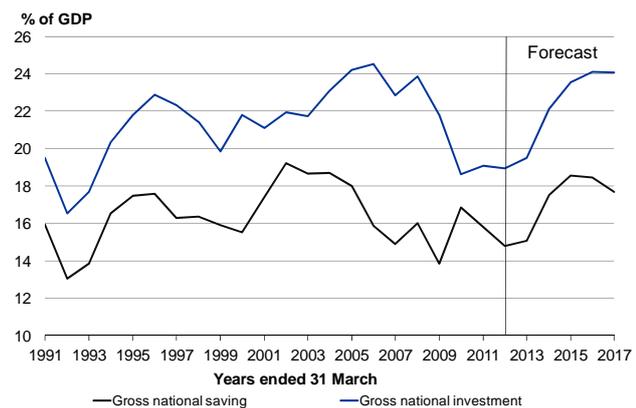
Weakness in the services balance is the main driver of the deterioration in the current account deficit, as a falling exchange rate results in an increase in the value of imports of services (as overseas travel and other services imports become more expensive). Exports of services are expected to increase only moderately as the global economy recovers, in part owing to the elevated exchange rate.

The income deficit is also expected to widen – primarily in the latter part of the forecast horizon – as business profits pick up, leading to increased flows overseas of income on equity investments in New Zealand, as well as higher interest payments overseas on New Zealand's net stock of debt as a result of higher international interest rates.

...even as national saving rises

The current account deficit (equal to the difference between national saving and investment) is expected to increase over the forecast period. This is owing to investment increasing by more than saving, partly as a result of the Canterbury rebuild (Figure 1.15). However, the investment-saving gap does not flow through fully into new borrowing, with a large proportion of the Canterbury rebuild to be paid for by overseas insurance inflows; Statistics New Zealand estimates a total of \$17.9 billion of reinsurance claims from all of the Canterbury earthquakes. At the end of the December 2012 quarter, \$8.0 billion of these claims had been settled with overseas reinsurers, with these inflows recorded in the financial account of the balance of payments.

Figure 1.15 – Saving and investment



Sources: Statistics New Zealand, the Treasury

The rise in national saving is driven mainly by higher general government saving over the forecast period, as tax revenue increases and government consumption continues to be restrained. Gross general government saving as a share of GDP is expected to rise from a low of -1.5% in the 2011 March year to 3.5% in the 2017 March year.

Business operating surplus growth is expected to rise in the near term as output continues to grow faster than hours worked and margins are restored, improving profits and supporting corporate tax revenue. Operating surplus growth is expected to moderate thereafter, as the labour market picks up and the overall pace of nominal GDP growth slows. Household saving, as discussed above, is expected to remain broadly stable across the forecast period.

The net international liability position is forecast to rise from 71.7% of GDP at the end of December 2012 to 80.9% of GDP at the end of March 2017, partly reflecting a fall in international assets as insurance claims are settled.

Labour market conditions remain subdued...

While GDP growth was solid in 2012, the unemployment rate remains elevated and employment growth weak. Despite this, wage growth remains moderate, with skilled workers in particular demand. Indicators for the labour market have pointed to a pick up for some time, but this is yet to eventuate. Recent labour market conditions are discussed in more detail in the box below.

Recent Labour Market Conditions

Labour market outturns have been lower than both Treasury and other forecaster expectations over the past year. The unemployment rate has remained elevated despite real output increasing solidly, particularly in 2012. In addition, employment fell in three of the four quarters in 2012. This box provides an overview of the recent conditions in the labour market.²

Fall in employment concentrated in younger part-time workers...

Total employment fell 32,000 (1.4%) in the year to December 2012, with part-time employment down 34,500 (6.6%) over the same time period. The fall in part-time employment was greatest amongst younger (under 30) female workers, especially those working one to nine hours per week. As the fall in employment was concentrated amongst those working fewer hours, the overall impact on aggregate hours worked in the economy was less, falling only 1.0% from a year ago. The fact that a large proportion of the fall was in younger workers, who are generally at the lower end of the income scale, partly explains why PAYE tax revenue rose more than 5% in the 2012 calendar year, despite the weak headline labour market statistics.

