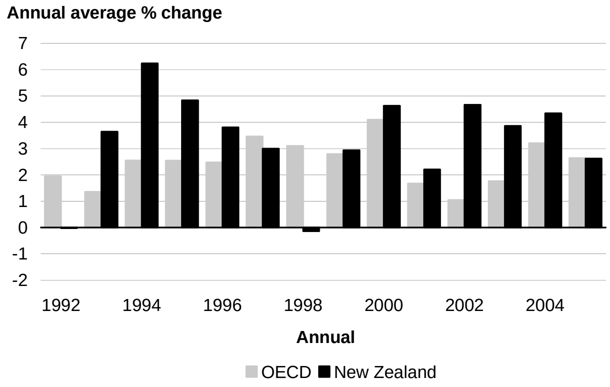
# 1

# Economic and Tax Outlook

## Summary

*Figure 1.1* – Growth in real GDP




Sources: Statistics New Zealand, OECD

- The New Zealand economy enjoyed an extended period of growth of around 3.5% per annum over the past five years, albeit at a lower rate from mid-2004. However, the strong growth, especially in domestic demand, led to a growing current account deficit. Capacity constraints increased and consumer price inflation rose to 3.3% in March 2006.
- Increases in short-term interest rates, declining terms of trade (partly due to rising oil prices), slowing population growth and lower profit growth (as a result of increasing cost pressures) all led to slower growth in domestic demand in the final two quarters of 2005. The slowdown started sooner than we expected in the December *Half Year Update.* Growth was strong in mid-2005 and partial indicators pointed to ongoing momentum in domestic demand.
- Real GDP growth is expected to be 2.1% in the year to March 2006 and to fall to 1.0% in March 2007. The forecast slowdown is expected to result in a reduction in the current account deficit, capacity constraints and inflationary pressures.
- Growth in private consumption and residential investment is expected to begin to recover in late 2007 as higher export incomes start to flow through to the household sector, the labour market strengthens and interest rates decline.
- Market investment is forecast to contract 3.4% in the year to March 2007 as businesses respond to lower profitability, but to start to recover later that year as export returns improve and interest rates fall.
- Employment is forecast to fall slightly in the coming year and the unemployment rate is expected to increase from its 20-year low of 3.6% in December 2005 to 4.8% in the second half of 2007, before declining slightly. We expect wage growth to ease with slower employment growth and annual average growth in compensation of employees

(which combines wage and employment growth) to fall from 7.7% recently to 3.0% in March 2007.

- Agricultural exports are forecast to recover as a result of a return to better seasonal conditions. The fall in the New Zealand dollar will lead to increased demand for services exports, but with a lag of approximately one year.

- Growth in imports is expected to ease with the slower growth in the domestic economy and fall in the exchange rate. As a result, the current account deficit is expected to decline to 6.0% of GDP at the end of the forecast period.

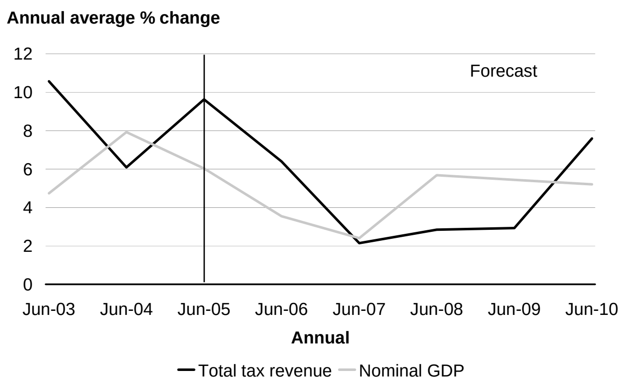
- Consumer price inflation is forecast to remain high for some time as a result of higher oil prices and the fall in the New Zealand dollar. Subject to inflation expectations, 90-day interest rates are assumed to start to decline in early 2007.

- We expect annual average growth in nominal GDP to slow sharply from an estimated 4.3% in the year to March 2006 to 1.9% in March 2007. It is forecast to recover rapidly with growth of 5.2% in March 2008 and 5.6% in the following year.

- Growth in tax revenue is expected to show a similar cycle to nominal GDP. Corporate tax growth is expected to lag growth in GDP as a result of flat profit growth and a build-up of tax losses. Changes to the provisional tax system will bring a dip in tax revenue in 2008/09 with a rebound the following year.

- Source deductions are expected to follow the course of the labour market, with growth expected to fall below 4% in the year to June 2007 after three years of growth of around 8%. Growth recovers to around 5% per annum.

***Figure 1.2*** – Total tax revenue and nominal GDP




Sources: Statistics New Zealand, The Treasury

- Growth in goods and services tax (GST) slowed markedly through 2005 and is expected to be only around 1.5% in the year to June 2006. With the expected easing in private consumption, it is forecast to remain around that rate in 2007. Thereafter, growth in GST recovers in line with private consumption.

***Table 1.1*** – Economic outlook: central forecast[1]

| **(Annual average % change, year to 31 March)** | **2005 Actual** | **2006 Estimate** | **2007 Forecast** | **2008 Forecast** | **2009 Forecast** | **2010 Forecast** |
|---|---|---|---|---|---|---|
| Private consumption | 5.8 | 3.8 | 0.7 | 0.8 | 1.9 | 2.3 |
| Public consumption[2] | 5.2 | 5.9 | 5.6 | 2.2 | 3.9 | 3.4 |
| **Total consumption** | **5.7** | **4.3** | **1.8** | **1.1** | **2.3** | **2.5** |
| Residential investment | 2.3 | -5.4 | -10.4 | -1.2 | 5.2 | 8.1 |
| Central government investment | 17.8 | 23.8 | -1.0 | 3.7 | 3.6 | 3.3 |
| Other investment | 9.8 | 7.8 | -3.4 | -0.4 | 4.8 | 3.8 |
| **Total investment** | **7.8** | **6.0** | **-4.6** | **-0.2** | **4.8** | **4.6** |
| Stock change[3] | 0.3 | -0.6 | -0.3 | 0.3 | 0.0 | 0.0 |
| **Gross National Expenditure** | **6.5** | **4.3** | **-0.2** | **1.2** | **2.9** | **3.0** |
| Exports | 3.9 | 0.1 | 1.0 | 5.6 | 5.0 | 3.8 |
| Imports | 13.7 | 5.1 | -1.0 | -0.9 | 3.4 | 3.7 |
| **GDP (production measure)** | **3.7** | **2.1** | **1.0** | **3.3** | **3.5** | **3.1** |
| *– annual % change* | *2.2* | *1.6* | *1.6* | *4.0* | *3.1* | *3.1* |
| Real GDP per capita | 2.5 | 1.1 | 0.1 | 2.4 | 2.6 | 2.3 |
| Nominal GDP (expenditure basis) | 7.2 | 4.3 | 1.9 | 5.2 | 5.6 | 5.2 |
| GDP deflator | 3.6 | 2.2 | 0.8 | 1.6 | 2.1 | 2.1 |
| Employment[4] | 3.6 | 2.4 | -0.3 | 0.4 | 1.5 | 1.5 |
| Unemployment[5] | 3.9 | 3.8 | 4.7 | 4.7 | 4.4 | 4.5 |
| Wages[6] | 3.3 | 4.6 | 4.0 | 3.5 | 3.5 | 3.4 |
| CPI inflation[7] | 2.8 | 3.3 | 3.4 | 2.4 | 2.0 | 2.0 |
| Export prices[8] | 3.7 | 1.3 | 14.4 | 4.4 | 0.8 | -1.0 |
| Import prices[8] | -2.0 | 2.3 | 18.3 | 5.0 | -0.7 | -1.8 |
| Current account balance | | | | | | |
| – $ million | -11,062 | -14,462 | -13,925 | -12,188 | -11,383 | -11,035 |
| – % of GDP | -7.4 | -9.3 | -8.8 | -7.3 | -6.5 | -6.0 |
| TWI[9] | 69.6 | 68.3 | 59.1 | 57.2 | 56.6 | 56.5 |
| 90-day bank bill rate[9] | 6.9 | 7.6 | 7.0 | 6.3 | 6.0 | 5.8 |
| 10-year bond rate[9] | 6.0 | 5.7 | 5.9 | 5.9 | 6.0 | 6.0 |

