



Hon Dr Michael Cullen  
MINISTER OF FINANCE

◆ DECEMBER ECONOMIC AND FISCAL UPDATE 2003 ◆

18 DECEMBER 2003

---

## Statement of Responsibility

On the basis of the economic and fiscal information available to it, the Treasury has used its best professional judgement in supplying the Minister of Finance with this Economic and Fiscal Update. The Update incorporates the fiscal and economic implications both of Government decisions and circumstances as at 8 December 2003 that were communicated to me, and of other economic and fiscal information available to the Treasury in accordance with the provisions of the Fiscal Responsibility Act 1994.



John Whitehead  
Secretary to the Treasury

11 December 2003

This Economic and Fiscal Update has been prepared in accordance with the Fiscal Responsibility Act 1994. I accept overall responsibility for the integrity of the disclosures contained in this Update, and the consistency and completeness of the Update information in accordance with the requirements of the Fiscal Responsibility Act 1994.

To enable the Treasury to prepare this Update, I have ensured that the Secretary to the Treasury has been advised of all Government decisions and other circumstances as at 8 December 2003 of which I was aware and that had material economic or fiscal implications.



Hon Dr Michael Cullen  
Minister of Finance

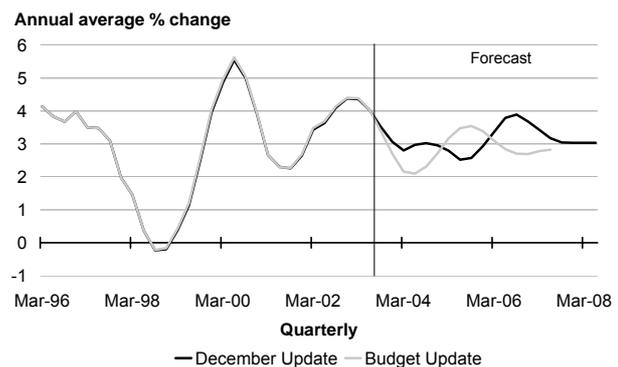
11 December 2003

## Economic Outlook

### Summary

- The economy has grown strongly over the past two years. Annual growth was 4.0% in the year ended June. Employment growth has been strong, and the unemployment rate has fallen to 4.4%, which is lower than at any time since the late-1980s.
- However, in the last year strong overall growth has come to be increasingly dominated by domestic demand.
- The Iraq conflict, the SARS outbreak and drought have all been partly responsible for slower export growth, and also led to an overall “growth pause” over the June quarter.
- But in general, strong domestic demand can be explained by strong employment and household wealth, and more immigration, while declining net export earnings can be explained by the increasing exchange rate.
- Over the short term, GDP growth is expected to continue to be robust, owing to ongoing strong household and business spending. Housing investment growth will be particularly strong.
- The strong end to the year sees real GDP growth of 2.8% for the year to March 2004, compared with 2.2% forecast in the *Budget Update*.
- As calendar 2004 progresses the pace of domestic demand growth is forecast to abate, with the housing investment cycle running its course and households easing back their other spending. Together with export growth remaining low quarterly GDP growth will slow. For the year ended March 2005, 2.8% growth is forecast, declining further to 2.5% by June.
- From mid-2005, the rebound in global growth is forecast to provide a greater stimulus to exports, with the exchange rate acting as less of a drag given its assumed decline. Households are expected to continue to consolidate their financial position so that despite steady business investment and rising infrastructure investment, domestic

**Figure 1.1 – Real GDP growth**

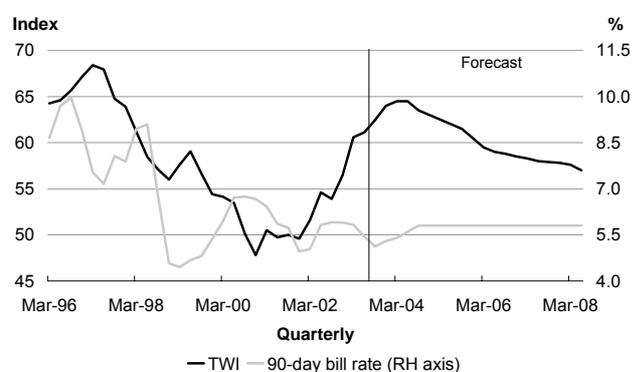


Sources: Statistics New Zealand, The Treasury

demand will slow further, implying more balanced growth than has occurred over 2003. With import growth also slowing, GDP growth of around 3.4% is forecast for 2005/06 and 2006/07.

- At the end of the forecast period, economic growth is expected to have been relatively robust for a decade. An economic growth cycle is forecast, with the period of slower growth in 2004/05 representing the trough, but the fluctuation is expected to be less than in past cycles.
- Over most of the forecast period, annual CPI inflation is expected to fluctuate between 2.0% and 2.5%. Non-tradable inflation will persist for a time even after domestic demand growth begins to slow. Tradable inflation will be muted over the short term, but will increase as the declining exchange rate makes exports and imports more expensive.
- Monetary policy is assumed to lean against these inflation pressures. Modest increases in the Reserve Bank's Official Cash Rate (OCR) are expected to see 90-day bank bills at around 5.8% from the middle of 2004. This represents a modest interest rate cycle by historical standards.
- The current account deficit is forecast to increase to 6% of GDP by early 2005, because of the strength of domestic demand and the high exchange rate, both of which will draw in imports. As growth becomes more balanced, however, the deficit will decrease to around 5% of GDP.
- Overall, the view of the economy implied by this forecast is similar to that presented in the 2003 *Budget Update*. However, the level of nominal GDP is higher throughout the forecast period than forecast in the *Budget Update*, because of historical revisions and a higher starting level of labour market earnings. This implies higher tax revenue for the Government.

