
Economic Outlook

Overview

- The pace of expansion in economic activity quickened and broadened over the second half of 2013. This trend is likely to have continued in 2014. Over the second half of 2013, agricultural production recovered from the drought earlier in the year and exports rose strongly; business confidence increased and investment in capital goods accelerated; and economy-wide employment rose sharply, supporting growth in household incomes.
- Household and business incomes have been further boosted by high prices for New Zealand's export commodities, which have underpinned record high levels in the terms of trade. The rise in incomes has been reflected in faster growth in private consumption expenditure and in market investment. Low interest rates, the Canterbury rebuild and strengthening net migration inflows are also adding to domestic demand.
- Growth in demand has reduced spare capacity in the economy and consumer price inflation has increased, particularly for non-tradable goods and services. Prices in the tradable sector have continued to fall, reflecting weak import prices and the ongoing appreciation of the exchange rate, and have helped keep overall inflation moderate. At the same time, the high exchange rate is reducing the price competitiveness of firms in the tradable sector, and restraints on high loan-to-value mortgage lending are reducing the impact of low interest rates on parts of the economy.
- Growth in New Zealand's major trading partners is gaining momentum, supported by expansionary monetary policy. However, inflation is low in many countries, public and private debt is high and financial stability risks, while reduced, remain a threat to the recovery. Internationally, monetary policy accommodation is expected to remain in place for some time.
- Domestically, the pace of expansion in the economy is expected to quicken to 4.0% over the next year and employment is forecast to increase by 3.0%. The relatively positive growth outlook and the accompanying inflationary pressures have led the Reserve Bank to begin returning interest rates to more neutral settings. Short-term interest rates are forecast to rise to 4.3% in the March 2015 quarter and to 4.8% a year later, and consumer price inflation is expected to peak at around 2.5% in mid-2016 and to ease to 2.0% in early 2018.

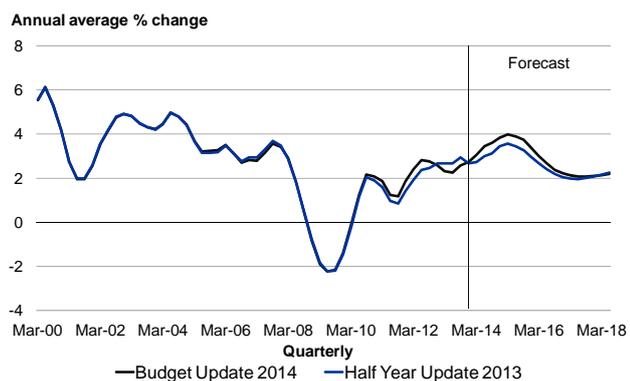
- Expectations of widening interest rate differentials are providing support for the current high level of the New Zealand dollar. The trade-weighted exchange rate is assumed to remain elevated throughout the forecast period, which slows growth in the tradables sector and contributes to a widening of the current account deficit.
- Beyond 2015, tighter monetary conditions, combined with a decline in the terms of trade and slowing net migration inflows, contribute to a period of more moderate growth that enables inflation to stabilise and the exchange rate to depreciate. Nonetheless, the exchange rate remains high at the end of the forecast period and continues to constrain export growth, while import demand continues to be supported by the Canterbury rebuild. This is reflected in a current account deficit of 6.3% of GDP in 2018.

Economic Outlook

Higher terms of trade and increased net migration inflows provide a temporary boost...

The terms of trade (the price of exports relative to imports) have risen to 40-year highs, leading to an increase in national income and purchasing power. These gains are reflected in increased consumer spending and business investment. Higher net migration inflows are also adding to demand. As a consequence, the near-term growth outlook is slightly stronger than forecast in the *Half Year Update* (Figure 1.1). However, recent gains in the terms of trade and net migration are expected to be temporary.

Figure 1.1 – Real GDP growth



Sources: Statistics New Zealand, the Treasury

Rising dairy export prices have been a major contributor to the higher terms of trade but, more recently, dairy prices have moved lower and further falls are anticipated as global supply increases. Demand from Asia, and China in particular, is expected to remain strong and to provide support for historically high prices over the medium term. Prices for many other export commodities are also at high levels but, like the market for dairy products, increases in supply are expected to result in lower prices over the next 12 to 18 months.

Overall, the terms of trade are projected to decline by about 9% over the next year but to remain at a high level over the medium term. This is a small decline relative to many of those experienced over the past 40 years and the historical experience suggests that the terms of trade will, in all likelihood, be much more volatile than projected. Nonetheless, over the medium term the terms of trade are expected to settle at a level that is well above their long-run trend (see Box on the outlook for the terms of trade on page 13). The Risks and Scenarios chapter explores the likely effects of a large and sustained fall in the terms of trade.