Another factor that could be supporting tax revenue is that the overall labour market may not be as weak as the Household Labour Force Survey (HLFS) suggests. Other indicators of the labour market, such as the Quarterly Employment Survey (QES) and employment conditions surveys, suggest more strength in the labour market than the HLFS. The different coverage of the surveys can explain some of the differences in results, with the QES not covering self-employment or the agricultural sector, both of which showed very weak employment results during 2012. However, despite the wider coverage in the HLFS, issues in the survey itself may also be contributing to the different results; otherwise it is difficult to explain why the headline measures of employment and unemployment remain at odds with other indicators. Overall, it is considered that while the labour market remains subdued, the weakness may be overstated somewhat in the HLFS headline employment and unemployment figures.

² The March 2013 HLFS was released after the finalisation of the economic forecasts. The increase in quarterly employment was stronger than forecast (1.7% compared to 0.4%). The unemployment rate fell to 6.2% compared to the 6.9% forecast. Recent quarterly outturns in the survey have been volatile and Statistics New Zealand noted that an atypical fall in unemployment in the March 2013 quarter was accentuated in the headline unemployment rate figure. While the outturn paints a stronger picture of near-term labour market conditions, recent volatility suggests caution about being too definitive about this strength. The release does not change our view of the medium-term outlook included in the forecasts.

...as firms look to control costs and improve productivity...

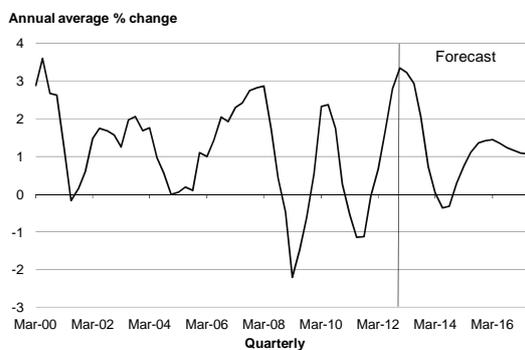
Similar to many other economies, New Zealand’s recovery from the recent recession has been more prolonged than previous recoveries. Previous relationships between business confidence and employment growth have failed to hold over the past year, with indicators pointing to much stronger employment. Businesses may be waiting until they see demand grow more strongly before they gain enough confidence to hire additional workers. In the meantime, firms have focused on controlling costs and improving productivity. Economy-wide estimates of labour productivity (hours-worked basis) were up a very strong 3.3% in 2012 from the previous year, following a 0.1% fall in 2011 (Figure 1.16). Increases in employment tend to lag increases in output by one to two quarters, thus stronger employment growth is expected in the second half of 2013, as well as a moderation in productivity growth.

...leading workers to leave the labour force

The subdued labour market contributed to a fall in the labour force participation rate over 2012, as some workers became discouraged at not being able to find work and left the labour force. The participation rate fell 1.2 percentage points over 2012, with the main change occurring in the December quarter. While several age groups contributed to this fall, the main contributions came from younger people (15- to 19-year-olds particularly) and older people (55+). There is evidence that some younger workers may have given up looking for work and instead enrolled in education. This is part of a trend since 2007 of a falling participation rate for 15- to 19-year-olds, while the proportion in education has increased. The other age group that contributed significantly to the fall in participation – older workers – saw the number of those identifying as retired increase over the year. While this is likely to be part of a longer-term trend as baby boomers retire, the size of the increase suggests that some older workers may have decided to fully retire as they could not find work, thereby leaving the labour force.

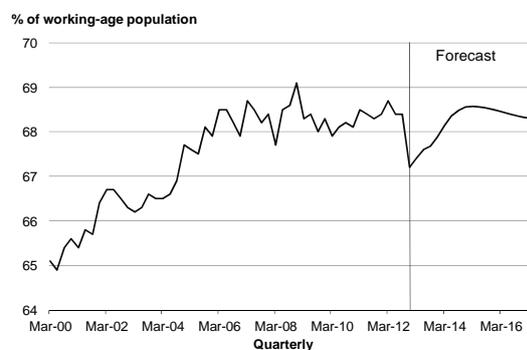
Overall, the fall in the participation rate is expected to be temporary rather than structural in nature. The participation rate is expected to rise gradually again over 2013 and 2014, as employment opportunities improve, encouraging people to seek work again (Figure 1.17). In the later period of the forecasts, the participation rate should begin to fall again as there will be a greater number of people in the older age groups that tend to participate less in the labour force.

