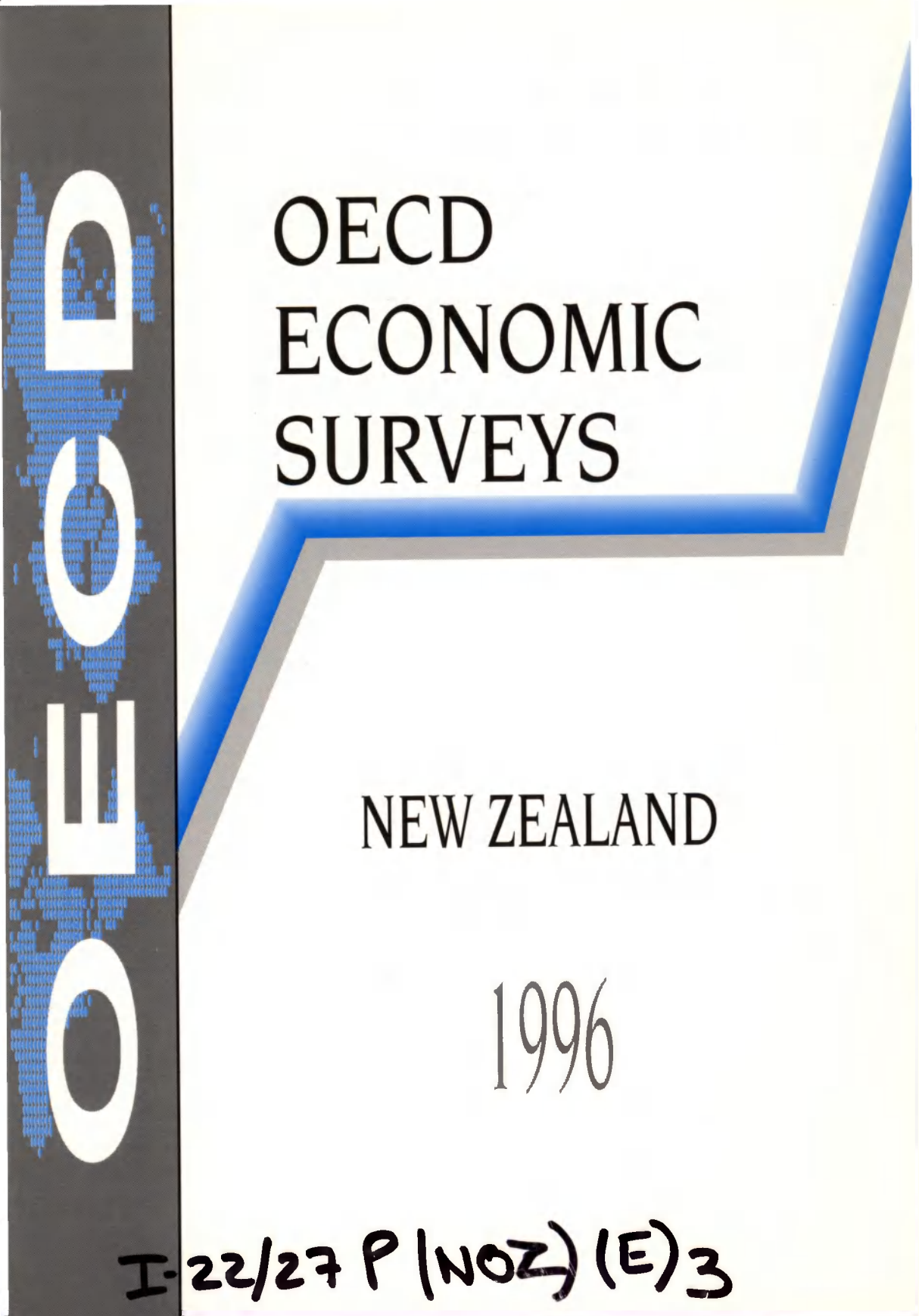




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NEW ZEALAND

1996

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1995-1996

NEW ZEALAND

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BASIC STATISTICS OF NEW ZEALAND

THE LAND

Area (1 000 sq. km)	270.5	Urban population, ¹	
Total occupied farm land,		percentage of total (31.03.95)	76.2
percentage of total, 1993	64.1	Population of major urban areas	
of which: Grassland	51.6	(1994/95 1 000 persons):	
		Auckland	952.6
		Christchurch	324.4
		Wellington	331.1

THE PEOPLE

Population, September 1995 (1 000)	3 575.4	Civilian employment, December 1995 (1 000)	1 666.0
Inhabitants per sq. km	13.2	of which:	
		Agriculture	161.8
		Manufacturing	303.0
		Trade (wholesale and retail)	358.1
		Community and personal services	442.9

PARLIAMENT AND GOVERNMENT

Present composition of Parliament:	
National Party	41
Labour Party	41
United	7
New Zealand First	5
Alliance	2
Christian Democrats	1
Conservatives	1
Independent	1

Present Government: National Party

Next general election: at latest by November 1996

PRODUCTION ²

Gross National Product, 1994-1995		GNP per capita, 1994-1995 (NZ\$)	22 885
(NZ\$ million)	82 211		

FOREIGN TRADE (1995)

Main exports (percentage of total):		Main imports (percentage of total):	
Manufactures	25.7	Machinery and transport equipment	43.4
Meat and meat preparations	12.8	Other manufactures	26.4
Dairy produce	13.0	Mineral fuels, lubricants, etc.	5.2
Wool	5.6	Chemicals	9.6

THE CURRENCY

Monetary unit: New Zealand dollar

Currency unit per US dollar, average of daily figures:

Year 1995	1.5240
March 1996	1.4677

1. Defined as the population in the 30 main and secondary urban areas.

2. Year ending 31 March.

Note: An international comparison of certain basic statistics is given in an annex table.

This Survey is based on the Secretariat's study prepared for the annual review of New Zealand by the Economic and Development Review Committee on 25 March 1996.

•

After revisions in the light of discussions during the review, final approval of the Survey for publication was given by the Committee on 12 April 1996.

•

The previous Survey of New Zealand was issued in October 1994.

Introduction

New Zealand's economic performance continues to be impressive. The current expansion has already lasted longer than previous ones and, in a marked break from past trends, GDP growth in recent years has outpaced that of other OECD countries, averaging $5\frac{1}{2}$ per cent in 1993-94 and still reaching $3\frac{1}{2}$ per cent in 1995. Although broadly based, the upturn has been particularly supported by buoyant private capital spending, which should enhance the economy's growth prospects. Substantial job creation has led to a sharp decline in the unemployment rate to well below the OECD average. With diminishing slack in product and labour markets, some inflation and current account pressures have emerged. So far, however, these have remained limited compared with past periods of strong growth, reflecting the beneficial effects of the wide-ranging structural and institutional reforms implemented since the mid-1980s. These included trade liberalisation, deregulation of goods and labour markets as well as an overhaul of the public sector and the introduction of a medium-term oriented macroeconomic policy framework.

The outlook for this year and next is favourable. After slowing during 1995 in response to tighter monetary conditions, economic expansion appears to have stabilised. With tax cuts in mid-1996 boosting private consumption, output growth is likely to gather momentum and, according to Secretariat projections, could reach $2\frac{3}{4}$ and $3\frac{1}{4}$ per cent in 1996 and 1997, respectively. Inflation is expected to remain under control, declining in the near term before edging up again as activity strengthens next year. There are risks to this scenario, however. In particular, it is possible that, in anticipation of the tax reductions, domestic demand increases more rapidly than expected. Faster growth at a time when the economy is still operating near capacity could then re-ignite inflation pressures and push up the external deficit. The challenge to policy makers thus is to prevent

significant imbalances from emerging that could threaten growth prospects in the medium term.

The policy framework established over the past decade should help in this respect. Public finances have improved dramatically since the early 1990s, and the underlying rationale of the recent *Fiscal Responsibility Act* is to ensure the continuation of prudent budgetary policies. Despite the announced tax cuts, the central government budget is expected to remain in sizeable surplus. Nonetheless, a gradual implementation of the tax reductions accompanied by ongoing spending restraint would be required to avoid undue pressure on monetary conditions. Notwithstanding a temporary breach of the ambitious 0 to 2 per cent target range, the monetary policy framework introduced by the *Reserve Bank Act* has proved to be effective in containing inflation so far. But this has required a sharp increase in both interest rates and the exchange rate, which could, if it persists, have adverse consequences for investment, competitiveness, and the economy's growth potential. Together with prudent fiscal management, sustained implementation of structural reforms would facilitate the task of monetary authorities. The *Employment Contracts Act*, which deregulated labour markets, has prevented the emergence of generalised wage pressures in the face of falling unemployment, although relative wages are now more responsive to particular skill shortages. But there is still unfinished business in the structural policy area, including skill development, trade protection, privatisation, and health reform.

Chapter I of the Survey reviews the main features of the current recovery and then discusses the short and medium-term prospects for the economy. Chapter II examines the policy settings underlying these developments and provides an assessment of the overall strategy. Chapter III deals with labour-market and related issues against the backdrop of the recommendations made in the *OECD Jobs Study*. Chapter IV addresses the specific structural topic of the Survey – public-sector reform, including initiatives in the health and education sectors. Conclusions arising from the analysis are presented in Chapter V.

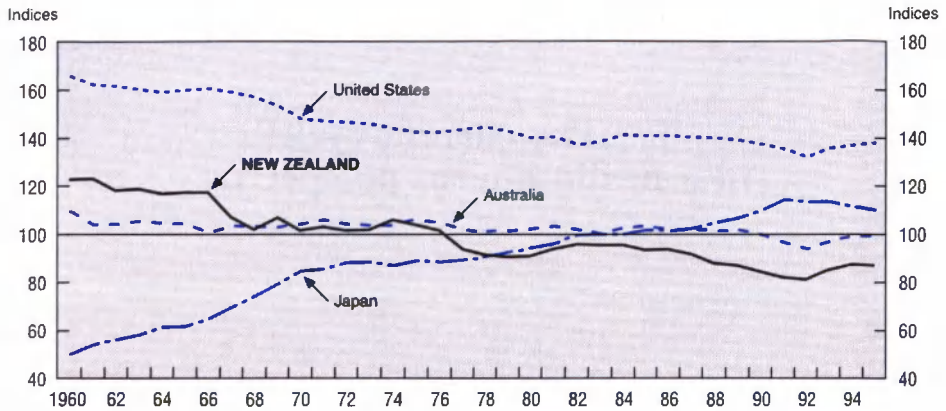
I. The current cycle in a medium-term perspective

Recovery from stagnation

The New Zealand economy is now into its fifth year of growth. Unlike previous upswings, the current one was not sparked off by a fiscal expansion or a positive terms-of-trade shock. Instead, the initial impetus for the recovery came from a surge in export volumes which followed a depreciation of the New Zealand dollar. Although the currency has firmed since, export performance has remained favourable, as trade liberalisation has encouraged improvements in non-price competitiveness. Income generated in the export sector, along with low interest rates throughout 1993 and into 1994, allowed firms and households to increase spending. Rising profitability and record levels of business confidence led to a rapid expansion in investment and employment and, consequently, a marked fall in unemployment. This, in turn, bolstered consumer confidence and reinforced economic growth which, since 1993, has been among the strongest in the OECD area.

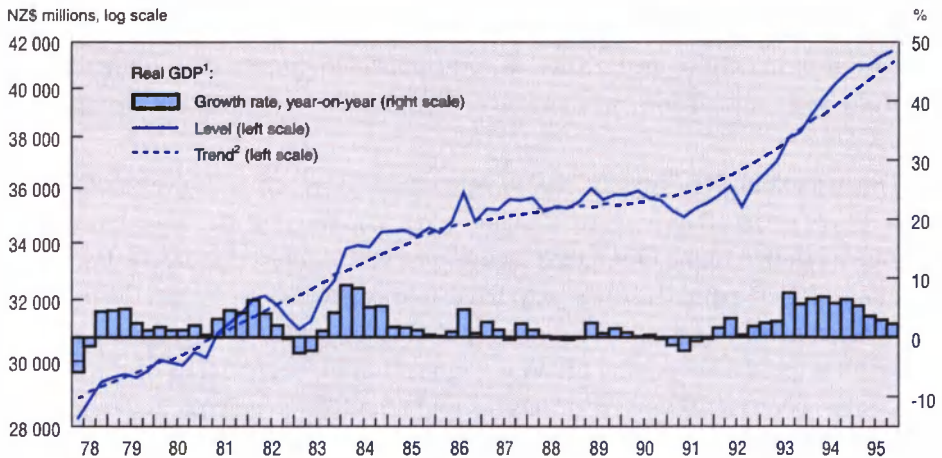
This excellent performance has to be seen in perspective, however. Despite the recent surge in activity, New Zealand's per capita GDP declined by almost 10 per cent relative to the OECD average from 1984 to 1994 (Figure 1). By 1995, the country's per capita income may have just recovered to 87 per cent of an OECD benchmark (up from a low of 81 per cent in 1992). This reflects the fact that the New Zealand economy broadly stagnated in the second half of the 1980s, when other countries enjoyed strong growth, and then entered recession, in parallel with the international business cycle (Figure 2). With a large amount of economic slack in the early 1990s, rapid growth in recent years represents to a considerable degree a cyclical rebound, underpinned by business and household spending which was deferred during the recession.

Figure 1. **GDP PER HEAD IN SELECTED OECD COUNTRIES¹**
Current PPPs, OECD = 100



1. 1995 figures are OECD Secretariat estimates.
Source: OECD.

Figure 2. **GROWTH PERFORMANCE OVER THE LONG TERM**



1. Output measure, 1982/83 prices.
2. Hodrick-Prescott filter, $\lambda = 1\ 600$. 1977 Q2 to 1995 Q4.
Source: Statistics New Zealand and OECD.

Whether the past decline in relative economic performance can be fully reversed will depend on the extent to which the recent expansionary phase proves sustainable. By 1994, the upswing had already lasted longer than most previous ones and spare resources in the economy that assisted growth were vanishing. Labour became more of a constraint to firms and capacity utilisation reached very high levels despite buoyant investment activity. Over the past year, inflation pressures have emerged, accompanied by a deterioration in the external current account, although growth has slowed in response to tighter monetary conditions. So far, however, domestic and external imbalances have been less pronounced than in previous cycles, while the extensive structural reforms of the past decade are likely to have increased the productive potential of the economy. Nevertheless, as will be discussed in Chapter II of the Survey, policy makers face a difficult task in guarding against inflation pressures in the near term while avoiding a hard landing for the economy in the medium run. The rest of this chapter reviews the current cycle in more detail and concludes with an assessment of the economic outlook.

Buoyant demand and output

After providing a strong stimulus to the economy at the onset of the recovery, *exports* weakened temporarily in 1992 due to bad weather conditions which caused high farm stock losses; thereafter, however, against the backdrop of rapidly expanding markets, export growth regained momentum, approaching 10 per cent in 1994 (Table 1). Non-commodity manufactures and tourism, in particular, contributed to this positive performance, which was achieved despite a 20 per cent rise in the effective exchange rate since 1992. Only more recently has the resulting loss in price competitiveness begun to be felt, leading – along with a weaker international economic situation and capacity constraints – to a marked slowdown in export growth (see balance-of-payments section below). Despite the rapid expansion of export volumes during most of the recovery, the real foreign balance has made a negative contribution to GDP growth (Figure 3), as import volumes have been boosted by buoyant domestic demand, especially investment and consumer durables spending.

Gross fixed capital formation has been the main factor underpinning the recovery, contributing about 5 percentage points per annum to real GDP growth from 1993 (Figure 3). Business investment has expanded particularly strongly

Table 1. **Demand and output developments**

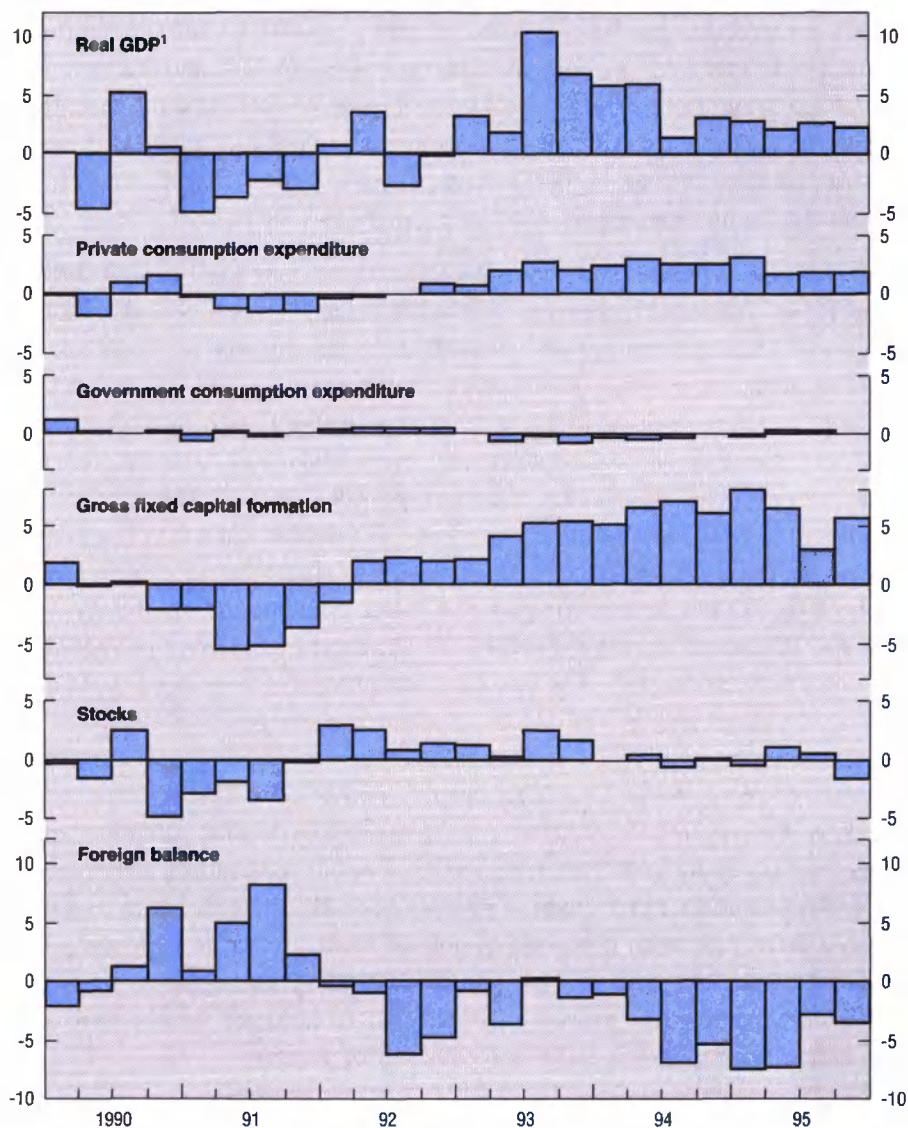
Volume percentage changes

	1990 NZ\$ million	A. Demand							
		Average			Calendar years				
		1970-79	1979-84	1984-94	1991	1992	1993	1994	1995
Private consumption	45 386	1.7	2.1	1.5	-2.0	0.2	3.0	4.4	3.5
Public consumption	12 264	3.8	1.4	0.3	-0.7	2.3	-2.5	-2.1	0.9
Gross fixed capital formation	14 130	0.6	7.2	3.5	-16.0	5.2	17.7	23.3	18.0
Public	3 498	2.9	2.8	-3.5	-15.7	-11.8	-12.5	11.3	..
Business	7 310	-0.1	10.4	6.1	-16.2	12.3	28.1	29.1	..
Residential	3 322	-1.4	5.8	3.0	-15.9	6.2	17.3	12.3	..
Final domestic demand	71 780	1.8	3.1	1.9	-5.3	1.7	5.5	8.3	7.4
Change in stocks	1 098	0.3	0.3	-0.1	-2.2	1.8	1.4	-0.2	-0.2
Total domestic demand	72 878	1.9	3.3	1.7	-7.3	3.5	6.8	8.0	7.1
Exports	19 792	3.7	4.8	4.5	7.1	1.0	6.0	9.6	2.2
Imports	19 394	4.1	3.1	5.8	-3.9	8.9	8.9	17.9	12.6
Change in foreign balance	398	-0.5	0.4	-0.8	4.1	-3.2	-1.6	-4.4	-5.6
GDP (expenditure basis)	73 276	1.7	3.8	1.1	-3.7	0.3	5.5	4.1	2.2
	1990/91 NZ\$ million	B. Output							
		Average			Calendar years				
		1970-79	1979-84	1984-94	1991	1992	1993	1994	1995
Agriculture	5 380	..	3.1	4.3	-1.3	-2.9	4.7	3.4	-2.1
Mining and quarrying	1 042	..	4.6	6.2	5.8	6.8	-1.2	0.7	-1.6
Manufacturing	12 790	..	4.0	0.0	-3.5	5.0	5.5	6.1	4.7
Construction	3 097	..	4.3	-1.8	-17.9	-6.2	13.0	13.2	12.5
Trade, restaurants and hotels	11 943	..	1.1	0.9	-2.5	1.5	5.3	10.0	5.0
Transport, communications business and personal services	8 305	..	3.7	4.0	2.5	3.4	4.7	7.0	4.9
General government services	8 613	..	0.7	-0.6	1.3	-0.3	0.3	-0.3	-0.5
GDP (output basis)	73 311	..	2.9	1.6	-1.4	1.9	4.6	6.3	3.5

Source: Statistics New Zealand and OECD, *Annual National Accounts*.

