1

Economic Outlook

Overview

- Economic growth was 3.3% in the year ended December 2014. Growth of over 3.0% is expected in the year ahead, supported by net migration inflows, labour income growth, stimulatory interest rates and construction activity. Drought is likely to have had a small negative impact on GDP growth in the first half of 2015.

- Real GDP growth is expected to moderate as migration inflows ease, construction growth slows and interest rates rise in response to increasing capacity pressures. Government expenditure growth is forecast to remain subdued, exerting a mild constraining influence on demand in most years of the forecast. The high exchange rate remains a headwind for export growth but households benefit from increased purchasing power.

- Global oil prices have fallen considerably since the *Half Year Update*, reflecting ongoing increases in supply and an easing in demand. Lower oil import prices are feeding through to the economy via lower inflation and increased purchasing power, providing a partial offset to the reduced income associated with lower dairy prices. This is reflected in a smaller fall in the terms of trade than was forecast in the *Half Year Update*.

- Lower fuel prices, particularly in the March quarter, and an appreciating exchange rate have contributed to lower tradables inflation. Non-tradables inflation has eased as the economy has operated with a degree of spare capacity and non-tradables inflation is expected to remain low in the near term. Looking forward, continued above-trend growth is expected to generate greater upward pressure on non-tradables prices. In addition, tradables inflation is forecast to increase as international oil prices rise and the exchange rate stabilises, causing headline inflation to rise to around 2.0% in late 2016.

- The weaker domestic price outlook is reflected in a lower level of nominal GDP over the forecast period compared to the *Half Year Update*. Nominal GDP growth is forecast to be slower in the years ending June 2016 and 2017, but faster in the later years of the forecast period. Over the five-year forecast period, nominal GDP is forecast to be a cumulative $5.0 billion lower compared to the *Half Year Update.*

Table 1.1 – Economic forecasts[1]

(Annual average % change, March years)	2014 Actual	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast	2019 Forecast
Private consumption	2.9	3.7	3.9	2.8	2.7	2.8
Public consumption	2.7	3.2	0.9	0.4	2.3	1.9
Total consumption	**2.8**	**3.5**	**3.2**	**2.3**	**2.6**	**2.6**
Residential investment	16.7	13.9	11.9	5.3	6.0	0.2
Market investment	8.3	6.7	5.4	5.1	2.9	2.4
Non-market investment	12.5	-6.4	2.6	2.4	2.4	2.4
Total investment	**10.4**	**7.5**	**8.1**	**5.0**	**3.6**	**1.8**
Stock change[2]	0.2	0.2	-0.3	0.3	0.2	0.1
Gross national expenditure	**4.6**	**4.6**	**4.2**	**3.2**	**3.1**	**2.5**
Exports	0.2	2.2	0.5	3.5	3.2	3.3
Imports	8.0	7.0	3.5	4.5	4.0	3.3
GDP (expenditure measure)	**2.4**	**3.2**	**3.3**	**2.8**	**2.8**	**2.4**
GDP (production measure)	**2.5**	**3.3**	**3.1**	**2.8**	**2.8**	**2.4**
Real GDP per capita	1.6	1.7	1.3	1.7	1.8	1.5
Nominal GDP (expenditure measure)	6.8	3.9	3.3	5.3	4.8	4.1
GDP deflator	4.2	0.7	0.0	2.4	2.0	1.7
Potential GDP	2.1	2.4	2.5	2.8	2.8	2.6
Output gap (% deviation, March year average)[3]	-0.9	0.0	0.5	0.6	0.6	0.4
Employment	2.4	3.3	2.3	1.6	1.4	1.2
Unemployment rate[4]	6.1	5.6	5.1	4.7	4.5	4.5
Participation rate[5]	69.0	69.2	68.8	68.8	68.8	68.8
Nominal wages[6]	2.5	2.7	2.5	2.9	3.1	3.3
CPI inflation[7]	1.5	0.2	1.4	2.1	2.0	2.1
Terms of trade[8]	13.7	0.2	-2.9	2.9	0.1	-0.4
House prices[9]	8.0	6.8	5.2	3.0	2.4	2.0
Current account balance						
$billions	-6.0	-9.8	-13.7	-12.8	-13.8	-15.1
% of GDP	-2.6	-4.1	-5.6	-4.9	-5.1	-5.3
Net international investment position						
% of GDP	-65.5	-65.6	-69.1	-70.5	-72.4	-74.8
TWI[10]	80.0	77.9	77.9	77.9	77.9	77.1
90-day bank bill rate[10]	3.0	3.6	3.6	3.7	4.3	4.8
10-year bond rate[10]	4.6	3.3	3.5	4.2	4.8	5.1

Notes: 1 Forecasts finalised 10 April 2015.
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.
8 System of National Accounts (SNA) and merchandise basis, annual average percentage change.
9 Quotable Value New Zealand (QVNZ) House Price Index, annual percentage change.
10 Average for the March quarter. 2015 actual.

Longer time series for these variables are provided on page 138.