Figure 1.16 – Economy-wide labour productivity (hours-worked basis)



Sources: Statistics New Zealand, the Treasury

Figure 1.17 – Labour force participation rate



Sources: Statistics New Zealand, the Treasury

...but set to strengthen as business confidence and output increase

The labour market is expected to strengthen over the forecast period, beginning in the second half of 2013. The Canterbury rebuild will be a large contributor to the strengthening, particularly in the 2014 March year, but a more widespread improvement is expected to occur across the country as output continues to increase. A turn in net migration, as fewer New Zealanders leave for Australia as the mining investment boom reaches a peak and the Australian economy slows, is expected to support the filling of skilled job vacancies and keep wage growth moderate.

Signalled reductions in ACC levies are expected to generate some additional demand for workers, while ongoing welfare reform is expected to strengthen job-search incentives and have a positive influence on labour force participation.

Employment growth is expected to be positive in the first half of 2013, before accelerating as the recovery becomes more entrenched, giving businesses

enough confidence to employ additional workers. Annual average employment growth is expected to turn around from a low of -0.8% in the June 2013 quarter to peak at 3.1% in the September 2014 quarter (Figure 1.18). Employment growth is then expected to moderate towards the end of the forecast period.

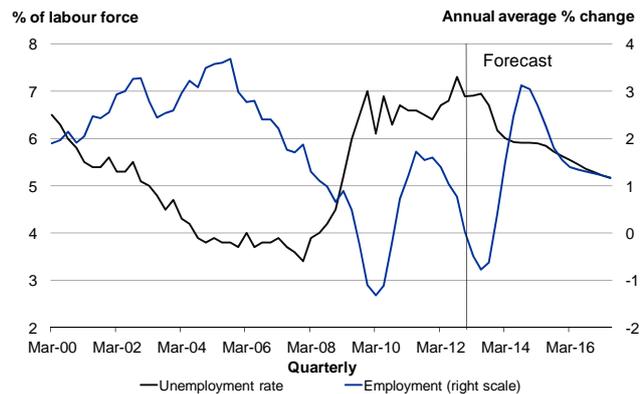
The strong employment growth is expected to drive a fall in the unemployment rate across the forecast period. The unemployment rate is expected to stay broadly steady at around 6.9% over the first half of 2013, before declining steadily, to slightly above 5% in March 2017. The rise in employment, fall in unemployment and pressures from the Canterbury rebuild are expected to put upward pressures on wages in the near term, with annual growth in average hourly earnings expected to rise to 3.2% in the December 2013 quarter, before moderating the following year. Over time, wage pressures will begin to grow again as the unemployment rate continues to fall.

Growth in compensation of employees, which is driven by changes in the number of hours worked in the economy as well as wage rates, is forecast to increase 2.9% in the March 2013 year, 3.9% in the March 2014 year and 4.7% in the March 2015 year as the labour market recovers and additional hours are worked. Higher wage rates will also contribute. Annual growth in compensation of employees is then expected to moderate slightly towards the end of the forecast period as employment and hours worked growth slows. Compensation of employees is an important contributor to forecasts of PAYE revenue.

Inflation low as exchange rate remains elevated...

Annual Consumers Price Index (CPI) inflation has been lower than anticipated in the *Half Year Update*. The main drivers for the lower result are a greater flow-through from a higher exchange rate and ongoing heavy discounting by retailers as they try to maximise sales volumes. The elevated exchange rate has contributed to negative annual tradables inflation; this has helped retailers, particularly those who sell imported goods, to keep

Figure 1.18 – Unemployment rate and employment growth



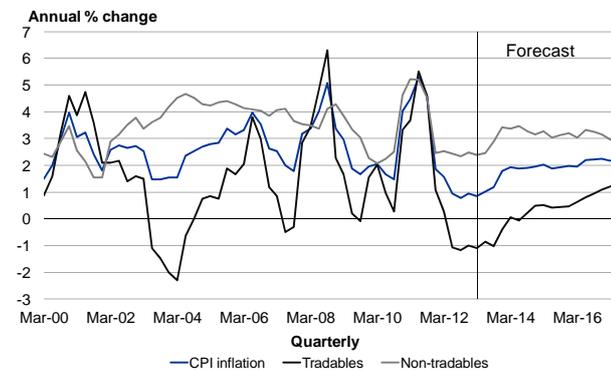
Sources: Statistics New Zealand, the Treasury

prices low, as they operate in a highly-competitive environment. Annual non-tradables inflation remains below its long-term average, but still relatively high at 2.4% in the March 2013 quarter, given that spare capacity remains in the economy, keeping pricing pressures lower.