Table 1.1 – Economic forecasts¹

(Annual average % change, March years)	2013 Actual	2014 Forecast	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast
Private consumption	2.6	3.6	4.1	3.6	2.4	1.6
Public consumption	-0.6	1.4	0.0	1.2	1.9	1.6
Total consumption	1.9	3.1	3.3	3.1	2.3	1.6
Residential investment	19.4	14.5	22.6	10.8	1.6	0.1
Market investment	4.9	11.3	9.6	4.3	3.8	2.8
Non-market investment	-9.9	1.6	2.7	2.4	2.4	2.4
Total investment	7.3	11.8	13.6	5.7	3.5	2.4
Stock change ²	-0.4	0.2	0.2	-0.1	-0.2	-0.1
Gross national expenditure	2.3	5.2	6.3	3.7	2.5	1.7
Exports	2.6	-0.7	1.4	2.1	2.7	2.6
Imports	1.2	8.2	6.6	4.4	3.7	1.6
GDP (expenditure measure)	2.6	2.5	3.9	3.0	2.1	2.1
GDP (production measure)	2.3	3.0	4.0	3.0	2.1	2.1
Real GDP per capita	1.6	2.0	2.2	1.7	1.1	1.2
Nominal GDP (expenditure measure)	2.2	6.7	5.7	4.3	4.5	3.7
GDP deflator	-0.5	4.1	1.7	1.3	2.3	1.6
Output gap (% deviation, March year avg) ³	-1.2	-0.4	0.8	1.2	0.6	0.2
Employment	0.3	2.4	3.0	1.8	1.3	1.2
Unemployment rate ⁴	6.2	5.9	5.4	5.1	4.8	4.4
Participation rate ⁵	67.9	69.0	69.3	69.2	69.1	69.0
Nominal wages ⁶	2.1	3.0	2.7	3.1	3.5	3.5
CPI inflation ⁷	0.9	1.5	1.8	2.5	2.3	2.0
Terms of trade ⁸	-5.9	13.2	1.6	-4.9	0.9	0.2
House prices ⁹	7.6	8.0	7.3	4.3	2.5	2.4
Current account balance						
\$billion	-8.3	-7.0	-10.4	-14.6	-16.0	-17.1
% of GDP	-3.9	-3.1	-4.4	-5.9	-6.2	-6.3
Net international investment position						
% of GDP	-71.4	-65.9	-66.7	-69.8	-73.0	-76.6
TWI ¹⁰	75.9	78.7	78.6	78.4	76.9	73.2
90-day bank bill rate ¹⁰	2.7	3.0	4.3	4.8	4.9	5.3
10-year bond rate ¹⁰	3.7	4.6	4.8	5.0	5.1	5.2

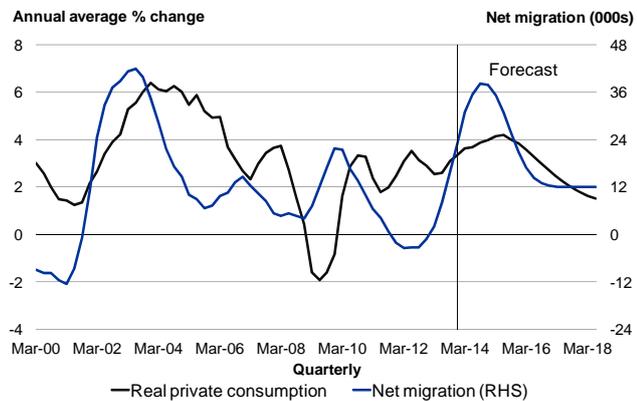
- Notes: 1 Forecasts finalised 17 April 2014.
2 Contribution to GDP growth.
3 Estimated as the percentage difference between actual real GDP and potential real GDP.
4 Percent of the labour force, March quarter, seasonally adjusted.
5 Percent of the working-age population, March quarter, seasonally adjusted.
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 QVNZ House Price Index, annual percentage change.
10 Average for the March quarter. CPI, TWI and interest rates are actuals for 2014.

Longer time series for these variables are provided on page 132.

Net permanent and long-term migration inflows have continued to rise in recent months, increasing the population and adding to demand in the housing market and to private consumption demand more broadly (Figure 1.2). Net inflows reached nearly 32,000 in the 12 months to March 2014, almost double the inflow at the time of the *Half Year Update*, and have contributed to a doubling in annual population growth over the past 18 months.

Much of the rise in net migration inflows is accounted for by fewer departures, mostly to Australia, reflecting the relatively positive outlook for employment growth in New Zealand. Arrivals from Australia have also strengthened, driven by returning New Zealanders. Annual net migration is expected to increase further, to around 38,000 later this year, before declining gradually to its long-run average inflow of 12,000 per year. However, like the terms of trade, movements in net migration are hard to predict and can change rapidly. The implications of a greater increase in net inflows are discussed in the Risks and Scenarios chapter.

Figure 1.2 – Private consumption and net migration



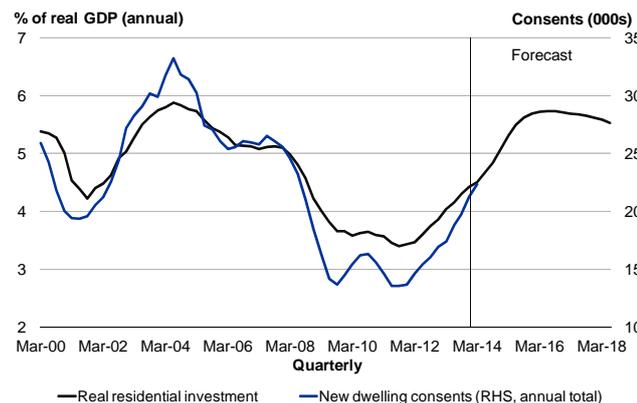
Sources: Statistics New Zealand, the Treasury

...while the Canterbury rebuild has a longer-lasting impact

The Canterbury rebuild is expected to provide significant impetus to demand over the forecast horizon and beyond, chiefly through additional residential and business investment, but also through related consumption spending on consumer durables.