(Table 1), virtually doubling in volume terms since the cyclical trough in mid-1991. As a result, its share of real GDP has increased from 13 to 24 per cent.¹ Strong growth in profits, together with very healthy corporate balance sheets, has facilitated this development. Other factors driving capital spending include pressure on capacity, scrapping of obsolete equipment, and a rise in the desired capital stock associated with economic restructuring. Capacity utilisation in manufacturing and construction has remained at the historically high level of

Figure 3. **CONTRIBUTION TO GDP GROWTH**
Per cent change over 4 quarters



1. Expenditure measure; 1982/83 prices.

Source: Statistics New Zealand and OECD Secretariat.

over 90 per cent reached in late 1993, despite continued soaring business investment. The upgrading to new technology by many firms has been reflected in buoyant (both real and nominal) investment in computers. At the same time, business construction has been boosted by strong growth in tourism. In the year to June 1995, spending on both machinery and equipment and non-residential construction grew by one-third in real terms before weakening most recently. On the other hand, the expansion of residential investment has moderated over the past year in response to higher mortgage rates, although it continues to be underpinned by the housing demand of immigrants (see below).

Private consumption has been slower to revive than fixed capital formation (Table 1), as households sought to rebuild balance sheets through increased savings when real income growth resumed at the onset of the recovery. Over the past three years, however, growth of consumer spending has exceeded that of disposable income, peaking in early 1995 at a twelve-month rate of over 5 per cent. There are a number of reasons why households may now be prepared to borrow more, including wealth effects, high consumer confidence, increased availability of credit, and net migration flows. Household net worth has increased by some 15 per cent since 1993, due mainly to rising house prices. Growing household wealth has been accompanied by strong expenditure on durable goods, which was postponed during the recession. The recent weakening of spending on these items reflects the fact that this catch-up process was coming to an end as well as slower growth in residential construction. In addition to higher asset values, consumer confidence has proved to be an important determinant of household demand, remaining high despite slower economic growth, perhaps buoyed by the continued improvement in the labour-market situation and the prospect for tax reductions (see Chapter II). Consumer spending may also have benefited from the fact that credit is now more freely available than in previous economic upswings, with competition among finance companies leading to the development of more tailored and innovative lending packages for households. Finally, immigration has probably contributed to a lower saving ratio to the extent that new migrants initially consume out of wealth.

Real GDP growth derived from estimates of the above expenditure components (Figure 3) probably understates the strength of the recovery. In recent years, the production-based measure of GDP, which is considered more reliable by Statistics New Zealand, has tended to rise significantly faster (Table 1), with

the divergence averaging nearly 2 percentage points since 1994. In contrast to the expenditure estimate, output-based GDP growth accelerated further in 1994 to over 6 per cent, before easing to 3½ per cent in 1995. Sectorally, the expansion reflected strong output increases in construction, manufacturing and private services (Table 1). While in these sectors activity has weakened only more recently, primary production has tended to decline since late 1994 (due in part to poor weather conditions and capacity constraints). General government services have shown virtually no volume growth during the economic upturn.

Marked decline in unemployment

As will be discussed in more detail in Chapter III of the Survey, the labour-market situation has improved considerably in recent years, although unemployment is still higher than up to the mid-1980s. The recovery has led to substantial job creation, some rise in labour-force participation, and a significant fall in unemployment. From 1993, employment growth has been very strong, peaking at an annual rate of 5 per cent at the turn of 1995 (Table 2). While labour demand has increased across the board, employment has grown particularly rapidly in the manufacturing and construction sectors where the upswing has been most pro-

Table 2. **The labour market**
Annual percentage change

	1991	1992	1993	1994	1995	1995			
						Q1	Q2	Q3	Q4
Working age population	1.4	1.1	1.1	1.4	1.6	1.5	1.5	1.6	1.7
Participation rate ^{1, 2}	63.8	63.3	63.3	64.1	64.4	64.4	64.6	65.1	65.1
Labour force	1.4	0.4	1.1	2.7	2.6	2.2	2.6	2.9	2.7
Unemployment rate ²	10.3	10.3	9.5	8.1	6.3	6.6	6.3	6.1	6.1
Employment ratio ^{2, 3}	57.2	56.8	57.3	58.9	60.7	60.2	60.5	61.1	61.1
Employment	-1.4	0.4	2.0	4.3	4.7	5.0	4.9	4.8	4.1
Labour productivity									
Output basis	-0.0	1.5	2.6	1.9	-1.1	0.4	-1.3	-1.7	-1.7
Expenditure basis	-2.3	-0.1	3.5	-0.1	-2.3	-2.0	-2.6	-2.0	-1.8

1. Labour force/working age population.

2. Per cent.

3. Employment/working age population.

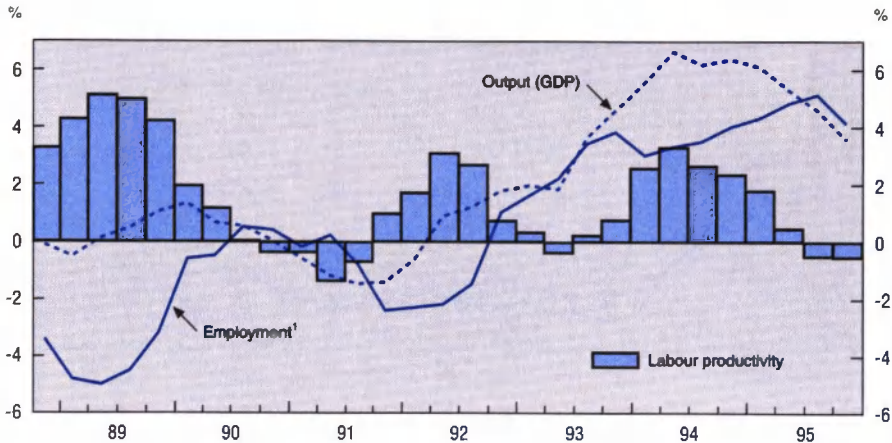
Source: Statistics New Zealand.

nounced. However, this has only brought back the secondary sector's share of total employment to pre-recession levels. Moreover, even though by mid-1994 the job losses during the 1987-91 period had been recovered, insufficient employment has been created so far to absorb the substantial increase in the working-age population since the mid-1980s. Nonetheless, firms have found skilled labour increasingly difficult to come by. Survey evidence suggests that skill shortages are more severe than in 1986-87 when the employment ratio was about 3 percentage points higher.

Set against the strong upturn, labour productivity gains have not been outstanding, averaging $1\frac{1}{2}$ per cent per annum. This implies that only about 40 per cent of the increase in output resulted from more efficient use of labour, the rest coming from higher employment. The 1991 *Employment Contracts Act*, which has made labour arrangements more flexible, should have had a positive impact on productivity outcomes in recent years. Indeed, productivity growth resumed following the implementation of the Act. But this coincided with the cyclical turnaround of the economy, and there has been no further improvement in performance thereafter. In manufacturing, productivity even fell throughout 1993 and 1994 as firms rapidly increased employment. These developments have to be seen against the background of large productivity gains during the period of restructuring and rationalisation in the late 1980s (Figure 4). Thus, hoarded labour was probably minimal at the onset of the recovery and firms adjusted employment levels relatively quickly to increasing demand and output. Although productivity growth has not been outstanding, low growth in wages (see below) has meant that unit labour costs have barely grown since the *Employment Contracts Act* was passed.

With improving job opportunities, labour supply picked up strongly, growing at an annual rate of $2\frac{1}{2}$ to 3 per cent per annum from 1994 (Table 2). Reversing a trend observed since the mid-1980s, migration has increasingly contributed to the working-age population. In 1995, around one-third of the growth in the latter reflected net immigration. In addition, the labour-force participation rate has increased by 2 percentage points since early 1993, recovering about two-thirds of the fall since 1987. Nonetheless, the growth of labour demand in recent years has outstripped that of labour supply. As a result, the unemployment rate has declined by 5 percentage points since 1991 to just over

Figure 4. **LABOUR PRODUCTIVITY**
Annual average percentage change



1. Full-time equivalent.

Source: Statistics New Zealand.

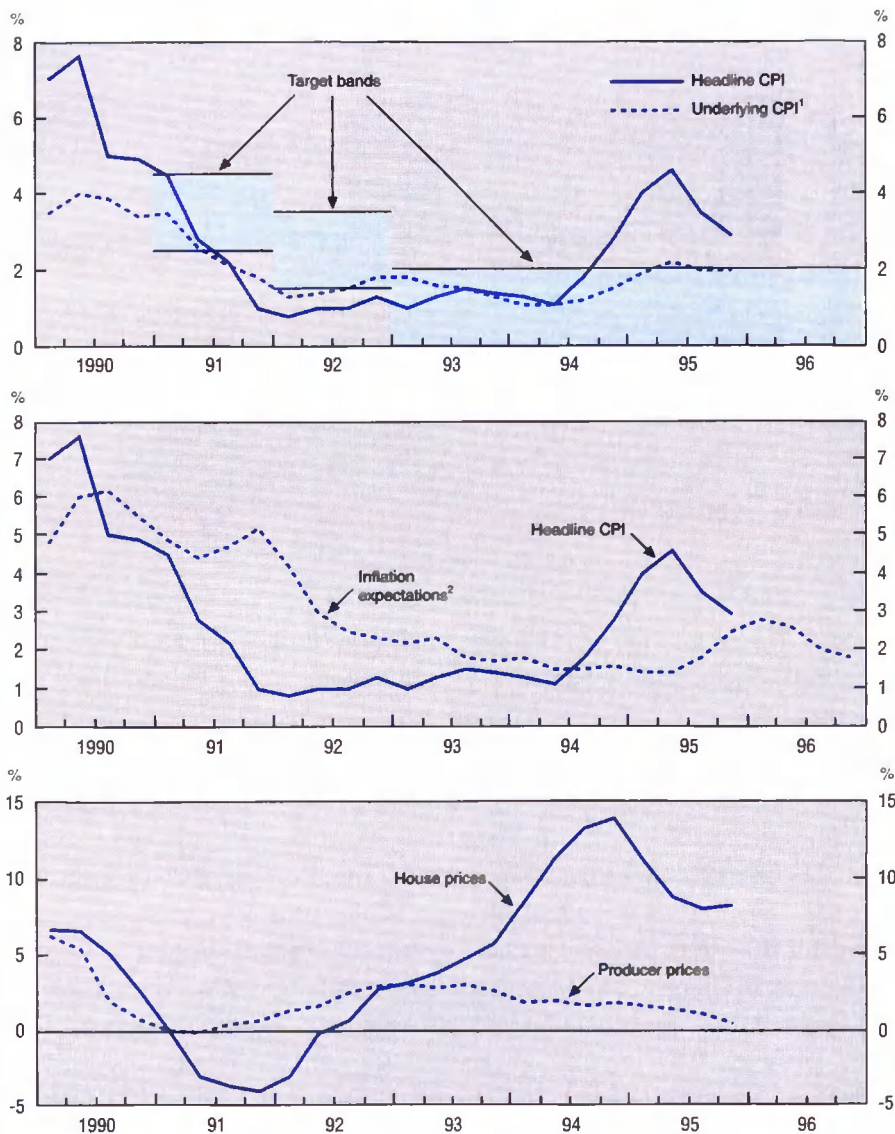
6 per cent. The proportion of long-term unemployed has decreased significantly, but unemployment still remains very high among youth, Maori and Pacific islanders.

Some inflation pressure

With considerable slack at the beginning of the recovery, inflation remained low in the face of rapid economic growth. The Reserve Bank's indicator of underlying inflation – the annual increase in the consumer price index (CPI), adjusted for the effect of interest rates, significant changes in the terms of trade, and government charges – trended downwards until mid-1994, when it was close to the mid-point of the official 0 to 2 per cent target range (Figure 5). Subsequently, however, price increases picked up, suggesting that output had exceeded its potential (sustainable) level. In the second quarter of 1995, underlying inflation slightly overshot the target band, and since then it has remained at its upper limit. Headline (overall) CPI inflation rose even more, as monetary tightening raised its significant mortgage interest component, peaking at over 4½ per cent and falling back to below 3 per cent most recently.

Figure 5. **INFLATION INDICATORS**

Annual percentage change



1. As calculated by the Reserve Bank.

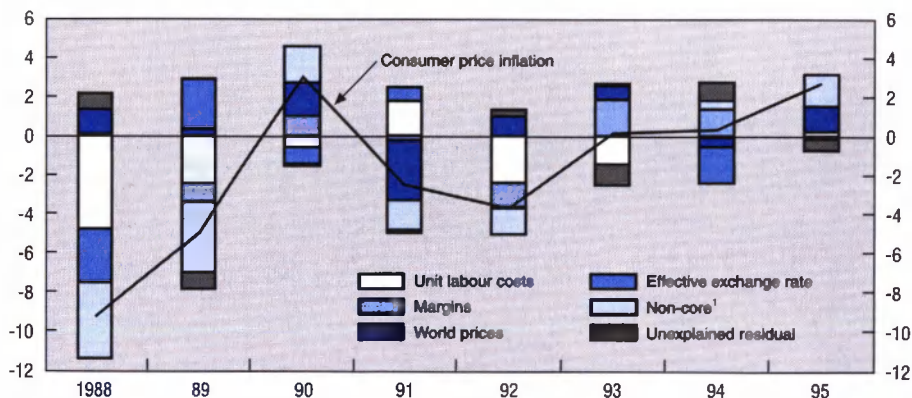
2. As surveyed by the Reserve Bank twelve months earlier.

Source: Statistics New Zealand and Reserve Bank.

The main influences acting on CPI inflation can be quantified using the Reserve Bank's CPI equation system (Figure 6). The results suggest that further disinflation in the early phase of the recovery reflected both slowing unit labour cost increases and shrinking profit margins. Inflation stabilised when profit margins started rising in response to strengthening demand, although the damping effect of unit labour cost developments continued, given still high unemployment. For a while, despite ongoing upward pressure from profit margins, exchange-rate appreciation sufficed to prevent a rise in CPI growth, with its disinflationary effect of nearly 2 percentage points substituting for the dwindling contribution of wage moderation. As world market prices surged in late 1994, however, core inflation picked up, and non-core components (especially interest rates and housing) led to an even larger increase in headline inflation.

The degree of inflation pressure has not been evenly distributed through the economy. Underlying tradeables inflation at the consumer price level has remained moderate at below 1 per cent, reflecting the strong appreciation of the New Zealand dollar. However, it has been higher than would have been expected

Figure 6. **EXPLAINING THE CHANGES
IN CONSUMER PRICE INFLATION**
Percentage points, years to March



1. Includes indirect taxes, housing and interest rate effects.
Source: Reserve Bank and OECD Secretariat estimates.

on the basis of movements in world prices and the exchange rate. One explanation for the weak exchange-rate pass-through to domestic prices is that robust demand conditions have allowed a widening of profit margins, implying that the sector exposed to international competition has also faced some inflation pressures. But these have been limited compared with developments in the non-tradeables sector where underlying inflation rose to around 4 per cent in early 1995 and has remained there since. The construction sector, in particular, has been a significant source of inflation pressure, as capacity constraints and the need to pay higher wages to attract and retain skilled staff led to sharp increases in costs. House price inflation peaked at about 14 per cent in late 1994 before declining to just over 8 per cent more recently (Figure 5). In the Auckland region, it reached almost 25 per cent and is still running at over 15 per cent despite the impact of firm monetary conditions.

Wage increases, which had fallen below 1 per cent in 1993, have picked up since, approaching 3 per cent more recently (Table 3). Wage moderation in the early phase of the recovery reflected the initial degree of slack in the labour market, as well as the low level of actual and expected inflation (Figure 5).

Table 3. **Wages and prices**
Annual percentage change

	1991	1992	1993	1994	1995	1995			
						Q1	Q2	Q3	Q4
Wages									
Average weekly earnings	4.3	3.0	0.9	2.2	2.8	2.6	2.7	2.9	2.9
Salary and wage rates									
Private sector	2.4	1.2	1.2	1.2	1.5	1.4	1.4	1.6	1.9
Central government	2.8	0.4	0.4	0.6	1.3	1.0	1.1	1.1	1.9
Prices									
Consumer prices	2.6	1.0	1.3	1.8	3.8	4.0	4.6	3.5	2.9
Energy (fuel and electricity)	6.1	4.2	5.8	6.2	4.8	3.9	4.3	5.4	5.4
Food	0.9	0.1	1.1	-0.3	1.3	0.9	2.5	0.8	1.0
Wholesales prices, manufacturing									
Inputs	-1.8	3.4	2.3	1.1	0.4	1.0	0.4	0.2	0.1
Outputs	0.6	2.7	3.4	1.2	1.0	1.3	0.7	1.0	1.2
GDP price deflator	2.5	2.4	1.5	1.6	2.1	3.6	3.2	0.7	-0.1
Import price deflator	1.0	6.7	-0.4	-3.6	-0.1	1.1	-1.1	0.2	-0.7
Export price deflator	-4.2	8.2	2.6	-4.0	-0.6	2.0	-1.0	-1.3	-2.0

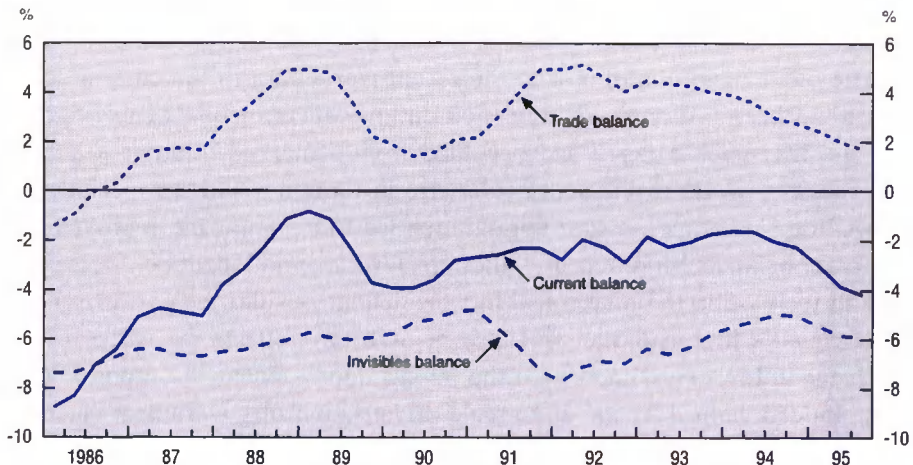
Source: Statistics New Zealand; OECD. *Main Economic Indicators*.