**Figure 1.2 – Monetary conditions**



Sources: Reserve Bank of New Zealand, The Treasury

**Table 1.1** – Economic outlook: central forecast<sup>1</sup>

(Annual average % change, March years)	2002 Actual	2003 Actual	2004 Forecast	2005 Forecast	2006 Forecast	2007 Forecast	2008 Forecast
Private consumption	2.8	3.8	4.3	3.1	2.9	2.9	3.0
Public consumption <sup>2</sup>	3.9	5.0	5.0	3.5	3.0	4.5	2.8
<b>Total Consumption</b>	<b>3.1</b>	<b>4.1</b>	<b>4.5</b>	<b>3.2</b>	<b>2.9</b>	<b>3.3</b>	<b>3.0</b>
Residential investment	3.3	23.3	20.3	5.2	-7.9	-1.6	0.9
Market investment	5.4	4.1	9.1	5.8	5.7	3.2	4.1
Non-market investment	3.7	2.8	5.1	4.8	9.7	3.8	2.8
<b>Total Investment</b>	<b>4.7</b>	<b>8.6</b>	<b>11.6</b>	<b>5.6</b>	<b>2.3</b>	<b>2.1</b>	<b>3.2</b>
Stock change <sup>3</sup>	0.3	-0.4	0.0	0.1	0.2	-0.2	-0.1
<b>Gross National Expenditure</b>	<b>3.7</b>	<b>4.5</b>	<b>5.4</b>	<b>3.8</b>	<b>2.9</b>	<b>2.8</b>	<b>2.9</b>
Exports	2.0	7.0	1.7	4.2	6.1	5.5	3.5
Imports	2.4	9.4	11.9	7.1	4.7	3.7	3.0
<b>GDP (production measure)</b>	<b>3.4</b>	<b>4.4</b>	<b>2.8</b>	<b>2.8</b>	<b>3.4</b>	<b>3.4</b>	<b>3.0</b>
- annual % change	4.1	4.0	3.0	2.3	4.1	3.0	3.0
Nominal GDP (expenditure basis)	7.9	4.0	4.7	5.6	5.3	5.2	5.1
GDP deflator	3.7	-0.6	2.3	2.7	1.9	1.8	2.0
Employment <sup>4</sup>	2.5	2.6	3.0	1.4	0.9	1.4	1.4
Unemployment <sup>5</sup>	5.2	4.9	4.4	4.8	4.9	4.8	4.8
Wages <sup>6</sup>	3.5	2.9	3.7	4.2	3.9	3.6	3.6
CPI inflation <sup>7</sup>	2.6	2.5	1.4	2.4	2.4	2.2	2.0
Export prices <sup>8</sup>	3.1	-13.0	-9.8	-2.1	3.4	3.5	1.2
Import prices <sup>8</sup>	-0.9	-7.2	-10.2	-2.2	3.1	3.2	0.8
Current account balance							
- \$ million	-2,795	-5,035	-7,340	-8,488	-8,603	-8,660	-8,704
- % of GDP	-2.3	-3.9	-5.5	-6.0	-5.8	-5.5	-5.3
TWI <sup>9</sup>	51.6	60.6	64.5	62.5	59.5	58.3	57.6
90-day bank bill rate <sup>9</sup>	5.0	5.8	5.4	5.8	5.8	5.8	5.8
10-year bond rate <sup>9</sup>	6.7	6.0	6.3	6.4	6.0	6.0	6.0

Sources: Statistics New Zealand, Reserve Bank of New Zealand, The Treasury

- NOTES:
- 1 Forecasts finalised 21 November 2003. Text finalised 11 December 2003. Additional tables are available on the Internet at [www.treasury.govt.nz/forecasts/defu/2003/](http://www.treasury.govt.nz/forecasts/defu/2003/).
  - 2 The forecast profile for public consumption is influenced by government defence spending.
  - 3 Contribution to GDP growth.
  - 4 Household Labour Force Survey, full-time equivalent employment.
  - 5 Household Labour Force Survey, percentage of the labour force, March quarter, seasonally adjusted.
  - 6 Quarterly Employment Survey, average hourly ordinary time earnings.
  - 7 Annual % change, March quarter
  - 8 Overseas Trade Index basis, annual average percentage change, March quarter.
  - 9 Average for the March quarter.

### Assumptions Underlying the Central Forecast

*Global economic activity* – global economic growth, inflation and interest rate forecasts are assumed to conform to those presented in the November *Asia Pacific Consensus Forecasts*. Long-term forecasts (beyond 2004) are taken from the October *Consensus Forecasts*. For a more detailed discussion of the global outlook, see the 'Global economic growth' box on page 21.

*Oil prices* – oil prices are assumed to decline gradually over the short term, consistent with the price of oil futures at the time the forecasts were put together. Thereafter, oil prices are assumed to converge to a long-term average of around US\$18.50 per barrel.

*Net migration* – the net number of migrants has started to decline from a peak early in 2003 and is assumed to continue declining to approximately 10,000 per year by 2005/06. This assumption is higher than the one used in the *Budget Update*.

*Monetary conditions* – from the middle of 2004, the exchange rate (TWI) is assumed to decline steadily to its estimated equilibrium of around 57. This is a technical assumption. The forecasts assume a neutral short-term interest rate of 5.8%.

*Climate* – agricultural growing conditions and the level of hydroelectricity storage lakes are assumed to be normal over the forecast period.

## Recent and Current Developments

### *The economy as a whole has performed well over the past two years...*

Annual real GDP growth was 4.0% in the year ended June 2003, following growth of 3.6% during the previous year. New Zealand's performance easily exceeded the OECD average over this period.

Nominal GDP growth is estimated to have been slightly slower at 3.8%. However, with Statistics New Zealand revising up official estimates of nominal GDP by approximately \$1.5 billion dollars over two years, the level of nominal GDP is higher than the forecasts contained in the *Budget Update*. This helps explain the increase in tax revenue experienced over the past year.

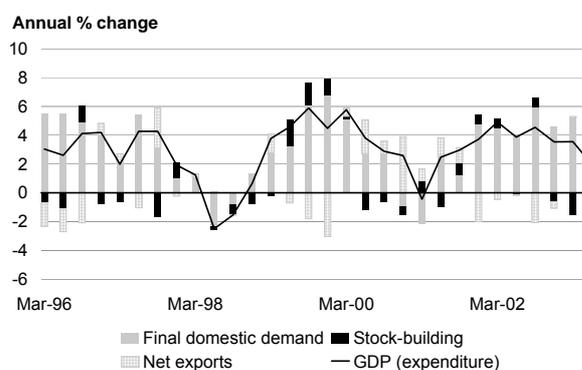
### *... but growth has become increasingly domestically based over the past year*

Digging more deeply into the GDP statistics, it is clear that some components of production, income and spending have grown faster than others.

### *Household and business spending has grown quickly...*

Household spending grew rapidly over 2003/04, the result of more purchases of consumption items, but also vastly more

**Figure 1.3** – Contributions to GDP growth



Sources: Statistics New Zealand, The Treasury

investment in new housing. The value of houses constructed rose by almost 25% over the year ended June.

More jobs and steady wage increases have provided the foundation for household spending over this period. Employment growth has been healthy since the end of 2002, and became very rapid in mid-2003, driving the unemployment rate down to 4.4% by September. The unemployment rate has declined in spite of a growing number of people choosing to enter the labour force.

The strength of employment growth means that the level of employment at the beginning of the forecast period is considerably higher than expected in the *Budget Update*. Although the view of employment growth from this point on has not changed dramatically since the Budget, growth so far together with slightly faster wage growth is likely to translate into higher income tax receipts over the forecast period.

Greater household wealth has also provided a basis for more consumption and investment over the past year. The average price of houses, which are the most widely held of household assets, has gone up by 17%, not only encouraging more house building but also making householders more willing to purchase consumption items on credit.