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

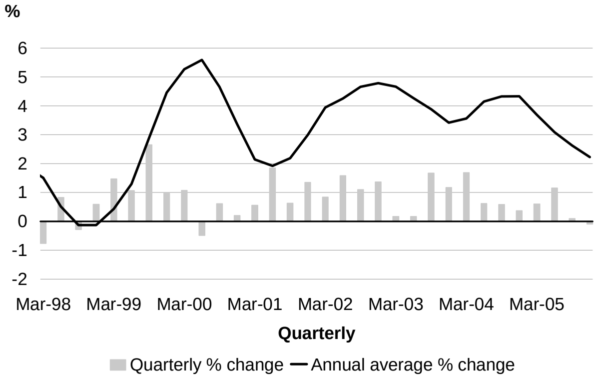
NOTES:
1 Forecasts finalised on 13 April 2006. Text finalised on 5 May 2006.
2 The forecast profile for public consumption is influenced by government defence spending.
3 Contribution to GDP growth.
4 Household Labour Force Survey, full-time equivalent employment.
5 Household Labour Force Survey, percentage of the labour force, March quarter, seasonally adjusted.
6 Quarterly Employment Survey, average hourly ordinary time earnings.
7 Annual percentage change.
8 Overseas Trade Index basis, annual average percentage change, March quarter.
9 Average for the March quarter.

# Recent Economic Environment

***The economy slowed more than expected in the second half of 2005…***

Growth in the New Zealand economy started to slow in mid-2004 on a quarterly basis following a period of five years of above-trend growth. After four quarters of below-trend growth, output increased in the June quarter of 2005 by more than we estimated in the *Pre-election Update*. In addition, partial indicators continued to show robust activity in late 2005, leading us in the December *Half Year Update* to expect more strength in domestic demand in the second half of 2005. However, growth in the September and December quarters of 2005 was substantially weaker than forecast in the *Half Year Update*, bringing forward the slowdown which we had expected to occur in the 2006 calendar year.

***Figure 1.3*** – Growth in GDP (production basis)




Source: Statistics New Zealand

***… as domestic demand weakened…***

The slowing in the economy in the second half of 2005 was concentrated in the domestic sector and was mainly due to factors whose effect was felt sooner than expected.

- Increases in short-term interest rates lowered growth in private consumption and residential investment, despite a shift in the term structure of home loans towards lower, longer-term rates.
- Lower terms of trade brought slower growth in private consumption. Petrol prices increased 18% in the year to December 2005, reducing disposable income.
- Net migration inflows declined to a low of 6,000 in the year to October 2005, reducing aggregate growth in private consumption and residential investment.
- Businesses were faced with higher input and wage costs which they were not able to pass on fully, leading to lower profit growth and slower growth in business investment.

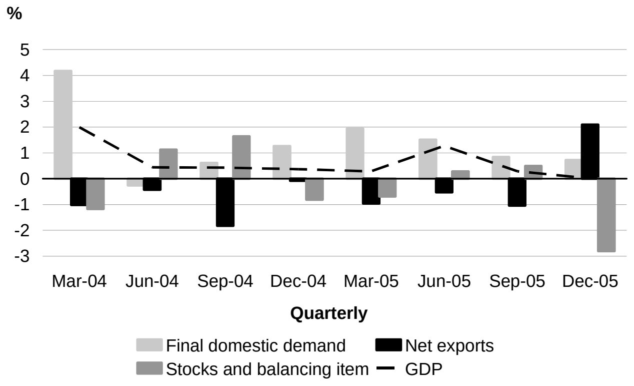
***… and net exports continued to make a negative contribution***

Net exports continued to detract from growth throughout most of 2004 and 2005. Export growth was constrained by slow growth in agricultural export volumes as a result of poor seasonal conditions, while manufactured exports and services exports (chiefly in-bound tourism) were adversely affected by the strong exchange rate. Increases in imports detracted from growth in GDP throughout most of the period.

### *Growth stalled in the final quarter of 2005…*

In contrast to the recent pattern, net exports made a positive contribution to growth in the final quarter of 2005 as a result of a recovery in dairy exports and a fall in imports of consumption, intermediate and capital goods largely due to weaker final domestic demand. However, the positive impact of net exports and final domestic demand was offset by a large negative contribution from stocks and the balancing item, resulting in no growth in the quarter in GDP on an expenditure basis. On a production basis, growth declined 0.1%.

***Figure 1.4*** – Contributions to quarterly GDP growth (expenditure basis)




Sources: Statistics New Zealand, The Treasury

### *… but positive growth is expected in first quarter of 2006*

Stock changes made a positive contribution to growth in the second half of 2004 and first half of 2005, indicating some involuntary stock accumulation as the economy slowed. The reduction in stocks in the December quarter of 2005 may have been an attempt to unwind some of this build-up and may overstate the weakness in the economy, although some of the decrease was related to the increase in dairy exports. We expect a slight recovery in stocks in the March 2006 quarter, which – together with low growth in consumption – is expected to more than offset a fall in exports, leading to a small increase in GDP and annual average growth of 2.1%.

### *Growth in other measures of national income also slowed…*

Growth in nominal GDP, which is more closely tied to tax revenue than growth in real GDP, also slowed from a peak of 8.5% annual average growth in September 2004 to 4.5% for calendar year 2005. The GDP implicit price deflator, the broadest measure of price increases in the economy, increased 2.6% on an annual average basis in calendar year 2005, down from a peak of 3.9% in September 2004.

The fall in the rate of growth of the GDP deflator was partly a result of a fall in the terms of trade in the second half of 2005 as export prices eased and import prices (especially for oil) increased, both in New Zealand dollar terms. This reduction in New Zealand's international purchasing power was reflected in lower growth in Real Gross National Disposable Income, which increased by only 1.5% in 2005, down from 5.6% annual average growth in mid-2004.

### *… despite some positive indicators…*

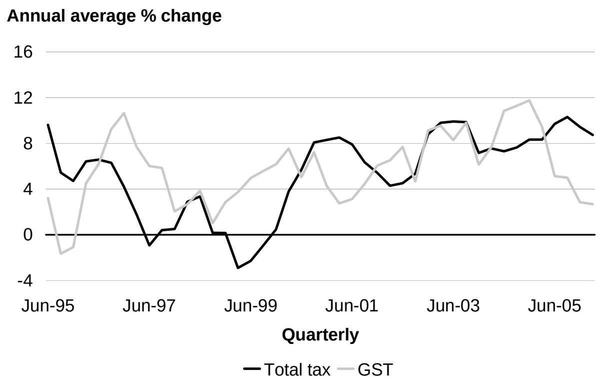
The weakening in domestic demand in the second half of 2005 occurred despite some indicators pointing to continuing robust growth at the time our *Half Year Update* forecasts were finalised. We expected to see more momentum in domestic demand, sustained by buoyant house prices and a strong labour market. This did not eventuate and some revisions to historical data (relating to the labour market) suggested that domestic activity was weaker than we had understood at the time of the *Half Year Update*.

It also appears that some of the factors which we thought would have longer lags (in particular, higher interest rates and the higher exchange rate) had an effect sooner than expected. Despite economic growth in the second half of 2005 being much weaker than we forecast in the *Half Year Update*, Treasury forecasts for calendar year 2005 were in line with the data available at the time and within the range of other forecasters.

### *… including tax revenue*

Through the latter half of 2005, tax revenue maintained its momentum, continuing to grow at around 10% (annualised) as it had done for most of the previous two years. This was interpreted as a sign of continued strength in the domestic economy. However, at the time of the *Half Year Update*, GST growth had slowed to less than 3%, having peaked at more than 10% in 2004. This now appears as an indicator of some weakness in domestic demand. Growth in corporate tax was also strong at the time, but subsequent analysis has revealed that most of the growth was due to higher earnings on investment funds unrelated to the domestic economy.