Notwithstanding their recent rise, wages have developed more in line with underlying rather than headline inflation. This contrasts with past experience and may be the result of the breakdown in wage indexation. Moreover, the flexibility introduced by labour-market reforms (see Chapter III) appears to have helped to prevent pressures in certain sectors (notably construction) from becoming generalised.

Rise in the external deficit

After improving during most of the recovery, the external balance has deteriorated significantly since mid-1994 (Figure 7). At over 4 per cent of GDP in the twelve months to September 1995, the current account deficit is, however, still moderate compared with past periods of strong growth (following the cyclical rebound in the mid-1980s, for instance, the external deficit peaked at around 9 per cent of GDP). During the first three years of the upswing, strong export growth coupled with improving terms of trade contributed to a relatively stable merchandise trade balance, despite strong import growth. At the same time, the

Figure 7. **CURRENT ACCOUNT**
Per cent of GDP, four quarters ended



Source: Statistics New Zealand.

invisibles deficit narrowed a little in relation to GDP, with an improving service balance more than offsetting rising investment income outflows. The recent worsening in the external position reflected to a large extent a marked decline in the merchandise trade surplus, driven by the adverse effect of exchange-rate appreciation on price competitiveness in the face of sustained growth of domestic demand.

As noted, until recently, the economic upturn was characterised by high export growth. Primary exports, which are still the main source of revenues, benefited from strong demand for forestry and dairy products, but they were outperformed by manufacturing exports, with non-commodity export volumes growing particularly fast (at about 12 per cent per annum during the first four years of the recovery). However, the latter's share of total exports is still relatively small (at 16 per cent, up from 13 per cent in the early 1990s). Over the last year, export growth has weakened across the board (Table 4). At the same time, import volumes have continued to increase at high rates. Strong business investment has been reflected in rapid growth in imports of capital goods. Imports of industrial supplies and consumer goods have also risen significantly, as manufacturing activity and household incomes have increased. In contrast to the early part of the recovery, largely due to depressed prices for agricultural products, improvements in the terms of trade are no longer compensating for the excess of import over export volume growth since 1994 (Table 4). As a result, the merchandise trade balance has deteriorated.

The other main contributor to the recent weakening in the current account position has been a strongly rising deficit on investment income (Table 5). Up to 1994, the invisibles balance had benefited from a marked improvement in net travel receipts owing to the spectacular rise in foreign visitors, especially from Asia. At the same time, inward immigration led to a significant improvement in the transfer balance. More recently, these factors have no longer compensated for the trend increase in the investment income deficit. Besides the cost of servicing New Zealand's high external debt (see below), this reflects the surge in direct investment inflows combined with the strong improvement in corporate profitability. Indeed, helped by the large-scale privatisation of government enterprises (Chapter IV), the stock of foreign direct investment more than tripled from 1989 to 1994 to about one-quarter of GDP. Moreover, with the profitability of foreign companies operating in New Zealand tending to outstrip that of domestic

Table 4. Trade volumes and prices

Percentage change

	1991 weights	1989	1990	1991	1992	1993	1994	1995 ¹
Export volumes								
Total goods	100.0	-3.1	6.0	10.5	2.2	4.4	10.1	3.1
Food	44.7	-8.2	6.5	10.2	1.4	3.0	7.8	6.1
Manufactures	33.4	8.5	10.7	7.1	7.9	8.8	14.0	5.7
Raw materials	18.7	-7.5	-3.3	18.2	-2.6	0.0	9.1	-4.1
Export prices								
Total goods	100.0	13.1	-1.4	-4.2	8.3	2.5	-4.0	-0.1
Food	44.7	22.1	0.0	0.6	10.2	0.5	-8.2	-4.5
Manufactures	33.4	8.4	-0.4	-3.2	4.2	-0.3	-0.2	2.4
Raw materials	18.7	4.0	-6.3	-15.9	9.9	13.5	0.4	5.0
Import volumes								
Total goods	100.0	21.4	7.8	-9.4	10.5	4.1	16.3	11.2
Manufactures	83.2	23.1	8.4	-11.3	12.7	2.2	17.8	12.4
Energy	8.4	20.8	11.0	-7.4	1.4	8.3	16.2	6.0
Import prices								
Total goods	100.0	7.8	0.8	1.0	6.6	-0.3	-3.6	0.1
Manufactures	83.2	6.4	-2.7	2.0	7.8	1.3	-2.2	0.0
Energy	8.4	21.2	24.6	-2.0	0.9	-6.7	-15.7	1.4
Terms of trade		4.9	-2.2	-5.2	1.6	2.8	-0.5	-0.2

1. First three quarters over same period of 1994.

Source: OECD.

Table 5. Balance of payments

NZ\$ million

	1989	1990	1991	1992	1993	1994	1995 ¹
Exports	14 778	15 408	16 564	18 121	19 354	20 188	20 404
Imports	13 186	13 883	12 976	15 101	16 150	17 880	19 116
Trade balance	1 592	1 525	3 588	3 020	3 204	2 307	1 288
Non-factor services, net	-1 309	-1 395	-1 540	-1 894	-1 338	-651	-850
Investment income, net	-3 249	-2 767	-4 408	-4 057	-4 517	-5 104	-6 009
Transfers, net	349	586	680	786	1 249	1 520	1 455
Invisibles, net	-4 211	-3 575	-5 268	-5 165	-4 606	-4 234	-5 404
Current balance	-2 618	-2 050	-1 679	-2 145	-1 400	-1 926	-4 116
Per cent of GDP	-3.7	-2.8	-2.3	-2.9	-1.8	-2.3	-4.7

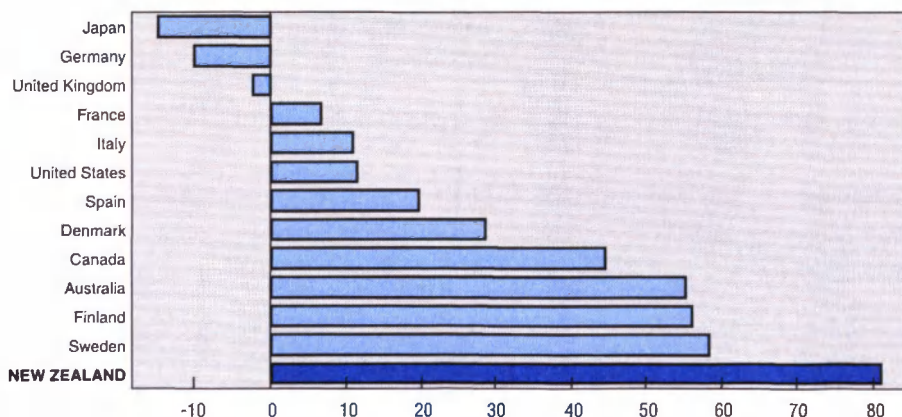
1. First three quarters at seasonally-adjusted annual rates.

Source: Statistics New Zealand.

firms operating abroad, investment income outflows have increased considerably more than inflows, despite sizeable direct investments overseas by New Zealand businesses.

Substantial current account deficits in the 1970s and 1980s have been reflected in high levels of external indebtedness by international comparison (Figure 8). New Zealand's net external liabilities (both debt and equity) are estimated to have been equivalent to about 80 per cent of GDP in early 1994. Gross overseas debt, which amounted to about 90 per cent of GDP at that time, has declined to around 82 per cent since. This has resulted from the net repayment of external government debt (which has fallen to less than one-third of the total) and the appreciation of the New Zealand dollar; the decline in terms of GDP has been accentuated by strong economic growth. The share of debt denominated in New Zealand dollars has risen significantly, surpassing that of US\$ denominated debt and approaching one-half of the total. This in part reflects the Government's decision to give priority to the repayment of its net foreign-currency debt, which should be eliminated by 1997. In doing so, the Government

Figure 8. **NET EXTERNAL DEBT¹**
Per cent of GDP



1. 1994.

Source: OECD Secretariat.

wants to remove the exchange-rate risk from its balance sheet and to enhance its chances to obtain better credit ratings. The latter are still one step below those accorded to the best borrowers, although the improved economic and fiscal situation has already led to upgrades of New Zealand's sovereign debt by the major rating agencies. With the budget in surplus, the current account deficit now largely reflects private-sector funding choices. But, despite the declining government share, the high level of external debt still leaves New Zealand vulnerable to external shocks.

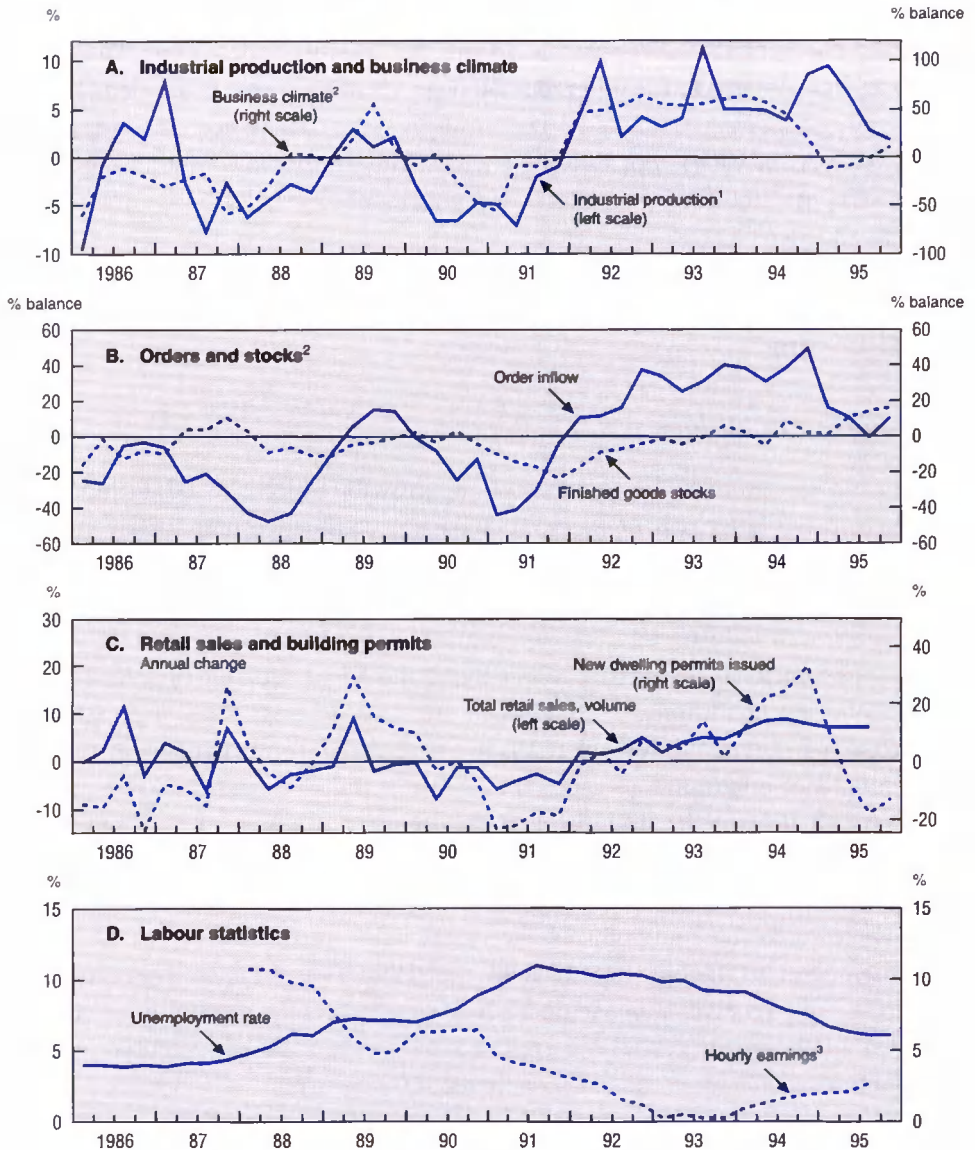
A soft landing?

The short-term outlook

Latest indicators suggest that economic growth, which slowed during 1995, troughed in the latter part of the year. Business confidence has improved since mid-1995, following a decline over the preceding year (Figure 9). Building permits have picked up, after falling markedly from late 1994 to mid-1995, and order inflows in industry have begun to grow again. Moreover, capacity utilisation in manufacturing increased markedly in the fourth quarter of 1995. Given tight monetary conditions, as evidenced by high interest rates and a strong New Zealand dollar, the revival is likely to be gradual, however, with the real foreign balance continuing to act as a brake on activity and much slower investment growth than in the past. Such a development – which implies real GDP growth below the rate of expansion of productive potential, estimated at 3 to 3½ per cent (see Annex I) – should be consistent with a decline in underlying inflation towards the mid-point of the target range in the near term. With the implementation of income tax cuts in mid-1996 (see Chapter II), economic growth should receive a boost and become increasingly consumption-led. In 1997, it might again broadly correspond to the growth of potential output, assuming a second round of tax reductions.

Substituting for investment, private consumption is expected to provide the main impetus to growth during the projection period. In the short run, despite continued high consumer confidence, household spending is likely to be damped by lower income growth, reflecting both a slower expansion of employment and a sharp decline in farm incomes over the past year. Thereafter, however, household

Figure 9. **SHORT-TERM ECONOMIC INDICATORS**



1. Manufacturing. Annual change.

2. Survey balance.

3. All industries, annual change.

Source: Statistics New Zealand and OECD, *Main Economic Indicators*.

disposable income will be supported by the tax measures. Although some of the resulting extra income is likely to be saved, private consumption growth may approach 5 per cent in 1997 (Table 6). Residential investment is also expected to recover towards the end of the projection period, although from a low level, as the past decline in building permits points to a further weakening of housing

Table 6. **Short-term economic prospects**

	Current prices, NZ\$ billion		Percentage volume change		
	1992	Per cent of GDP	1995	1996	1997
Private consumption	46.7	62.8	3.5	4.1	4.7
Government consumption	12.6	16.9	0.9	0.7	0.6
Gross fixed investment	12.2	16.4	18.0	8.5	6.8
Final domestic demand	71.5	96.1	7.4	5.1	4.9
Stockbuilding ^{1, 2}	1.4	1.9	-0.2	-0.5	-0.6
Total domestic demand	72.9	98.0	7.1	4.5	4.3
Exports of goods and services	23.1	31.1	2.2	5.7	7.5
Imports of goods and services	21.6	29.0	12.6	8.5	8.4
Foreign balance ¹	1.5	2.0	-5.6	-2.5	-1.9
GDP expenditure at constant prices			2.2	2.8	3.2
GDP price deflator			2.1	2.2	1.8
GDP at current prices	74.4	100.0	4.3	5.0	5.0
<i>Memorandum items:</i>					
GDP production at constant prices			3.5	2.8	3.2
Private consumption deflator			1.6	2.0	2.1
Private compensation per employee			2.0	3.1	3.5
Total employment			4.7	2.2	1.8
Unemployment rate			6.3	5.9	6.1
Breakdown of gross fixed investment					
Private non-residential	6.8	9.1	24.0	10.9	8.3
Private residential	3.1	4.1	2.1	-2.1	2.4
General government	2.3	3.2	8.3	6.0	2.7
Short-term interest rate			9.0	8.8	8.5
Long-term interest rate			7.7	7.6	7.1
Current balance as a per cent of GDP			-4.8	-3.7	-3.7

1. As a percentage of GDP in the previous period.

2. Including statistical discrepancy and valuation adjustment.

Source: OECD.

activity in the near term. While not reaching the extraordinary growth rates of the last few years, business investment should remain robust. Strong profit growth and debt repayment has left company balance sheets in a solid position, enabling firms to continue to invest during a temporary slowdown in demand.

Export growth is projected to recover but to remain below the high rates recorded in the first half of the 1990s, as the deterioration in price competitiveness resulting from exchange-rate appreciation is likely to entail further losses in market share. These should be limited, however, by gains in non-price competitiveness. There is evidence that firms are moving into higher value-added products to protect sales against price competition, diversifying into new markets, and stepping up investment in marketing and distribution networks. Moreover, tourism should continue to be an important source of export revenue. The domestic-led nature of the expansion means that import growth is expected to remain strong, although slower expansion in business capital spending should have a damping impact. Further tariff reductions and internationalisation will contribute to a continued rise in import penetration. With import volumes increasing faster than export volumes, the current account deficit is projected to stay high, although improving terms of trade are assumed to prevent it from widening significantly.

The temporary slowdown in activity is expected to be reflected in the labour market. Employment growth is projected to slow sharply in the near term, before picking up again in 1997. With immigration and rising participation boosting the labour force, no further inroads into unemployment are expected over the projection period. This, combined with declining inflation and the effects of labour-market reform, should prevent wage increases from accelerating further. With real GDP falling below the productive potential and given the lagged effects of exchange-rate appreciation, underlying CPI inflation is projected to recede through 1996, before picking up again as demand strengthens. The short-term projections are, however, likely to overstate inflation developments in 1997, because they are based on the technical assumption of an unchanged nominal exchange rate whereas policy settings suggest continued currency appreciation.

Underlying the projections summarised in Table 6 are the following assumptions:

- Real GDP in the OECD area grows by 2 per cent and 2½ per cent in 1996 and 1997, respectively; world trade expands at rate of just over 7 per cent in 1996 and approaches 8 per cent in 1997.
- The New Zealand dollar's exchange rate remains unchanged against other currencies from mid-February 1996.
- The oil price increases 2 per cent per annum in line with OECD export prices; the rise in non-oil commodity prices slows to 2 per cent in 1997; New Zealand's import prices decline by 3 per cent in 1996 and rise somewhat in 1997.
- Tax cuts of the order of just over 1 per cent of GDP will be implemented in mid-1996 and again in mid-1997.
- Short-term interest rates remain high, declining only marginally from the current level of 9 per cent; long-term interest rates ease in line with those of new Zealand's major trading partners.

Risks and uncertainties

Given the greater openness and international orientation of the economy, growth prospects in New Zealand are strongly influenced by the conjuncture in its major trading partners. While activity in Europe could be weaker than assumed in the projections, recent indicators for the United States and for Japan suggest, if anything, a somewhat stronger recovery; at the same time, growth performance in other Asian economies and in Australia still appears favourable. Thus, the risks to the projections seem to lie mainly on the domestic side.

On the one hand, it is possible that the period of slower growth will be more protracted than assumed. Indeed, with interest rates likely to remain high in the foreseeable future, firms may become less confident about the economy's growth prospects. This could lead them to cut back stocks and make them less willing to invest in capital and to increase employment. As a result, household demand would also be weaker. Moreover, exporters may have more difficulties to cope with the high exchange rate than assumed. However, lower demand would reduce inflation pressure and allow an easing of monetary conditions.

On the other hand, strong growth could resume more quickly than expected if private consumption and investment pick up in anticipation of the tax cuts. Such a scenario is not excluded, given continued high consumer confidence and

the recent improvement in the business climate. Faster growth at a time when the economy is still operating at levels close to full capacity could re-ignite inflationary pressures, requiring a tightening of monetary conditions. Exchange-rate appreciation, combined with stronger domestic demand, would imply a larger external deficit than projected. Rising inflation and current account pressures would reduce the room for further tax reductions (see Chapter II) and could lead to a "hard landing" for the economy, with adverse effects on medium-term economic performance.

A medium-term scenario

Provided the tensions described above can be avoided, New Zealand's medium-term economic prospects appear favourable (Table 7). Over the 1995-2001 period, real GDP growth is projected to average $3\frac{1}{4}$ per cent, as compared with under 3 per cent in the OECD area. This would be 2 percentage points more than was achieved over the preceding seven years, while OECD growth is expected to accelerate only little. Underlying this profile is a doubling of the rate of expansion of domestic demand, with business investment continuing to increase strongly. Exports are also projected to make a significant contribution to economic growth, although they are expected to expand less than New Zealand's markets. This reflects past increases in the real exchange rate, which is assumed to remain constant from the end of 1997. Given strong domestic demand and the increasing openness of the economy, imports are projected to outpace exports. Improving terms of trade should offset the resulting deterioration in the real foreign balance, but the current account deficit is projected to remain sizeable during the period considered. With both labour demand and supply growing strongly, unemployment would decline only marginally, remaining above its estimated "natural rate" of 5 to 6 per cent (see Box 2 in Chapter III). This, together with output growth slightly below its potential rate, could help keep inflation within the 0 to 2 per cent target range.