Meanwhile, business investment has been given a boost by low prices for imported capital equipment. Computer prices, in particular, have fallen dramatically in real terms. Adding to the incentive to invest, capacity utilisation rates have been relatively high in recent quarters, particularly in the construction sector, implying a need for more investment. Overall utilisation peaked at a ten-year high of 91.4% in mid-2003. It has since declined slightly to 89.5% but remains above the average for the period since 1990 (88.9%).

As a consequence of more domestic spending, but also because of lower prices, demand for imports has been strong. The volume of imports rose 10.3% over the year ended June, although the value declined 0.3%.

Consumer price inflation ran at an annual rate of less than 1.5% over the middle of 2003. A rising exchange rate has caused import and export prices to decline, offsetting non-tradable inflation. The non-tradable inflation rate, which was 4.1% in September, has been driven up partly by housing and household operation costs.

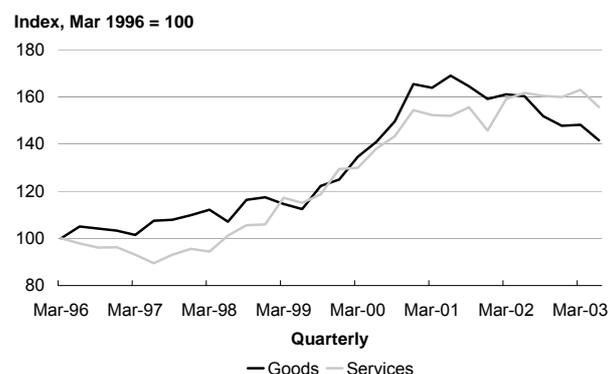
### **... while export earnings growth has been slow**

In contrast to domestic spending, export earnings have been declining. The volume of exports increased 5.0% over the year ended June 2003, but falling prices meant export receipts fell 5.9%.

The important point here is that in contrast to household incomes and profits for most businesses, exporters' incomes have declined.

Falling New Zealand dollar prices have been widespread. The agricultural

**Figure 1.4 – Nominal export earnings**



Sources: Statistics New Zealand, The Treasury

sector has been hit particularly hard over the last year, and farm incomes have declined from high levels in previous years.

Exporters of services, such as tourist operators and educational institutions, have been less affected by falling prices, but the quarterly volume of service exports was reduced over the period from March to June.

### ***Unusual events explain some of the dichotomy between export earnings and domestic spending...***

One of the reasons for the uneven growth of different parts of the economy is that a series of shocks that hit the economy over the first half of this year mostly affected exporters.

- the US-Iraq conflict added to a climate of general geo-political uncertainty, caused oil prices to fluctuate and acted to delay global recovery
- the outbreak of Severe Acute Respiratory Syndrome (SARS), principally in Asia, led to a marked fall in visitor arrivals
- dry weather led to poor agricultural growing conditions, and reduced the level of hydroelectric storage lakes, causing some manufacturers to conserve energy by cutting back production.

The quarterly GDP growth rate was reduced to 0.2% in June, following 0.6% in March. Quarterly export volumes fell by 3.1%, while domestic spending was largely unaffected.

These events were discussed in detail in the *Budget Update*, and their effects have been broadly as expected.

### ***... but less fleeting influences have also been fundamental.***

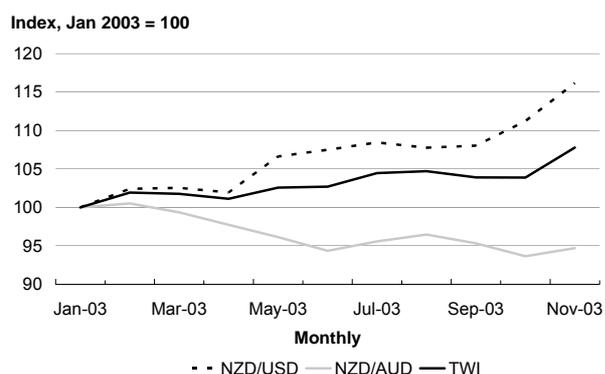
The shocks that hit the March and June quarters were temporary and, it appears, their effects were short-lived. But it is expected that the divide between domestic spending and net export growth will continue to widen for a time. This is because more fundamental forces have also been at work this year.

In the household sector, high levels of net migration have been increasing the demand for consumption goods and services in general, and housing in particular. The annual net number of migrants peaked at over 40,000 in the March quarter and has remained relatively high.

At the same time, a rising exchange rate has reduced the prices of both imports and exports. This has encouraged households and businesses to spend on imported goods, sometimes at the expense of domestic producers, and is also the main reason for lower incomes in the export sector.

Although export earnings have been significantly lower this year than in

**Figure 1.5 – Exchange rates**



Sources: Reserve Bank of New Zealand, The Treasury

2002, the effect of the exchange rate appreciation on overall GDP growth has been moderate so far, and the 4.0% growth rate over the year ended June is evidence of that. Partly, this is due to the fact that it can take a long time – one to two years is typical – for exchange rate developments to impact on export volumes and to flow through to the rest of the economy. This year's rise in the exchange rate is expected to have its greatest negative effect on economic activity from late-2004.

Another reason why the effect of the rising exchange rate on total GDP might not so far have been as large as expected is that components of the Trade Weighted Index (TWI) have been moving in opposite directions. On one hand, compared with most major currencies, the US dollar has been losing value, and the New Zealand dollar has consequently been gaining value. On the other hand, since the beginning of 2003, the New Zealand dollar has lost ground to the Australian dollar. Exporters of primary commodities will generally be worse off because of the weakening US dollar, since their exports are priced in that currency. But some manufacturing exporters, particularly those which buy raw materials in US dollars and sell finished products in Australian dollars, could be better off.

### ***Growth appears to have been strong over the second half of 2003***

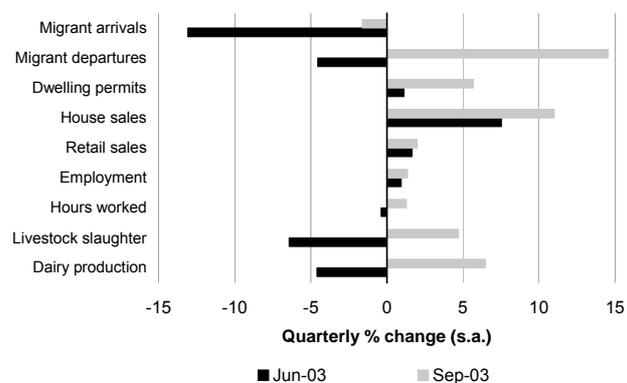
Turning to the very recent past, most indicators of economic activity are indicating a rebound in GDP growth over the September quarter.

Retail trade turnover and the number of building permits granted for new houses both rose significantly, suggesting that household spending continued to grow rapidly, supported by increased job security and further house price rises.

Agricultural production also appears to have increased, and tourist numbers have rebounded, following sharp declines over the June quarter.