Reconstruction investment is estimated to total around \$40 billion, with around half of this expenditure expected to have taken place by the end of the forecast period in mid-2018. Construction activity is also expected to increase elsewhere, particularly in the Auckland area where there is a shortage of housing.

Figure 1.3 – Real residential investment

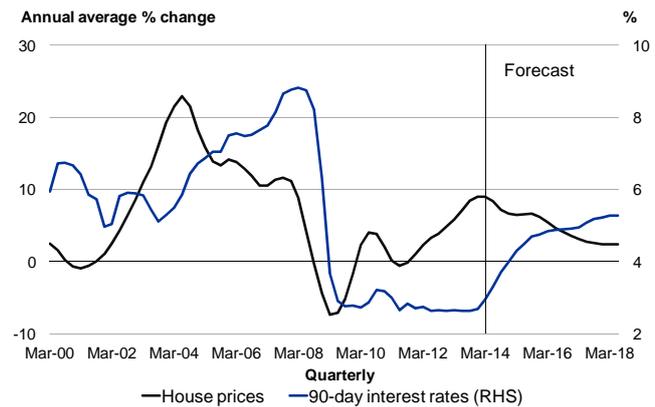


Sources: Statistics New Zealand, the Treasury

Construction activity rose strongly over the first half of 2013 and continued at a high level over the remainder of the year. The number and value of residential building consents has continued to trend upward in recent months, indicating a strong pipeline of activity ahead (Figure 1.3). Employment in the industry has continued to expand and the labour market has tightened, particularly in Canterbury, where unemployment has fallen to low levels. Construction costs in the Consumers Price Index (CPI) have increased and are likely to increase further as capacity pressures become more acute, underpinning non-tradables inflation in coming years. While these costs are assumed to have limited implications for other industries, the risk of stronger cost pressures remains high.

House prices rose 9% in the year ending December, although the rate of increase has eased in recent months, likely reflecting loan-to-value restrictions on mortgage lending imposed by the Reserve Bank on 1 October 2013, as well as higher mortgage interest rates. Further interest rate rises are projected and house price inflation is expected to ease further (Figure 1.4). In these forecasts, short-term interest rates rise to 4.8% by the March quarter 2016, up from 3.0% in the March quarter 2014, a little faster than projected in the *Half Year Update*, reflecting stronger growth.

Figure 1.4 – House prices and interest rates

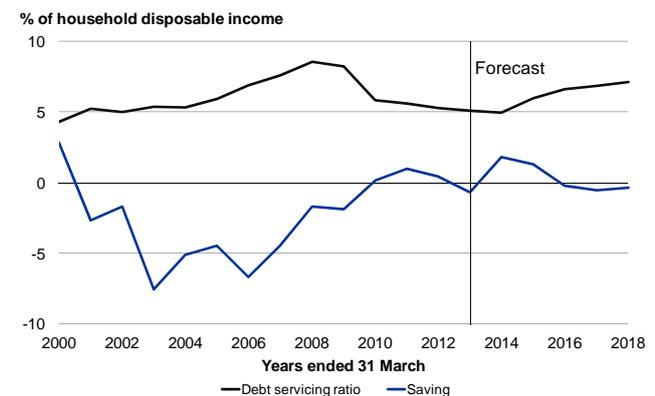


Sources: Quotable Value, Reserve Bank, the Treasury

Projected interest rate increases flow through to higher household debt servicing expenses (Figure 1.5), which constrains the rate of growth of consumption demand and the demand for housing assets. Although interest rates are projected to rise, the timing and extent of future increases are uncertain; for example, interest rates may not rise as quickly as forecast if the terms of trade fall more sharply than expected (as in the Risks and Scenarios chapter).

Household debt has declined from its earlier peak as a share of household income, but remains elevated. These forecasts assume that some of the income gains from the rise in the terms of trade are saved (Figure 1.5), but the response of consumers to increased income is uncertain. There is a risk that, rather than increase their saving, households may instead prefer to increase their debt levels to fund the purchase of houses or the consumption of other goods and services and, as a consequence, house price inflation and domestic demand pressures do not ease as anticipated. The implications of stronger private consumption are modelled in the Risks and Scenarios chapter.

Figure 1.5 – Household saving and debt servicing



Sources: Statistics New Zealand, the Treasury

Private consumption expenditure is supported by a stronger labour market...

Growth in private consumption is supported by rising labour income and the terms of trade. Employment growth accelerated over the second half of 2013, reflecting increased demand in the economy and greater confidence in the economic outlook, and the unemployment rate fell to 6.0% (Figure 1.6). With demand continuing to strengthen and confidence remaining high, further gains in employment are anticipated. The unemployment rate is expected to decline to around 5.0% in 2016, underpinned by a labour force participation rate that is assumed to return to its pre-recession peak in coming quarters and to remain at an historically high level. The higher labour force participation rate, coupled with rising net migration inflows, partly offsets the impact of stronger labour demand and results in only a gradual increase in wage growth.