With little slack in the economy, the assessment of potential output growth is crucial to New Zealand's medium-term prospects. There is no doubt that the country's productive potential has been enhanced by strong investment in recent years and by the structural reforms of the past decade, which have increased efficiency of resource use. However, while estimates of potential output typically

Table 7. A medium-term scenario
Average annual percentage change, volumes

	1987-1994	1995-2001
Private consumption	1.3	3.6
Government consumption	0.2	0.6
Fixed capital formation	4.1	6.7
Stockbuilding ¹	0.3	0.0
Total domestic demand	2.1	4.1
Exports	4.6	6.4
Imports	6.5	7.5
Real foreign balance ¹	-1.1	-1.5
Real GDP	1.2	3.2
Labour productivity	1.2	1.2
Employment	0.0	1.9
Participation rate (per cent)	64.1	65.1
Unemployment rate (per cent)	7.8	6.0
Private consumption deflator	3.5	1.9
GDP deflator	3.7	2.1
Private compensation per employee	3.6	3.4
Current balance (per cent of GDP)	-2.7	-3.2
Real exchange rate	-0.7	1.0
Short-term interest rate (per cent)	11.7	7.2
Long-term interest rate (per cent)	10.9	6.7

1. Per cent of GDP.
Source: OECD.

differ widely, in the case of New Zealand data limitations add to methodological problems (see Annex I). The above scenario assumes labour productivity to grow by over 1½ per cent per annum following its recent decline. This is somewhat more than the rate achieved during the recovery in the first half of the 1990s. However, with a tighter labour market than at that time, firms may now focus more heavily on efficiency gains. Increasing skill levels resulting from higher education participation and intensified training efforts could also lead to faster productivity growth. On the other hand, labour supply could expand less than projected, reducing potential output growth. The scenario assumes a continued rise in labour-force participation. It is not clear, however, to what extent the recent pick-up in the participation rate reflects structural rather cyclical influences (see Chapter III).

Although potential output growth could be higher than assumed in the above scenario, the estimated rate of 3 to 3½ per cent represents a substantial improvement on past experience (see Annex I), and in the absence of hard evidence it would seem advisable to err on the side of caution. The medium-term projections imply levels of unemployment and real GDP that are, and will remain, close to the NAIRU and potential output, respectively. Thus, to prevent a rekindling of inflationary pressures and a deterioration in the external position, economic management will face the difficult task to ensure that future economic growth matches, but does not exceed, that in supply. Indeed, while the projections assume a decline in interest rates and a stable (real) exchange rate, the emergence of significant imbalances would require a tightening of monetary conditions. This would lead to a more cyclical outlook for the economy and adversely affect medium-term growth performance. The policy setting in place to guard against this happening will be discussed in the following chapter.

II. Economic policies

The overall strategy

With a view to reversing the long-term decline in relative living standards, over the last decade New Zealand has been following an economic strategy that aimed at opening up the economy by trade and financial-market liberalisation; getting the macroeconomic fundamentals – notably inflation and government finances – right; and giving more play to market forces through structural reforms. The *Reserve Bank Act* and the *Fiscal Responsibility Act* imparted a strong medium-term orientation to monetary and fiscal policies so as to create a stable macroeconomic environment. Structural policies to enhance economic efficiency included the *Employment Contracts Act*, which deregulated the labour market, and widespread reform in the public sector. Current government priorities in this area are the refinement of the health reforms, as well as the enhancement of education and training, which are considered crucial to longer-term economic performance.

Considerable progress has been made in improving economic fundamentals. Notwithstanding a slight, temporary, target breach quite recently, the monetary policy framework established by the *Reserve Bank Act* has proven to be effective in containing inflation throughout the economic upswing. This has, however, required a significant tightening of monetary conditions, despite a substantial improvement in the budget position. The present fiscal surpluses help counter the pressures the economic expansion is exerting on the current account, which has deteriorated much less than in past periods of strong growth. While continuing the repayment of public debt, the Government recognises that a continuation of the fiscal policy settings of the early 1990s is likely to result in increasingly high structural fiscal surpluses and that this will require some correction over the next decade. Consistent with its publicly-stated long-term objective of reducing

government expenses to less than 30 per cent of GDP, the Government is concentrating on using tax cuts as its preferred approach to limiting the growth in fiscal surpluses. The Government's recently-announced fiscal and social policy programme package provides a two-step reduction in income taxes over the next two years, increases in expenditure in the above-mentioned priority areas and further, albeit slower, debt repayment. On the structural side, the *Employment Contracts Act* has resulted in more flexible labour-market arrangements, contributing to wage moderation and low inflation. More generally, structural initiatives, together with transparent and predictable macroeconomic policies, have created an environment conducive to strong non-inflationary growth.

Nonetheless, despite such favourable framework conditions, maintaining both price stability and robust economic growth is not a trivial task, especially when the economy is operating near capacity. Although the Government has designed its fiscal package in a way that attempts to minimise the resulting macroeconomic shock, it will require vigilant economic management to ensure that significant transition costs are avoided. Co-ordination of fiscal and monetary policies will reduce the risk of short-run strains on the path of adjustment in the economy. The following paragraphs review recent progress made in implementing the economic strategy in the areas of financial and structural policies. This is followed by a discussion of the challenges facing policy makers in the period ahead.

Progress in implementation

Monetary management

The 1989 *Reserve Bank Act* made price stability the sole objective of monetary policy, giving the central bank complete autonomy in policy implementation. As described in more detail in previous OECD Surveys, the specific inflation target consistent with this objective – currently 0 to 2 per cent – is defined in a performance contract between the Governor of the Reserve Bank and the Minister of Finance. The Bank has developed a measure labelled “underlying inflation” as a representation of the rate of inflation in the CPI permissible after allowance for a set of caveats, which permit inflation to lie outside the target band in the event of a change in GST (Goods and Services Tax – the

New Zealand value-added tax), significant changes in other indirect taxes, significant impacts from changes in interest rates (which rather unusually form part of the CPI), terms of trade, government charges or local authority levies, or in the event of crisis such as a natural disaster. This is interpreted as the measure against which the Bank's performance should be assessed. As that measure has diverged from the "headline" CPI since 1994 so it has received increasing emphasis in the Bank's statements.

Among the countries which have adopted explicit inflation objectives, New Zealand appears to be the only one having done it as part of such a coherent monetary policy framework, stressing accountability and transparency. Given that central bank action impacts on inflation only with substantial lags, monetary policy has become increasingly forward-looking, with its stance determined on the basis of inflation forecasts. In the past the Bank paid particular importance to the exchange rate because of its direct and fairly reliable impact on the price level and inflation over a period of six to twelve months into the future. More recently, however, the Bank has paid greater attention than previously to the role of interest rates in the inflation process. This reflects both improved empirical evidence of the impact of interest rates on demand and, thus, on inflation at the eighteen-month to two-year horizon and, secondly, an increased awareness of the very short-term, direct impact of interest rate movements on asset prices represented in the CPI. According greater weight to interest rates in the assessment of monetary conditions, however, does not imply that it is feasible to target interest rates and the exchange rate independently. The Bank has to accept market-led tradeoffs between interest rates and the effective exchange rate, considering that it is their combined effect – the level of "monetary conditions" – that normally matters most for hitting the inflation target.

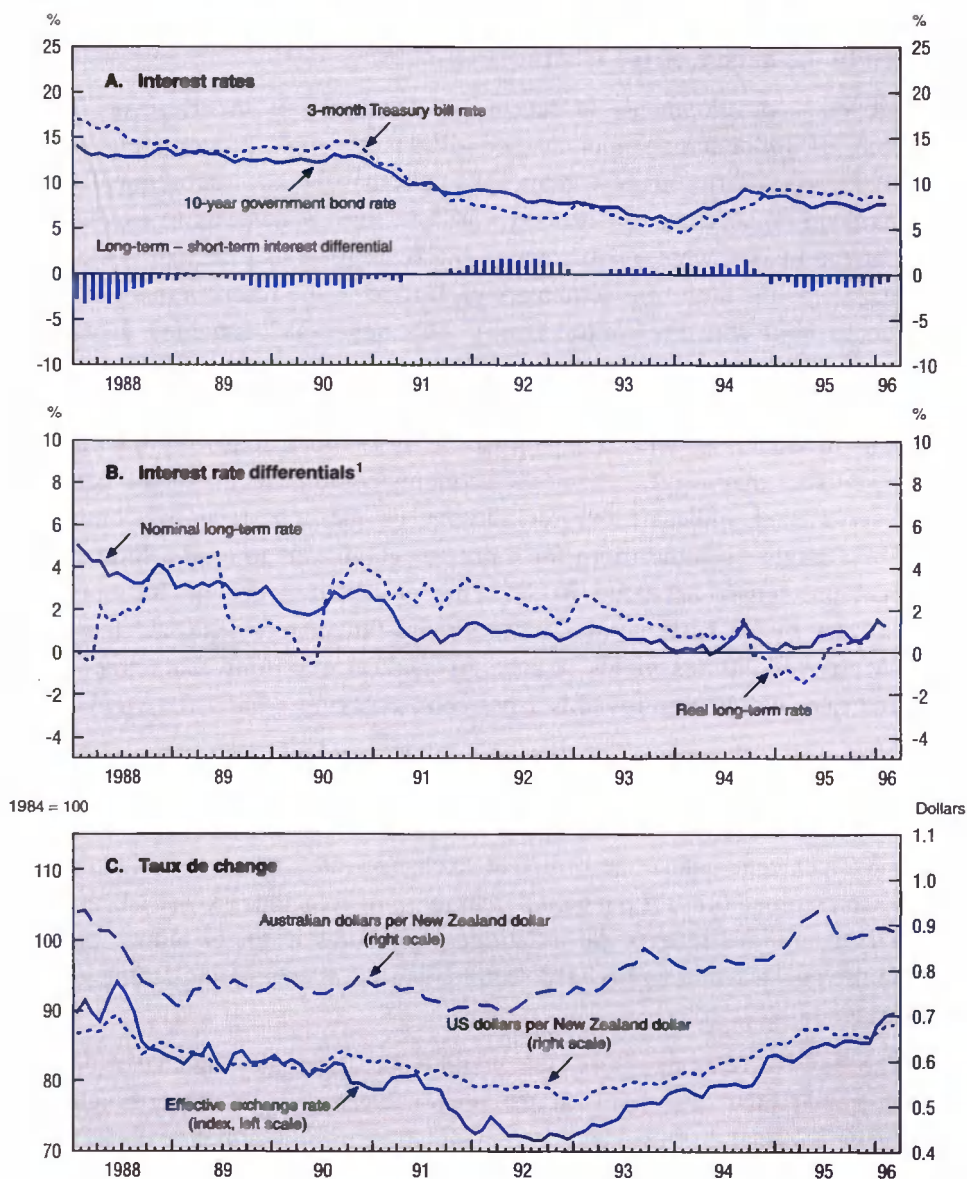
With price stability achieved in 1991, the Reserve Bank encouraged an easing in monetary conditions during the first few years of the recovery. By early 1994, short-term interest rates had declined by nearly 10 percentage points to 4½ per cent (Figure 10). From 1993, however, the continuing fall in interest rates had been largely offset by a strengthening of the New Zealand dollar, leaving monetary conditions broadly unchanged. Nonetheless, it was probably in that period that the inflation pressures emerged which eventually resulted in a temporary overshooting of the target. In late 1993/early 1994, strong capital inflows in response to increasing confidence in New Zealand's economic prospects put

downward pressure on interest rates. The Reserve Bank allowed this to happen so the exchange rate would not appreciate too rapidly and threaten the lower bound of the inflation target range. In the event, low interest rates led over time to rising non-tradeables inflation, especially in the housing market, which was not fully offset by a decrease in tradeables inflation due to lower-than-expected exchange-rate pass-through effects (see Chapter I).

In February 1994, international interest rates picked up, following the decision of the US Federal Reserve to tighten monetary conditions. New Zealand interest rates firmed too, but initially, the exchange rate weakened. Predicting a marked slowdown in real GDP growth, the Reserve Bank considered that monetary conditions were consistent with inflation remaining within the target range, although it was expected to rise in 1995. By mid-1994, however, it became clear that the inflation outlook was less favourable than anticipated, and the Bank began encouraging the market-led increase in interest rates. As inflation rose so did inflation expectations (Figure 5) but by notably less than the “headline” rate which was boosted by rising mortgage costs. Long-term international interest-rate differentials (Figure 10) also widened. In the final quarter of 1994, monetary conditions firmed significantly, as large capital inflows, attracted by robust growth and high interest rates, pushed up the exchange rate, while short-term interest rates continued to rise. With long-term rates easing in line with international developments, the yield curve turned negative for the first time since 1991 (Figure 10).

The significant exchange-rate appreciation has placed a large part of the burden of monetary restraint on the tradeables sector, although inflationary pressures were spread across the whole economy (notably the construction sector). With a series of statements in the early part of 1995, the Reserve Bank therefore signalled that it did not want short-term interest rates or mortgage rates to drop. Indeed, through July 1995, three-month Treasury Bill rates and mortgage interest rates remained at just over 9 per cent and around 11 per cent, respectively, despite a gradual reduction in long-term interest rates. In its mid-year *Monetary Policy Statement*, the Reserve Bank acknowledged that more firming of monetary conditions should have taken place in early 1994 and that underlying inflation was likely to exceed temporarily the target range. Although the strains on the productive capacity of the economy had begun to ease, it considered that a relaxation of overall monetary conditions would be premature, as it would keep

Figure 10. **INTEREST AND EXCHANGE RATE MOVEMENTS**



1. Vis-à-vis the weighted average of major trading partners – United States, United Kingdom, Japan, Australia, Germany and Canada.
Source: OECD.

inflation close to the upper edge of the range. Instead, to minimise the risk of target breaches in the future, monetary policy should aim at restoring underlying inflation to the middle of the range.

Monetary developments in recent months illustrate the Reserve Bank's approach of influencing monetary conditions through pronouncements. In July 1995, short-term interest rates dropped sharply and, subsequently, the New Zealand dollar came under downward pressure. Statements to encourage a move by the market were insufficient so the Bank used its principal instrument, lowering twice the target for settlement cash (that is, the reserves that banks are required to hold with the central bank). This target had remained unchanged since early 1993, even though monetary conditions first eased and then tightened sharply during this period, which shows how remarkably effective merely making pronouncements in general appears to be. In October, following the publication of statistics that suggested that the economy could be weaker than expected, the Reserve Bank indicated that, conditional on the appearance of confirming data, there might be some room for monetary conditions to ease a little sooner than had previously appeared likely. This prompted a decline in short-term interest rates by 80 basis points, and a similar fall in mortgage and long-term rates. Moreover, futures yields pointed to markets expecting that three-month bank bill rates would ease towards 7 per cent, implying a fairly flat yield curve.

With new data suggesting that the growth outlook was not as weak as thought in October, in its *Monetary Policy Statement* at the end of 1995, the Reserve Bank made it clear that it did not want short-term interest rates to fall below 8½ per cent unless the effective exchange rate appreciated significantly more than assumed (*i.e.* 1.7 per cent per annum). Its reluctance to see an easing in monetary conditions reflects the inflationary pressures in the economy, particularly in the construction and related sectors, as well as continuing strong growth in bank lending.

The Reserve Bank monitors money and credit aggregates together with other indicators that may shed light on the appropriateness of monetary conditions, although it does not find any one of them suitable for guiding policy decisions on its own. Growth in the narrower aggregates (currency and M1) has slowed markedly from the high rates recorded in 1994 (Table 8), reflecting rising interest rates and weaker economic activity. At the same time, broader money (M3) has continued to grow relatively rapidly, although the expansion of domestic credit has been

Table 8. Money and credit aggregates

Per cent year-on-year growth rate

End of month		M1	M3	Private sector credit	Domestic credit	CPI
1990	March	7.9	1.4	9.7	5.3	7.0
	June	11.3	4.0	11.4	5.4	7.6
	September	3.1	7.0	10.1	9.3	5.1
	December	5.0	14.5	12.5	15.1	4.9
1991	March	3.7	12.8	11.1	13.0	4.5
	June	-8.1	9.8	9.3	12.3	2.9
	September	-3.7	7.5	5.5	7.0	2.1
	December	1.6	6.9	2.8	3.2	0.9
1992	March	2.1	11.3	5.9	8.5	0.8
	June	6.8	7.8	3.8	6.0	0.9
	September	2.8	13.5	13.7	12.6	1.0
	December	0.7	10.7	14.2	10.7	1.3
1993	March	-2.7	6.2	8.8	6.5	0.9
	June	-0.2	9.6	11.1	8.5	1.3
	September	5.1	5.3	4.2	2.8	1.4
	December	8.7	5.4	9.1	7.0	1.4
1994	March	15.1	6.6	13.0	10.4	1.3
	June	22.0	5.8	10.6	9.2	1.1
	September	11.9	4.1	10.5	6.8	1.8
	December	6.0	3.5	8.2	5.9	2.8
1995	March	2.6	6.7	7.7	4.1	4.0
	June	-1.4	8.8	11.3	6.9	4.6
	September	-1.7	9.9	11.9	11.2	3.5
	December	6.3	15.5	13.8	12.0	2.9

Source: Reserve Bank Bulletin.

damped by declining government borrowing. Private-sector credit growth has remained in the double digits, with the housing sector accounting for an increasing proportion but business sector borrowing also rising strongly.

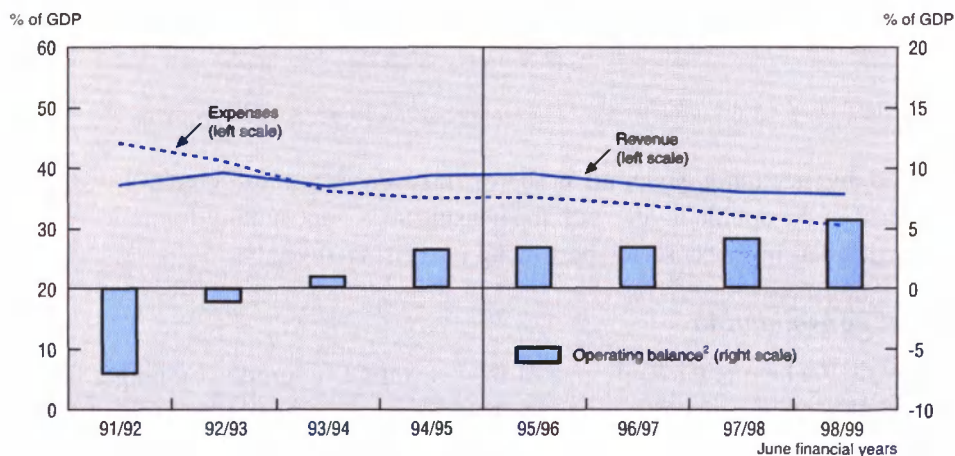
Fiscal consolidation

New Zealand is currently one of the few OECD countries running a budget surplus. This represents a remarkable turnaround: as recently as in the 1991/92 fiscal year (ending in June), the budget was in deficit by about 7 per cent of GDP, whereas in 1994/95 it ran a surplus of 3 per cent of GDP. Spending cuts are mainly responsible for this outcome, with the ratio of expenditure to GDP falling by about 10 percentage points, while revenue has remained roughly stable rela-

tive to GDP (Figure 11). This is a prime example of the finding for OECD countries that fiscal consolidation is more likely to be successfully accomplished through expenditure reductions than through increases in taxation. Spending restraint has been helped by the strong cyclical upswing, which has reduced unemployment benefits, as well as by public sector reforms, which have improved both the efficiency and control of expenditure. One aspect of the latter has been a switch from cash accounting to accrual accounting in an attempt both to improve the information content and enhance the credibility of government accounts, by bringing them into line with practice in the private sector (see Chapter IV and Annex II for further details and the effect on budget outcomes).