Export prices are still subdued, but it seems that exporters did increase their real output over the quarter.

**Figure 1.6** – Selected real activity indicators



Sources: Statistics New Zealand, Real Estate Institute of New Zealand, Fonterra, The Treasury

Global economic growth also accelerated over the September quarter, following concerns that the recovery of several of New Zealand's trading partners' economies would stall as a result of geo-political uncertainty and disease. The 2.0% rate of quarterly expansion in the US was the fastest in a decade. See box, "Global economic growth" on page 21, for a summary of international growth developments and forecasts.

### Export Performance

The performance of the export sector is an important component of the economic outlook. Exports fell sharply in the June quarter of 2003. This in part reflected the effect of dry climatic conditions over the beginning of 2003, which saw dairy production fall and a surge in meat slaughtering in the March quarter, followed by a slump in June. The outbreak of SARS had a negative impact on the exports of some foods, particularly seafood, while visitor arrivals fell sharply.

The unwinding of these negative factors is expected to see a lift in export volumes in the September quarter, with services exports in particular bouncing back.

Export volume growth is forecast to be subdued over the final quarter of 2003 and over much of 2004, as this year's exchange rate appreciation impacts on exporters' competitiveness, despite stronger global growth. The greatest impact of the appreciation of the exchange rate is likely to be on non-commodity exports, particularly manufactured goods, forestry and services. Analysis suggests that there is a lag of around 1½ years between a rise in the currency and any impact on export volumes.

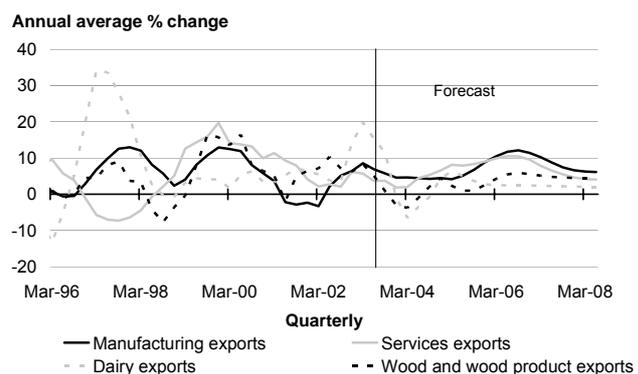
A further complication is that it is the bilateral exchange rate between New Zealand and trading partners that is important when considering competitiveness. With Australia accounting for around 50% of New Zealand's manufactured goods exports, and an important source of visitor arrivals, the smaller appreciation in the New Zealand/Australian exchange rate compared to the New Zealand/United States rate will mitigate some of the impact of the appreciation of the TWI. The central forecast sees annual average manufactures export growth slow to 4.6% and 4.2% in the March 2004 and 2005 years, down from 8.5% in the year to March 2003, and substantially weaker than expected at the time of the *Budget Update*. It will also be lower than the average since 1990 of about 8%. Forestry export volumes are forecast to fall 3.8% in the year to March 2004, with growth recovering to just 2.3% in the year to March 2005.

A return to normal growing conditions in the agricultural sector is expected to boost primary exports and help offset some of the weakness described above.

The level of the TWI means that New Zealand dollar prices and exporter receipts will be weak for a while yet, although an improved outlook for the world prices of many of New Zealand's exports will provide some offset.

As the rebound in global growth becomes embedded and the exchange rate becomes less of a drag, export volume and receipts growth are forecast to lift, with manufacturing, forestry and services exports all contributing to a solid 6.1% rise in export volumes in the March 2006 year.

**Figure 1.7 – Export volume growth**



Sources: Statistics NZ, The Treasury

### Global Economic Growth

*Consensus Forecasts* based forecasts of trading partner growth point to growth returning to a little above its long-term average in 2004, and then to around its average, following three years of being below-par. The expected rebound in 2004 is pretty much across the board with better growth in the US, Australia and non-Japan Asia, offsetting only modest growth in Japan and Europe. These are consistent with other views the Treasury monitors.

Calendar years	2002 <sup>a</sup>	2003 <sup>e</sup>	2004 <sup>f</sup>	2005 <sup>f</sup>	2006 <sup>f</sup>	2007 <sup>f</sup>	2008 <sup>f</sup>
Australia	3.6	2.5	3.8	3.7	3.5	3.4	3.6
Japan	0.2	2.4	1.3	0.9	1.9	1.8	1.9
US	2.4	2.7	4.0	3.5	3.3	3.3	3.2
Europe*	1.1	1.0	2.0	2.1	2.1	2.0	2.0
Non-Japan Asia**	5.3	4.3	5.7	5.7	5.6	5.4	5.2
Trading partner growth	2.8	2.7	3.6	3.5	3.5	3.4	3.4

\* UK, Germany, Italy, France (weighted by export share).

\*\* Korea, Taiwan, China, Malaysia, Hong Kong, Singapore (weighted by export share).

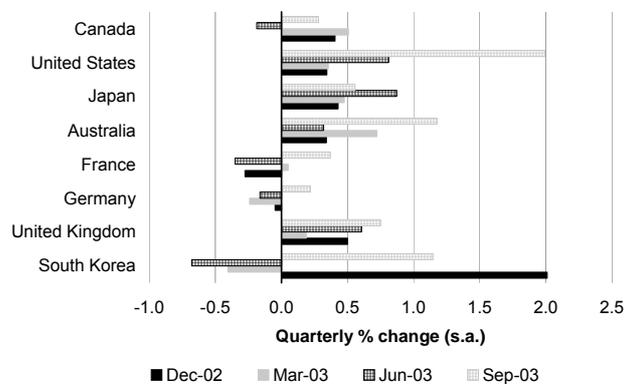
<sup>a</sup> Actual. <sup>e</sup> Estimate. <sup>f</sup> Forecast.

However, other scenarios are also plausible. In the short term, for example, there is a risk that *Consensus Forecasts* are underestimating the momentum that major economies – and particularly the US – are building up. If this were the case, trading partner growth could be materially higher than that underpinning the central forecast over the next year or so.

Alternatively, the rebound in growth currently underway could give way to weaker growth, either because of unforeseen shocks or because of structural imbalances present in some countries acting as a constraint to ongoing growth.

For instance, the US has large government budget and current account deficits. These look to be a factor behind the current depreciation in the US dollar. Thus far the decline has been orderly and a necessary part of unwinding these imbalances, but if sentiment around lending to American consumers and businesses were to change significantly for the worse a less benign adjustment path is possible. This could make exporters in other countries uncompetitive (especially if the exchange rate adjustment is pushed onto a small group of countries) and lead to sharply reduced export earnings and in those countries where economic recoveries are fragile (like Europe and Japan), spark a relapse into slow growth or recession. Moreover, some of these countries also face their own structural challenges with regard to increasing trend growth above the 2% level that many see currently (see table above).