Key economic forecast assumptions and judgements

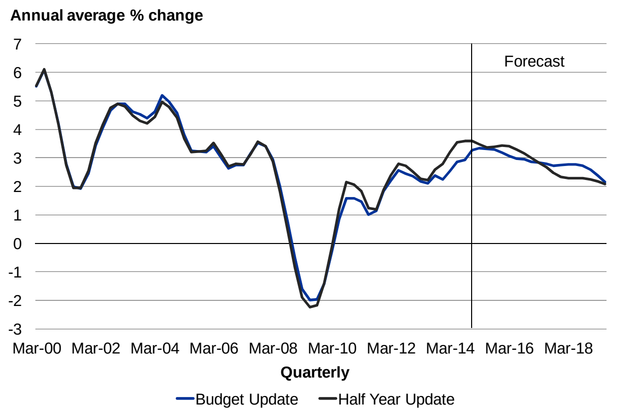
- Net permanent and long-term migration inflows are assumed to rise from 55,800 in the year ended March 2015 to 56,600 in the year ended June 2015 and to return to the long-run assumption of 12,000 per year in the year ended June 2017.
- West Texas Intermediate (WTI) oil prices are assumed to rise from US$49 per barrel in the March 2015 quarter to US$78 in the March 2019 quarter.
- Dairy prices are expected to recover at a modest rate, returning towards the long-term levels forecast by the OECD-FAO of US$3,900/mt towards the end of 2016.
- Trading partner growth is assumed to increase in 2015 and 2016 as growth picks up in the US, euro area and Japan, offset by slightly slower growth in Australia and China.
- Growth in potential output is assumed to increase from 2.3% in the year ended December 2014 to a peak of 2.9% in the year ended September 2017 and to ease to 2.6% by the end of the forecast period.
- The output gap (spare capacity) is currently around zero and is estimated to become increasingly positive over the next year or so, contributing to higher inflation.
- Economy-wide labour productivity growth is estimated to average 1.2% per year between the years ending March 2015 and March 2019.
- Average hours worked per week per person are estimated to decline from around 33.4 in the year to December 2014 to around 32.9 by the end of the forecast period.
- The labour force participation rate is estimated to be 68.8% for most of the forecast period.
- The non-accelerating inflation rate of unemployment (NAIRU) is estimated to be around 4.5% by the end of the forecast period.
- Ninety-day interest rates are estimated to remain stable around 3.6% until the end of 2016 before rising to 4.9% in the June 2019 quarter. Ten-year interest rates are estimated to rise from 3.3% in the March 2015 quarter to 5.2% in the June 2019 quarter.
- The trade weighted exchange rate index (TWI-17) is assumed to hold at around 77.9 until late 2018, when it begins to decline, reaching 76.4 in the June 2019 quarter.
- Investment associated with the rebuild following the Canterbury earthquakes is assumed to be around $40 billion in 2011 prices (rounded to the nearest $5 billion), spread across residential property ($18 billion), commercial property ($9 billion) and infrastructure and social assets ($11 billion).
- The tobacco excise tax increase in the March quarter 2016 adds 0.2 percentage points to annual inflation.
- The reduction in ACC vehicle levies in September 2015 quarter is estimated to reduce consumer price inflation by 0.25 percentage points.

Recent Developments and Near-term Outlook

The economic expansion has gathered pace...

The pace of economic expansion strengthened over the second half of 2014 owing to strong domestic demand and a surge in tourism expenditure. Rapid migration-led population growth, increases in labour income, low interest rates and increased construction activity are expected to continue to support domestic demand, and underpin the outlook for growth over 2015.

Figure 1.1 – Real GDP growth



Sources: Statistics New Zealand, the Treasury

Although real production GDP grew as expected over the second half of 2014, revisions to previous quarters by Statistics New Zealand meant that growth in the year ended December was lower than expected at 3.3% – but still the fastest pace since late 2007 (Figure 1.1).

…with several developments impacting the economy and its outlook

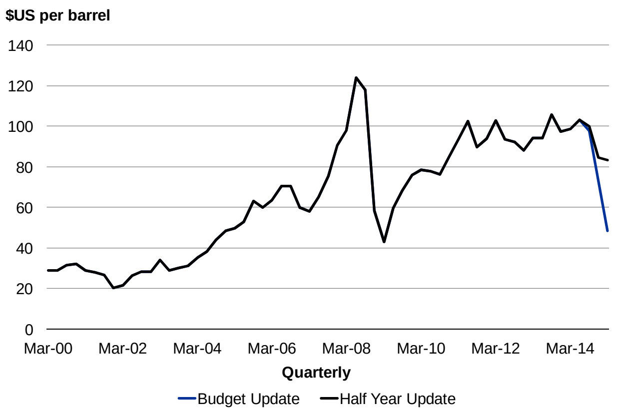
Several key developments have shaped the economic outlook and have reinforced the key themes of strong real activity and relatively weak price inflation presented in the *Half Year Update*. These developments include the sharp falls in international oil prices since late last year, higher than forecast net migrant inflows and the impacts of the summer drought.

Judgements around the future path of commodity prices, trading partner growth, the extent and duration of the current migration cycle and the amount of spare capacity and its relationship with inflation remain the key factors influencing the economic outlook.

International oil prices fell sharply…

Oil prices have fallen sharply since the *Half Year Update* was finalised in November. WTI prices have fallen from around US$80 per barrel in November 2014 to around $US50 per barrel in March 2015 (Figure 1.2). Brent and Dubai crude oil prices have followed a similar pattern. The price falls are primarily a result of increased supply from US shale oil production and the Organisation of Petroleum Exporting Countries' decision to maintain production levels despite falling prices. At the same time, international demand has eased, partly reflecting a slowdown in growth in China.

Figure 1.2 – WTI oil price

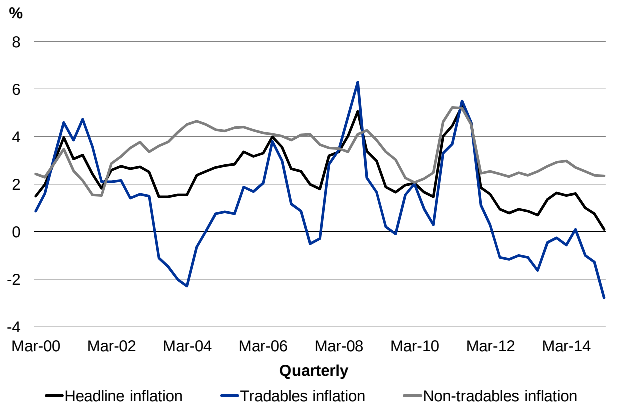


Sources: Haver Analytics, the Treasury

Changes in oil prices directly affect consumer prices through lower fuel prices and indirectly through lower input costs for domestic firms. In addition, New Zealand's major trading partners are net oil importers so the positive impacts on domestic demand in those economies, all else equal, support demand for New Zealand's exports.

…contributing to weaker than forecast inflation…

Figure 1.3 – Consumer price inflation



Source: Statistics New Zealand

Falling fuel prices provided the largest negative contribution to the 0.3% fall in quarterly inflation in the March 2015 quarter. Annual consumer price inflation eased to 0.1% from 0.8% in the December quarter (Figure 1.3) – considerably lower than the 1.3% forecast in the *Half Year Update*. Even excluding the impacts of lower fuel prices, inflation is low and inflation expectations are subdued. Although some slack remains in the labour market, capacity utilisation is generally quite high, indicating that, in aggregate, spare capacity has largely been absorbed. Capacity pressures take some time to influence inflation and inflation is expected to remain low this year.