At the time of the June 1994 Budget, fiscal developments continued to be more favourable than projected, with the “operating” (that is, accrual-based budget) balance recording a slight surplus in the 1993/94 fiscal year. This reflected the positive effect of stronger-than-expected activity on both revenue and expenditure as well as foreign exchange gains and lower-than-anticipated debt service payments. The Government announced some new spending initiatives, mainly on health (to help implement the reforms discussed in Chapter IV)

Figure 11. **BUDGETARY DEVELOPMENTS¹**



1. Accrual basis. Projections from 1995/96 onwards from 1995 December Fiscal Update.

2. Includes net balance of State-owned enterprises and crown entities.

Source: New Zealand Treasury.

and education (to support the introduction of the national curriculum and qualifications framework, see Chapter III). Nonetheless, the Budget projections suggested that – with continued overall expenditure restraint and unchanged tax rates – the operating surplus would reach 5 per cent of GDP by 1996/97, leading the Government to signal its intention to cut taxes in the future.

Indeed, the fiscal progress outlooks presented in the 1994 Fiscal Strategy Report (which accompanies the Budget) indicated that by the end of the decade a no-policy-change approach would result in an operating surplus of about 8 per cent of GDP, net public debt approaching zero and a Crown net worth around 30 per cent of GDP. Such outturns would be inconsistent with the Government's stated long-term fiscal objectives. For example, in the February 1995 Budget Policy Statement, the Government set out its fiscal objectives in line with the principles detailed in the *1994 Fiscal Responsibility Act* (see Chapter IV). In the long run, it aimed at: lowering net public debt (then running at about 40 per cent of GDP) to less than 20 per cent of GDP and then maintaining a balanced budget over the cycle; restoring the Crown's (that is, central government's) net worth to significantly positive levels; reducing the risks to the fiscal position; and establishing a broadly based low-tax environment. In the short run, the Government intended to move into a net public debt range of 20 to 30 per cent of GDP by holding operating expenses stable in nominal terms and by running fiscal surpluses of at least 3 per cent, as well as to eliminate net public foreign-currency debt in order to reduce the exchange-rate risk.

The projections required by the Fiscal Responsibility Act demonstrated that there was going to be a need for a fiscal correction over the next decade, as a continuation of current trends would lead to an increasingly tight fiscal stance and the Government owning an unjustifiably large share of the country's wealth. Delaying the correction would only increase the required size of any correction (and so its potential disruptive impact) or raise the potential for steadily losing expenditure control. The Government therefore announced its intention to reduce income taxes subject to the attainment of some clearly-specified conditions: that net public debt was less than 30 per cent of GDP, that tax cuts would not place ongoing operating surpluses at risk (implying that net debt would continue to fall and that tax cuts would be sustainable), and that tax cuts would not involve significant risks of strong inflationary or balance-of-payments pressures (*i.e.* they would not place the prospect of sustainable growth at risk).

When the June 1995 Budget was presented, the fiscal situation was, again, much better than expected a year earlier. The operating surplus for 1994/95 was 3 per cent (rather than the budgeted 1 per cent) due in particular to higher corporate tax revenues, as companies had improved their profitability and used up their previous tax-loss credits. In addition, the other factors mentioned above (economic activity, interest- and exchange-rate developments) continued to have a favourable impact on government finances. New spending initiatives focused again on the two priority areas, health and education. Nonetheless, expenditure in these areas was still projected to decline as a proportion of GDP, albeit much less than aggregate spending. More noteworthy, perhaps, was the Government's reiteration of the specific economic and fiscal conditions for future tax cuts, which, on the basis of the budget projections, raised expectations of tax cuts in 1996/97.

In its December 1995 Fiscal Update, the Government stated that it was satisfied that conditions for tax cuts would be met because net public debt was expected to fall below 30 per cent of GDP towards the end of the 1996/97 fiscal year, although the medium-term projection for the current account deficit was revised upwards from around 1 per cent to 3-4 per cent of GDP. It therefore announced its intention both to reduce income taxes and increase expenditure in priority areas in the June 1996 Budget. The tax cuts, which account for the bulk of the package, would be targeted at low and middle-income earners and implemented in two steps in mid-1996 and mid-1997, amounting to about 1 per cent of GDP on both occasions (subsequently, precise details were released, see Chapter III). The tax measures imply a fall in total revenue as a proportion of GDP from just under 39 per cent in 1994/95 to just under 36 per cent in 1998/99. On the expenditure side, extra resources will be devoted to education and health, a number of measures stemming from the Employment Taskforce (see next chapter for details), as well as to initiatives still under development (including changes to Family Assistance and pensions). Nevertheless, total expenses are still projected to fall from 35 per cent of GDP in 1994/95 to 30½ per cent in 1998/99. This continued expenditure restraint enables the Government to simultaneously project substantial tax cuts, an operating surplus of 5½ per cent of GDP by 1998/99, and a markedly declining debt-to-GDP ratio (see below).

The New Zealand Government has recognised early the need to correct an impending fiscal imbalance and has adopted a process that attempts to minimise the transition costs. It has chosen to concentrate its fiscal easing on the revenue

side, which is consistent with the above-noted finding for OECD countries that fiscal consolidation is more likely to be successful through expenditure control. The Government has also focused on the micro design of the fiscal package, recognising that its long-run benefits will depend on the supply response they might generate. In this respect, there may be greater potential gains from future tax reductions if they were to lower top tax rates and so flatten the income tax scale. As noted, a major issue is whether significant transition costs can be successfully avoided. The key to this will relate to how well the monetary policy framework will cope with the structural shift in the fiscal stance (see below).

For example, there are a number of risks and uncertainties associated with the Government's projections. In particular, they assume that economic growth will average nearly 4 per cent per annum without any major increase in inflationary pressure. This is clearly much better than the long-term performance and may be difficult to achieve as the economy is already operating near capacity, even though structural reforms have increased its growth potential (see Annex I). The projections also assume that both health and education expenses decline as a proportion of GDP, despite the fact that these are areas where the government has continuously faced pressure to spend more. Nevertheless, even on the more conservative assumptions that growth averages 3 per cent per annum and that there is slippage on both health and education spending, the operating surplus might still be expected to remain in the 3 per cent range (Table 9).

Table 9. The effect of alternative scenarios on the budget balance

	Operating balance, June financial years, per cent of GDP			
	1995/96	1996/97	1997/98	1998/99
Central projection ¹	3.3	3.3	4.0	5.6
With lower growth ²	3.3	2.9	3.3	4.5
With lower growth and higher social spending ³	3.3	2.7	2.7	3.5

1. Central projection is taken from 1995 December Fiscal Update.

2. Assumes GDP growth is 1 per cent per annum slower in each year from 1996/97 to 1998/99.

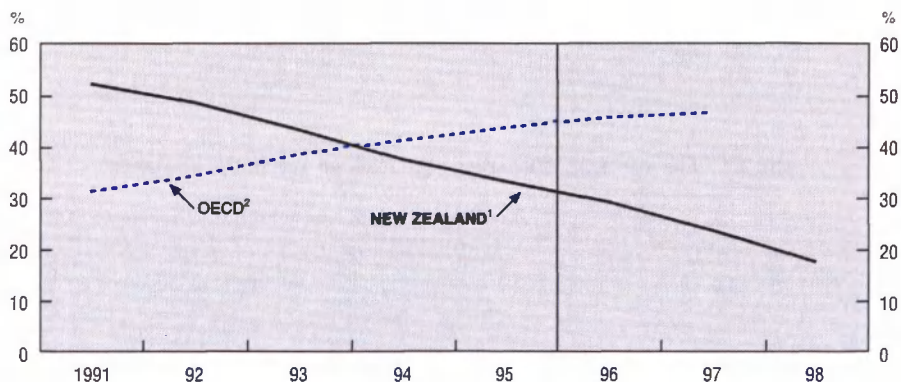
3. Additionally assumes that health and education spending remains the same proportion of GDP as in 1995/96.

Source: 1995 December Fiscal Update and OECD Secretariat calculations.

One consequence of the improving budget balance has been a fairly rapid turnaround in the government's debt position. After rising steeply throughout the 1980s, the net debt-to-GDP ratio peaked at about 50 per cent in 1991/92, a level much higher than the average for other OECD countries which was under 35 per cent at that time (Figure 12). Increasing primary budget surpluses (*i.e.* excluding net interest payments) during the 1990s, combined with strong GDP growth, led to a substantial fall in this ratio to 37½ per cent in 1994/95. Including local government, for which no recent data are available, the net debt ratio is likely to be in the order of 40 per cent. Meanwhile, the OECD average for general government has increased to 45 per cent, and is not expected to decline significantly over the medium term while New Zealand's net debt-to-GDP ratio is projected to fall below 20 per cent in the late 1990s.

As noted in Chapter I, debt repayment has been concentrated on liabilities denominated in foreign currency because, given the strong dependence of New Zealand on commodity-based exports, the exchange rate – and hence the domestic-currency value of the outstanding stock of debt – is vulnerable to terms-

Figure 12. **NET GOVERNMENT DEBT**
As a percentage of GDP



1. Central government. Fiscal year, beginning in June. Projections from 1995 December Fiscal Update.

2. General government. Weighted average of 17 countries (1992 GDP weights and exchange rates), calendar years.

Source: New Zealand Treasury and Secretariat estimates.

of-trade shocks. By 1996/97, the Government expects to have fully eliminated net foreign-currency debt, which as recently as the early 1990s accounted for almost half of its total liabilities. The declining public debt ratio is reflected in lower net interest payments, which have fallen from about 6 per cent of GDP in 1991/92 to just over 4 per cent and are expected to amount to only 2 per cent of GDP in the late 1990s. Lower risk premia on interest rates have also contributed to that trend, as evidenced by the declining differential between domestic and international bond yields (Figure 10) and upgrades of New Zealand's debt status by major rating agencies. Indeed, the country now appears to be in a virtuous circle of budget surpluses, declining interest payments, falling debt and lower risk premia on long-term interest rates.

Structural reform

Over the past two years or so, policy efforts on the structural side have aimed at implementing, refining and complementing the initiatives launched in the late 1980s and early 1990s. In the public sector, as discussed in detail in the last chapter of the Survey, the focus has been on consolidating the health and education reforms, restructuring the electricity sector and improving the financial management and accountability of local government. Recent initiatives in the labour market area, which involve skill development, income support and taxation, are reviewed in Chapter III, which also deals with product market competition, and in particular the progress being made in trade liberalisation. The following paragraphs therefore only report on recent major reforms in fields not covered by the next two chapters of the Survey, namely international taxation and bank supervision.

With respect to *international taxation*, in February 1995, the Government released a discussion document which explained the need to adopt policies in this area that promote economic efficiency and minimise compliance costs, while protecting the domestic tax base from sophisticated avoidance practices. In particular, it argued that it is likely that any taxes that New Zealand, as a small, open economy, imposes on non-residents would, if not credited by the latter's home government, simply increase the domestic cost of capital and thereby discourage investment. Hence, reducing such taxes would make the country better off. Subsequently, in August, the Government introduced into Parliament a package of international tax reforms. For all income earned by foreign direct investors tax

rates are to be capped at the level that applies if they retain their income in New Zealand. At the same time, measures are to be taken to reduce the ability of companies to shift their profits from New Zealand to lower-taxed jurisdictions and to limit the extent that firms can avoid tax by over-allocating debt to their New Zealand operations.

As to *bank supervision*, following an internal review process and extensive consultations since late 1991, the Reserve Bank implemented a new regime at the beginning of 1996. The new system aims to minimise moral hazard, strengthen market discipline, and reduce banking risks. It requires the banks to make detailed quarterly public disclosures, including all significant risk exposure and any credit ratings they may have. Each bank will have to display a brief summary of this in every branch to assist depositors to decide whether the institution is sound. The public disclosure statements replace the information the banks in the past provided privately to the Reserve Bank. The disclosure framework is expected to play an important role in promoting a sound banking system. But it does not replace banking supervision. Under the new approach, the Reserve Bank of New Zealand continues to have responsibility for supervising the banking system in order to promote a sound and efficient financial system. It will continue to monitor banks, but will do so primarily on the basis of their public disclosure statements. And it will continue to require banks incorporated in New Zealand to comply with the BIS capital requirements. The Bank also retains its capacity to respond to financial distress in the financial system, including the ability to investigate a bank's affairs, to recommend the deregistration of a bank, to give directions to a bank in distress and to recommend to the Government that a bank in acute financial distress be placed into statutory management. But the disclosure framework has facilitated the removal of a number of prudential regulations on banks, including the former limit on large exposures.

As it is doubtful whether depositors always have the skills to decide whether an institution is sound, the system to some extent relies on the judgement of analysts in the financial markets and credit rating agencies. However, the latter have a strong incentive to get their assessment right and, in any case, the risks that might be involved are limited by the fact that most New Zealand banks are controlled by foreign parents which are subject to supervision in their home country. Moreover, as noted, the Reserve Bank continues to have the responsibility for maintaining the soundness of the banking system, as well as powers to

investigate the affairs of banks, to cancel their registration, and to recommend that they be placed into statutory management.

The challenges ahead

The recent favourable economic performance, which represents a marked break from past trends, is, to a large extent, a reflection of the beneficial effects of the radical structural and institutional reforms that have been implemented over the past decade. While other OECD countries have pursued similar policies, few, if any, have done so in the context of such a coherent overall framework, stressing predictability, transparency and accountability. The reforms have been remarkable for their sustained focus on improving economic efficiency. The thrust of structural policies has been to reduce distortions and impediments to growth, to open and assure access to markets, and to encourage investment. Their focus on microeconomic considerations led the authorities to design stable, credible and mutually consistent macroeconomic policies that did not interfere with the efficient allocation of resources. In this sense, both sets of policies serve the same objective – increasing production potential and living standards. However, although such a policy framework has created the conditions for a sustained lift in performance, some of its elements could give rise to problems in the future.

As noted above, with the introduction of inflation targets, monetary policy has become more forward-looking, relying heavily on economic forecasts. But developments in the past two years have shown that inflation forecasts can be substantially wrong. Although the monetary stance was tightened before the Reserve Bank's measure of underlying inflation picked up, it is clear with hindsight that the move towards restriction came too late, partly because the momentum of the recovery was underestimated. This may be explained by the fact that, apart from the difficulties in assessing the forces that affect the economy, policy making in New Zealand is hampered by statistical problems. Indeed, as discussed above, the output and expenditure measures of GDP provide a completely different picture of the cycle. Moreover, among other things, the absence of reliable capital stock data means that, at this stage, it is not possible to say with any confidence what the growth of total factor productivity or the productive potential might be (see Annex I). An estimate of the output gap is nevertheless crucial to assessing inflation pressures.

Another problem arises from the fact that, while the Reserve Bank in general focuses on overall monetary conditions, in practice it cannot be indifferent to the exchange rate/interest rate mix, given the different lags with which the two variables affect the pace of inflation. As the Bank has to keep inflation within the target range continuously, the exchange rate tends to be more important because of its powerful short-term effect on prices. Recent experience has shown, however, that the pass-through of the exchange rate appreciation to inflation can be weakened by strong pressures prevailing in the domestic economy. On the other hand, to compensate for this eventuality by additional exchange-rate appreciation risked putting too high a burden of monetary restraint on the tradeable sector.

Given this dilemma, the Reserve Bank has, at times, hesitated to raise interest rates lest this would lead to too rapid an appreciation of the currency. Recently, strong domestic inflation pressure has led the authorities to give the interest rate a greater role in the implementation of policy. This has been complicated, however, by capital inflows in response to upgrades of New Zealand's credit rating, leading to downward pressure on interest rates and upward pressure on the exchange rate, as well as by persistent market expectations of monetary easing. Although the Reserve Bank prefers to steer monetary conditions through pronouncements, in these circumstances greater reliance on formal instrument settings (such as the settlement cash target) may be needed if the desired policy stance is to be maintained.

Although, so far, wages appear to have adjusted to "underlying" rather than "headline" inflation, the credibility of the measurement of the former has been the subject of increased attention. The major issue is that the Reserve Bank estimate of underlying inflation includes a significant judgemental element. Also, it is the Bank that calculates the measure of inflation by which the Governor's performance is largely assessed. If mortgage interest charges in the CPI were replaced by a rental equivalence measure, this would go a significant way to reduce the difference between underlying and headline inflation. Ideally, however, the former should be defined in such a way that it could be mechanically calculated by some outside agency. If this is not possible, it would be desirable to enhance the transparency of the current measure of underlying inflation. This would help increase the credibility of the overall monetary policy framework.

As underlying inflation is currently at the upper limit of the target band, and given that monetary conditions are very tight and the economy is still growing fairly strongly, the case for tax reductions might seem questionable. Indeed, if inflation pressures do not subside quickly, then the Reserve Bank will be compelled to tighten monetary conditions further because, unless it can be confident of inflation being close to the mid-point of the target range in the near future, there will always be a risk that unforeseen shocks will drive inflation outside the target. In other words, the policy mix might become “skewed”, with a looser fiscal policy entailing a tighter monetary policy. Under such a scenario, the traded-goods sector would probably be particularly hard hit through strong upward pressure on the exchange rate. This suggests that a gradual approach to the cutting of taxes would be appropriate and that the transitional issues associated with tax reductions – notably concerning inflation and balance-of-payments pressures – will require very careful consideration.

On the other hand, fiscal projections indicate that – even with tax cuts – the budget balance will show a rising surplus, with a negligible cyclical contribution to this. Thus, the tax cuts only imply a policy change from a contractionary to a less contractionary, or at most broadly neutral, fiscal stance. Moreover, the *Fiscal Responsibility Act* encourages a medium- to long-term focus in fiscal policy implementation, while the *Reserve Bank Act* gives the monetary authorities the responsibility of maintaining price stability in the short run. Furthermore, there are strong microeconomic grounds for the tax cuts as a means of addressing a number of disincentive problems which exist, as discussed in the following chapter. Thus, perhaps, the issue which needs to be faced concerns not merely the appropriate balance of fiscal and monetary policy, but the policy framework as a whole.

Among OECD countries, New Zealand appears to operate an ambitious regime for controlling inflation. However, although the width of the inflation target band may seem narrow at 0-2 per cent, the existence of “caveats”, relating to a range of supply-side shocks from government actions, overseas and natural disasters, makes it more flexible in operation. Policy is focused on restricting the impact of demand pressures on inflation and on preventing “second-round” effects from supply shocks feeding through into more general inflation. This institutional setting is highly formalised and New Zealand also appears to view failure to achieve the prescribed targets more seriously than do other countries

where such an approach is operated. Hence, the strong interest worldwide in how well this regime works.

Thus far the practice appears very successful. Inflation has remained almost entirely within the prescribed bands throughout its operation. After falling to below 2 per cent by the end of 1991, somewhat earlier than planned, underlying inflation has remained in the 0-2 per cent range since then, with the sole exception of the June 1995 quarter, when it was 2.2 per cent. Reflecting the implementation of tighter monetary policy, the interest rate component in the CPI has driven “headline” inflation above 2 per cent since the end of 1994, as is allowed for by the caveats. Otherwise it has not been necessary to consider use of caveats in the period after 1991, except for some limited instances of sharp increases in government charges and oil and timber commodity price shocks in 1995. Nevertheless, with output at present above potential and underlying inflation close to the upper limit of the target range, the current year is likely to provide a further test of the monetary framework.

It is difficult to know in advance what would constitute the optimal width of the target band. Having too narrow a band would risk missing the target sufficiently frequently to call its credibility into question. It could require implausible forecasting ability by the Reserve Bank if changes in inflationary pressure are to be detected early enough for monetary policy to react in time to prevent them driving inflation outside the band, given the quite long time lags before policy takes effect. There will thus tend to be some irreducible minimum for the variation in inflation, determined mainly by the magnitude of the shocks to which the economy is subject and the length of lags before policy actions take effect. Attempts to go below this will tend to result in instability in the setting of monetary conditions.

Because forecasting always involves a margin of error, it is essential that the Reserve Bank continually aims to steer future inflation towards the middle of the band if it is to minimise the risks of breaching the target range. Even so, the chances of such breaches will not be zero. This can be illustrated using the Reserve Bank’s own forecasting record to assess the likelihood that future inflation will deviate from the target band (Table 10). This probability will be greater the closer the initial forecast is to the target limits.