***Figure 1.5*** – GST and total tax revenue growth

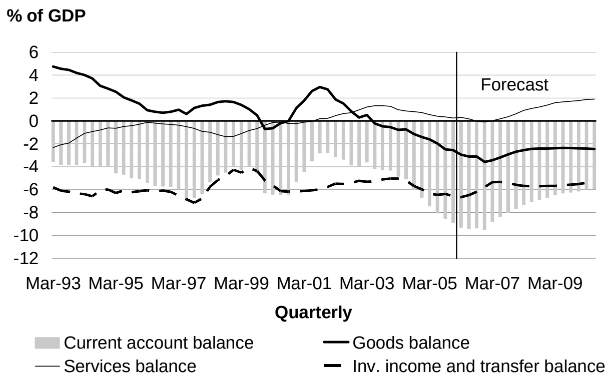



Source: The Treasury

### *Strong domestic growth led to a higher current account deficit, …*

The strong performance of the domestic economy relative to the external sector in the past five years led to a current account deficit equivalent to 8.9% of GDP in calendar year 2005. The rapid increase in the deficit in the past two years was due to an increase in the goods deficit (a result of weak export performance from the agricultural sector as a result of poor seasonal conditions, combined with a rapid increase in imports and increase in oil prices) and an increase in the investment income deficit (a result of servicing New Zealand's negative net international investment position which was equivalent to 89% of GDP at the end of 2005). The balance on services also declined, but not to the same extent as the other two main components.

***Figure 1.6*** – Current account balance




Sources: Statistics New Zealand, The Treasury

***… capacity constraints and price pressures***

The extended period of expansion in the economy (albeit slowing since the second half of 2004) also led to increased capacity constraints and inflationary pressures. Although capacity utilisation has declined from its recent peak in December 2004, according to the Quarterly Survey of Business Opinion, it remained at a high level of 91.4% in the March 2006 quarter. Labour constraint indicators have also eased in recent quarters, but remain at high levels. Resource constraints have led to increased price pressure as firms' input prices increased by more than their output prices, putting pressure on margins and slowing growth in profitability.

Consumer price inflation increased from 2.8% in March 2005 to 3.3% in March 2006. Continuing (but easing) increases in construction costs, arising from rapid growth in residential investment, have contributed to annual inflation in goods and services which are not traded internationally remaining above 4% for the past two years. The prices of internationally traded goods and services have also begun to increase at a faster rate recently as a result of increases in international oil prices, combined with the fall in the value of the New Zealand dollar. Tradables inflation exceeded 2% in March 2006 for the first time since September 2002.

**Assumptions Underlying the Central Forecast**

*Global economic activity* – global economic growth, inflation and interest rate forecasts are taken from the March 2006 *Consensus Forecasts* and *Asia Pacific Consensus Forecasts*. The general global outlook is positive as growth becomes more broad based. The United States is expected to recover from weakness at the end of 2005, Japan is continuing to emerge from recession and there are indications that European GDP growth will pick up in mid-2006 in spite of currently weak domestic demand. Economic growth for New Zealand's top 14 trading partners is forecast at 3.6% in the year to March 2007 and then returns to trend of 3.5% from 2008 onwards.

*Oil prices* – prices for West Texas Intermediate (WTI) in the December 2005 quarter were slightly lower than forecast in the *Half Year Update,* but March 2006 quarter prices were above the levels forecast in the *Half Year Update*. Futures pricing at the time these forecasts were finalised suggests that prices will continue to increase to US$68/barrel in September 2007 and then stay relatively steady for the remainder of the forecast period. Prices at the end of the forecast period are projected to be approximately 21% higher than in the *Half Year Update*.

*Net migration* – net migrant inflows appear to have troughed on an annual basis in October 2005 at 6,000. They are assumed to recover to their long-term average level of 10,000 per annum and remain at that level for the rest of the forecast period.

*Monetary conditions* – the New Zealand dollar exchange rate as measured by the Trade Weighted Index (TWI) is assumed to continue to decline from its March 2006 quarter average of 68.2 to 56.5 by the end of the forecast period. A neutral short-term interest rate of 5.8% is assumed.

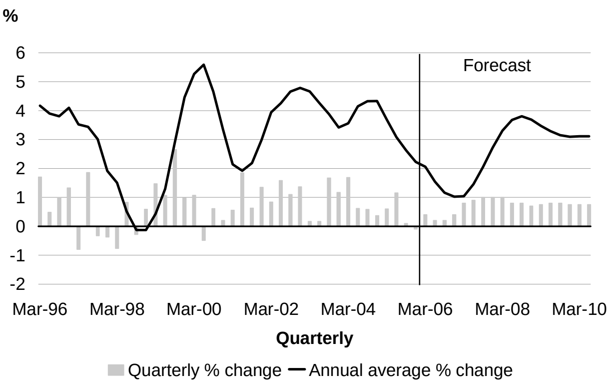
*Climate* – agricultural growing conditions and the level of hydro electricity storage lakes are assumed to be normal over the forecast period.

## The Outlook for 2006/07 and Beyond

### *Growth is expected to continue to be slow in 2006/07…*

Quarterly growth rates of between 0.2% and 0.4% are expected over 2006, taking annual average growth to only 1.0% in December 2006 and March 2007. Underlying this, the reorientation in the drivers of growth is expected to continue. Domestic demand is forecast to be flat or contract in quarterly terms in the last three quarters of 2006, while exports are expected to stage a modest recovery, boosting GDP growth.

***Figure 1.7*** – Growth in real GDP




Sources: Statistics New Zealand, The Treasury

We expect easing employment and wage growth, declining terms of trade and lower house price growth to drive the downturn. These factors are offset to some degree by increased government transfers (supporting private consumption), and central government consumption which is forecast to grow 5.6% in the March 2007 year, making a positive contribution to growth in total output. Annual average growth in nominal GDP is forecast to fall to 1.9% in March 2007 and GDP per capita growth to 0.1%. These would be the lowest growth rates since the Asian financial crisis and droughts affected the economy in 1998 and 1999.

The decline in growth in the coming year is part of the cyclical pattern of the economy and does not point to lower trend growth. The expected downturn is deeper than forecast in the *Half Year Update* because many of the factors leading to it have intensified. The impact of the downturn is likely to be felt more by businesses than households initially as profits fall. As businesses reduce employment and investment, growth in consumption slows markedly.

### *… before picking up again in 2007/08*

Economic growth is expected to increase again in 2007 as agricultural export volumes recover and the fall in the exchange rate and buoyant trading partner growth lead to increased export volumes. Imports will also be weak as a result of the slower growth in domestic demand and the lower exchange rate. Higher export incomes will flow through to the domestic economy, while interest rates are expected to ease (subject to the inflation outlook), stimulating private consumption and residential and business investment. Employment growth will also begin to increase again, leading to higher household incomes and supporting private consumption. The economy is expected to recover gradually in the year to March 2008, expanding by 3.3%, and growth will reach 3.5% in March 2009 as the recovery spreads to the domestic sector. Growth returns to trend in the final forecast year.

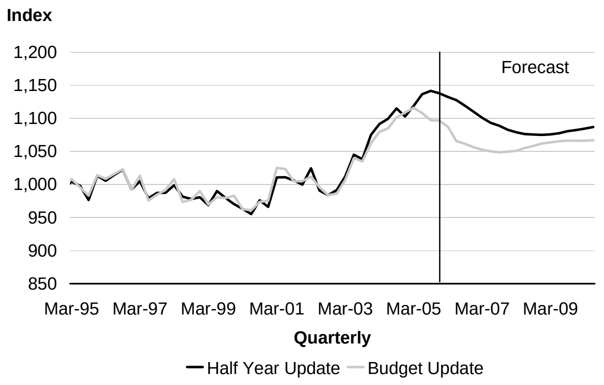
### *Growth in tax revenue is expected to follow the economic cycle*

Growth in tax revenue is expected to ease in the short term as economic growth slows. After two years in a row of negative operating surplus growth, greater utilisation of losses is anticipated when the economy starts to pick up in 2008, resulting in 2007/08 tax revenue growing more slowly than nominal GDP on an annual basis for the first time since 2003/04. In 2008/09, tax revenue grows more slowly than GDP as a result of indexation of income tax thresholds and of changes to the provisional tax regime which remove a major provisional tax date from that year.