Similarly, although rising net migration adds to demand pressures in the short-run, in the medium term it increases the productive capacity of the economy. This increase is reflected in potential GDP growth, which expands at an average rate of 2.6% per year over the forecast period, slightly higher than in the *Half Year Update*.

Over the year ahead, employment is expected to grow 3.0% and to be the primary factor contributing to

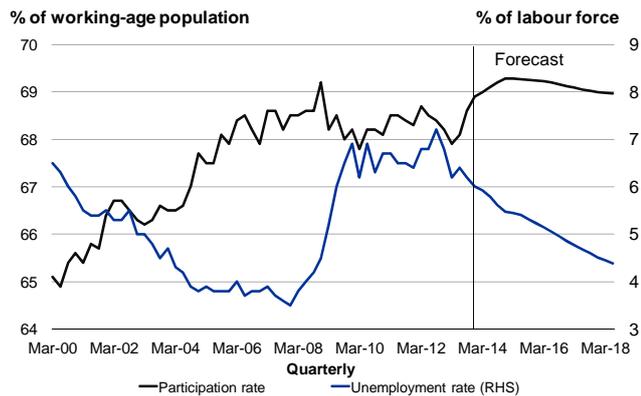
increased output. From the year ending March 2015 onward, growth in the capital stock, which partly reflects the Canterbury rebuild, makes the largest factor contribution to increases in output. These trends are reflected in above-average labour productivity growth over the March years ending 2013 to 2016 when output growth is strongest, but slower productivity growth thereafter as output growth slows. As a consequence, the forecast pickup in GDP per capita growth to over 2.0% per year in 2014 is expected to subside by 2016, and to average around 1.7% over the forecast period, a little above its post-2000 average.

...and higher real incomes

Increases in the terms of trade, which measure the prices of goods and services New Zealand exports relative to those it imports, mean that the purchasing power of New Zealand residents has improved. The terms of trade effects are not captured directly by the measures of real GDP, which measures production, but are included in real gross national income (GNI). The recent rise in the terms of trade has caused a significant divergence between the movements of real GDP and real GNI; that is, real incomes are

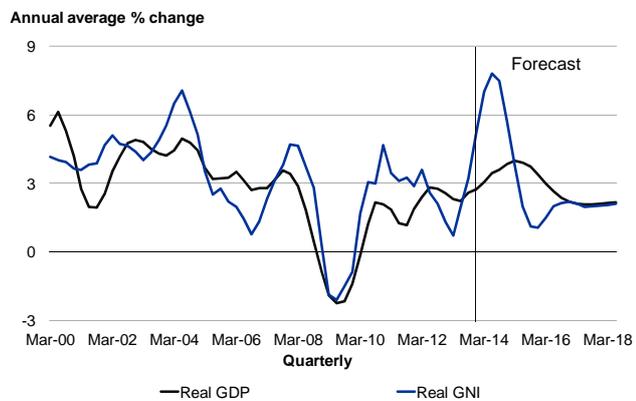
increasing faster than real output or GDP (Figure 1.7). Although real income growth slows as the terms of trade ease, the ongoing high level of the terms of trade means that real incomes also remain high. Some of these income flows will be required to meet increased depreciation as the capital stock expands, but a large proportion of the gains from the terms of trade are likely to be available to support domestic consumption.

Figure 1.6 – Labour market



Sources: Statistics New Zealand, the Treasury

Figure 1.7 – Real income and real output



Sources: Statistics New Zealand, the Treasury

Outlook for New Zealand's Terms of Trade

Until the late 1980s, New Zealand's terms of trade appeared to be on a downward trend. This was considered a serious issue for the economy and was often explained in terms of a long-term decline in commodity prices relative to manufacturing prices.¹ The trend decline in the terms of trade appears to have stopped in the late 1980s, followed by a period of stability in the 1990s and an upward trend from around 2000.

One of the main factors responsible for this change is the entry of China into the world economy, increasing the demand for commodities and contributing to falling prices for manufactured goods. This combination has resulted in a rise in New Zealand's terms of trade over the past 10-15 years (Figure 1.8).

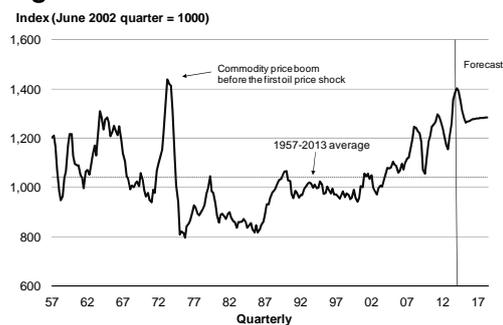
The terms of trade are an important influence on New Zealand's nominal GDP which in turn is a key driver of tax revenue. Higher export prices flow through directly to the tradables sector and indirectly to the rest of the economy.