…and providing a partial offset to lower export prices

The near-term outlook for the terms of trade has improved as lower import prices have provided a partial offset to lower export prices. Lower export prices result in a direct fall in national income and lower inflation. However, lower import prices, which result in a higher terms of trade, increase real national disposable income. The overall impact on nominal GDP depends on the extent to which households and businesses respond to the additional real income and how lower import prices affect domestic prices.

See the box "Commodity prices" (page 12) for details on how recent commodity price movements and the judgements around their future paths have impacted the outlook for the terms of trade and nominal GDP.

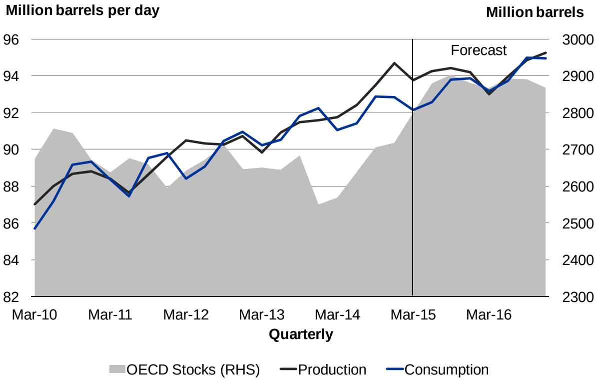
Commodity prices

Nearly three-quarters of New Zealand's goods exports are primary products in raw commodity or further processed form and around 15% of goods imports are crude and refined oil and petroleum products. As a result, New Zealand's trade balance and terms of trade are heavily influenced by developments in world commodity prices. This box focuses on recent developments in key commodities and the outlook for dairy and crude oil prices, two key judgements for the macroeconomic forecasts.

Recent commodity price movements

From US$107/barrel in June 2014, WTI crude oil prices fell to around US$80/barrel in November when the *Half Year Update* was finalised and to US$45/barrel in early 2015, a five-year low.[1] Since then they have traded in a US$45/barrel to US$60/barrel range. The initial catalyst for the fall was a growing surplus of crude oil production (and therefore increasing inventories), driven by shale oil extraction in the US and, to a lesser extent, oil sands production in Canada. At the same time, OPEC maintained production levels. This overall increase in supply was coupled with subdued demand from Europe and Japan and slowing growth in China (Figure 1.4). As a net importer of approximately 25 million barrels of crude oil per annum,[2] as well as other mineral fuels, the fall in crude oil prices has been beneficial to New Zealand's trade balance and terms of trade.

Figure 1.4 – Petroleum and other liquids production and consumption



Source: US Energy Information Administration

The global dairy market is little changed from the *Half Year Update*. Dairy production remains high in the key exporters including New Zealand, the European Union (EU) and the US. Meanwhile, demand from the two largest dairy importers, China and Russia, remains subdued owing to increased domestic production and high inventories in China and the ban on EU and US imports by Russia. GlobalDairyTrade (GDT) prices for New Zealand's key dairy export, whole milk powder, reached a low of US$2,229/mt in December 2014 and have only recovered modestly since then to around US$2,385/mt. The GDT index, reflecting a basket of dairy commodities, fell to a six-year low at the first GDT auction in May 2015.

Forestry prices have followed a similar pattern to dairy prices, falling throughout most of 2014 from record highs early in the year as demand from China has slowed. Prices for other export commodities have fared better. Meat prices, driven by beef, reached record levels in November 2014, largely owing to high US demand. Although meat prices have subsequently eased, they remain at high levels. Prices for horticultural products, including apples and kiwifruit, and for wine and seafood have held up well.

1 WTI is used as a proxy for the world oil price. Brent and Dubai crude oil prices followed a similar pattern.

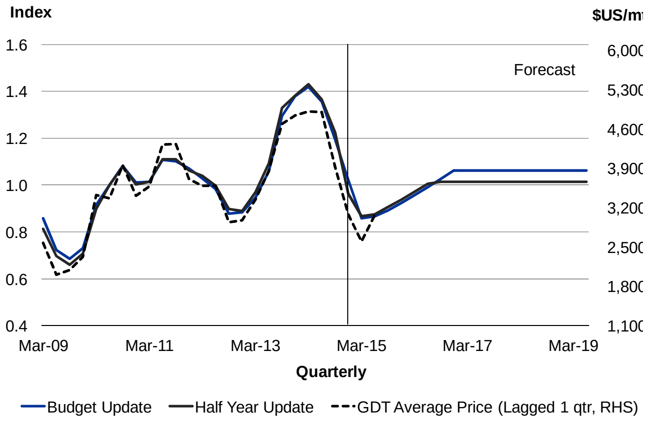
2 Ministry of Business, Innovation & Employment. In 2014 36.5 million barrels of crude oil were imported and 13.4 million exported.

Commodity price outlook

The supply overhang in the market is expected to keep crude oil prices at low levels throughout 2015. This overhang is expected to be eroded as production is cut back. Prices are currently still at levels that allow most production to be maintained in the short term. However, current prices are below long-term average costs for many producers, particularly those operating under more technologically challenging conditions, which has led to a sharp reduction in exploration and investment and will lead to slower production growth in the future. The macroeconomic forecasts assume that oil prices will gradually return to around US$80/barrel, which approximately reflects long-term costs of production.