...but set to increase as spare capacity is used up and exchange rate depreciates...

While inflation has been low recently, both non-tradables and tradables pricing pressures are expected to pick up over the forecast period (Figure 1.19). Pressure on non-tradables prices will come primarily through a closing of the output gap as spare capacity is used up. Potential growth is forecast to increase from just under 2% currently and approach 2.5% near the end of the forecast period.³ While the size of the current negative output gap is subject to uncertainty, the estimated gap of 0.8% of GDP in the March 2013 quarter is expected to be eliminated by mid-2014. Another factor that is likely to contribute to additional non-tradable pricing pressures is the Canterbury rebuild. It is expected that these pressures will be moderate as productivity gains are made, although there are risks to this judgement. These risks are discussed further in the Risks and Scenarios chapter. Higher government charges are also expected to contribute to non-tradables inflation, with higher tobacco prices in particular contributing around 0.4 percentage points to annual non-tradable inflation (or 0.2 percentage points to total inflation) in each year excluding the March 2017 year.

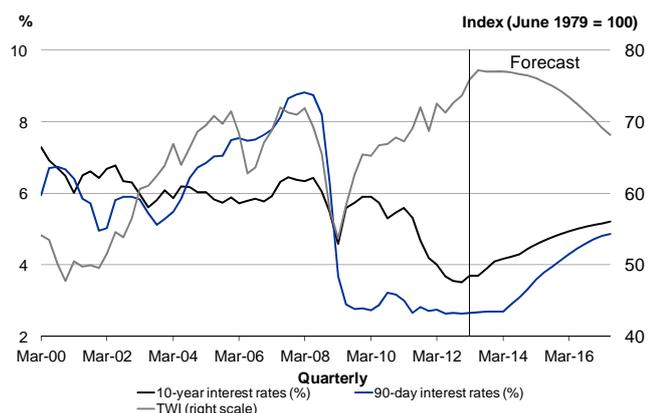
Figure 1.19 – Inflation



Sources: Statistics New Zealand, the Treasury

The exchange rate will be the main influence on tradables inflation over the forecast period. The NZD trade-weighted index (TWI) is expected to remain elevated over 2013 and 2014, before depreciating over the rest of the forecast period. This reflects the adjustment required to reduce the current account deficit to a sustainable level over time (Figure 1.20). As the exchange rate stops appreciating and then depreciates, there will be upwards pressure on tradables inflation. Risks around the path and pass-through of the exchange rate are discussed in the Risks and Scenarios chapter.

Figure 1.20 – TWI, 90-day and 10-year rates



Sources: RBNZ, the Treasury

³ For more details on assumptions surrounding potential growth, see “Potential Output in the 2012 *Half Year Update*”, available at www.treasury.govt.nz/budget/forecasts/hyefu2012.

Overall, annual CPI inflation is expected to rise to 1.9% in the March 2014 quarter from 0.9% in the March 2013 quarter. Inflation will increase only gradually from there, to 2.2% in the March 2017 quarter.

...leading to a withdrawal of monetary stimulus

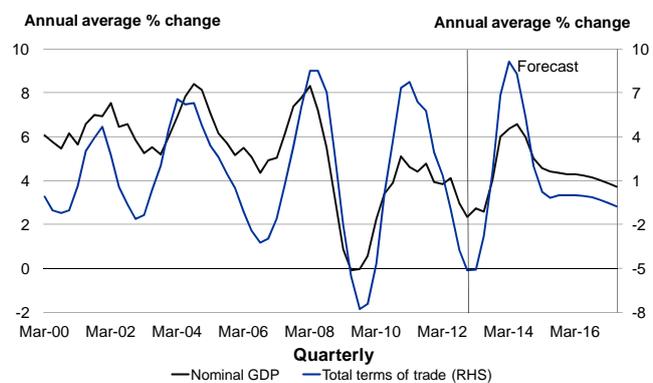
Over time, as the economy continues to grow and spare capacity is used up, monetary stimulus is expected to be progressively withdrawn in order to combat increasing inflationary pressures. The withdrawal of stimulus in these forecasts is more gradual than assumed in the *Half Year Update* as the result of lower-than-expected inflationary pressures to date. Ninety-day interest rates are expected to remain around 2.7% until the March 2014 quarter. After this, rates should rise gradually as inflation pressures increase. Ninety-day rates are expected to be 4.8% in the March 2017 quarter (Figure 1.20).