More generally, it is clear that it is the whole policy environment that enables inflation to be kept within narrow bands. Not only do monetary and fiscal

Table 10. The probability of a breach of the inflation target¹

Reserve Bank 4 quarters-ahead inflation forecast	Probability of inflation outturn exceeding 2 per cent	Probability of inflation outturn less than 0 per cent	Probability of target being breached ²
2.0	50%	0%	50%
1.75	30%	0%	30%
1.5	15%	0%	15%
1.25	5%	0%	6%
1.0	2%	2%	3%
0.75	0%	5%	6%
0.50	0%	15%	15%
0.25	0%	30%	30%
0.0	0%	50%	50%

1. Based on updated calculations following the same approach used in "Inflation Forecast Errors: CPI components and underlying", C. Connolly and A-M. Brook, Research Note N95/2, Reserve Bank of New Zealand. This method assumes that the deviation of actual inflation from the Reserve Bank's forecast is normally distributed with mean zero and standard deviation given by the standard error of the Bank's historical forecasting record.

2. Fourth column is the sum of the second and third columns, although columns may not sum exactly because of rounding.

Source: Reserve Bank. OECD Secretariat.

policy need to be compatible but the economy itself needs to be able to react swiftly to shocks without any great transition costs. More pressure may be placed on monetary policy if the programme of supply-side reform loses pace. Indeed, neither monetary policy nor fiscal policy alone can achieve the macroeconomic objectives that New Zealand has set itself. The supply-side reform is an integral part of the process. As discussed in Chapters III and IV below, additional progress on privatisation, reducing tariff barriers, eliminating producer board monopolies and optimising the tax base and rates will all help improve the flexibility with which the economy responds and should increase its long-run non-inflationary growth potential further.

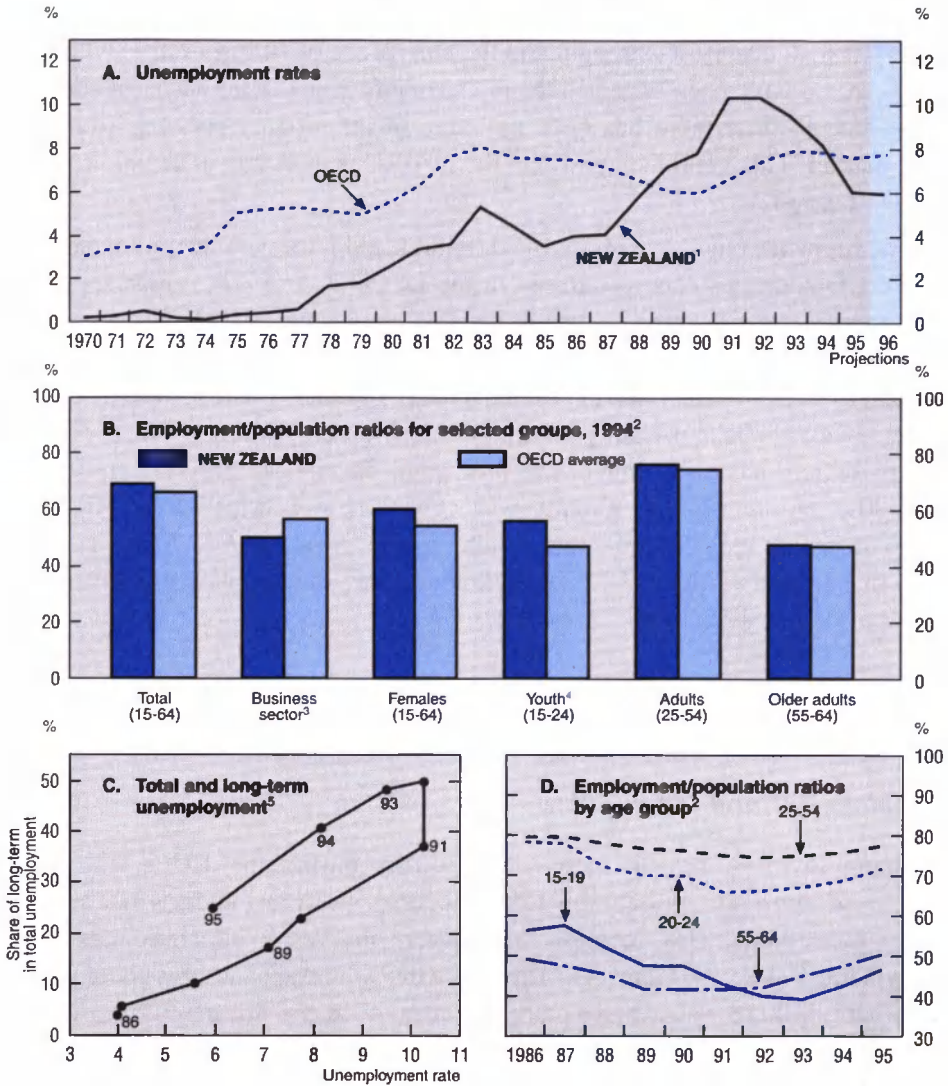
III. Implementing the OECD Jobs Strategy

The unemployment rate in New Zealand began rising in the 1970s, although it remained below the OECD average until the late 1980s, when it increased sharply from just under 4 per cent in 1987 to a peak of nearly 11 per cent in 1991 (Figure 13). It has since fallen rapidly to just over 6 per cent at the end of 1995, once again below the OECD average, as the economy has experienced a prolonged period of strong growth in both output and employment.

The extent of labour market reform since the mid-1980s has been substantial and probably greater than in any other OECD country over the same period. Foremost among the changes has been the introduction of a legal framework, under the 1991 *Employment Contracts Act*, for a highly decentralised wage-bargaining system, which has replaced a rigid and complex system of industry-wide occupational awards. There has also been a transformation of the tax and benefit system, with major cuts and a tightening in the eligibility for unemployment-related benefits, a shift from direct to indirect taxation and a flattening of the schedule of income tax rates. More generally, there has been a major emphasis on the need to open all sectors of the economy up to competition, particularly through a substantial reduction in tariff protection. In the second half of 1995 a wide range of labour market initiatives were announced including the extension of active labour market programmes, a reform to benefit abatement and the strengthening of obligations on beneficiaries. These measures, along with income tax reductions and family assistance reforms announced in February 1996, were intended to further address some of the issues identified in this study.

Given the radical changes to the institutional framework underlying the labour market, it is particularly difficult to assess what the non-cyclical or non-accelerating inflation rate of unemployment (NAIRU) might currently be. Such an assessment is made all the more complex since, in the period prior to reform, heavy reliance was placed on direct intervention by the authorities in the wage

Figure 13. **EMPLOYMENT AND UNEMPLOYMENT**



1. Break in series in 1986.
 2. Defined as the percentage of each population group that is employed.
 3. Business sector employment as a per cent of working age population.
 4. The minimum age for youth differs across countries (either 14, 15 or 16), therefore, any comparison with the OECD average should be made with care.
 5. Long-term unemployment is defined as individuals looking for work for one year or more.
- Source: Statistics New Zealand; OECD, *Labour Force Statistics, Main Economic Indicators* and Secretariat estimates.

formation process to contain inflationary pressure, culminating in a prolonged freeze on wage and prices in the early 1980s.² However, a feature of the present recovery is that, despite its strength and the emergence of skill shortages which in the past would have been expected to spill over into generalised wage inflation, it is only recently that there has been any sign of inflationary pressure from the labour market. This would suggest that the NAIRU is currently at or below 6 per cent (see below).

The immense challenge represented by high and persistent unemployment in most OECD countries was recognised in the OECD *Jobs Study*, which set out a broad programme of action to tackle it. This chapter is one of a series to be published in OECD *Economic Surveys* dealing with the problem on a country-specific basis. The remainder of this chapter is organised as follows. The first section reviews labour market performance with an emphasis on the effects of reforms which have impinged on the wage formation process since the mid-1980s, particularly the *Employment Contracts Act*, which took effect in 1991. The policy recommendations which emerge from the *Jobs Study* are discussed in a second section. The final section assesses recent policy initiatives and the scope for further action.

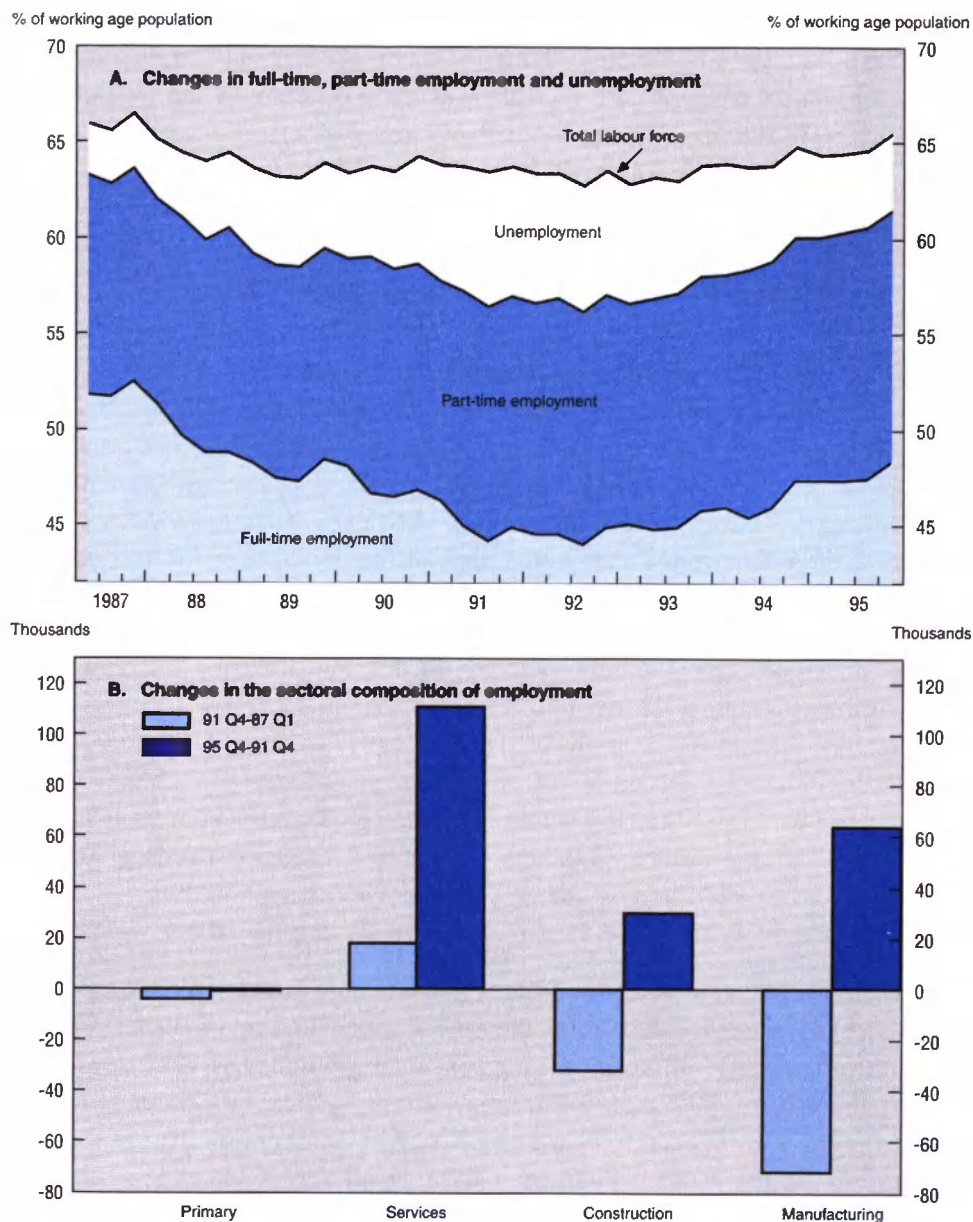
Labour market performance

Unemployment and job creation

Unemployment, having increased gradually during the 1970s and early 1980s,³ rose more rapidly between 1987 and 1991, from just under 4 per cent to nearly 11 per cent. This increase was largely the result of a steep drop in employment (Figure 14, Panel A). Although GDP was stagnant throughout much of this period, there was a more marked downturn in the manufacturing sector, following a substantial loss in competitiveness as monetary policy was tightened in the mid-1980s. Manufacturing output fell by about 16 per cent between the beginning of 1987 and mid-1991 and about two-thirds of the overall job losses were in the manufacturing sector over this period (Figure 14, Panel B), although it only accounted for about one-fifth of total employment.

As discussed in Chapter I, since 1991 there has been a sustained recovery in output with a progressive increase in the growth rate of employment which

Figure 14. **DECOMPOSITION OF THE CHANGE IN EMPLOYMENT**



Source: Statistics New Zealand.

peaked at about 5 per cent per annum in the final quarter of 1994 and the first two quarters of 1995. The unemployment rate has fallen more-or-less continuously since the third quarter of 1991, reaching just over 6 per cent in the third quarter of 1995. An area of concern until recently was the proportion of the unemployed who had been out of work for more than twelve months. In 1992 it peaked at 50 per cent – which was high by comparison with most OECD countries (Figure 13, Panel C). However, with the fall in the aggregate unemployment rate together with the implementation of a number of active labour market policies targeting this group of unemployed, the share has fallen to just over one-quarter in 1995.

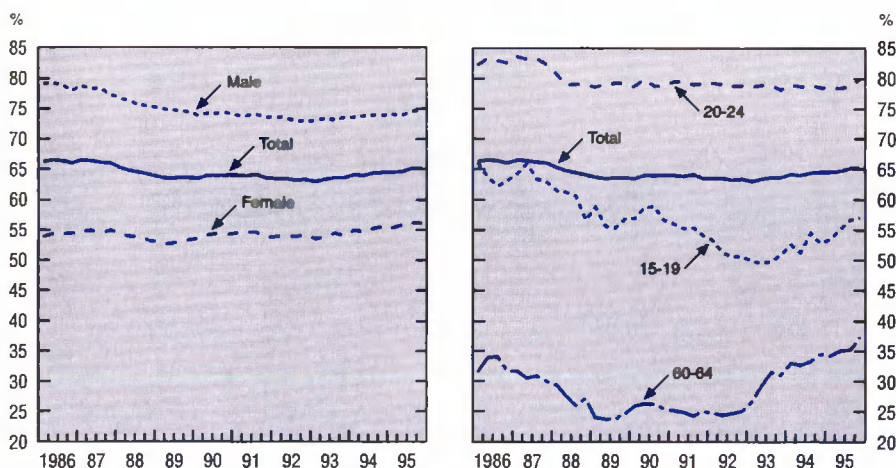
Most of the extra jobs have come in the service sector. There has also been a strong increase in manufacturing employment, although it has still not recovered to the levels of 1987 (Figure 14, Panel B). Full-time employment growth has averaged 4 per cent per annum over the last three years, but the full-time employment rate has still not returned to its 1987 level. As in many other OECD countries, there has been a continuing shift in the composition of employment towards part-time employment, which has grown almost continuously throughout the period (Figure 14, Panel A). Part-time employment now accounts for about 37 per cent of all female employment and 10 per cent of all male employment. Some of this part-time work would seem to be “involuntary” (in the sense that a full-time job would be preferred). Thus, in 1993 among OECD countries New Zealand had the second highest rate of involuntary part-time employment (in the sense that a full-time job would have been preferred) among men and the third highest among women,⁴ although international evidence also suggests that involuntary part-time workers change status quickly, becoming either full-time employed, voluntary part-time employed or else leaving the labour force.

The rise in unemployment from 1987 onwards was cushioned, at least initially, by a marked reduction in the labour force (Figure 14, Panel A). The participation rate fell from over 66½ per cent at the beginning of 1987 to 63½ per cent by the end of 1991, partly in response to the cyclical drop in employment opportunities.⁵ OECD Secretariat estimates suggest that the responsiveness of the labour force to the cycle is comparatively high in New Zealand in relation to most other OECD countries,⁶ a factor which is partly explained by the cyclical sensitivity of net migration flows.⁷ Despite strong growth in employment since 1991, neither labour force participation nor the employment rate (both

expressed as a proportion of the population of working age) have yet returned to their 1987 levels. The drop in both employment and participation rates is most apparent among the young, and in particular those aged 15 to 19 (Figure 13, Panel D and Figure 15). This is partly explained by a rise in the average age at which young people leave the education system: the enrolment rate of those aged 15 to 19 in full-time education rose from about 52 per cent in 1988 to 65 per cent in 1992, which partly reflects the increasing gap between relative wages and job opportunities in the skilled and unskilled labour market, but also an opening up of opportunities in tertiary education which require completion of secondary school (discussed further below). As in most other OECD countries the youth unemployment rate is well above the rate for the population as a whole: in mid-1995 it stood at over 15 per cent.

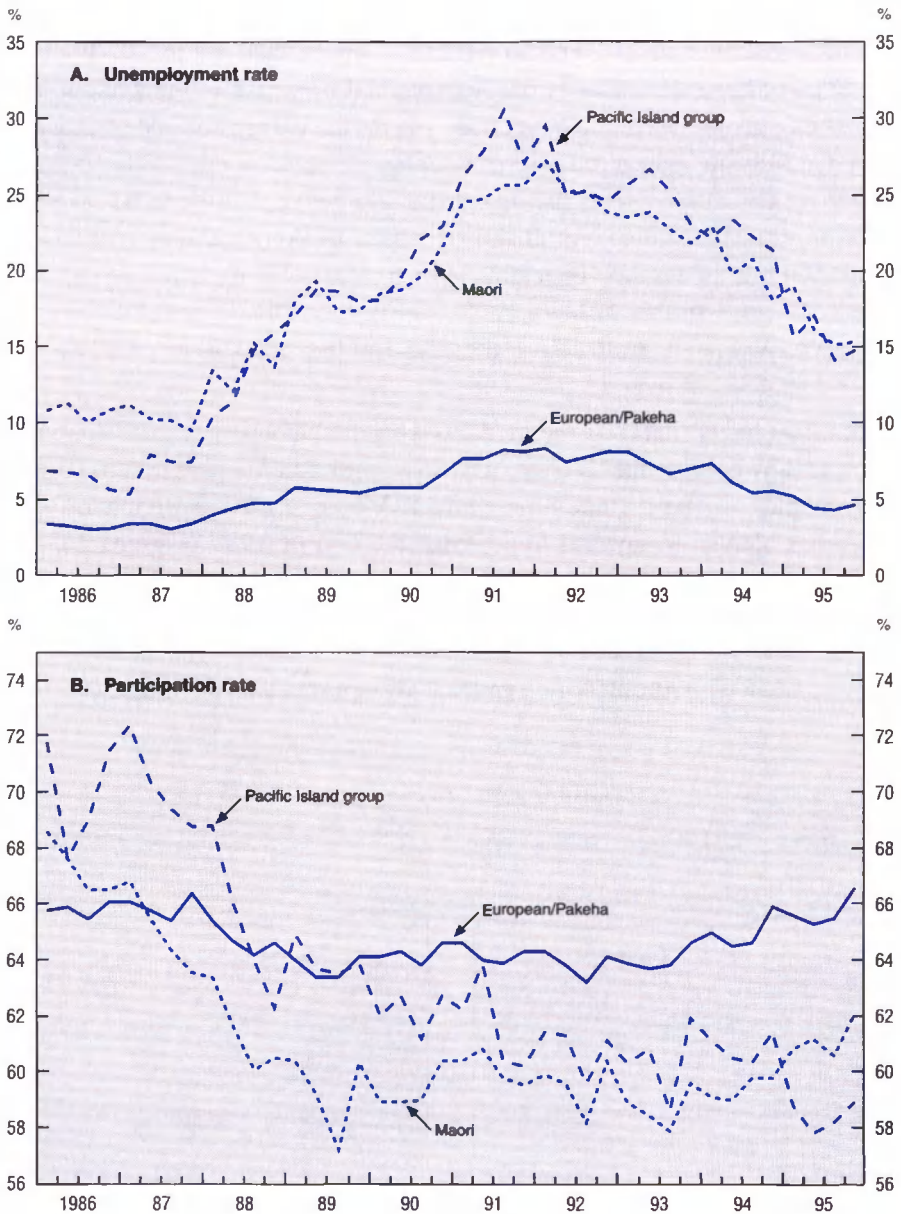
It seems likely that over the medium term the labour force participation rate will trend upwards again. Firstly, any structural fall in participation rates of young people may be a "one-time" effect. Moreover, the participation rate of females has shown an upward trend since the end of 1989 (Figure 15), which

Figure 15. **LABOUR FORCE PARTICIPATION RATES BY AGE AND SEX**
Per cent



Source: Statistics New Zealand and OECD.