### *Decline in terms of trade is a key judgement in these forecasts*

A key judgement in these forecasts is that the terms of trade will be lower than shown in the *Half Year Update*. The reasons for this are that June 2005 quarter data were revised down after the *Half Year Update* was finalised and the terms of trade in the second half of 2005 turned out to be lower than previously forecast. In the forecast period, oil prices are expected to continue to increase. In addition, prices for some of New Zealand's export commodities are past their peak as some of the factors supporting those prices dissipate, in particular supply constraints on other producers caused by disease outbreaks in the case of meat and climatic conditions in the case of dairy products.

***Figure 1.8*** – Terms of trade (SNA basis)




Sources: Statistics New Zealand, The Treasury

The ANZ Commodity Price Index is approximately 6% below its peak in May 2005 in world price terms and is expected to decline further. Although this decline will be offset to some degree in domestic price terms by the fall in the New Zealand dollar, the lower exchange rate will also lead to higher import prices, having little effect overall on the terms of trade. We expect that there will be some offset to higher oil prices in higher prices for some export goods e.g., coal, chemicals and plastic products.

The effect of the fall in the terms of trade is to reduce incomes in the economy as a whole, not only in the export sector. Lower export incomes flow through to households and increasing import prices reduce households' disposable income and lead to lower consumption growth than otherwise. (For more discussion of the terms of trade, see the box on the following two pages.)

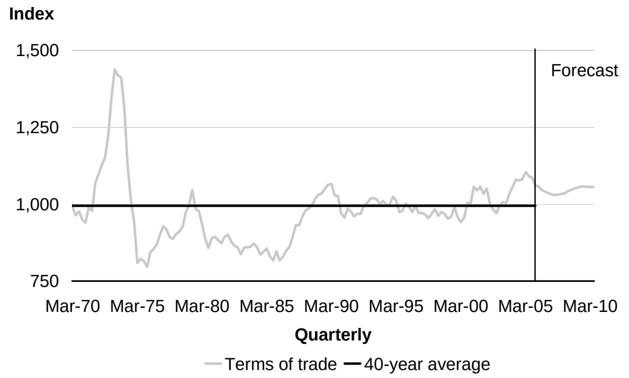
## Terms of Trade

*The terms of trade have a major impact on the New Zealand economy and are one of the key judgements in these forecasts. They fell from record highs recently and are expected to continue to decline in the forecast period but to remain at a relatively high level.*

### Recent developments

Large movements in the terms of trade (the ratio of export prices to import prices) have historically had major effects on the New Zealand economy and are one of the key judgements of these forecasts. A fall in export prices relative to import prices allows a smaller volume of imports to be purchased with a given volume of exports. The implied drop in the real purchasing power of domestic production is equivalent to a transfer of income to the rest of the world.

***Figure 1.9*** – Terms of trade (OTI basis)




Sources: Statistics New Zealand, The Treasury

As changes in the terms of trade represent changes in relative prices, they do not directly affect real GDP, although there are significant indirect effects. These indirect effects could include changes to the spending patterns of New Zealand consumers due to higher real incomes or changes to firms' investment decisions.

During the 1990s, New Zealand's terms of trade were relatively stable and close to their 40-year average. However, between 2000 and their peak in March 2005, the merchandise terms of trade rose by 17%, driven by significant increases in the world price for some of New Zealand's main commodity exports, particularly dairy, beef, lamb and aluminium. Strong world demand (particularly from China and the US), coupled with tight supply conditions (compounded by disease outbreaks limiting some agricultural exports), increased these prices to new records in some cases.

Import prices (in world terms) also increased over this period, although to a lesser extent than the export price increases. These increases were driven largely by considerable movements in the price of crude oil. Since the start of 2002, WTI crude oil prices have increased by more than 250%. However, falls in the world price of some consumer and capital goods imports have partly offset the oil price increases. As largely an exporter of manufactures, China has been able to use its vast supply of labour to become a competitive producer and put downward pressure on the world price of manufactured goods. In 1983, New Zealand sourced less than 1% of its imports from China; in 2005 this had increased to more than 10% and is expected to continue rising.

In the second half of 2005, the world prices for New Zealand's main commodity exports fell from their recent highs as the supply factors mentioned above started to unwind. Compounding the impact of falling export prices were continuing increases in oil prices. The impact of this was that the terms of trade fell over the second half of 2005.

### Outlook

The current level of the terms of trade is below the level forecast in the *Half Year Update*. This is due to both historical revisions by Statistics New Zealand and larger than expected falls in some export prices. This lower level in comparison with the *Half Year Update* is one of the reasons for the lower consumption growth forecasts than in the *Half Year Update* as the income gains of the high terms of trade to New Zealand households are less pronounced.

We expect the terms of trade to continue their recent decline over 2006 and 2007 as the supply factors gradually dissipate, compounded by oil prices staying at recent high levels over the majority of the forecast period. Some risks to the terms of trade outlook are discussed in more detail in the Risks and Scenarios chapter.

Although the terms of trade are forecast to decline, they are expected to remain at a level that is high by historical standards. The increasing presence of China in the global economy is expected to continue to drive demand for commodities, which will have flow-on effects for New Zealand commodity prices. China is also expected to have a continuing impact on the price of New Zealand's imported goods.

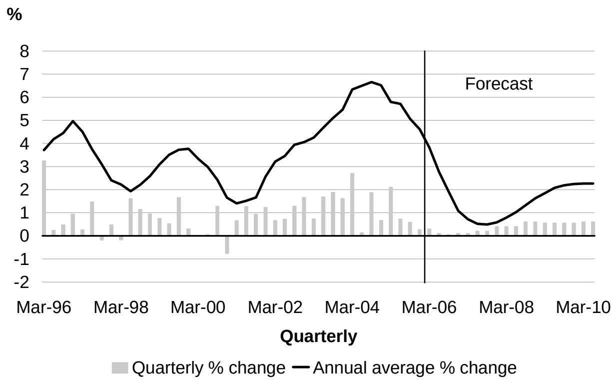
The reasonably strong outlook for New Zealand's trading partners (other than China) is also expected to contribute to the terms of trade staying at a level that is high by historical standards.

### Impact

The impact on the economy of a fall in the terms of trade is hard to quantify. Changes in the terms of trade can have different macroeconomic impacts depending on the composition of the relative price movements. If a fall in the terms of trade is due to a fall in export prices, it will initially impact on exporters before indirectly affecting households. However, if a fall in the terms of trade is a result of an increase in import prices (for example, oil prices), it is likely to affect households and businesses more directly and the macroeconomic shock will be different.

***Growth in private consumption is expected to ease…***

*Figure 1.10* – Growth in private consumption




Sources: Statistics New Zealand, The Treasury

Most factors point to a further easing in private consumption growth in the near term, although there are some supportive factors, particularly increased government transfers. Private consumption growth is forecast to decline from an estimated 3.8% (annual average) in March 2006 to 0.7% in March 2007. It recovers slowly in the following year to an annual average of 0.8% in March 2008. These forecasts are lower than in the *Half Year Update* because growth in the second half of 2005 was weaker than expected and some of the factors constraining growth have intensified.

***… as a result of higher interest rates and increasing fuel prices…***

Ninety-day bank bills increased from 5.1% in the third quarter of 2003 to 7.6% in the first quarter of 2006. Although many households have switched to longer-term, lower interest rate home loans, the sector as a whole faces higher average interest rates as households re-finance. Higher interest rates will reduce expenditure growth, especially on consumer durables, as households will be less willing to take on extra debt.

We estimate that the 24% increase in petrol prices in the year to March 2006 will add $600-700 million to households' annual fuel bill. While there is likely to be some reduction in fuel consumption, the price increase is also likely to reduce expenditure in other areas. Further increases in oil prices, compounded by a continuing decline in the New Zealand dollar, are expected to bring further reductions in private consumption growth.

***… a cooling housing market…***

The housing market has been easing since its peak in late 2003 and is expected to continue to ease over the next year, with average house prices declining 5% in the year to mid-2007. The increase in housing wealth has provided a stimulus for consumption growth recently thanks to the increase in households' net assets, some of which has been used to fund current consumption. The slowdown in house price growth is expected to restrain growth in expenditure.