Ten-year government bond rates have been low over the second half of 2012 and early 2013 as New Zealand bonds have received additional demand from overseas investors looking to diversify portfolios. The New Zealand economy has also performed favourably on an international stage, attracting more funds. However, 10-year interest rates are expected to increase over the forecast horizon, primarily as global risk appetite increases as growth prospects improve. Typically this will reduce the demand for government bonds and increase demand for other higher-yielding assets such as equities, increasing bond yields – this is expected to be not only a trend in New Zealand bonds, but bonds around the globe. Ten-year bond rates are forecast to increase from 3.7% in the March 2013 quarter to 5.2% by the June 2017 quarter (Figure 1.20).

Stronger nominal GDP growth expected

Despite solid real GDP growth, nominal GDP growth (which includes price effects as well as volumes) has been soft over the past year. Nominal GDP growth for the March 2013 year is expected to be a modest 2.7%, down from 4.6% and 3.8% in 2011 and 2012 respectively. Weak pricing pressures have been the main reason behind the weaker nominal GDP result, with a high exchange rate keeping downwards pressures on tradables prices, strong competition and subdued demand engraining a discounting culture among businesses, and falling terms of trade also contributing. However, a strong turnaround is expected in the March 2014 year, with nominal GDP expected to rise 6.4%. This will primarily be driven by an increase in the terms of trade, but also a levelling off in the exchange rate and a pick up in demand across the economy leading to greater pricing pressures.

Figure 1.21 – Nominal GDP and terms of trade



Sources: Statistics New Zealand, the Treasury

Nominal GDP growth is expected to moderate somewhat later in the forecast period, as the total terms of trade level off and pricing pressures are restrained by higher interest rates. Nominal GDP growth is forecast to average 4.2% per year over the 2015 to 2017 March year period.

Nominal GDP is particularly important for generating forecasts of tax revenue. The main components of nominal income GDP, namely compensation of employees and business operating surplus, are inputs for generating forecasts of PAYE and corporate tax revenues respectively.

Economic Forecast Assumptions

- Net permanent and long-term migration returned to a small inflow in the March 2013 year and is forecast to return to a long-run assumption of 12,000 per year by the start of 2015.
- The non-accelerating inflation rate of unemployment (NAIRU) is assumed to be around 4.5% by 2017.
- Average hours worked per week are assumed to be around 33 (near their current level).
- Economy-wide labour productivity growth is assumed to average around 1.3% per year between the years ending March 2013 and March 2017. This includes a 3.2% increase in 2013, followed by flat productivity growth in 2014.
- Investment associated with the rebuild from the Canterbury earthquakes is assumed to be around \$40 billion (rounded to the nearest \$5 billion), spread across residential property (\$18 billion), commercial and social assets (\$15 billion) and infrastructure (\$5 billion). Around \$17 billion of the total (or 45%) is forecast to be undertaken within the forecast period to June 2017.
- WTI oil prices are assumed to fall from around US\$94 per barrel in the March 2013 quarter to around US\$85 in the June 2017 quarter.
- Ninety-day interest rates are assumed to increase from mid-2014 to around 4.9% at the end of the forecast period. Ten-year interest rates are also assumed to rise gradually from their current levels, reaching 5.2% by the end of the forecast period.
- The TWI is assumed to remain around 77 until the start of 2015 before falling to around 68 in the June 2017 quarter.
- Tobacco excise increases add 0.2 percentage points to annual inflation in each of the March quarters 2014, 2015 and 2016.
- The reductions to ACC levy rates signalled as part of Budget 2013 will reduce contributions by households and employers by around \$300 million in the year to June 2015 and around \$1 billion in future years.