An elevated outlook for the terms of trade has been one of the key features of recent Treasury forecasts. The headline merchandise terms of trade reached a fresh 40-year high in the December 2013 quarter and were only 3.5% short of their 1973 high.² The terms of trade are expected to fall over the second half of 2014 as high dairy prices drive increases in global production. This is expected to reduce global prices and to lower returns to New Zealand producers.

Nonetheless, rising demand from China and other emerging economies is expected to support demand for our commodity exports, and to underpin the terms of trade, into the medium term as total world production is unable to keep pace. In the 2014 *Budget Update*, the merchandise terms of trade are assumed to remain around 25% higher than their 50-year average.

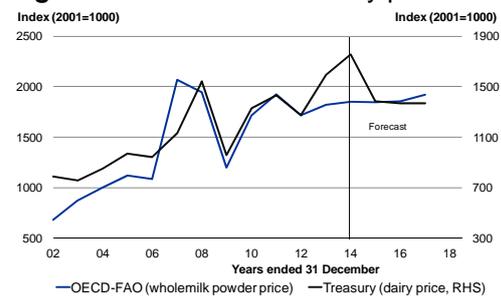
The Treasury's forecasts are supported by international research, particularly with regard to dairy prices, which the OECD-FAO expects to remain high in real terms for the next decade (Figure 1.9). The Risks and Scenarios chapter contains a scenario based on a greater fall in the terms of trade that is maintained at a lower level over the medium term.

Figure 1.8 – Merchandise terms of trade



Sources: Statistics New Zealand, the Treasury

Figure 1.9 – Forecasts of dairy prices



Sources: OECD-FAO, the Treasury

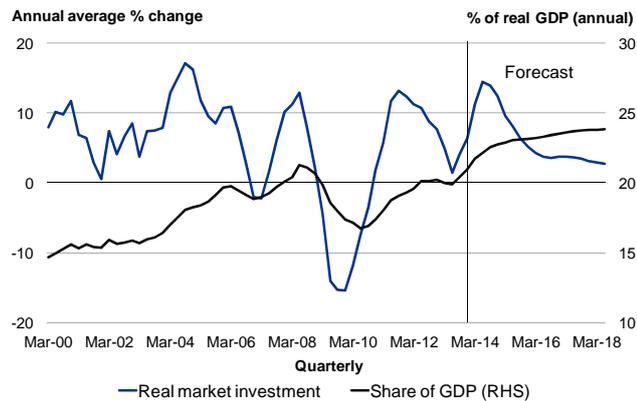
¹ For further discussion see Borkin, P, Past, Present and Future Developments in New Zealand's Terms of Trade, New Zealand Treasury Working Paper 06/09.

² Note that there are methodological differences between the headline measure of the terms of trade and the SNA-based series that the Treasury forecasts.

Market investment has accelerated...

The current environment of low interest rates, positive business sentiment and an elevated exchange rate (which makes imported capital goods cheaper) has supported a marked acceleration in investment in plant, machinery and equipment, which comprises about half of market investment. These supportive factors are expected to continue to drive investment growth over the next year or so (Figure 1.10). Thereafter, the influence of tighter monetary policy and the gradual decline of the exchange rate lead to slower investment growth. Furthermore, increases in demand from the Canterbury rebuild are expected to fade over 2015 as construction activity reaches its peak and continues at a high level for a number of years beyond the end of the forecast period in 2018.

Figure 1.10 – Investment demand

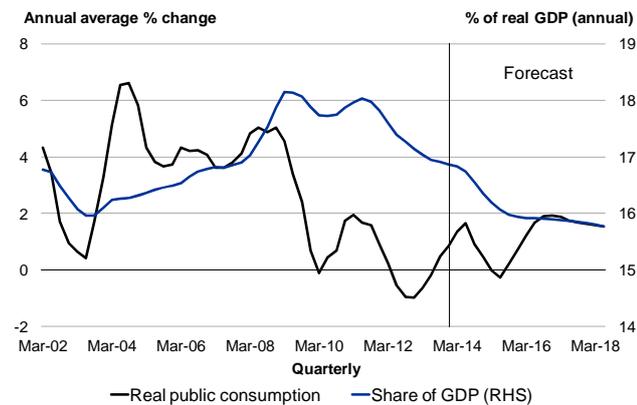


Sources: Statistics New Zealand, the Treasury

...but fiscal policy remains tight

The Government's fiscal objectives of achieving an operating balance surplus in the year ending June 2015 and then reducing debt are consistent with moderate growth in real government consumption over the forecast period (Figure 1.11). The increased operating allowances announced in the Budget are assumed to result in higher government consumption expenditure. The composition of spending will be revisited when government policy decisions are confirmed in future Budgets, that is, the operating allowances may be used for either higher spending or revenue reductions (see the 2014 *Fiscal Strategy Report*).

Figure 1.11 – Public consumption



Sources: Statistics New Zealand, the Treasury

Despite the increased allowances, government consumption is forecast to continue to decline as a proportion of GDP and the fiscal impulse or stimulus to the economy maintains its contractionary trend. That is, the net impact of the Government's spending, taxation and borrowing programmes is to reduce the share of the economy's productive resources it utilises, which enables other sectors of the economy to expand more vigorously.