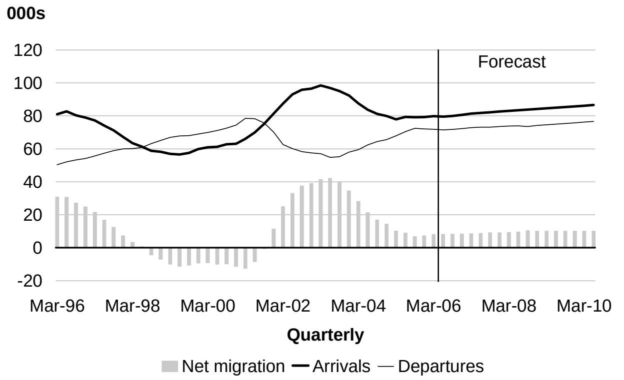
In addition, households may wish to consolidate their debt in order to help control debt servicing costs. This implies a small decline in the level of household dis-saving. Lower growth in residential construction (discussed below) will also reduce private consumption, especially for consumer durables which are associated with investment in housing. (See the box on Consumption and Housing Wealth on pages 72-73 for further discussion.)

***… an easing labour market and lower population growth…***

Conditions in the labour market are expected to ease in the forecast period, with a slight decline in employment in the year to March 2007. The decline in hours worked will be more pronounced as some employers hold on to existing labour but reduce their hours. Growth in hourly earnings is expected to decline to 3.5% in March 2008 from its peak of 4.7% in mid-2006. The combined effect of these changes is that annual average growth in compensation of employees will decline from 7.7% in the third quarter of 2005 to 3.0% in March 2007, before recovering to 4.2% in March 2008 and 5.2% in March 2009. (See pages 75-76 for more discussion of the labour market.)

Population growth has been slowing since net permanent and long-term (PLT) migration inflows peaked at 42,500 in mid-2003. Net PLT migration inflows have already increased from a low of 6,000 in the year to October 2005 to 9,700 in the year to March 2006 and are assumed to be around 10,000 per annum for most of the forecast period. However, there is some uncertainty about future migration flows. Higher-than-forecast departures and decreasing arrivals are possible as economic growth in New Zealand slows relative to other economies. Such an outcome would pose a downside risk to our forecasts.

***Figure 1.11*** – Permanent and long-term migration – annual totals




Sources: Statistics New Zealand, The Treasury

***… and the declining New Zealand dollar***

The fall in the New Zealand dollar, which commenced in the first quarter of 2006 and is expected to continue, will raise the cost of imported goods, reducing consumption levels. Furthermore, over the past couple of years consumers may have brought forward their expenditure on some durables to take advantage of lower prices coming from the high exchange rate. As a result, some expenditure which would have occurred over the next couple of years may have already been undertaken, and so consumption growth is likely to be lower than otherwise. In addition to higher prices for imported goods, the prices of locally produced goods may also rise because of increases in the price of imported inputs or imported substitutes, leading to lower real incomes and slower consumption growth.

Further out, the decline in the New Zealand dollar is expected to lead to higher export returns which will flow through to higher household incomes. Along with lower interest rates and increasing employment, these higher incomes are expected to lead to an increase in private consumption growth on a quarterly basis from mid-2007. On an annual average basis, private consumption growth is forecast to strengthen from 0.8% in March 2008 to 1.9% in March 2009.

## Consumption and Housing Wealth

*Increases in housing wealth have been an important factor in explaining strong consumption growth in the past five years, but are expected to make a smaller contribution in the forecast period.*

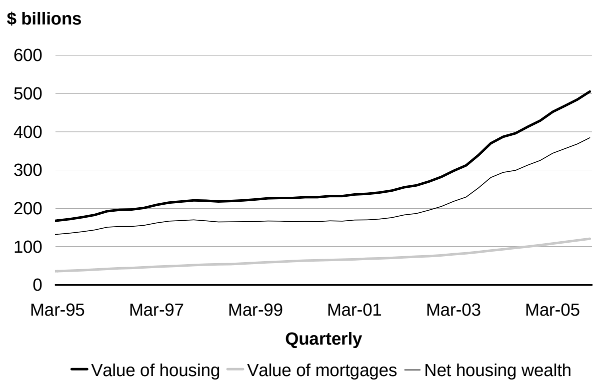
### Impact of housing wealth on consumption

Over the past five years, growth in real private consumption has been an important contributor to overall economic growth. Over that period, private consumption has grown at an average annual rate of 4.6% to be 25.4% higher than in 2000, while real GDP has grown at an average annual rate of 3.5% to be 19.0% higher than in 2000. A number of factors have combined to support this strong consumption growth and these include: a strong labour market with rising employment and falling unemployment, as well as relatively strong wage growth; a currency that has generally been appreciating or at a high level contributing to lower prices for imported goods; boosts to population from net migration, particularly over 2002 and 2003; and interest rates that have been relatively low by historical standards.

In addition, households have experienced substantial wealth gains from the boom in property prices that has occurred over the last few years. This boom has itself been supported by many of the factors outlined above, but has also been a more widespread phenomenon with rapid house price growth occurring in a number of countries. Since the end of 2000, New Zealand house prices have increased by nearly 80% and, with housing assets by far the largest asset class held by households, this has resulted in a surge in both net housing wealth and the overall net wealth of households.

The nominal value of housing assets held by households increased by 118% between December 2000 and December 2005 with households now holding just over $500 billion worth of housing assets.[1] Over the same period mortgage values have increased by 83%. Nominal net housing wealth (housing assets less mortgages) has increased an estimated 131% in five years (deflation based on changes in consumption prices results in a 118% real increase).

***Figure 1.12*** – Housing wealth




Source: Spicers

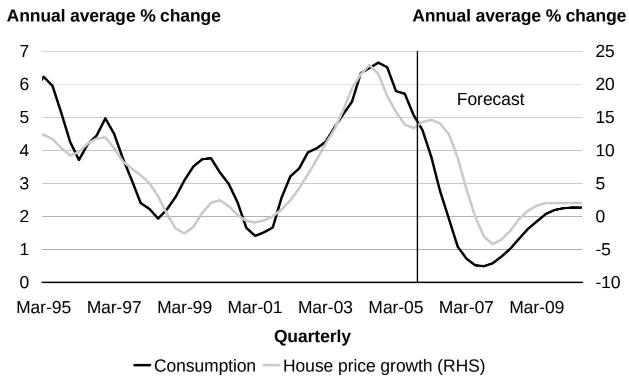
1 Spicers Household Savings Indicators, March 2006.

Studies suggest that consumption is positively related to changes in real housing wealth, at least in the short run, and – while it is difficult to be precise about the exact magnitude of the relationship – several estimates suggest that a 10% increase in real housing wealth generates around a 2% increase in consumption.[2] While such estimates are possibly too large in times of rapid house price growth and therefore housing wealth accumulation, there is evidence that households have been utilising some of their housing wealth gains to fund consumption by borrowing against the equity in their housing. Simple estimates of mortgage equity withdrawal, the extent to which new mortgage borrowing exceeds expenditure on residential investment, suggest that at an aggregate level such withdrawals totalled $13-14 billion over the past three calendar years.

### Outlook

While house price growth and its associated wealth effects have been important factors supporting consumption growth over recent years, their influence is expected to become much less pronounced over the forecast period as the rate of house price growth slows and even becomes negative. From the end of 2005, nominal house prices are forecast to increase only 4% over the entire forecast period (up to June 2010).

***Figure 1.13*** – House prices and consumption




Sources: Statistics New Zealand, QVNZ, The Treasury

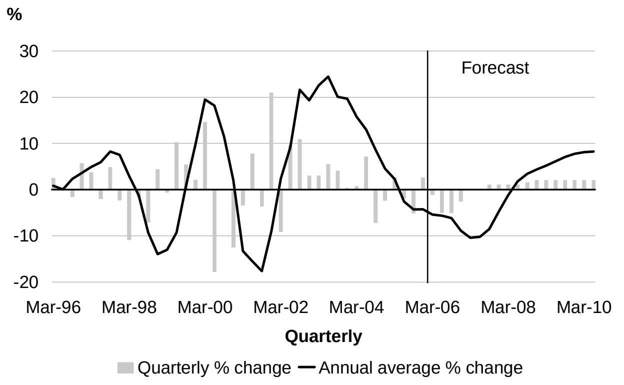
Factors behind this relatively slow price growth include: slower population growth limiting demand for housing and an expected increase in housing vacancy rates; a return toward longer-run relationships between house prices and rents, with movements in house prices expected to stop diverging from rents and begin converging; and slower household income growth than has occurred over 2004 and 2005 acting as a constraint on the amount by which house prices can increase without affecting affordability and also limiting the extent to which higher rents can contribute to closing the gap between rental and house price inflation.