Dairy export prices are forecast to recover from the second half of 2015 onward at a relatively modest pace (Figure 1.5). Demand for dairy products is expected to pick up as imports into China return to more normal levels. There could be a larger increase in global dairy demand if Russia returns to global markets. However, global inventories of dairy products are high, particularly in the EU, and there is considerable uncertainty over the supply response of EU producers following the removal of milk production quotas. Dairy prices are assumed to recover towards the long-term levels forecast by the OECD-FAO of around US$3,900/mt towards the end of 2016 as supply and demand become more balanced.[3]

Figure 1.5 – Dairy prices



Sources: GlobalDairyTrade, Statistics New Zealand, the Treasury

Impact on the New Zealand economy

The combined impacts of movements in export and import commodity prices are captured in the terms of trade, which have an important influence on New Zealand's income growth. Lower export prices reduce producer incomes and therefore influence their consumption, investment and saving decisions. Lower import prices have the opposite effect but it is less direct. That is, lower import prices enable producers and consumers to buy more of the lower priced goods or other goods for an unchanged income. At a national level, the fall in dairy prices is mainly reflected in lower export receipts (reduced income), while the fall in oil prices is mainly reflected in lower consumer and intermediate input prices (increased purchasing power), and both are reflected in lower nominal GDP.

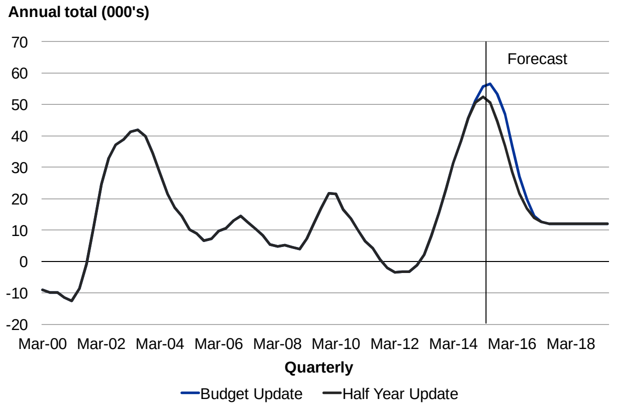
The outlook for dairy and other export commodities is similar to the *Half Year Update* but oil prices are considerably weaker. Although still expected to decline in the short term, the terms of trade are expected to trough at a higher level and remain higher than the *Half Year Update* throughout the forecast, chiefly as a result of lower import prices (Figure 1.12).

3 OECD-FAO Agricultural Outlook 2014, weighted to reflect New Zealand's export mix.

Net migration continues to surge…

The net inflow of permanent and long-term (PLT) migrants in the March 2015 year rose to 55,800 – surpassing the peak inflow of 52,400 forecast in the *Half Year Update.* These inflows have supported both domestic demand and productive capacity through increased labour supply. Initially fewer departures were the key driver, although increased arrivals are now the larger factor accounting for around two-thirds of the increase in the past year. The net inflow is now expected to peak at 56,600 in the year to June 2015 (Figure 1.6).

Figure 1.6 – Net PLT migration



Sources: Statistics New Zealand, the Treasury

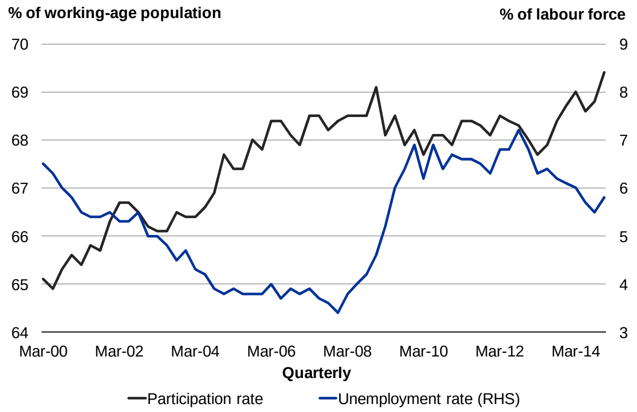
…contributing to renewed activity in the housing market

The resurgence in housing market activity from late last year has continued in early 2015. Housing demand is being supported by lower fixed-term mortgage rates as long-term interest rates fall and by continued migration inflows. The housing supply response in the Auckland market remains gradual. Consequently, national house price inflation is expected to increase throughout 2015, supported by rapid house price inflation in Auckland. The resultant wealth effect is expected to provide additional support to household expenditure growth.

Solid labour demand…

The number of people employed increased by 80,000 (3.5%) in the December 2014 year led by growth in full-time staff.[4] Almost a third of national employment growth was in the construction industry, underscoring the strong growth impetus from the sector. Employment growth was stronger than forecast in the *Half Year Update* in the December quarter and employment indicators suggest employment growth will be stronger than previously forecast in the near term.

Figure 1.7 – Unemployment and participation rates



Source: Statistics New Zealand

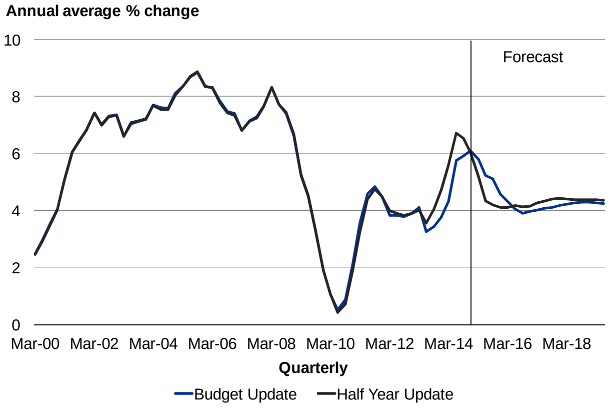
Labour supply has also grown rapidly through high net inflows of migrants and increased participation in the labour force, tempering the declines in the unemployment rate. The unemployment rate declined through 2014 but increased to 5.7% in the December quarter as the participation rate rose to 69.4% from 68.8% in the September quarter (Figure 1.7). The unemployment rate is expected to resume its downward trend as employment growth remains robust and labour supply growth begins to ease as net migration inflows slow.

4 Latest data released after finalisation of the economic forecasts show employment growth of 0.7% in the March quarter, a further rise in the participation rate to 69.6% and the unemployment rate remaining at a revised 5.8%.

…and income growth support household expenditure

Further increases in labour supply and low inflation are expected to keep annual growth in weekly earnings subdued throughout most of 2015 at around 2.1%. Despite that, total labour income growth is initially higher than in the *Half Year Update* reflecting solid employment growth over the year ahead (Figure 1.8). Real household income growth, which has been boosted by low inflation, is expected to provide greater support to private consumption growth than previously forecast in the near term.