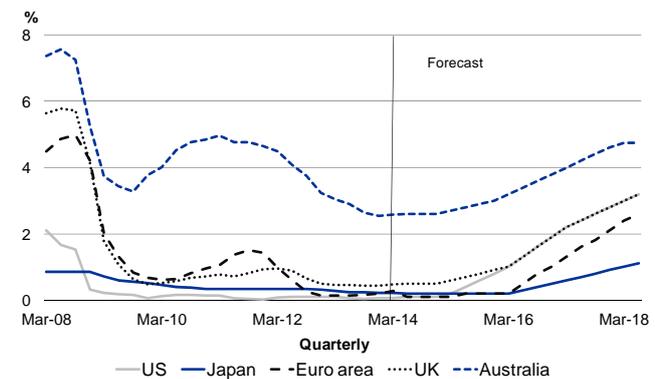
Trading partner growth is supporting export demand...

Economic growth in our major trading partners has been slightly higher than anticipated in the *Half Year Update* for most of the advanced economies, and the UK and US in particular; Japan and some of the emerging Asian economies underperformed relative to the forecasts.

The trend in world growth forecasts since late last year is for improvement in most advanced economies as their recoveries take hold, but some downgrades for emerging economies as capacity constraints, structural issues and tighter financial conditions, driven by greater investor concerns about vulnerabilities, affect their outlook. Inflation in the major advanced economies has remained subdued and the period of low interest rates is likely to be sustained for some time (Figure 1.12).

In the US, adverse winter weather has likely contributed to a period of slower growth, but a return to the moderate growth evident at the end of 2013 is expected. The labour market has continued to strengthen, albeit at a somewhat slower pace in recent months, and the unemployment rate has fallen to 6.3%. Ongoing monetary stimulus and slowing fiscal consolidation are expected to support growth of around 3% per year over the forecast period. A prolonged period of low interest rates and supportive monetary policy is also expected for the euro area and Japan.

Figure 1.12 – Short-term interest rates in advanced economies

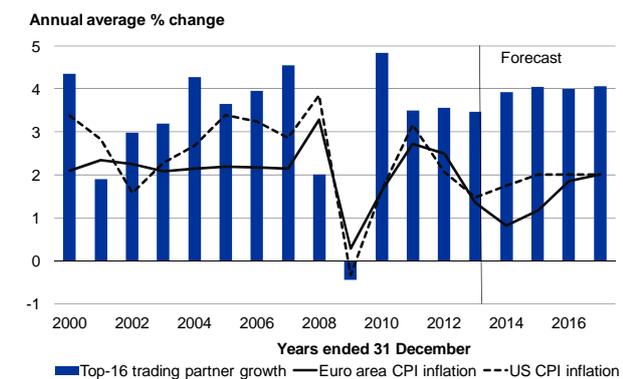


Sources: Haver, the Treasury

Growth in the Australian economy continues to reflect the rebalancing of activity from mining investment to exports and to other sectors. This transition has been accompanied by slower growth in 2013, but there are signs that demand is picking up, supported by low interest rates and strong demand in the housing market. However, the labour market remains subdued and the unemployment rate has been little changed over the past year, averaging around 5.8%. Growth is expected to remain below average for the next two years or so.

In China, growth also appears to have eased early in 2014, but is expected to recover, partly reflecting additional fiscal support. Over the medium term, growth is expected to moderate to around 7.0% as more restrained rates of credit growth and the impacts of reforms to promote a transition to a more balanced and sustainable growth path take effect. Although growth is expected to be more moderate, demand for New Zealand’s export commodities is likely to remain strong as ongoing increases in per capita incomes and changing dietary tastes drive continued increases in protein consumption.

Figure 1.13 – Trading partner growth and inflation in the US and euro area



Sources: Haver, the Treasury

Overall, trading partner growth is expected to increase at a similar pace to that experienced through the mid-2000s (Figure 1.13). Rising demand, particularly in China, will support export growth and underpin strong export prices. Despite the improved outlook, significant downside risks remain. Public debt remains high in many advanced

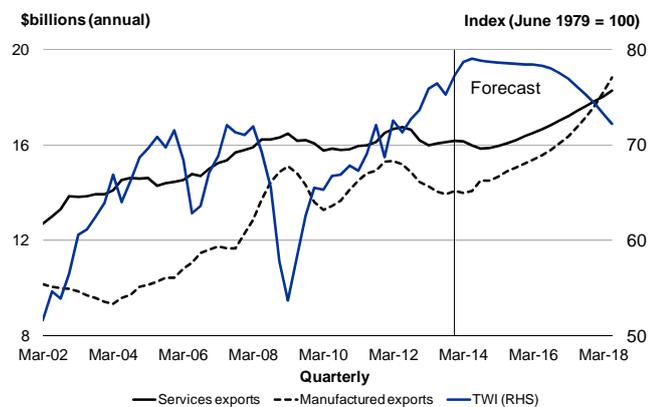
economies and credible medium-term plans to reduce the stock of debt are yet to emerge. Similarly, private and banking-sector debt remains high and credit conditions generally remain weak. In the euro area, the additional challenges of structural reform remain and risks to activity from very low inflation have emerged. The potential for a financial crisis in emerging markets and/or China also poses threats to the outlook. Risks to the global outlook are explored in more detail in the Risks and Scenarios chapter.