2 See, for example, Treasury Working Paper "Modelling New Zealand Consumption Expenditure over the 1990s" (02/19) and IMF Country Report No. 05/153.

***Residential investment is expected to decline further…***

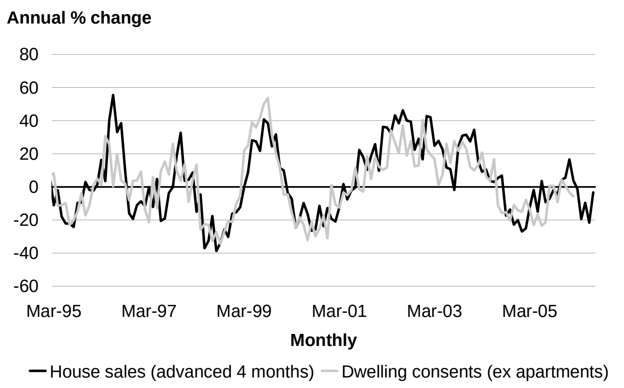
Residential investment is estimated to have declined 5.4% in the year to March 2006, following a weak September 2005 quarter. Many of the same factors explain this decline as those discussed above in relation to the slowing in private consumption, in particular the impact of past interest rate increases and lower population growth as a result of lower net immigration. Residential investment is forecast to decline further in the March 2007 year as a result of a continuation of these factors. These influences are reflected in building consents data which point to weaker residential construction activity in the near term. Expectations of slower house price growth will also affect residential investment.

***Figure 1.14*** – Growth in residential investment




Sources: Statistics New Zealand, The Treasury

***Figure 1.15*** – House sales and dwelling consents




Sources: Statistics New Zealand, REINZ

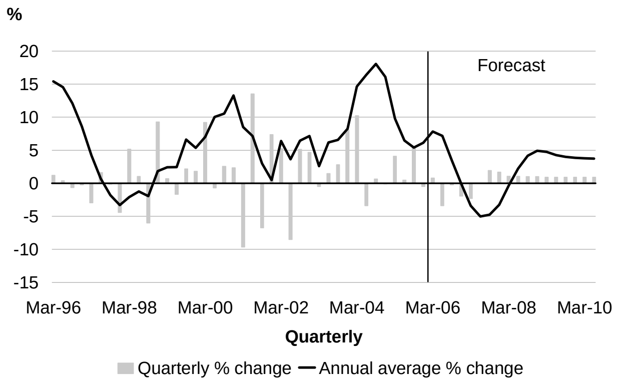
***… as the housing market slows***

The housing market has been slowing since late 2003, despite a revival in late 2004 as a result of the "mortgage wars". The slowing is a result of the same fundamental factors as the fall in residential investment, plus some others related specifically to the housing market. Rents have not kept pace with the increase in the capital cost of housing, indicating that the return on investment is not sufficient to cover the cost at current values. In addition, estimated vacancy rates have been increasing, suggesting that the supply of housing is outstripping the demand for additional units. Furthermore, the price of existing housing relative to the cost of building new housing is at all-time highs; however, rather than suggesting that more new housing needs to be built, this factor points to the overheated nature of the second-hand housing market.

Residential investment is expected to begin to pick up slowly in the March 2008 year as interest rates fall and employment increases, before recovering to its trend growth rate of around 8% in the final year of the forecasts. The recovery in residential investment will be relatively slow in order to allow the housing market to come back into balance.

***Firms are expected to curtail investment…***

**Figure 1.16** – Growth in market investment




Sources: Statistics New Zealand, The Treasury

Business investment declined in the final quarter of 2005 as businesses reacted to the weaker demand, increased cost pressures and resulting slower profit growth. In particular, firms operating in the tradables sector of the economy, either through exporting or competing with imported goods, faced lower returns because of the high exchange rate. Input cost pressures may begin to ease as the domestic economy cools, but capital goods prices are expected to increase as the exchange rate declines. Higher interest rates will also curb businesses' investment plans. Some investment in imported capital items may have been brought forward in the past couple of years to take advantage of the strong exchange rate, leading to a period of lower investment in the future.

As a result of this outlook, we expect firms to continue to reduce their investment, giving a contraction of 3.4% in the year to March 2007, slightly deeper than forecast in the *Half Year Update*. Strong balance sheets, arising from past profit growth, will prevent a deeper fall. Business investment is expected to recover in the latter part of 2007 as higher export returns are received, although the March 2008 year will still show a contraction on an annual basis. Growth in business investment is forecast to settle at its trend rate of around 4% per annum for the remainder of the forecast period.

The response of businesses to the conditions they are facing is one of the key judgements in these forecasts. In this central scenario we assume a relatively muted response to the cost pressures and lower demand which are confronting them. An alternative scenario is developed in the Risks and Scenarios chapter (see pages 116-118) to show what would happen if their reaction was more pronounced.

***… and reduce employment…***

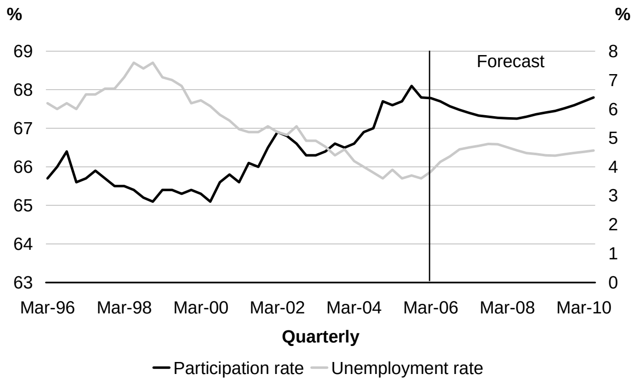
Employment declined marginally in the final quarter of 2005 and we expect it to be 0.3% lower in March 2007 than in the previous year as firms react to the weaker sales and profits. The decrease in hours worked will be greater than in total employment as firms are expected to retain workers but reduce their hours. The extent to which firms do this will depend on the degree to which they regard the downturn as temporary and how difficult they expect it will be to secure workers again when the upturn comes.

Employment is expected to start to grow again in 2007 as higher returns from exports flow through to both producers and consumers, demand strengthens again and firms increase their output. The alternative scenario for firm responses to the downturn includes a sharper decline in employment levels (see pages 116-118).

### *… leading to a rise in unemployment*

With the fall in employment, the proportion of the working age population participating in the labour market is also expected to fall as some workers are discouraged from looking for work. The participation rate is expected to continue to decline from its recent peak of 68.1% in the September quarter 2005 to 67.3% in mid-2007 and remain at that level until late 2008 when growth in employment encourages more people into the labour force. Demographic factors (continuing increases in the participation of females and older people) will also play a role in the higher participation.

***Figure 1.17*** – Participation and unemployment rates




Sources: Statistics New Zealand, The Treasury

With continuing annual growth of around 1.2% in the working age population, and despite the fall in the participation rate, the unemployment rate is expected to increase from its 20-year low of 3.6% in December 2005, peaking at 4.8% in the second half of 2007. Compared with previous downturns in the economy, this is a modest rise and partly reflects the degree of labour hoarding by firms. The unemployment rate is forecast to fall gradually and the participation rate to increase after employment growth resumes in 2007.

### *Wage growth is forecast to peak in 2006…*

Wage growth is expected to peak in mid-2006 with private sector hourly earnings increasing by 4.5% on an annual average basis, approximately a year after the low in the unemployment rate and the high in the participation rate were recorded. However, by late 2006 rising unemployment, lower business profitability, recent low labour productivity growth and the slowing economy are expected to lead to moderation in wage growth. Public sector wage growth, which has been influenced by large settlements for certain occupational groups recently, is expected to decline from a peak of 7.3% in 2005 to the same trend growth rate as private sector wages of around 3.4% in the latter part of the forecast period.