Figure 1.8 – Compensation of employees



Sources: Statistics New Zealand, the Treasury

Investment is supported by construction activity and low interest rates…

Business sentiment and activity surveys point to solid investment growth over the year ahead as construction activity increases, the high NZ dollar makes capital goods imports cheaper and relatively low interest rates make investment more profitable. In addition, rapid population growth is adding to demand and supporting investment. Real business investment rose steadily over the latter half of 2014 – rising 7.5% in the year ended December – and is expected to continue growing at a slower but still robust rate of 5.0% to 6.0% over the next four to six quarters.

Residential investment is at historically high levels, following a 16.7% rise in the December 2014 year. Despite a recent slowing in building consent issuance, strong housing demand in Auckland and ongoing high levels of reconstruction activity in Canterbury continue to underpin the outlook for solid residential investment growth.

…but agricultural production is impacted by drought

Drought in parts of the South Island and dry conditions elsewhere are likely to have slowed GDP growth in the first half of 2015. This has been reflected in Fonterra revising down its milk production growth estimates for the 2014/15 season from a 3.3% increase earlier in the season to an increase of only 1.5%.

Growth momentum is expected to continue in the year ahead…

Solid labour income growth, increasing house prices and low debt-servicing costs, combined with low inflation which boosts real incomes, are supporting the outlook for household consumption expenditure. Low interest rates, a high NZ dollar and improved business sentiment also support a solid outlook for business investment. Residential investment is forecast to continue rising in the year ahead, driven by strong demand for housing in Auckland and a high level of rebuilding in Canterbury. Net exports will be a drag on activity reflecting the impacts of drought, solid import growth as a result of strong domestic demand and an expected pull-back in tourism expenditure following the Cricket World Cup in the March quarter. Overall, annual average growth in real GDP is forecast to remain similar to recent quarters at close to 3.3% for most of 2015.

…with further widening in the annual current account deficit

The annual current account deficit widened to 3.3% of GDP in December 2014 from 2.6% in the previous quarter, as lower commodity export prices flowed through to a smaller goods surplus. A surge in tourism expenditure driven by higher tourist arrivals in the December 2014 quarter drove an increase in the annual services surplus.

The current account deficit is expected to widen further over coming quarters as lower commodity export prices continue to reduce export values. However, lower import prices, higher tourism receipts and lower income outflows are expected to temper the widening in the current account deficit compared to the *Half Year Update*. The current account deficit is forecast to widen to 5.6% of GDP in March 2016 compared to 6.3% previously.

Subdued domestic inflation and further declines in the terms of trade result in slower nominal GDP growth

A sharp fall in the terms of trade, mainly reflecting falls in dairy export prices, and low domestic inflation contributed to nominal GDP growth of just 0.4% in the December 2014 quarter, reducing annual average growth to 5.7% from 7.6% in the previous quarter. Low domestic inflation and further pass-through of falls in export prices are expected to result in nominal GDP growth slowing to 2.4% in the June 2015 year.

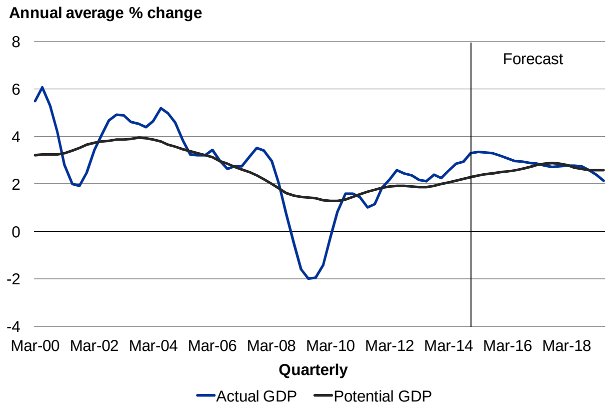
Medium-term Outlook

Growth moderates gradually in the medium term…

Growth in output from 2016 onwards is a little stronger than in the *Half Year Update*. Annual average growth for the year to March 2016 is expected to be 3.1%, and is then forecast to ease gradually to 2.4% at the end of the forecast period. Consumption and investment growth moderate as population and labour income growth ease, construction activity slows and interest rates rise. Relative to the *Half Year Update*, growth is forecast to be slightly slower in the first part of the forecast period reflecting the downward revisions to historical growth by Statistics New Zealand. Growth is higher later in the forecast period chiefly reflecting faster private consumption growth, largely as a consequence of lower import prices and interest rates.

Higher population growth compared to the *Half Year Update* contributes to a small upward revision to the economy's potential growth rate over the forecast period.[5] The annual average rate is estimated to increase from around 2.5% currently to 2.8% in mid-2017 as productivity growth rises from low levels with labour productivity growth rising towards trend. Potential growth averages around 2.6% over the forecast period (Figure 1.9).

Figure 1.9 – Actual and potential GDP growth



Sources: Statistics New Zealand, the Treasury

…as population growth eases…

The annual net inflow of migrants is expected to ease from a peak of 56,600 in June 2015 as departures increase and arrivals decline from record high levels in line with an improving Australian economy. Net inflows return to the long-run assumption of 12,000 a year by mid-2017. The change in the profile of migration results in an additional 11,400 people over the forecast period compared to the *Half Year Update*.

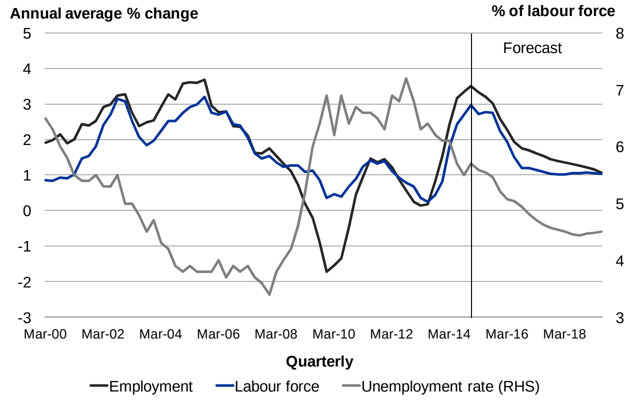
Risks remain around the duration and size of migration flows. Scenario two in the Risks and Scenarios chapter assesses the potential impact of stronger domestic demand, in part driven by a larger than expected migration cycle.