Figure 16. UNEMPLOYMENT AND PARTICIPATION RATES BY ETHNIC GROUP



Source: Statistics New Zealand.

may be partly associated with the increased availability of part-time job opportunities. There have also been a number of announcements of future changes to the tax and benefit system (discussed below), which should have a positive effect on participation. Finally, the raising of the retirement age from 60 to 65 is increasing the participation rate of older people.⁸

A worrying feature of labour market performance has been the varying experiences of the different ethnic groups. New Zealand is a multi-racial society comprised of a working age population which is 10 per cent Maori, 4 per cent Pacific Islanders and 83 per cent of European origin. The unemployment rates of Pacific Islanders and Maoris, both currently about 15 per cent, are nearly four times the rate for Europeans (Figure 16, Panel A). Moreover, the fall in the overall participation rate since 1987 has occurred mainly among non-Europeans (Figure 16, Panel B). This differing experience partly reflects the fact that Maoris and Pacific Islanders are typically less qualified (an issue which is discussed further in the following section) and so disproportionately represented among unskilled workers who bore the brunt of the job losses which took place in the late-1980s. Another factor behind the ethnic differences in unemployment rates is that both Maori and Pacific Island populations have much younger age structures than the rest of the population. However, this also means that the true divergences between participation rates of Maoris, Pacific-Islanders and Europeans in aggregate data are under-stated (other things being equal, a more youthful population should imply a higher participation rate). Recent work⁹ suggests that, were it not for the difference between the age structure of the Maori and non-Maori populations, there would be a 10 percentage points divergence in male participation rates (more than double that observed).

Impact of changes to labour law

As indicated above, the *Employment Contracts Act* (ECA) facilitated significant changes in bargaining arrangements in the labour market (see Box 1). In order to appreciate the scale of the changes, it is important to understand the previous system of wage bargaining. In the period up until the late-1980s the wage formation process is best described as being a “multi-tiered” system with a range of elements including: awards, which set minimum wages for various jobs at a national level; registered collective agreements which set minimum wage rates for various jobs at the enterprise level; informal house agreements, setting

Box 1. The 1991 Employment Contracts Act

- The main provision of the Act is to allow employers and employees to choose with whom, and within what structures, they associate. All bargaining is towards an employment contract, which can be either collective or individual.
- It is illegal to give union members any preference in contracts, to unduly influence an employee to belong (or not belong) to an employees organisation or to negotiate a closed shop. All parties have the right to be represented in matters relating to their employment. When a party has authorised a bargaining agent, the other party must, if they are going to negotiate, negotiate with that agent.
- The right to strike or lockout in pursuit of the negotiation of collective contracts is maintained, although is only permissible after the expiry of the contract. It is illegal for a group of employees to strike to force other employers to join a collective contract (*i.e.* secondary strikes are outlawed). If employers agree to be in a multi-employer contract, it is legal to strike when negotiating the contract.
- A statutory minimum code of employment rights, including a minimum wage, holidays, sick leave, protection against unjustified dismissal and occupational safety standards, is preserved.
- All parties are provided with the right to enforce their employment contract through an Employment Court and Employment Tribunal, which can provide redress if the employment rights provided by their contract or legislation are found to have been breached.
- Access to the Employment Court to have either part or all of their employment contract set aside if they believe that their employment contract contains harsh and oppressive conditions or was obtained in a harsh or oppressive manner.

Comparison with arrangements in other OECD countries

The form of employment arrangements which the ECA leads to is most like that prevailing in North America where recognition of bargaining representatives needs to be established at the beginning of each bargaining round. This is in contrast to the situation in many European countries where there is a continuity of recognition between rounds which is often supported by legislation. However, there are a number of differences with the North American approach, as:

- there are no statutory requirements to "bargain in good faith";
- agreements requiring workers to belong to a union, or giving preference to union workers, are explicitly prohibited under the ECA (but not in North America);
- there are no statutory job protection obligations either in the form of a minimum notice period or severance pay. Both are, however, often negotiated into a contract, and there is a significant body of case law concerning both issues.

paid rates for particular jobs at the enterprise level; the national minimum wage; and general wage adjustments made by the government or by the arbitration court. For most of the post-war period up until the mid-1980s, there was direct intervention to varying degrees by the government in the private sector wage formation process.¹⁰ The 1987 *Labour Relations Act* was intended to achieve greater flexibility in bargaining structures, while still allowing for national awards. Its main feature was that it was permissible for only a single agreement to cover any group of workers, thus ending multi-tier bargaining, with the aim of encouraging enterprise and industry-based agreements. To this end, unions had the prerogative to initiate enterprise or industry-level negotiations by "citing out" the relevant employer from any national award. In practice, however, few employers were cited out (with unions preferring to keep their members on awards) and there was no major increase in enterprise bargaining.

The ECA, whose underlying rationale was to make employment contracts similar to those in all other areas of activity with the aim of encouraging decentralised enterprise bargaining, in combination with other major reforms to New Zealand product market regulation and macroeconomic policy management, has had a number of major discernible effects on the structure of bargaining in the labour market:

- *First*, it is estimated¹¹ that the coverage of collective bargaining fell by about half in the three years, from May 1991 to May 1994, to a level of about 40 per cent of all employees, although it appears that it may now be stabilising. This decline is almost entirely due to a collapse in multi-employer bargaining and its replacement by enterprise-based bargaining as the norm, coupled with a growth in individual employment contracts. In general terms, collective bargaining has only remained strong in industries which are dominated by large firms with significant market power and in the public sector.
- *Second*, although unions still dominate the representation of employees in contracts covered by collective agreements, it is estimated that in the two years following the ECA union density fell from about 45 per cent of the total workforce to 30 per cent.¹² Although there had been some reduction in union density prior to the ECA (it fell from 48 to 45 per cent in the two years prior to its introduction), the decline was much more pronounced following the ECA.

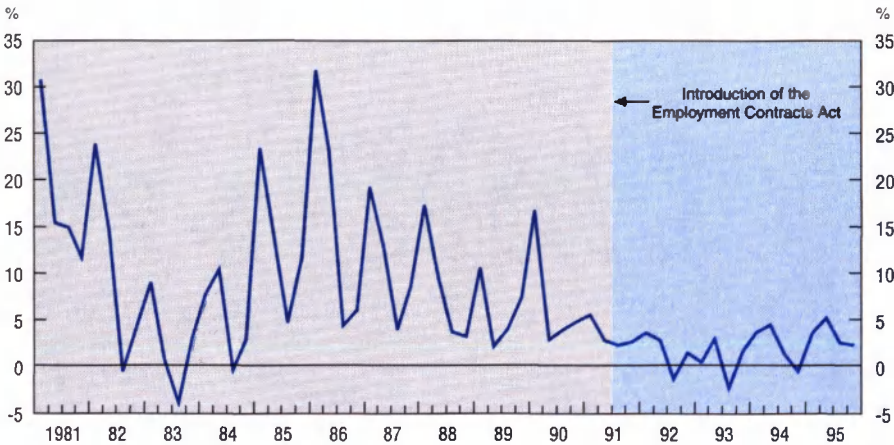
- *Third*, with the right to strike permissible only after the expiry of a contract, and secondary strikes made illegal, there has been a marked decline in labour unrest: the trend decline in labour unrest observed since the mid-1980s has continued and accelerated since 1991. This may be partly attributable to the fact that strikes are only permissible after the expiry of a contract and secondary strikes are illegal. It may also related to improved opportunities to resolve issues at an enterprise level.
- *Fourth*, in the first two years following the Act there was increased variation in the size of settlements, leading to a major readjustment of traditional wage relativities. Thus, data on collective settlements show some 10 per cent of employees experienced a decrease in basic rates, whilst other groups benefited from substantial increases.¹³ Approximately 60 per cent of settlements were for increases within 1 per cent of the mode increase (of zero per cent), compared with over 90 per cent of increases within 1 per cent in the early 1980s. Moreover, these figures are likely to understate the increase in wage dispersion given the shift towards individual employment contracts.
- *Fifth*, although there is not much evidence at a macroeconomic level, there is some evidence at a disaggregated level that the ECA has led to increased flexibility and improvements in productivity.¹⁴ Approximately 30 per cent of employers have obtained greater flexibility in the hours worked by their employees. There has been an increased use of performance-related pay. Survey responses from enterprises covering more than one-third of employees identify the ECA as being the single most important influence on productivity. Moreover, more than 70 per cent of private sector employers considered the previous system of industrial relations an obstacle to improving productivity. At the aggregate level there is evidence to suggest that employment now responds more quickly to changes in output than it did in the pre-ECA period (see Annex III for details).¹⁵

Assessing the overall impact of the ECA is more difficult. The ECA might be expected to affect macroeconomic performance in at least three ways: *first*, it should make the labour market function more efficiently by allowing relative wages to respond to skill shortages; *second* by implying a shift in bargaining power towards employers (as compulsory unionism is illegal, and strikes are less

likely and less costly for employers), it may have lowered the NAIRU; *third*, the ECA may allow more responsiveness to the differing labour needs of different firms, and the improved allocation could lower the NAIRU and raise productivity. It is, however, difficult to estimate what the effect of the ECA on the NAIRU might have been using standard econometric techniques, given its relatively recent introduction (see Box 2). The Act has clearly had a marked effect on the seasonal pattern of wages and earnings (Figure 17) as negotiation has become more staggered throughout the year rather than being concentrated on an annual round. Establishing more formal evidence of an impact on aggregate wage behaviour is hampered by the fact that it is difficult to detect any stable empirical relationships for aggregate wages, even in the pre-reform period. Estimated wage equations over the pre-reform period typically find no effect from unemployment on real wages, suggesting a high degree of real wage rigidity.¹⁶ Nevertheless, one empirical regularity which has been noted in the past, namely a link between changes in real producer wages and a measure of skill shortages,¹⁷ now appears to have broken down (Figure 18). One reason why such a relationship might possibly have existed in the past is that the more rigid pre-reform collective wage

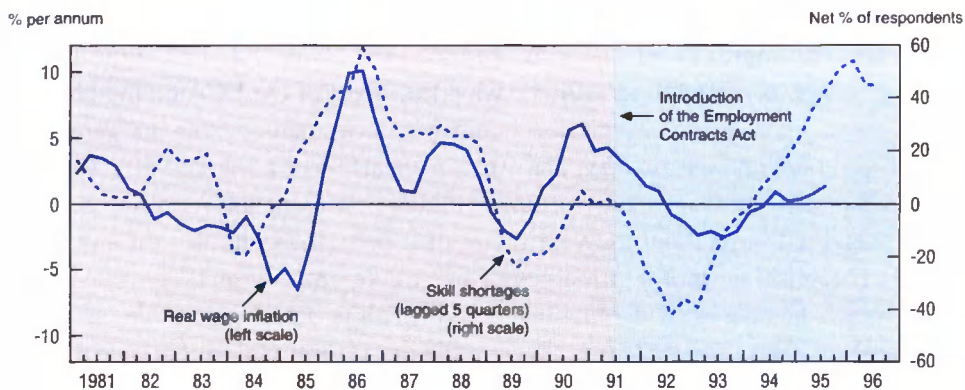
Figure 17. **THE CHANGING SEASONAL PATTERN OF PRIVATE SECTOR HOURLY EARNINGS**

Percentage change over previous quarter, annual rate



Source: Statistics New Zealand.

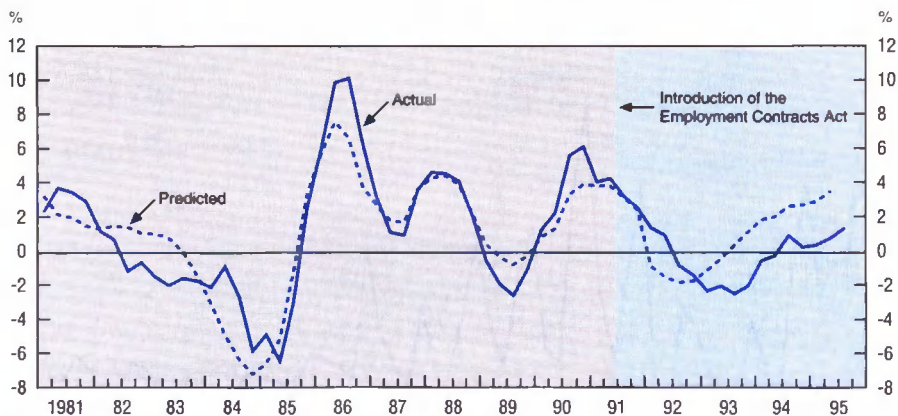
Figure 18. **REAL WAGE INFLATION AND SKILL SHORTAGES¹**



1. Real wages are defined as hourly earnings in the private sector deflated by the producer price index of output for all market groups. The skill shortage variable is the net percentage of respondents who perceive it to have become more difficult to find skilled labour as reported by the *Quarterly Survey of Business Opinion*.

Source: Statistics New Zealand.

Figure 19. **ACTUAL AND PREDICTED REAL WAGE INFLATION¹**



1. Real wages are defined as hourly earnings in the private sector deflated by the producer price index of output for all market groups. The predicted real wage inflation rate is the out-of-sample prediction of a wage equation estimated up until the introduction of the Employment Contracts Act (see Annex III for details).

Source: Statistics New Zealand and OECD Secretariat calculations.

Box 2. What is the current equilibrium rate of unemployment?

Given the major upheaval in the wage formation process since the introduction of the Employment Contracts Act (ECA) in May 1991 and the fact that so few observations are available in the post-ECA period, it is extremely difficult to estimate what the equilibrium rate of unemployment (that is consistent with stable inflation) might be using any formal econometric techniques. However, one indication of where it is relative to the current unemployment rate can be given by what is happening to real wages: if unemployment is below the equilibrium rate, average real wage costs should be increasing at a rate faster than trend productivity growth. This simple relationship is examined for the post-ECA period in Figure 20 below, where the current unemployment rate is plotted on the horizontal axis and the annual change in real wages (measured relative to producer output price inflation) less trend productivity growth is plotted on the vertical axis. The ideal measure of real wages is total wage costs, but since a series for this variable is only available from the end of 1993, real wages are also proxied by the annual change in average hourly earnings. Trend productivity growth is assumed to be $1\frac{1}{2}$ per cent per annum throughout, although this may be a conservative estimate.

Figure 20, Panel A shows that in virtually every quarter, barring a couple of quarters immediately following the introduction of the ECA¹ the change in real wages has been less than trend productivity growth (*i.e.* the plot is below the horizontal axis). This suggests that the unemployment rate has been consistently *above* the equilibrium rate in the post-ECA period, putting downward pressure on real wages. In the final observation for the third quarter of 1995, real wage costs are still falling by about 1 per cent per annum relative to trend productivity, suggesting that the equilibrium rate of unemployment is currently below 6 per cent. This view tends to be confirmed by Figure 20, Panel B, which shows that there has been little sustained upwards pressure on underlying inflation, despite a continuous fall in the unemployment rate over this period.²

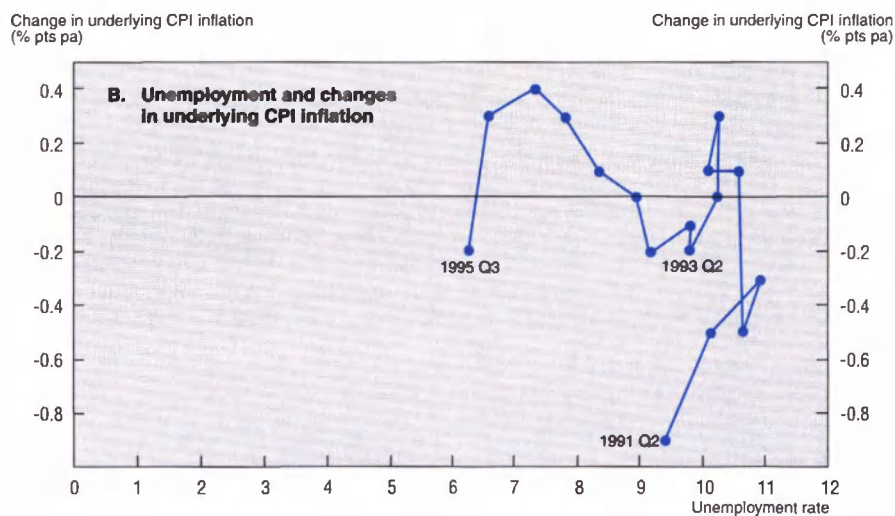
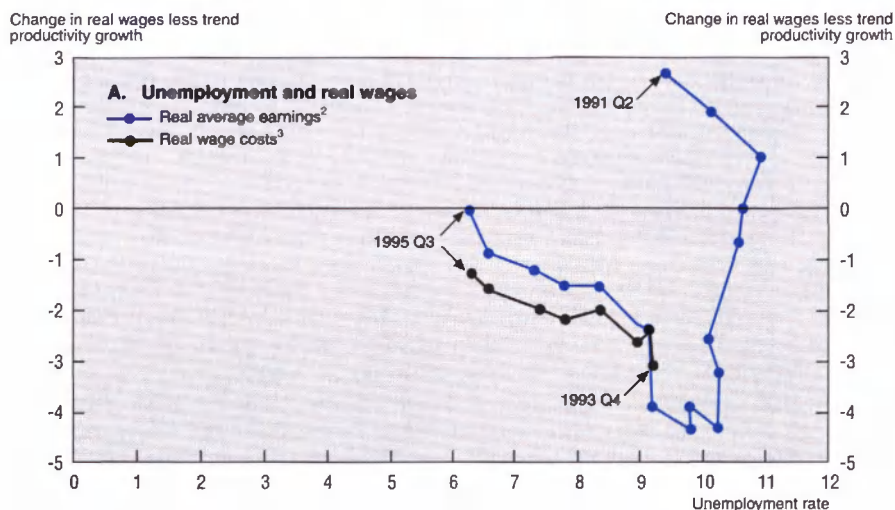
Nevertheless, some caution needs to be exercised in interpreting these simple relationships. On the one hand, if real wages respond with a lag, unemployment could already be at (or even below) the equilibrium rate, with any inflationary consequences not being observed until 1996. In addition, the measure of real wages based on average hourly earnings (which is arguably the inferior measure) was increasing at the same rate as trend productivity in the third quarter of 1995, suggesting that the equilibrium rate is about 6 per cent. On the other hand, if trend productivity growth is higher than the assumed $1\frac{1}{2}$ per cent per annum, then the equilibrium rate could be even lower than is suggested by Figure 20, Panel A.

1. The likely explanation why real wages seemingly increased so strongly in 1991 is nominal inertia: producer and consumer price inflation turned out lower than was generally expected, so that earlier nominal wage settlements delivered an unexpectedly high increase in real wages.
2. The upwards "blip" in inflation in early 1995 can partly be explained by a rise in fresh vegetable prices following unusual climatic conditions.

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**Figure 20. UNEMPLOYMENT AND INFLATIONARY PRESSURES
FOLLOWING THE EMPLOYMENT CONTRACTS ACT¹**



1. Real wages are measured as the annual change on the relevant wage variable less the annual change in producer price inflation and an assumed trend productivity growth rate of 1.5% pa.
 2. Based on average hourly earnings (ordinary time).
 3. Based on total labour costs.
- Source: OECD Secretariat.

formation system would have been more likely to preserve existing wage relationships, so that a skill shortage in a particular industry or occupation would have been more likely to lead to *generalised* wage inflation rather than just a change in *relative* wages.¹⁸ An attempt to quantify how important such a change in behaviour might be suggests that the skill shortages which emerged in 1994 and 1995 might, in the absence of the ECA, have been expected to lead to real wage increases of the order of 3½ per cent per annum rather than the ½ per cent per annum actually observed (see Figure 19 and Annex III for details).