### *… and labour productivity to increase*

Labour productivity growth has been low (and even negative) recently as the extensive increase in employment has lowered average worker productivity. This is a typical pattern in the later stages of an expansion as lower-skilled workers are drawn into the workforce. This development is expected to be reversed as employment levels consolidate and hours worked are reduced, and the benefits of recent investment in capital lead to higher labour productivity. Annual growth in labour productivity is forecast to average 1.4% over the forecast period. (For a discussion of recent developments in the measurement of labour productivity, see the box on the following page.)

## Recent Productivity Developments

*Statistics New Zealand recently released figures showing average labour productivity growth of 2.6% per annum for the period 1988 to 2005. The labour productivity figures used in these forecasts are lower than this but not inconsistent with the official measure. Our figures cover the whole economy, whereas the official productivity series cover only the measured sector. It is not possible to use the official measure here as we forecast GDP for the whole economy.*

Statistics New Zealand recently released productivity data for the measured sector of the New Zealand economy. The measured sector accounts for around 65% of GDP and excludes government administration, defence, education, health, personal and other services, and property and business services. These industries were excluded because of difficulties measuring their output and therefore productivity.

The Statistics New Zealand series suggest that over the period 1988 to 2005 labour productivity growth in the measured sector averaged 2.6% per annum, compared with average labour productivity growth for the economy as a whole of 1.3% per annum for the same period. Statistics New Zealand's estimates of labour productivity in the measured sector are similar to those calculated in a 2003 Treasury Working Paper, "Productivity in New Zealand 1988 to 2002".

Labour productivity growth across the whole of the economy forms the basis for projections of future productivity growth in this *Budget Update*. Table 1.2 below shows the historical and forecast labour productivity growth for the whole economy, calculated from total GDP and total hours worked in the whole economy.

***Table 1.2*** – Economy-wide productivity

| March Years | GDP Growth | Labour Productivity Growth | Labour Input Growth |
|---|---|---|---|
| Average 1988-2005 | 2.6 | 1.3 | 1.3 |
| 2005 | 3.7 | 0.3 | 3.4 |
| 2006 | 2.1 | -0.4 | 2.5 |
| 2007 | 1.0 | 1.5 | -0.4 |
| 2008 | 3.3 | 2.6 | 0.7 |
| 2009 | 3.5 | 1.8 | 1.7 |
| 2010 | 3.1 | 1.4 | 1.6 |
| Average 2006-2010 | 2.6 | 1.4 | 1.2 |

Sources: Statistics New Zealand, The Treasury

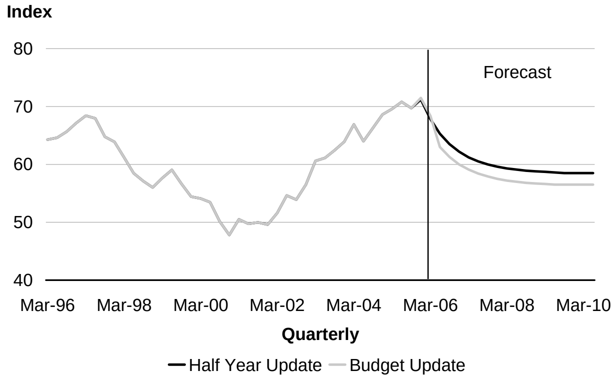
The economy-wide measure of labour productivity growth is lower than the official measure of productivity growth for the measured sector chiefly due to the way output in the non-measured sector is calculated. In the non-measured sector, output is based on the level of inputs, implying zero productivity growth. If there have been productivity gains in the non-measured industries, the economy-wide measure reported in Table 1.2 will understate productivity (and GDP); likewise the reverse is true if productivity has fallen in the non-measured sector.

The economy-wide measures reported in this document are not inconsistent with the measures published by Statistics New Zealand. The reasons for the differences between them are the different coverage of the two measures and the different methodology for constructing hours worked in the Statistics New Zealand measure from the one in Table 1.2, which is simply total hours worked. However, it is not possible to use the official measure of labour productivity in these forecasts because of these differences.

### *Exchange rate is assumed to fall further…*

Export volume growth has been weak recently, apart from the final quarter of 2005, as a result of both poor seasonal conditions affecting agricultural production and the effect of the high exchange rate on services and manufactured exports. The adjustment in the exchange rate which commenced in the first quarter of 2006 is expected to continue. For the purposes of the forecasts, the New Zealand dollar is assumed to fall to 60.0 on the Trade Weighted Index in the final quarter of 2006 and 56.5 by the end of the forecast period.

***Figure 1.18*** – Exchange rate (TWI)




Sources: Statistics New Zealand, The Treasury

However, there is considerable uncertainty about both the rate of depreciation of the exchange rate and how far it falls. An alternative scenario is developed in the Risks and Scenarios chapter which shows how the economy might develop if the exchange rate moved through a larger cycle. (See pages 119-120.)

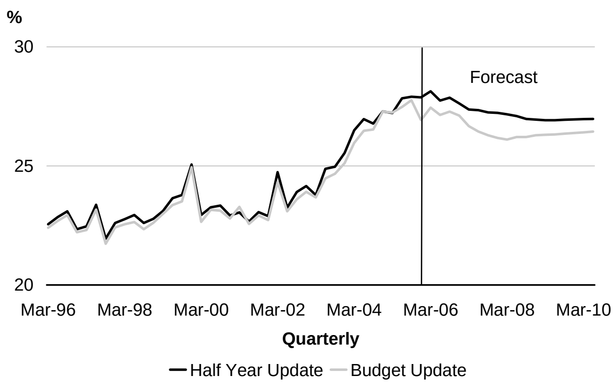
### *… contributing to a recovery in exports*

The benefits of the fall in the exchange rate on services exports (chiefly tourism) will not be felt for approximately a year as prices are set well in advance. The impact on commodity exports will be felt chiefly in terms of improved returns, with an increase in volumes dependent on seasonal conditions. Forestry, however, may be well-placed to respond to improved prices (in both international and New Zealand dollar terms) and strong demand from trading partners. Total export volumes are expected to increase 5.6% in the year to March 2008 after two years of low growth.

### *Import growth is expected to ease…*

Some recovery is expected in import volumes in the first quarter of 2006 from their sharp fall in the final quarter of 2005, but thereafter the expected slowdown in private consumption and residential and business investment is expected to flow through into reduced import volumes. The forecasts for import volumes are lower than in the *Half Year Update* because of the recent low outturns, lower domestic demand in the medium term and a lower exchange rate further out. As a result, total imports as a proportion of GNE plus exports (the import penetration ratio) are forecast to be lower than previously.

***Figure 1.19*** – Imports as a percentage of GNE plus exports




Sources: Statistics New Zealand, The Treasury

### *… leading to a narrowing of the current account deficit*

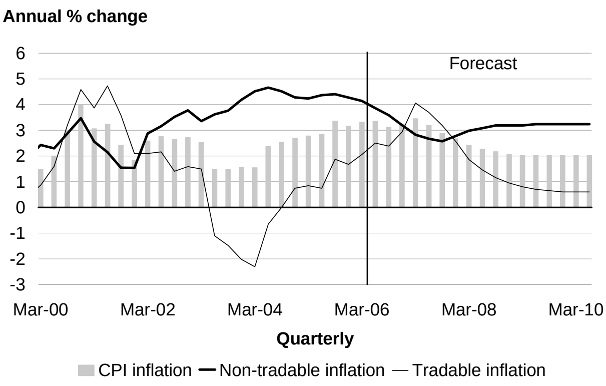
The deficit on the current account is forecast to increase further in the near term, reaching 9.5% of GDP on an annual basis in December 2006. However, once export volumes begin to increase and import volumes begin to fall (in response to both the lower exchange rate and weaker domestic demand), the trade deficit is expected to narrow. The deficit on investment income is also expected to close slowly over the forecast period as the cyclical peak in profits for New Zealand-based firms passes. From its forecast peak in December 2006, the current account deficit is expected to narrow to 6.0% of nominal GDP in the year to March 2010, similar to our *Half Year Update* forecast.