...but the high exchange rate is dampening the impact...

Expectations of future interest rate increases, combined with high commodity prices and New Zealand’s relatively favourable growth outlook, lifted the trade-weighted index (TWI) to a record high in the March quarter (Figure 1.14).

In the services export sector, which is dominated by tourism, the elevated exchange rate is making New Zealand a more expensive destination for tourists and foreign students who tend to have fixed foreign currency budgets. As a result, the New Zealand dollar value of export receipts for travel services and services exports more broadly has been static over the past year despite a 6% increase in visitor arrivals. The price competitiveness of manufactured goods exports is also reduced when the exchange rate appreciates, and export receipts in this sector have fallen over the past year. Trading conditions are expected to remain challenging in both sectors, although trading partner growth and the assumed depreciation of the exchange rate, particularly after 2016, provide some relief.

Figure 1.14 – Services and manufactured goods exports and the exchange rate

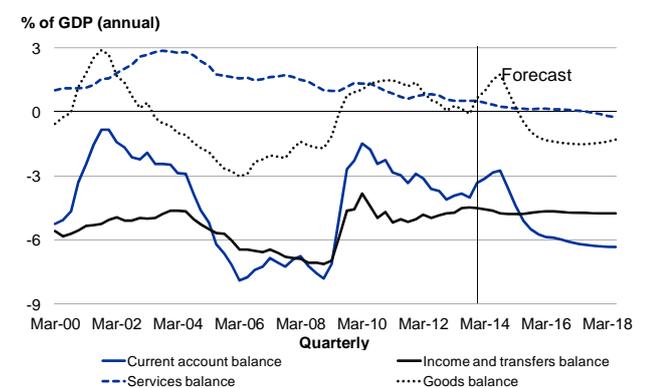


Sources: Statistics New Zealand, the Treasury

...and contributing to a widening current account deficit

In the final quarter of 2013 the strength of commodity export prices, combined with the recovery in dairy production from the earlier drought, increased the trade surplus and narrowed the current account deficit. Further increases in the trade surplus are expected in the near term reflecting ongoing high prices over the March quarter (Figure 1.15). More recently, dairy export prices have fallen and further falls are anticipated, leading to a decline in goods export receipts over the next two years or so. In addition, goods imports are expected to increase as investment and consumption demand continue to grow. As a consequence, the goods surplus is eroded over the year ahead and a widening deficit develops. This widening trend is halted late in the forecast period when the falling exchange rate supports export revenues.

Figure 1.15 – Current account

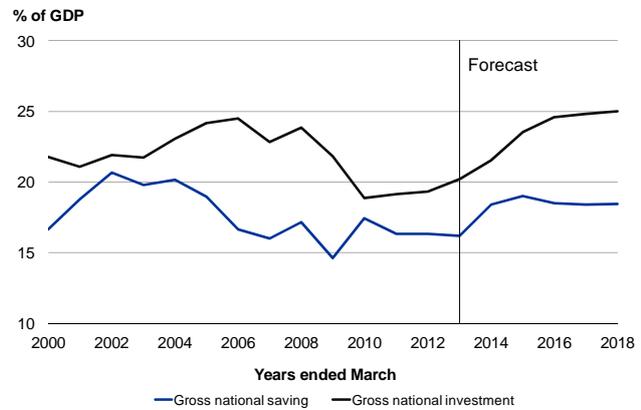


Sources: Statistics New Zealand, the Treasury

The long-term downward trend in the services surplus is forecast to continue, reflecting the depressing effect of the high exchange rate on export volume growth and its positive impact on services imports, which include holidays abroad by New Zealand residents.

Interest rates in the major developed economies are expected to remain on hold over the next year at least, but long-term rates are expected to rise gradually and to drive increases in interest outflows. Dividend outflows are also expected to increase, reflecting improved profitability, and overall the income deficit widens to around \$12 billion from around \$10 billion in the year ending March 2014. As a share of GDP, the income deficit is broadly stable at around 4.5% of GDP.

Figure 1.16 – Savings and investment



Sources: Statistics New Zealand, the Treasury

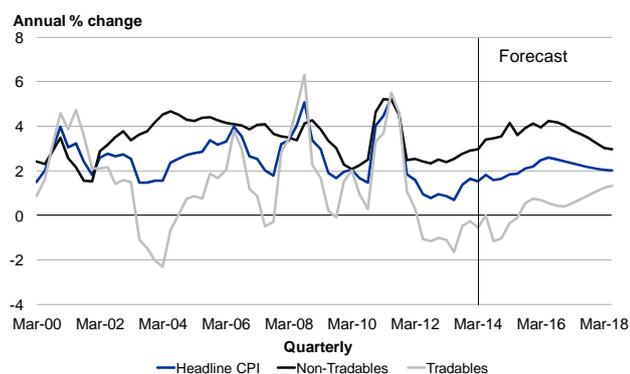
Over the forecast period investment demand rises more rapidly than saving, partly as a result of the Canterbury rebuild, which is reflected in a wider current account deficit (Figure 1.16). However, a large share of the Canterbury rebuild is assumed to be financed by overseas insurance inflows, which means that a proportion of the current account deficit is not generating additional international liabilities. Statistics New Zealand estimates a total of \$19 billion of reinsurance claims from all the Canterbury earthquakes, with \$13 billion of these claims having been settled.