5 Potential growth is the rate at which the economy can expand while maintaining stable inflation. It depends on how many people are available to work and how many hours they are willing to work (labour); the number of buildings, machines and computers (capital); and the efficiency with which they are used (total factor productivity).

…and employment and income growth slows

Annual employment growth is forecast to moderate from its 3.5% pace in the December 2015 quarter (Figure 1.10). The unemployment rate declines gradually to 4.5% in late 2017 as the contribution to the labour force from migration eases and labour force participation stabilises at slightly lower levels.

Figure 1.10 – Employment, labour force and unemployment rate



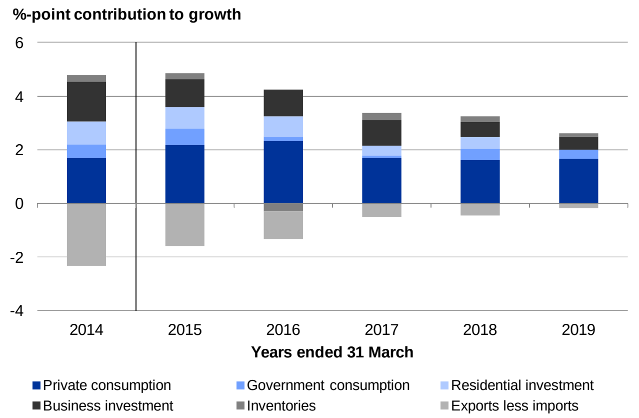
Sources: Statistics New Zealand, the Treasury

As the labour market tightens and inflation begins to rise, average hourly wage growth picks up gradually to 3.3% in the March quarter of 2019 from 2.5% in March 2016. Beyond June 2016, total labour income growth is slightly softer than previously forecast, mainly reflecting slower wage growth.

Household expenditure growth eases…

Private consumption is forecast to grow by 3.9% in the March 2016 year (contributing 2.3 percentage points to GDP growth [Figure 1.11]), before easing to 2.8% as support from population and labour income growth moderates and interest rates increase. Growth is stronger in later years compared to the *Half Year Update* given lower consumption import prices and lower interest rates.

Figure 1.11 – Contributions to real GDP growth



Sources: Statistics New Zealand, the Treasury

…while residential investment peaks…

Residential investment is expected to rise further, albeit at a slower rate than over recent years with activity peaking in early 2018. Investment is driven by strong population growth and housing demand in the Auckland market. A high level of activity in Canterbury is expected to be sustained for some time providing a solid base, although recent data have shown a decline in residential consents in the Canterbury region, posing some downside risk.

…and business investment slows as interest rates rise

Firms are forecast to expand their investment as output grows, supported by low interest rates and a high NZ dollar. Annual average growth in business investment is expected to remain over 5.0% until the March 2017 year, before easing to 2.4% in the March 2019 year as interest rates begin to rise and Canterbury rebuild-related growth slows.

Government expenditure growth remains subdued

Fiscal policy is forecast to exert a mild constraining influence on demand over most of the forecast period with operating allowances unchanged from the *Half Year Update*. Government consumption growth is expected to ease over the next few years before picking up in the 2017 fiscal year reflecting a larger operating allowance. Operating allowances are added to government expenditure as a technical assumption in the forecasts, but in practice are available for a combination of expenditure and revenue initiatives.

Trading partner growth is uneven…

Trading partner growth is expected to increase in 2015 and 2016 as growth remains on track in the US and picks up from a slow pace in the euro area and Japan (Table 1.2). Australian growth is expected to remain below trend for longer as the rebalancing from mining investment to other sectors of the economy progresses slowly. In addition, China's growth is slowing as investment growth eases. A greater weighting to higher growth economies means trading partner growth is slightly stronger than previously forecast in the longer term.

Table 1.2 – Trading partner growth forecasts (annual % change)

	2015 weights	2014 Estimate	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast	2019 Forecast
China	*25%*	7.4	7.0	6.9	6.8	6.6	6.5
Australia	*24%*	2.7	2.5	2.8	3.0	3.0	3.0
Other Asia*	*22%*	4.1	4.3	4.4	4.5	4.5	4.5
United States	*11%*	2.4	3.0	2.8	2.7	2.6	2.5
Euro area	*7%*	0.9	1.2	1.4	1.4	1.4	1.4
Japan	*7%*	-0.1	0.9	1.4	0.6	0.7	1.0
United Kingdom	*4%*	2.6	2.6	2.3	2.0	2.0	2.0
Canada	*1%*	2.5	2.4	2.2	2.3	2.2	2.2
Trading Partner Growth (TPG)	*100%*	3.7	3.8	3.9	4.0	4.0	4.0
TPG - Consensus (April 2015)		3.7	3.9	4.1	4.0	3.9	3.9
TPG - IMF WEO (April 2015)		3.7	3.9	3.9	3.8	3.8	3.9
TPG - The Treasury (2014 *Half Year Update*)		3.7	3.9	3.9	3.9	3.9	3.9

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

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

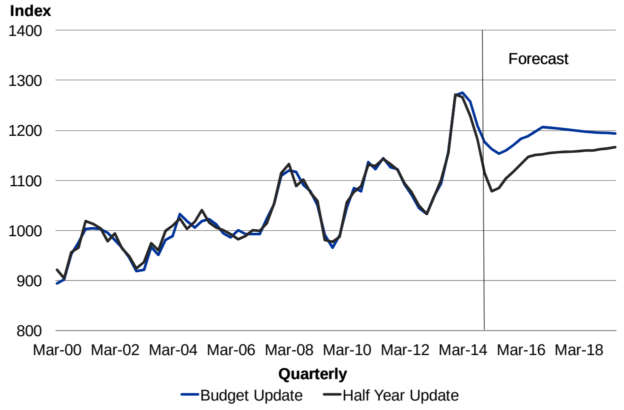
…with more accommodative monetary policy...