**Figure 1.8** – Quarterly GDP growth



Sources: Datastream, The Treasury

A retreat from open markets would also lead in the same direction, hurting future productivity and growth prospects in developed countries as well harming global development objectives.

## Forecasts to June 2005

***The pace and composition of GDP growth are expected to change gradually over the next two years***

Through to mid-2004 the economy is forecast to record robust, though moderating growth. From mid-2004, a period of slower growth is forecast, and the gap between household and business spending growth and export earnings growth is expected to begin to close. The amplitude of the economic cycle will seem quite small by historical standards, but this will conceal larger – partly offsetting – movements of the components of GDP.

The exact timing and depth of the growth slowdown are sources of uncertainty in this forecast. An alternative scenario, incorporating a more substantial slowing of growth, is examined in Chapter 3.

### ***Business and household spending will continue to provide the short-term impetus...***

Household spending and business investment will continue to increase rapidly.

Steady employment growth is expected to continue, keeping the unemployment rate at current levels, which are the lowest in over a decade. And because employees will be harder to find, annual wage inflation is forecast to pick up too.

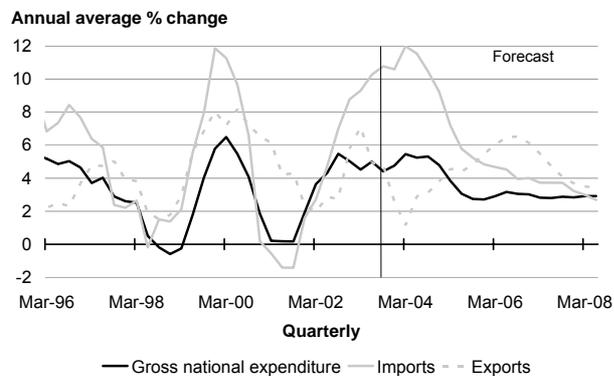
The residential construction boom is projected to persist. House prices are likely to continue to head upward at a fast rate, partly owing to the momentum they have built up already, and this is predicted to contribute directly to greater household wealth.

Business investment is forecast to benefit from a relatively low cost of capital, but also the commencement of investment projects which were delayed during the period of slower growth – and increased economic uncertainty – in the first half of 2003. Relatively high rates of capacity utilisation and healthy corporate balance sheets are also reasons for more business investment.

The healthy state of domestic demand, combined with low import prices, will push import volumes steadily upward.

Meanwhile, export volumes will begin to grow again following the contraction during the June quarter. But the recovery will not be underpinned by rising earnings, because prices will still be weak. Global economic growth is expected to be more firmly established by this time, and this should boost demand for New Zealand's exports, but the high and rising exchange rate will undermine New-Zealand-dollar returns.

**Figure 1.9** – Forecasts of GDP components



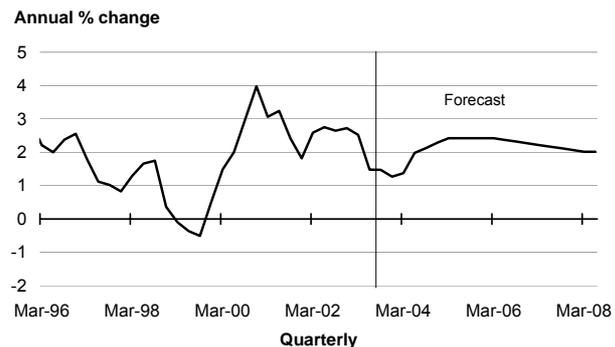
Sources: Statistics New Zealand, The Treasury

As a consequence of the continuing uneven performance of the economy, with domestic demand pulling in imports and export growth still not convincing, the annual current account deficit is expected to exceed 5.5% of GDP by the middle of 2004, with the quarterly deficit at 6.0% of GDP.

The CPI annual inflation rate is expected to rise over the next nine months too, from the current rate of 1.5% to about 2.0%, despite only modest quarterly increases in December and March, and even though import and export prices will be falling. Prices for housing and household operation will be rising particularly rapidly because of the residential property boom.

Because prices in some areas will have been rising rapidly for a prolonged period, there is a risk that inflation expectations will begin to be raised. Once changed, expectations can resist moving again. Consistent with the inflation outlook, the Reserve Bank is expected to increase its Official Cash Rate slightly over this period. Even so, the rate of inflation for non-tradable goods and services is expected to remain quite high for a prolonged period.

**Figure 1.10** – Consumer price inflation forecasts



Sources: Statistics New Zealand, The Treasury

### ***... but the economy will lose some momentum from the September quarter of 2004***

By mid-2004, the rate of economic growth is expected to slow. Over the year ended June 2005, GDP growth of 2.5% is forecast, below the average of recent years although not especially low for the trough of an economic cycle.

### ***A period of less house building and buying will be influential...***

Growth in house prices and new house construction is forecast to run its course over 2004 and some modest falls in activity are expected in 2005. The housing cycle will be the second greatest negative influence on GDP growth over the year to June 2005, behind the rising volume of imports.

As house prices stop rising, further household wealth growth will be constrained. And to the extent that households were counting on further capital gains, spending plans are likely to be cut back.

Employment growth is also forecast to be relatively slow from mid-2004, as businesses look to maintain profitability in the face of slower overall economic growth and higher wages.

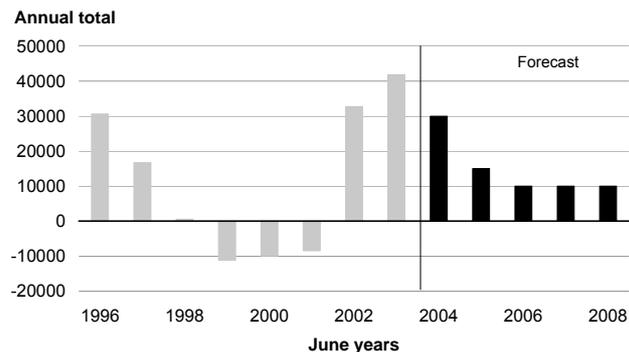
Businesses are likely to cut back on investment as well as employment, although investment will still grow faster than GDP. The price of imported capital equipment will still be low, particularly relative to labour costs, and firms will be making an effort to increase labour productivity by building up the capital stock.

**... and the improvement in exporters' prospects will be gradual at this stage**

Exporters will begin to see an improvement in their incomes over 2004/05, as export prices (in New Zealand dollars) rise. Export volumes will also grow steadily, but still not as fast as import volumes until the following year. Recovering exports of dairy products and services (tourism) will provide a solid base for growth.

**Reasons for slower growth will include fewer immigrants and more debt**

The net number of migrants is assumed to decline from about 40,000 per year now to 15,000 by June 2005 and 10,000 at the beginning of 2006. This will translate directly into slower population growth, with a consequent effect on the demand for housing, as well as for other goods and services. This is likely to be a key influence on house construction and prices over the period of slower GDP growth.