### *Inflation will remain high for some time…*

The fall in the exchange rate and increases in oil prices are expected to keep consumer price inflation above 3% in the short term. Petrol price increases have contributed 0.8 percentage points to inflation of 3.3% in March 2006 and if prices at the end of April are maintained, annual inflation will go even higher. A further fall in the New Zealand dollar will add more to tradables inflation, although we have assumed that firms will pass on slightly less of the higher costs arising from the fall than in the past because of recent strong profits, good balance sheet positions and a continuing competitive environment. This is a key assumption. Tradables inflation is expected to increase from its latest outturn of 2.1% in March 2006 to a peak of 4.1% in March 2007.

The rate of increase in the prices of goods and services which are not traded internationally is expected to ease as the economy cools, especially residential investment. Housing related prices are still one of the main contributors to non-tradables inflation, although their rate of increase is easing. Non-tradables inflation is expected to decline from its rate in excess of 4% in the past two years, offsetting the increase in tradables inflation in the near term. The chief risk to non-tradables inflation is the extent to which increasing labour costs will flow through to consumer prices.

***Figure 1.20*** – CPI inflation




Sources: Statistics New Zealand, The Treasury

### *… and interest rates are unlikely to decline until 2007*

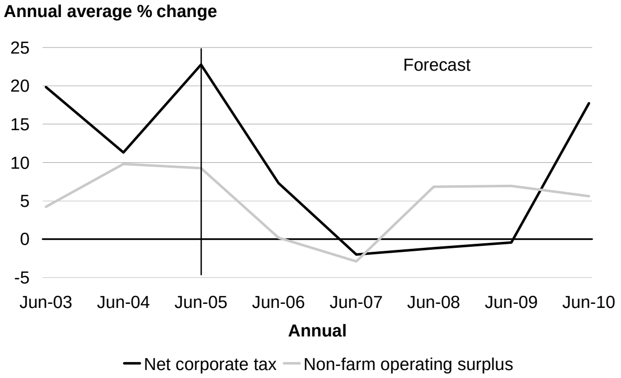
Although inflation is forecast to exceed the Reserve Bank's target band for at least the next year, the Bank has stated that it will look through the first-round effects of increases in the price of international commodities (such as oil) and the fall in the exchange rate. The key consideration for monetary policy is whether those changes lead to increased inflation expectations. We have assumed that they do not and expect 90-day interest rates to average 7.0% in the March quarter 2007 and continue to decline to the assumed neutral rate of 5.8% by the end of the forecast period. However, there is considerable uncertainty about the outlook for inflation and the extent to which it leads to higher inflation expectations and becomes built into wage and price increases.

### *Nominal GDP and tax revenue growth show a prominent cycle*

Growth in nominal GDP will slow sharply to 1.9% in the March 2007 year, down from an estimated 4.3% in March 2006. However, nominal GDP is forecast to recover rapidly with growth of 5.2% in the year to March 2008 and 5.6% in the following year. With a prominent cycle in nominal GDP, there is also a noticeable cycle in tax revenue. Growth in tax revenue is forecast to be below 3% per annum in each of the next three years.

The tax type where the cycle is most evident is corporate tax where growth in the June 2006 year is already much lower than the relatively high growth rates of recent years. Companies in most sectors of the economy are paying about the same amount of tax as last year, giving no growth. The notable exceptions are companies involved in the Finance and Insurance sector and the Utilities sector, which are paying more tax than last year as a result of increases in investment income and energy demand. Although growth in corporate tax is well down on the 20%-plus growth of 2004/05, it is still on track for growth of around 7% in 2005/06.

***Figure 1.21*** – Corporate tax revenue

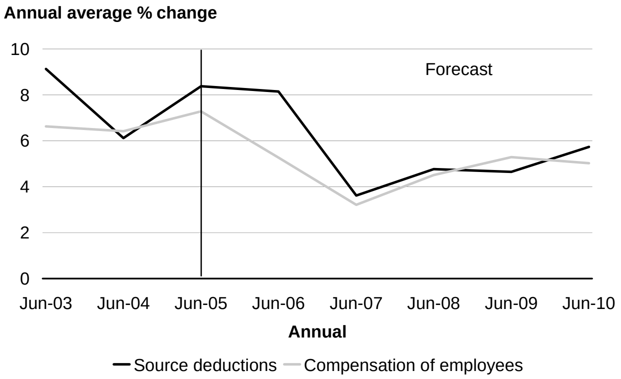



Sources: Statistics New Zealand, The Treasury

With aggregate company profits forecast to decline through 2006/07, the forecast for corporate tax in 2006/07 is slightly down on 2005/06. In addition, with corporate profitability falling off, there is likely to be a build-up of tax losses. The utilisation of these losses over the following few years will have a negative effect on total tax growth, contributing to tax revenue growth lagging nominal GDP growth through that period. This tax loss effect is not expected to be as severe as was the case after the recession of the late 1990s as, in aggregate, businesses' balance sheets are in better shape now than they were then. Changes to the provisional tax system cause the year to June 2009 to have 11 rather than the normal 12 provisional tax payment dates, which contributes to the dip in tax revenue in that year and the subsequent rebound in 2010.

Source deductions (mostly PAYE) growth for 2005/06 is steady at around 8%, buoyed by momentum in the labour market through the early part of the downswing of the economic cycle. Since source deductions revenue is closely linked to compensation of employees (COE), growth rates in 2006/07 and beyond are lower than in the past few years, tracking the cycle in the labour market.

***Figure 1.22*** – Source deductions tax revenue

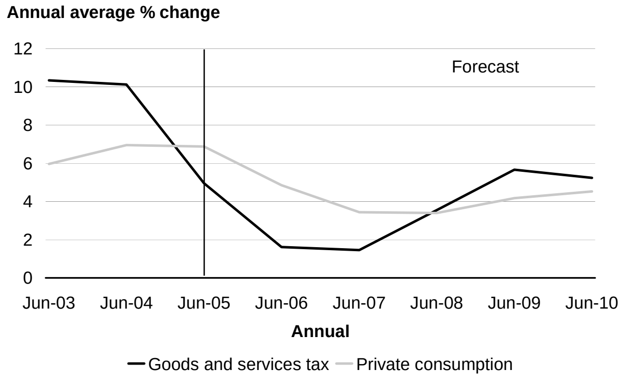



Sources: Statistics New Zealand, The Treasury

Normally, we expect source deductions to grow at a faster rate than COE owing to the progressive nature of the personal income tax scale. However, the tax threshold indexation scheduled to occur on 1 April 2008 depresses source deductions growth, further accentuating the cycle in tax revenue.

GST growth slowed markedly through 2005. This has continued through the early part of 2006, with GST growth for the 2006 June year expected to fall to around 1.5%. With a further easing in domestic consumption expected, GST growth in 2007 is also expected to be around 1.5%, coinciding with the bottom of the economic cycle. Thereafter, GST growth recovers, in line with private consumption

***Figure 1.23*** – GST revenue




Sources: Statistics New Zealand, The Treasury

## Effects of Tax Policy Changes on the Tax Forecasts

***Table 1.3***– Material changes in tax revenue forecasts owing to changes in tax policy since the *Half Year Update*

| ($ million) | 2005/06 Forecast | 2006/07 Forecast | 2007/08 Forecast | 2008/09 Forecast | 2009/10 Forecast |
|---|---|---|---|---|---|
| ***Material policy changes*** | | | | | |
| Carbon tax | - | (89) | (347) | (344) | (349) |
| Taxation of racing industry | - | (32) | (34) | (35) | (35) |
| Taxation of investment income | - | - | (13) | (13) | (13) |
| Other | 13 | 13 | 1 | (6) | (14) |
| ***Total*** | **13** | **(108)** | **(393)** | **(398)** | **(411)** |

Sources: Inland Revenue, The Treasury

The details of each policy change are as follows:

*Carbon tax*

The carbon tax of $15/tonne of $CO_2$-equivalent due to come into force on 1 April 2007 will not now proceed.

*Taxation of racing industry*

From 1 August 2006, the rate of totalisator duty decreases from 20% to 4% and there will be some changes around the depreciation of bloodstock.

*Taxation of investment income*

Changes to the Taxation of Investment Income proposals to apply from 1 April 2007 have increased the total cost of this policy by $13 million per annum.

*Other*

This category includes some policies with costings below the materiality threshold of $10 million per annum, plus some minor re-estimation of previous policy changes.