Low inflation – and in some cases falling prices – have been a global phenomenon recently with many central banks adopting more accommodative monetary policy stances since the *Half Year Update*. The European Central Bank introduced quantitative easing and the Bank of Japan expanded its quantitative easing programme while the Japanese government postponed a second sales tax hike. China has eased monetary policy in view of risks to its lower growth target of 7% this year, and Australia reduced its cash rate again in May, to 2.0%. Long-term interest rates have fallen given the increased demand for sovereign debt from the large quantitative easing programmes and postponement of policy rate increases. However, interest rates are expected to increase later in the forecast period as world growth strengthens and central banks reduce monetary stimulus.

…and recovery in the terms of trade…

The terms of trade are assumed to increase as commodity supply and demand come back into balance (Figure 1.12). Oil prices are assumed to rise steadily to around $US80 per barrel. As oil prices increase, they partially offset the benefits of rising dairy prices. Compared to the *Half Year Update*, weaker consumption and intermediate goods import prices as a result of the weaker global inflation environment provide less of a drag on the terms of trade over the latter years of the forecast period. These developments result in higher terms of trade than forecast in the *Half Year Update*.

Figure 1.12 – Goods terms of trade



Sources: Statistics New Zealand, the Treasury

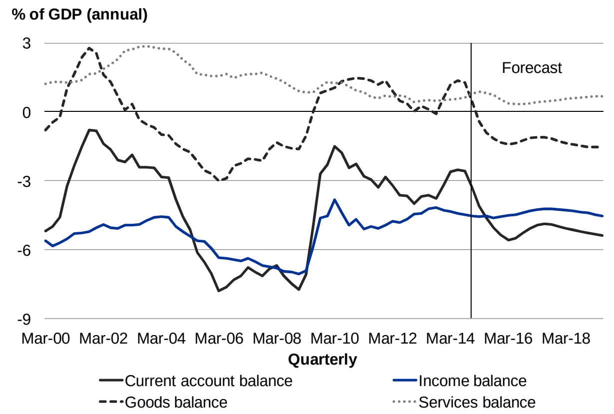
…leading to a higher NZ dollar…

The strong relative performance of the New Zealand economy, high terms of trade and positive international interest rate differentials exert upward pressure on the NZ dollar. The NZ dollar reached post-float highs against the euro and Australian dollar in April 2015 which have more than offset declines against the US dollar since July 2014 as expectations of interest rate increases build in that economy. The trade-weighted exchange rate index is higher than forecast in the *Half Year Update* and is expected to remain steady at an elevated level as these different forces continue to balance each other. A higher NZ dollar places downward pressure on tradables inflation and constrains export growth; however, households benefit through increased purchasing power.

…and the current account deficit stabilising

The annual current account deficit is forecast to stabilise around 5.0% to 5.5% of GDP from the March 2016 quarter until the end of the forecast period (Figure 1.13). Overall, the deficit is narrower by around half a percentage point compared to the *Half Year Update*, reflecting lower oil import prices and slower growth in intermediate and consumption import goods prices. Increased visitor arrivals result in a wider services surplus. Lower international interest rates moderate income outflows, leading to a narrower annual income deficit. As a consequence, net international liabilities are lower at 74.8% of GDP in the March 2019 quarter compared to 79.8% of GDP in the *Half Year Update*.

Figure 1.13 – Current account components

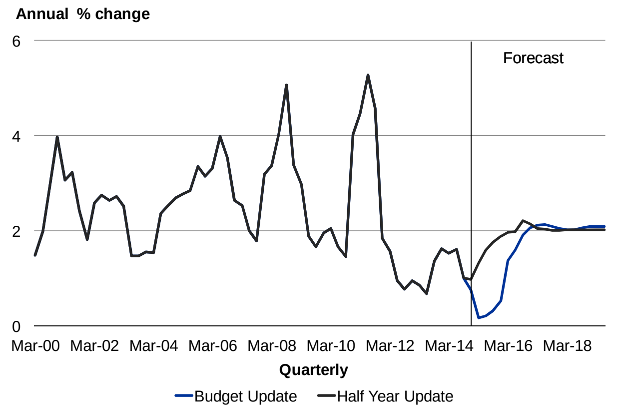


Sources: Statistics New Zealand, the Treasury

Inflation rises as cyclical factors pass…

Annual inflation is expected to remain low throughout 2015 and rise gradually to 2.1% by the end of 2016 (Figure 1.14), remaining close to the mid-point of the Reserve Bank's target band thereafter. Tradables inflation is expected to rise to 0.2% in early 2016, from an estimated -2.4% in the March 2015 year, remaining around that level over the rest of the forecast period.

Figure 1.14 – Consumer price inflation



Sources: Statistics New Zealand, the Treasury

Until recently the output gap has been negative but is now estimated to be around zero. Past spare capacity is reflected in current low non-tradables inflation and with inflation expectations and nominal wage growth also subdued, non-tradables inflation is expected to ease further to 2.0% over coming quarters. Non-tradables inflation is expected to rise to over 3.0% at the end of 2016 as capacity pressures develop. Consumer price inflation is considerably lower than forecast in the *Half Year Update*. Scenario one of the Risks and Scenarios chapter looks at the impacts of lower terms of trade than in the central forecast and a prolonged period of low global inflation. See the box "Why has inflation been surprisingly low?" (page 22) for details on the main factors that are contributing to low inflation and a discussion of the inflation outlook.

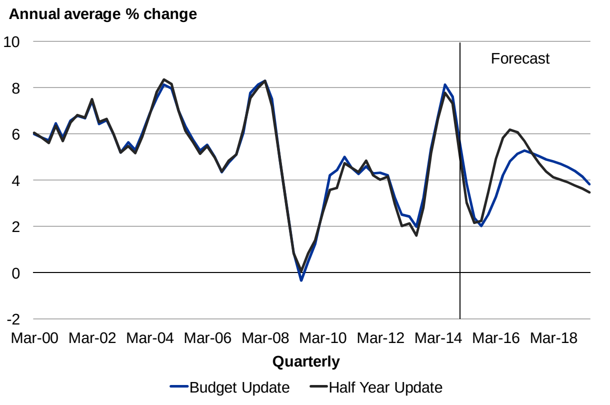
…supported by a period of low interest rates

Short-term interest rates are forecast to remain around current levels of 3.6% until late 2016 owing to the low inflation outlook. Short-term rates then begin to rise, reaching 4.8% in the March quarter of 2019. Long-term rates, which have fallen globally as a result of more accommodative monetary policy, are expected to increase gradually in line with international rates reaching 5.1% by March 2019.