**Figure 1.11 – Net immigration**

Other housing-related variables are also relevant, however. Interest rates will be marginally higher, and households in aggregate have built up significant debt to finance investment in housing and consumption over recent years. In an environment in which house prices are no longer increasing, and slower population growth is increasing the chance of rental housing lying empty, higher debt servicing costs are likely to mean households will cut back on discretionary spending.

Sources: Statistics New Zealand, The Treasury

**But government spending will provide some support...**

Government consumption and investment are expected to increase steadily through the whole forecast. Non-market investment is likely to be boosted by infrastructure investment, including spending on roads, although the precise timing and magnitude are uncertain.

**... and the seeds of an export recovery will have been sown**

The exchange rate is assumed to decline from about June 2004. The exchange rate path used in the forecasts is purely technical, but a decline at some stage over the forecast period would be consistent with a growing balance of payments deficit, a smaller gap between New Zealand's GDP growth and that of New Zealand's trading partners, and reduced interest rate differentials.

The lower exchange rate will eventually lead to a gradual reduction of the real net export deficit, as export and import prices increase. This is unlikely to happen before the end of 2005, but there will be some signs of improved export earnings and volumes before that.

Export volumes will not respond faster because many exporters have exchange rate hedges in place, and because it takes time to increase productive capacity, particularly in the agricultural and silvicultural industries.

Similarly, import volumes will continue to increase steadily over much of 2005, because it will take time for households and businesses to find domestic sources of production for some goods and services previously imported. In some cases, those sources of production will not exist and will need to be established.

Higher export and import prices will contribute to steady CPI inflation over 2005, in spite of lower housing costs.

### ***Quarterly GDP growth is not expected to slow dramatically***

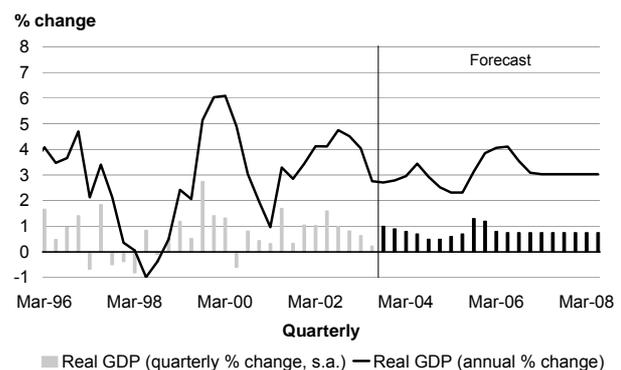
Through the entire period of slower economic growth – from mid-2004 to mid-2005 – it is important to note that the quarterly GDP growth rate is not expected to be slower than 0.5%. This is only slightly below the long-term average of about 0.8%.

The growth recession is therefore mild.

But as noted earlier, this does conceal some larger cyclical movements of the different components of GDP. The annual Gross National Expenditure growth rate is expected to slow from more than 5% in mid-2004 to about 3% by mid-2005. And the contribution of net exports to total GDP will move from a strongly negative one to one that is almost neutral.

Over the year to June 2005, nominal GDP growth will be 5.0%. Slower real economic growth will be partly offset by higher inflation, as import and export prices rise.

**Figure 1.12 – GDP growth**



Sources: Statistics NZ, The Treasury

### Recent Labour Market Developments

Statistics New Zealand and business survey data through 2003 has shown a labour market characterised by strong employment growth, high participation rates, and very low unemployment, combined with moderate wage pressure.

Together the latest Quarterly Employment Survey and Household Labour Force Survey results show a labour market continuing to operate with little slack. Fulltime equivalent employment grew 2.5% in the year to September, with an increase of 1.4% in the September quarter. The big sectoral employment gains have tended to come from the non-tradable sector, which is consistent with the sources of GDP growth. To date, however, wage inflation has risen only slightly. A further mild increase is forecast (to over 4% from the current 3.1% pace), but wage outturns appear well anchored.

The impact of fast employment growth on overall labour market conditions has been somewhat eased by high participation rates, currently at 66.6%. The ongoing strength of the labour market has pulled additional people into the labour force, particularly women.

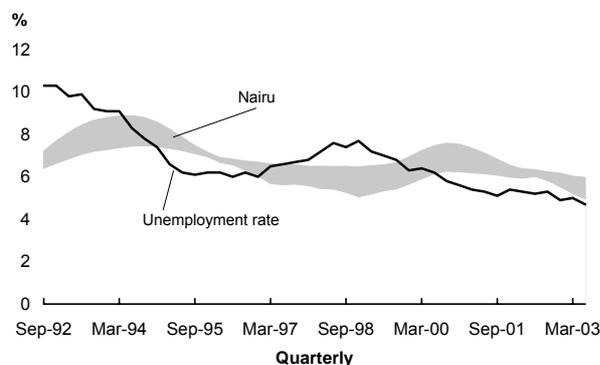
With strong increases in employment, the seasonally adjusted unemployment rate fell to 4.4% in the September quarter. The unemployment rate is at its lowest level since December 1987 when it was 4.2% and is the 5th lowest rate in the OECD. The extent to which these low levels of unemployment flow through to wages represents a key area of uncertainty in these forecasts.

The rate of unemployment that the economy can sustain without a marked increase in wage or price pressure is commonly referred as the NAIURU – or non-accelerating inflation rate of unemployment. In other words, at what level of unemployment will wage or price inflation begin to rise? If the NAIURU falls over time then medium term trend growth will rise as the workforce can increase (and vice versa) without generating extra inflation.

New Zealand's current low unemployment rate combined with wage and price developments raises the question about whether it has fallen below its NAIURU. While estimation of the NAIURU is imprecise as it cannot be directly observed, it appears to have changed over time. Work by the OECD published in 2000 suggested that New Zealand's NAIURU may have fallen by around ½% per annum over the last decade.

More recent work by the Treasury backs this up and is suggestive of structural unemployment continuing to fall over recent years. The analysis used a number of models of the NAIURU with different model specifications and various measures of inflation. The filtering process uses the rule that stable inflation implies an unemployment rate that is at the NAIURU but rising (falling) inflation is suggestive of an unemployment rate that is below (above) the NAIURU. Figure 1.13 indicates the range estimates generated using Kalman Filter specifications (note that these estimates also have large standard error bands around them).

**Figure 1.13** – A range of NAIURU estimates using the Kalman filter



Sources: Statistics New Zealand, The Treasury

The results indicate that: the concept of the NAIRU appears to be valid to the extent that estimates indicate that the rate of unemployment does have some impact on inflation; the spread of results indicates that estimates of the NAIRU are imprecise; and the NAIRU appears to have fallen over the estimation period.

While the modelling process does not examine the reasons for a falling NAIRU, there are a number of plausible factors that may have contributed, including strong growth, population demographics, labour market reforms, improved information technology and matching services from Work and Income New Zealand reducing frictional unemployment, and more appropriate skills.