In summary, the annual current account deficit is forecast to widen to 6.3% of GDP by the end of the forecast period in June 2018 and net international liabilities rise to 77% of GDP from 67% currently. In these forecasts, further depreciation of the exchange rate is required to stabilise the net international liability position.

Domestic sources of inflation are rising...

The strong pace of expansion evident in the economy is reducing spare capacity and contributing to price increases, particularly in non-traded sectors of the economy, including housing and household utilities. Falling tradable prices have provided an offset to rising non-tradable prices with the New Zealand dollar's appreciation, although the pace of falls has eased recently (Figure 1.17). Price pressures are expected to intensify, consistent with business survey measures of pricing intentions and with the expected stabilisation of the New Zealand dollar, which reduces opportunities for further tradable price falls.

Figure 1.17 – Consumer price inflation



Sources: Statistics New Zealand, the Treasury

Overall, headline CPI inflation is forecast to rise to around 2.5% in 2016 and decline gradually thereafter. Increases in tobacco excise taxes are expected to add 0.2 percentage points to annual inflation in each of the March 2015 and 2016 quarters.

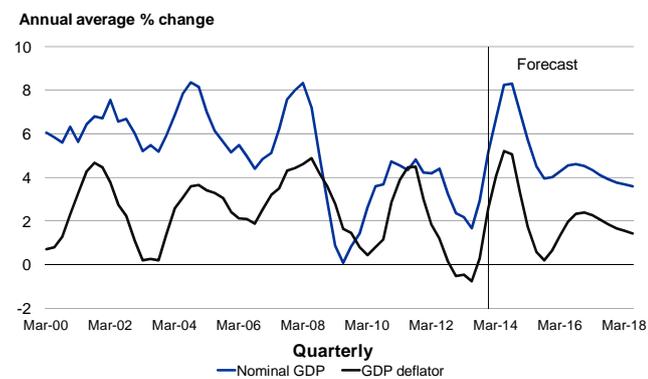
...leading to a withdrawal of monetary stimulus

As mentioned earlier, the Reserve Bank has begun to remove the stimulus to demand imparted by low interest rates. Further increases over the next two years are projected to lift short-term interest rates to around 4.8% from 3.3% currently. The higher interest rates have a direct impact on household disposable incomes through higher interest payments and an indirect impact on business investment demand, both of which result in slower growth. Although 90-day interest rates are expected to be neutral at around 4.8%, further increases may be required to offset the upward price pressure generated by the projected fall in the exchange rate and to keep inflation expectations anchored close to 2%.

Nominal GDP growth accelerates in the near term

The economy-wide price effects of movements in the terms of trade are captured in broad price measures including the GDP deflator, which is increasing sharply (Figure 1.18). With real GDP growth also rising briskly, nominal GDP growth is expected to accelerate to over 8% in the year ending June 2014. As the terms of trade fall later this year, nominal GDP growth slows to 4.5% in the year ending June 2015 and averages a little over 4% for the remainder of the forecast period.

Figure 1.18 – GDP deflator and nominal GDP



Sources: Statistics New Zealand, the Treasury

In the income measure of nominal GDP, which underpins the Treasury's tax revenue forecasts, compensation of employees grows at an average rate of 4.7% per year and remains broadly stable as a share of GDP. The net operating surplus, which drives forecasts of corporate tax, cycles around a more moderate growth rate of 3.8% per year, largely reflecting movements in commodity producer incomes.

Economic Forecast Assumptions

- Net permanent and long-term migration inflows rose to 31,900 in the year ended March 2014, although only data up to the February month (29,000) were available when the *Budget Update* was finalised. Net migrant inflows are forecast to rise to 38,100 in the September 2014 year before returning to the long-run assumption of 12,000 per year in 2017.
- The non-accelerating inflation rate of unemployment (NAIRU) is assumed to be around 4.5% by 2018.
- Average hours worked per week are assumed to decline from their current level of 33.0 to 32.8.
- Economy-wide labour productivity growth is assumed to average 1.3% per year between the years ending March 2014 and March 2018.
- 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). Around \$18 billion of the total is forecast to be undertaken within the forecast period to June 2018.
- WTI oil prices are assumed to fall from around US\$99 per barrel in the March 2014 quarter to around US\$81 in the March 2018 quarter, in line with oil futures prices.
- 90-day interest rates are assumed to increase from 3.0% in the March 2014 quarter to 5.3% in the March 2018 quarter and 10-year interest rates to rise from 4.6% in the March 2014 quarter to 5.2% in the March 2018 quarter.
- The TWI is assumed to remain around 79.0 from the June 2014 quarter until late 2016, and then to decline to 72.2 in the June 2018 quarter.
- Tobacco excise tax increases add 0.2 percentage points to annual inflation in each of the March 2015 and 2016 quarters.
- Reduced ACC levy rates will reduce contributions by households and employers by about \$400 million in the 2014/15 levy year and around \$480 million in the following levy year, with the latter to be finalised following ACC's public consultation.