Overall, low domestic inflation flows through to slower nominal GDP growth

While the outlook for real activity remains positive, the weak domestic inflation outlook results in slower nominal GDP growth in the 2016 and 2017 fiscal years than in the *Half Year Update*, but growth is faster in 2018 and 2019 (Figure 1.15). Cumulatively across the forecast period, nominal GDP is lower by around $5 billion.

Figure 1.15 – Nominal GDP growth



Sources: Statistics New Zealand, the Treasury

The downward revision to nominal GDP growth forecasts reduces forecast tax revenue from the *Half Year Update*. In addition, lower short-term interest rates as a result of downwardly-revised inflation contribute to a fall in tax revenue through lower interest resident withholding tax (see Fiscal Outlook chapter).

Why has inflation been surprisingly low?

Recent CPI inflation outturns have been low and have undershot the Treasury's and the Reserve Bank's forecasts. The most recent outturn showed prices rose only 0.1% in the year to March 2015, a significant deceleration from March 2014 (1.5%). Although fuel prices fell significantly over the December and March quarters, annual inflation excluding fuel was still a subdued 1.0% in March. Tradables inflation excluding vehicle fuels has been negative for some time and relatively stable, falling only slightly from -0.7% a year ago to -0.9% in March. On the other hand, non-tradables inflation has fallen from 3.0% to 2.3% over the same period.

There are a number of factors other than the fall in fuel prices that have contributed to low inflation, including:

- **Retail competition** – in recent years around 15% of retail items have been discounted each quarter, compared to around 9% in 2009, despite strengthening private consumption growth. The ability of consumers to purchase overseas goods online also contributes to more intense competition.
- **Quality adjustments** – quality-adjusted prices for electronic goods and communication services are continuing to decline as a result of improved technology and features.
- **Supply chain management** – the Treasury's business talks suggested that firms have been negotiating lower prices with their suppliers, allowing them to minimise price increases.
- **Low global inflation** – New Zealand's trading partners are experiencing low inflation, chiefly as a result of weak demand, which is contributing to lower import cost increases. This is also affecting prices for many non-tradable items as they include traded goods inputs.
- **The high NZ dollar** – this has been dampening tradables inflation with imported items such as durable goods and clothing and footwear declining in price over the past several years.

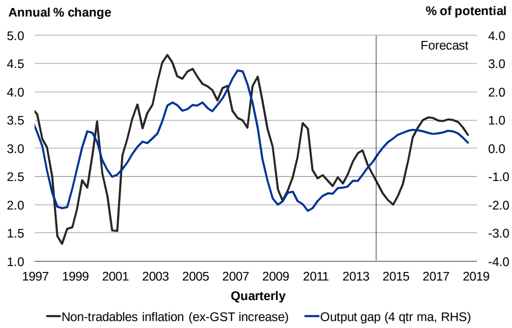
Another factor behind low inflation has been the presence of spare capacity in the economy. The output gap, a summary measure of the difference between actual output and its sustainable level, has been negative since 2009. That is, the economy has been capable of producing more, while leaving some resources less than fully employed. As a consequence, there has been less pressure on prices to rise.

However, the Treasury's model estimates show the output gap has recently closed. Other indicators suggesting spare capacity has been largely exhausted include the Quarterly Survey of Business Opinion (QSBO) measure of capacity utilisation which is at its highest level in six years. The QSBO also showed supply factors are becoming more of a constraint on the expansion of output than demand. The Treasury expects the output gap to become increasingly positive over the next year which, all else equal, will lead to higher non-tradables inflation (Figure 1.16).

The labour market has also experienced a reduction in spare capacity, with the unemployment rate declining from 6.0% to 5.8% over 2014, despite record rates of labour force participation and high net migration inflows. However, wage growth has been subdued at 2.1% in March 2015 year (partly reflecting the low inflation) and the unemployment rate remains above the level that would lead to an increase in inflation, indicating that there is still some spare capacity in the market.

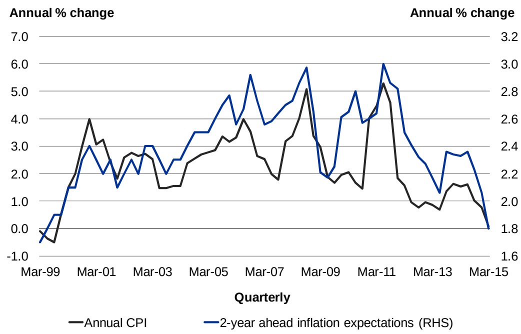
Even with the reduction in spare capacity in the economy, inflation expectations and surveys of pricing intentions have been falling. In the Reserve Bank's Survey of Expectations, the 2-year ahead inflation expectation declined from 2.3% in the March 2014 quarter to 1.8% in the March 2015 quarter. Similarly, the March QSBO showed a decline in firms' selling price expectations and cost price expectations to historically low levels. A net 6% of firms expect to raise prices while a net 19% of firms expect costs to increase in the June quarter. However, inflation expectations and pricing intentions tend to reflect recent outturns and the extent to which they influence future behaviour is uncertain (Figure 1.17).

Figure 1.16 – Non-tradables inflation and the output gap



Sources: Statistics New Zealand, the Treasury

Figure 1.17 – Headline CPI and inflation expectations



Sources: Statistics New Zealand, Reserve Bank of New Zealand

The factors discussed above which have contributed to the recent low inflation outturns are a mix of temporary and permanent factors. Downward pressure on inflation will continue if retail competition, quality enhancements in communications technology and supply chain management intensify. The other factors, including the recent oil price fall and the appreciation in the exchange rate, are likely to be temporary.

In these forecasts, inflation returns to the Reserve Bank's target mid-point as excess demand pressure builds. However, should low inflation persist there would be a case for interest rate cuts, as shown in the Reserve Bank's March Monetary Policy Statement. This would help to offset some of the weaker growth in nominal GDP and tax revenue which would eventuate from lower-than-forecast inflation.