A falling structural unemployment rate is included as one of the scenarios in the Risks and Scenarios chapter.

## 2005/06 and the Medium-term Outlook

### ***From mid-2005, economic conditions and growth are expected to become more balanced***

Economic growth is forecast to rebound to around 3½% over 2005/06 and 2006/07, with the negative contribution net exports made from 2001/02 to 2004/05 disappearing, and domestic demand growth stabilising.

### ***Over 2005 and 2006, export earnings will accelerate***

From about the end of 2005, export earnings and the volume of exports are expected to begin to increase rapidly. Nominal growth of 9.2% over the year to March 2006 and real growth of 6.1% will be higher than the averages (5.7% and 4.9% respectively) for the period since 1990.

Exporters will have had time to increase production to take advantage of the higher prices which will have been prevailing for several quarters by this time.

### ***Domestic spending will also increase steadily, although not as fast as export earnings***

Consumer and business spending will also grow faster over the end of 2005 and in 2006, following the period of sluggishness in the previous year. But rather than returning to the rapid rates of 2003/04, consumption and investment growth is likely to return only to the long term average.

Employment growth will remain gradual rather than impressive over this period, partly because annual wage inflation is forecast to persist at 3½% or so, encouraging businesses to keep improving labour productivity. But the unemployment rate will start to edge down from 5.0%, which it reached during the period of slower growth in 2004/05.

### ***A lower exchange rate and a sustained global recovery will help achieve this balance***

More balanced growth – with net exports making a slightly positive contribution to overall GDP growth – will be largely the result of global economic growth and the exchange rate acting as less of a drag on growth.

By 2006, the TWI is assumed to have fallen to less than 60.0, and will be steadily declining.

Meanwhile, household and business spending will be rising slightly faster.

### ***By 2007/08, both the rate and composition of growth are assumed to be back to “normal”...***

Because it is not possible to predict unexpected shocks, and because the effects of past shocks will have mostly worked their way through the economy, forecasts for the latter year or so of the forecast period flow from assumptions made about the long-term determinants of economic growth.

By 2007/08, domestic demand is forecast to be growing at approximately the same rate as total GDP, and the real value of net exports is predicted to be close to zero. Real GDP growth of 3.0% is forecast, and nominal GDP growth will be rising at a rate of approximately 5% per annum.

Real GDP growth will come from approximately equal parts labour force growth, capital stock growth, and multi-factor productivity. This is in line with the contributions observed over the last decade.

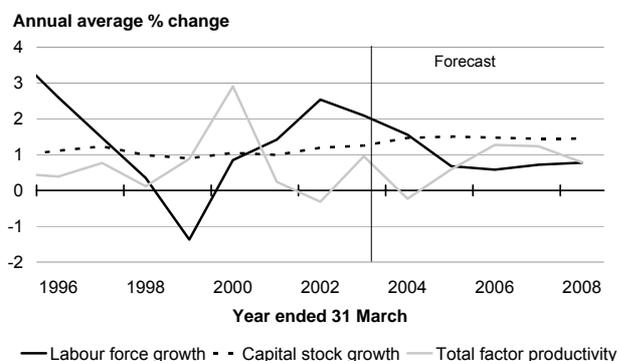
Employment and labour force growth are assumed to have stabilised, with the unemployment rate settling at just under 5%, around the level at which wage inflation is expected to be relatively stable. However, it is acknowledged that wage pressures could be either stronger than forecast, or weaker. The effects of an ongoing fall in the rate of unemployment the economy can sustain without generating increased inflation are considered in Chapter 3.

Also see the box, “Recent labour market developments and implications” on page 26.

The balance of payments deficit will be about 5% of GDP, which is expected to be sustainable over the long run without increasing the nation’s debt-to-GDP ratio.

CPI inflation is forecast to gradually decline to about 2% per year, the mid-point of the Reserve Bank’s 1-3% target.

**Figure 1.14** – Contributions to annual average GDP growth



Sources: Statistics New Zealand, The Treasury

... because many of the determinants of growth will be “at trend”

The contribution of net migration to population is assumed to have stabilised at around 10,000 people per year.

Interest rates are expected to be at “neutral” levels of around 5¾% for short-term rates and 6% for long-term rates. The exchange rate (TWI) is also expected to have moved down to its assumed equilibrium of around 57.

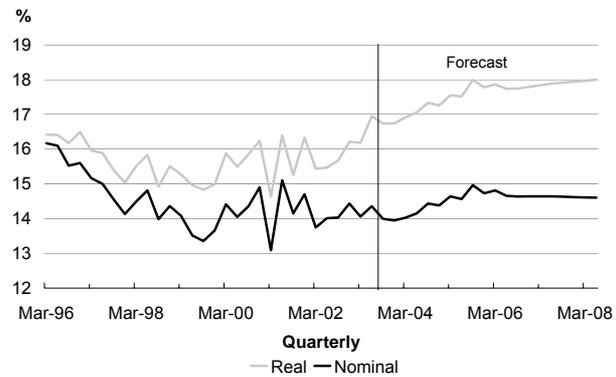
The rate of global economic growth will be approximately the same as the historical average. Furthermore, it will have been there for some years.

The capital-to-labour ratio is expected to rise over the whole forecast period. With real wage inflation running at around 1.5% per year over much of

the forecast, and the price of imported capital equipment rising by considerably less, there is expected to be an incentive to increase investment.

The other ratio which is expected to still be changing at the end of the forecast period is the household debt-servicing ratio. Household spending is forecast to outpace disposable income growth consistently. At some point the gap between the two may prompt households to cut back their spending significantly.

**Figure 1.15** – Investment to GDP ratio (excluding housing investment)



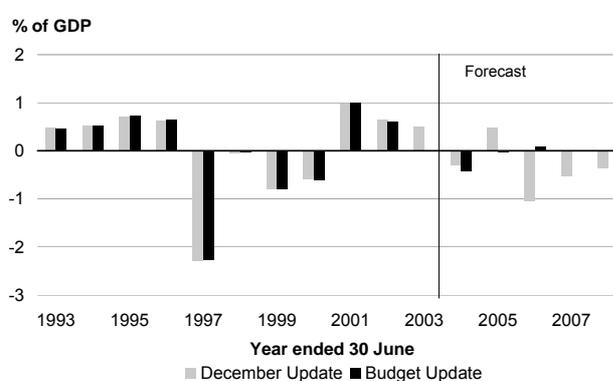
Sources: Statistics New Zealand, The Treasury

### Fiscal Impulse and Structural Fiscal Balances

The government's spending actions show up in the economic forecasts discussed in this Chapter in a number of ways. Public consumption incorporates government spending on employees and purchases of other goods and services, including military equipment. Non-market investment includes new physical investment undertaken by the government in areas like education, health and on roads. Other government spending such as transfers (e.g., New Zealand Superannuation and unemployment benefits) flows through the household sector and into private consumption. In addition, the government withdraws money from the economy through income tax, corporate tax and GST.

Fiscal impulse is a measure of whether changes in fiscal policy are adding to, or subtracting from, aggregate demand pressures in the economy. In Figure 1.16, a positive fiscal impulse represents a tightening of policy relative to the previous year. The fiscal impulse indicator presented here removes estimated cyclical influences and net interest payments to provide a measure of "discretionary" fiscal policy changes. Fiscal impulse is calculated as the change in the estimated structural primary cash balance. (The concept of a structural fiscal balance is discussed below.) The fiscal impulse indicator treats selected capital items as components of expenditure and is derived from (Core Crown) cash flow information.

**Figure 1.16 – Estimates of fiscal impulse**



Sources: Statistics New Zealand, The Treasury

Indicators based on fiscal aggregates have limitations. At best they can only provide an indication of the first round impact of changes in fiscal policy.

They focus only on the net impact of tax and spending decisions and so do not take into account the composition of changes in fiscal policy. Aggregate indicators do not allow for any supply side effects of the fiscal policy change (which may be relevant for the assessment of inflationary impacts).

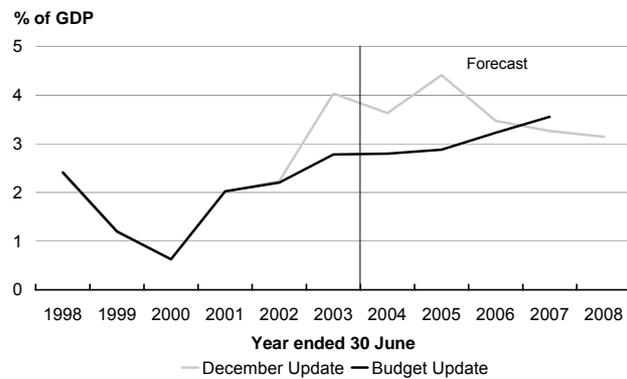
Ex post estimates of fiscal impulse may differ from the ex ante (or "real time") view because of revisions to the evolution of the structural component of the fiscal balance and changes in the implementation of spending plans. For example, the *Budget Update* estimate of fiscal impulse for the year ended June 2003 was neutral. Subsequent information suggests the outturn provided a small contractionary impulse. Forecast impulses across the years 2005 to 2008 are on average expansionary, at around a third of a percent of GDP. Fiscal impulses are sensitive to the cyclical adjustment and the removal of net interest payments. For example, removing the forecast cycle and net interest impact for the year ended June 2006 reduces the impulse by just under ½ percent of GDP.

The fiscal forecasts in the next Chapter focus on aggregates such as the OBERAC. The structural (or cyclically-adjusted) fiscal balance adjusts the actual fiscal balance for fluctuations of output around trend output. This provides a picture of the underlying fiscal position – that is, what the fiscal balance would be if the economy was operating at trend.<sup>1</sup>

<sup>1</sup> Treasury's approach to estimating structural fiscal balances and fiscal impulses is set out in Treasury Working Papers 01/10 and 02/30. The 2002 *December Update* discussed some of the alternative techniques used to estimate trend output.

The forecast fiscal surplus (not shown) is close to the forecast structural surplus because forecast deviations from trend output are relatively small. The increase in the structural fiscal surplus relative to the *Budget Update* reflects the view that the increase in tax revenues seen over the past few years is likely to be more structural than previously thought. Figure 1.17 also indicates that changes to fiscal plans in the latter years of the forecast period result in a change in the trajectory of the structural balance (see the 2004 *Budget Policy Statement*).

**Figure 1.17** – Estimates of the structural fiscal balance, OBERAC basis (ex net NZS Fund returns)



Sources: Statistics New Zealand, The Treasury

## Fiscal Forecasts – Finalisation Dates and Key Assumptions

### Finalisation Dates

Economic outlook (refer Chapter 1)	21 November
Tax revenue forecasts	27 November
Fiscal forecasts	8 December
Government decisions and circumstances	8 December
Actual asset revaluations	31 October
Foreign exchange rates	31 October
Specific fiscal risks (refer Chapter 4)	8 December
Contingent liabilities and commitments (refer Chapter 4)	31 October

### Key assumptions

The fiscal forecasts have been prepared in accordance with the Fiscal Responsibility Act 1994. They are based on the Crown's accounting policies and assumptions (refer page 88 of the GAAP tables). As with all assumptions, there is a degree of uncertainty surrounding them. This uncertainty increases as the forecast horizon extends. A summary of the key economic assumptions that are particularly relevant to the fiscal forecasts is provided below (on a June-year-end basis to align with the Crown's balance date of 30 June):

June Years	2003/04		2004/05	2005/06	2006/07	2007/08
	BEFU	DEFU	DEFU	DEFU	DEFU	DEFU
Real GDP (P) (ann avg % chg)	2.1	3.0	2.5	3.8	3.2	3.0
Nominal GDP (E) (\$m)	134,034	136,112	142,932	150,944	158,512	166,744
CPI (ann avg %)	1.7	1.5	2.3	2.4	2.2	2.1
Govt 10-year bonds (qty avg %)	6.2	6.4	6.3	6.0	6.0	6.0
90-day bill rate (qty avg %)	5.3	5.6	5.8	5.8	5.8	5.8
Unemployment rate (HLFS) basis (ann avg %)	5.5	4.4	4.7	4.9	4.8	4.8
Full-time equivalent employment (ann avg %)	1.0	3.2	0.9	1.1	1.4	1.4
Current account (% of GDP)	-5.1	-5.7	-6.1	-5.6	-5.7	-5.2

Source: The Treasury

### New Zealand Superannuation (NZS) Fund

The estimated annual contribution to the NZS Fund for the year ending 30 June 2005 is \$1.979 billion. The contribution to the NZS Fund is calculated over a 40-year rolling horizon to ensure superannuation entitlements over the next 40 years could be met if the contribution rate were to be held constant at that level for 40 years.

The Government is making the required annual contribution for 2003/04 as calculated by the formula set out in the NZS Fund Act.

\$ billion (June year end)	2002	2003	2004	2005	2006	2007	2008
Required contribution	N/A	N/A	1.879	1.979	2.156	2.265	2.410
Intended contribution	600	1.200	1.879	1.979	2.156	2.265	2.410

The underlying assumptions in calculating the contribution are the nominal GDP series to 2048, the New Zealand Superannuation (NZS) expense series to 2048, and the expected long run net after-tax annual return of the NZS Fund (6.8%) (7.0% *Budget Update*). The forecast rate-of-return is based on the forecasts of the Guardians of NZS. The GDP and NZS expense series were projected using the assumptions stated on page 29 of the 2003 FSR.

The Treasury website contains further information on the NZS Fund, as well as a copy of the NZS Fund model.