Other empirical work to assess the effect of the ECA on employment and wages using disaggregated data concludes that, through reducing trade union membership, the ECA has led to an increase in employment and downward pressure on wages.¹⁹ In particular, industries that had the highest levels of unionisation prior to the ECA experienced the largest absolute decline in union density, which in turn helps explain why wage growth in this sector was only one-quarter of the economy-wide average in the post-ECA period and why aggregate wage inflation remained so low. In addition, the further reduction in unionisation in those industries which already had the lowest levels of unionisation, is estimated to account for about 1 per cent of the total growth in aggregate employment in the post-ECA period.

Policy requirements

As noted in the OECD *Jobs Study*, achieving a sustained reduction in unemployment requires a broad range of policies which not only increase the flexibility of the labour market, but also improve competition in the market for goods and services and enhance human capital. Given the wide-ranging reforms which have taken place in New Zealand over the past decade, there is probably less urgent need to take action on many of these fronts than is the case in most OECD countries. Nevertheless, among the areas identified as deserving attention, perhaps the highest priority should be given to the need to improve the skills and competences of the workforce. This is an area where New Zealand lags behind other OECD countries, and which is to a large degree probably responsible for its poor historical record of productivity growth. A second set of policy requirements arise because, as in many other OECD countries, recent trends in the labour market highlight the need to keep the tax and benefit system under

Box 3. The OECD Jobs Strategy: synopsis of recommendations for New Zealand

The *OECD Jobs Study* sets out a strategy based on nine recommendations for improving the ability of OECD economies to cope with structural change, through enhancing the ability to adjust and to adapt, and increasing the capacity to innovate and be creative. The nine distinct policy areas covered included the macroeconomic policy framework and the creation and diffusion of technological know-how. With respect to labour and product market flexibility it identified the need for initiatives in the following areas: working-time flexibility, the entrepreneurial climate, wage and labour cost flexibility, employment security provisions, active labour market policies, labour force skills and competencies, and unemployment and related benefit systems.

Following from the detailed review of labour market and employment performance and the assessment of policy requirements below, this chapter identifies the following priority areas for policy action:

Improve labour force skills and competence

- Reduce the numbers of persons leaving school early by ensuring that secondary education includes a vocational option leading to recognised industry qualification. This should include courses and/or work experience developed in the context of improved school-industry linkages.
- Continue with the implementation by the New Zealand Qualifications Authority of a framework for nationally recognised school, vocational and academic qualifications to ensure that skills and competences acquired through experience are adequately recognised. In so doing, ensure that the framework is linked to training provided through the Industry Training Organisations and the Training Opportunities Programme. The framework itself should be monitored and evaluated with a view to simplifying its structure and speeding up its implementation.
- Take steps to improve further the quality and efficiency of tertiary education by bringing public subsidies more in line with public benefits of tertiary education; rationalising payment of subsidies to public and private institutions so that they are treated equally; and further ensuring the autonomy of public institutions through changes in governance and ownership.
- Monitor closely the various initiatives aimed at raising Maori and Pacific-Islanders participation and attainment in education and pursue vigorously those policies which show the most promise.

Reform unemployment and related benefit system

- Continue to review the current tax/benefit system in order to reduce work disincentives.

Active labour market policies

- Consider further extending the policy whereby long-term receipt of unemployment benefit is conditional on acceptance of a place on a programme by which

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job search activities can be monitored and encouraged (such as *Job Action*), or participation in some other form of ALMP.

Enhance product market competition

- Separate the Producer Boards' regulatory and commercial functions, and "unbundle" farm-gate prices.
- Speed up the planned reduction in tariffs in sectors such as clothing, footwear, passenger motor vehicles, carpets and textiles where current levels of protection are very high.

Wage formation

- Monitor the effect of the minimum wage, particularly on teenage workers following the recent introduction of a differentiated youth minimum wage. If the minimum wage is to be kept, it should not be indexed or uprated regularly in a fashion which risks setting a precedent in wage bargaining;
- Consider further reform of the Accident Compensation Scheme to contain its escalating cost.

continuous review in order to ensure that its effect on discouraging work incentives is minimised. This requirement has been acknowledged in the last twelve months with the Government announcing a series of initiatives designed to further improve work incentives and facilitate the movement of welfare recipients back into the workforce. The Government also recognised the needs of specific groups, particularly Maori and Pacific islanders, with labour market and educational initiatives directed at these groups. This clearly reflects a concern that if further reductions in the aggregate unemployment rate are to be sustained then it is clear that there must be some closing of the gap between the performance of different ethnic groups. The following discussion provides some background analysis to the specific *Jobs Study* recommendations for New Zealand. A synopsis of these recommendations is presented in Box 3.

Enhancing the ability to adjust and adapt

Wage formation

Following the introduction of the ECA, New Zealand now probably has one of the most deregulated systems of wage bargaining in the OECD. However,

there are a couple of outstanding issues regarding the wage formation process, with respect, in particular, to the minimum wage and the costs of the system of insurance for accident compensation.

Given the broad thrust of current labour market policies it is perhaps surprising that New Zealand still operates a minimum wage. Relative to average earnings the minimum wage halved in the 1975-84 period, increased sharply in 1985, but has subsequently drifted downward. For adults, it is currently just over 40 per cent of average earnings, having been recently increased by 2 per cent (in nominal terms) for the first time since 1990. A youth minimum wage, applying to workers aged between 15 and 19, was introduced for the first time in 1994 and has been set at 60 per cent of the adult minimum wage. Evidence from across OECD countries is not clear-cut, but suggests that the negative effects of minimum wages on employment depend very much on their level relative to average earnings and that where there are negative effects on employment they impact disproportionately on young people. This result is confirmed by an empirical study on New Zealand,²⁰ covering the period prior to the introduction of youth minimum wage in 1994. It finds evidence that there are negative employment effects on young adult workers aged 20 to 24 (who were covered by the minimum wage). The study suggests that a 10 per cent increase in the minimum wage reduced the employment of young workers (aged 20 to 24) by about 3½ per cent. In contrast, the absence, prior to 1994, of a minimum wage for workers aged 19 and under was found to be beneficial to the employment of teenage workers. Nevertheless, while the possible effects on the employment of young workers is a concern, it should be recognised that the level of the minimum wage is not high by OECD standards and that in the context of a highly deregulated labour market there may be a case for retaining the minimum wage on equity grounds.

Unlike most OECD countries, social security is not largely financed out of a specific payroll tax, but rather out of general taxation. Consequently non-wage labour costs are among the lowest in the OECD. However, one of the main components of non-wage labour costs is the premium paid towards the Accident Compensation Scheme, which is a comprehensive no-fault scheme administered by a Crown-owned agency, the Accident Rehabilitation and Compensation Insurance Corporation (ACC). An employers' premium goes towards the cost of work-related accidents, with the size of the premium varying according to the industry.²¹ In the year to June 1994 the size of the employers' premiums

amounted to about 2 per cent of total employee compensation. The major concern with the scheme is that its costs have continuously escalated. Thus, in the year to September 1995, 12 of the 21 industry groups identified by the scheme experienced increases in ACC costs of between 10 and 20 per cent, and in the previous year 11 of the 21 industries experienced increases of more than 20 per cent. Moreover, because the scheme is a pay-as-you-go system where premiums only cover the current costs (with a contingency reserve), there is an estimated unfunded liability of about NZ\$ 7 billion (approximately 8 per cent of GDP) not covered by present reserves. The Government has recently announced that, in the future, work-fitness testing will be more strictly applied in an attempt to reduce the number of long-term claimants, who account for a high proportion of current costs. However, it is not clear that this measure will in itself be sufficient to contain costs. In any case, it is likely that ending the ACC's monopoly by introducing private competition would be beneficial.²²

Taxes and transfers

Despite major reforms over the past decade, New Zealand's tax and benefit systems remain largely based on the traditional model of full-time employment and low levels of unemployment. Unemployment benefits are paid at a flat rate, are income-tested depending on family circumstances, and are of indefinite duration, providing eligibility is maintained. Over the past decade, however, there have been substantial structural changes in the labour market. As noted earlier, the importance of part-time employment has increased substantially, real incomes for some low-paid jobs have fallen and the numbers claiming unemployment benefit as well as other benefits have risen significantly. As is the case in many other OECD countries, there is therefore a need to review the tax as well as benefit systems, and their interaction, in the light of these developments.

Several changes have been made to the unemployment benefit system since the late-1980s in order to promote more active participation in the labour market. In particular, tighter eligibility requirements were placed on those receiving such financial support through work tests, while the period between leaving or losing a job and receipt of benefit was lengthened. Moreover, New Zealand is one of the few OECD countries where a summary measure of unemployment benefit entitlements has been trending downwards since the late 1980s.²³ International comparisons of unemployment benefit systems, although fraught with difficulties, suggest

that replacement rates in New Zealand are relatively low for beneficiaries without children in the first year of benefit receipt (Table 11). However, in the fourth, fifth and subsequent years replacement rates are relatively high, reflecting the indefinite duration of the benefit. The absence of any reduction in the scale of benefits as the duration of unemployment increases is a feature of the New Zealand system that stands out. Given that some research²⁴ indicates a positive correlation between the duration of unemployment spells and a measure of the duration of unemployment benefits (the ratio of the long-term to the average replacement rate of unemployment benefits), there may be a case for reviewing this aspect of the New Zealand system. An alternative approach to cutting benefits may be to impose greater requirements to participate in intensive assessments and supervised job search activities, or some other form of active labour market programme, after a long period on benefit.

Unemployment benefit is only one of the forms of income support available. The other allowances, which include sickness, invalids and single parent benefits, can also have potentially important effects on work incentives. The number of individuals receiving single-parent benefits has risen substantially, particularly during the 1980s, and in 1995, with the decline in unemployment, was approaching the number receiving unemployment benefit (Figure 21). In addition, between 1987 and 1991 as unemployment rose sharply, the number of individuals on disability and sickness benefits increased by almost 50 per cent. Although unemployment has since fallen substantially, the numbers claiming disability and sickness benefit grew by a further 45 per cent (Figure 21). In 1994/95, the number of individuals receiving such support was equivalent to 44 per cent of those claiming unemployment benefit. Reviewing evidence across OECD countries, it has been argued that there are good grounds for believing that invalidity and sickness benefit do sometimes substitute for unemployment benefits.²⁵ While there may be a number of reasons why individuals transfer from unemployment to sickness or invalidity benefit,²⁶ transition between the systems may also reflect financial incentives. In New Zealand sickness and invalidity benefit are up to 14 per cent and 25 per cent (depending on age and family circumstances) more generous, respectively, than unemployment benefit. In contrast, several OECD countries have aligned benefits, at least across sickness and unemployment benefit schemes, to prevent such distorting incentives. Nevertheless, the scale of any problem should be kept in perspective – although the numbers claiming sickness

Table 11. Gross unemployment benefit replacement rates by duration categories and family circumstances¹

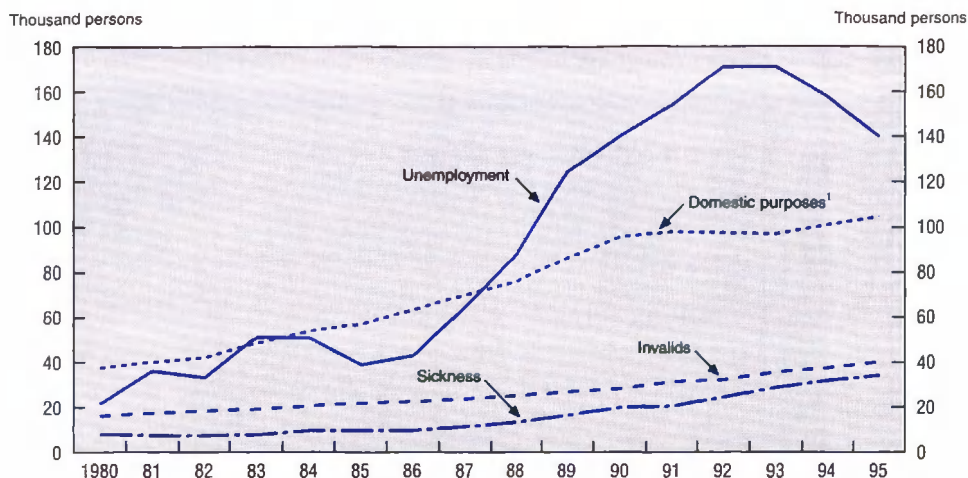
1993 data

	First year			Second and third year			Fourth and fifth year			Overall average
	Single	With dependent spouse	With spouse in work	Single	With dependent spouse	With spouse in work	Single	With dependent spouse	With spouse in work	
Australia	28	53	0	28	54	0	28	54	0	27
Austria	36	39	21	34	38	0	34	38	9	27
Belgium	51	51	47	36	53	30	36	53	30	43
Canada	58	58	58	13	24	0	13	24	0	27
Denmark	72	73	71	73	74	72	73	74	72	73
Finland	58	58	56	44	44	27	32	32	0	39
France	58	58	58	40	40	34	25	25	0	38
Germany	35	39	35	33	36	0	33	36	0	27
Greece	44	53	44	19	19	19	0	0	0	22
Ireland	39	55	39	28	44	5	26	52	0	31
Italy	10	11	10	0	0	0	0	0	0	3
Japan	30	30	30	0	0	0	0	0	0	10
Netherlands	70	70	70	47	60	18	34	49	0	46
NEW ZEALAND	30	51	0	32	53	0	32	53	0	28
Norway	62	62	62	47	47	47	8	8	8	39
Portugal	65	65	65	41	43	41	0	0	0	35
Spain	65	65	65	50	50	50	0	0	0	38
Sweden	79	80	79	6	6	6	0	0	0	28
Switzerland	70	70	70	19	19	19	0	0	0	30
United Kingdom	19	31	19	19	30	0	19	30	0	18
United States	27	29	25	5	9	0	5	9	0	12

1. Benefit entitlement before tax as a percentage of previous earnings before tax. Data shown are averages over replacement rates at two earnings levels (average earnings and two-thirds of average earnings). For further information see Chapter 8 of "The Jobs Study: Evidence and Explanations", OECD, 1994, Paris. Data refer to 1993 for all countries except France and the United States where the data refer to 1994.

Source: OECD Database on Unemployment Benefit Entitlements and Replacement Rates and New Zealand Treasury.

Figure 21. **NUMBERS OF PERSONS CLAIMING BENEFITS**



1. Domestic purposes benefit is primarily paid to single parents.

Source: New Zealand Department of Social Affairs.

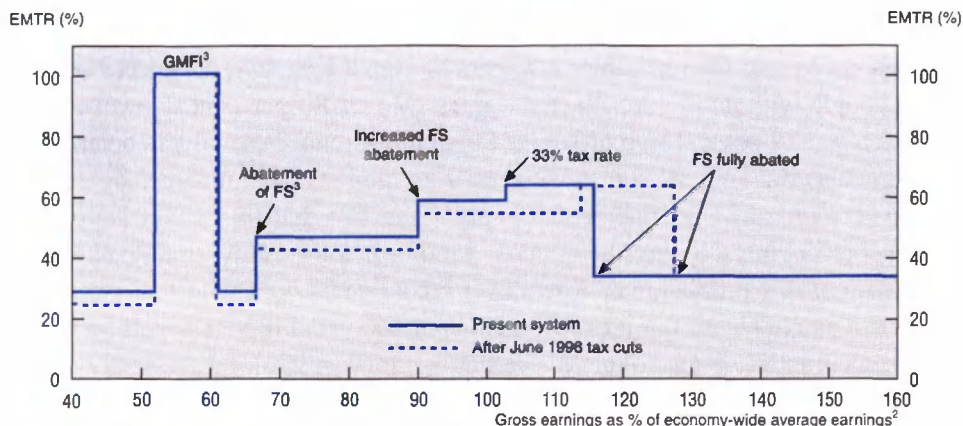
and invalidity benefits have grown, they are by no means exceptional in comparison with many OECD countries. Thus, the incidence of absence from work as a result of sickness in New Zealand is similar to the median across 19 OECD countries surveyed.²⁷ Moreover, in New Zealand the numbers currently claiming invalidity benefit together with those receiving ongoing income support from the Accident Compensation Scheme are equivalent to about 2½ per cent of the population of working age, which is low in comparison with most OECD countries and much lower than some countries (including Finland, Norway, Netherlands and Italy) where the proportion is over 8 per cent.²⁸

One major potential concern about the interaction of the tax and benefit system is the creation of a “poverty trap”. It exists when the combination of higher taxation and reductions in benefits associated with taking on additional work absorb much of the additional earned income – with the result that individuals consider themselves better off remaining on benefits and not doing the additional work. In New Zealand effective marginal tax rates facing beneficiaries can currently rise close to 100 per cent once other earnings exceed NZ\$ 80 per

week. In practice, in most OECD countries few people are affected by *current* poverty traps in the sense that they are actually paying high marginal tax rates. For example, in New Zealand, just over 2 per cent of married couples without children are paying marginal rates in excess of 50 per cent, and only 4 per cent of single people without children face tax rates of over 80 per cent. However, the scale of potential poverty trap problems for single parents especially is potentially much greater, since 75 per cent of single parent families have incomes below the level where marginal tax rates rise sharply – the fact that this might happen is presumably one reason why they choose to earn income below this level.²⁹ The magnitude of this problem has grown over recent years both with the rise in the number of single parent families and the increased availability of part-time work. Replacement rates are also likely to present the greatest work incentives problem for beneficiaries with children, because beneficiaries have until now received assistance for children through the benefit system which was additional to that received by both earning and beneficiary families through the Family Support Tax credit. The recently-announced changes to the benefit abatement system and the introduction of an Independent Family Tax Credit (discussed further below) seek to address these problems.

For working families with children, where the abatement of Family Support Tax Credit³⁰ (and now the new Independent Family Tax Credit) in combination with income taxation can produce a fairly high marginal effective tax rate (EMTR) over a range of incomes, as illustrated in Figure 22.³¹ There are about 250 000 families in receipt of the Family Support Tax Credit (of which about 110 000 are not in receipt of benefit). Those families in work would face EMTRs of up to 58 per cent or higher over a wide range of incomes.³² It is possible for families with two or more children to be simultaneously receiving Family Support and paying the top rate of income tax, at which point they will face an EMTR of 63 per cent (composed of a 33 per cent income tax rate and 30 per cent benefit abatement rate). Although such EMTRs are a potential source of disincentive to work, they are significantly lower than in some other OECD countries (notably Australia, France, Germany, Ireland and the United Kingdom) where some working families face EMTRs of between 80 and 105 per cent. Moreover, the planned future income tax cuts (also illustrated in Figure 22), discussed further below, will go some way towards addressing the problem.

Figure 22. **THE EFFECTIVE MARGINAL TAX FACED
BY A WORKING FAMILY WITH TWO CHILDREN¹**



1. The EMTR is calculated for gross annual earnings received in addition to benefit.
 2. Average earnings for the whole economy are taken to be \$NZ 30 000.
 3. GMFI stands for "Guaranteed Minimum Family Income", FS stands for "Family Support"; see text for explanations.
- Source: New Zealand Treasury and OECD Secretariat calculations.

A widening in the income distribution occurred in the second half of the 1980s, but since the early 1990s there appears to have been little change in this regard.³³ In the ten years to March 1994, the real disposable incomes of both the lower and middle-income quintiles have fallen in absolute terms by 4 and 5 per cent, respectively³⁴ and it is only those of the highest quintile which have risen, by 2 per cent, as illustrated in Figure 23.³⁵ These trends are primarily explained by the loss of employment in the late 1980s, although cuts in benefit rates³⁶ and reforms to the tax system (which implied a switch from direct to indirect taxation and a flattening of the income tax rate schedule) have played a role as well. This widening of the income distribution has been accompanied by increased employment opportunities for the low-skilled; it may also have enhanced the incentives for people to upgrade and develop their qualifications.

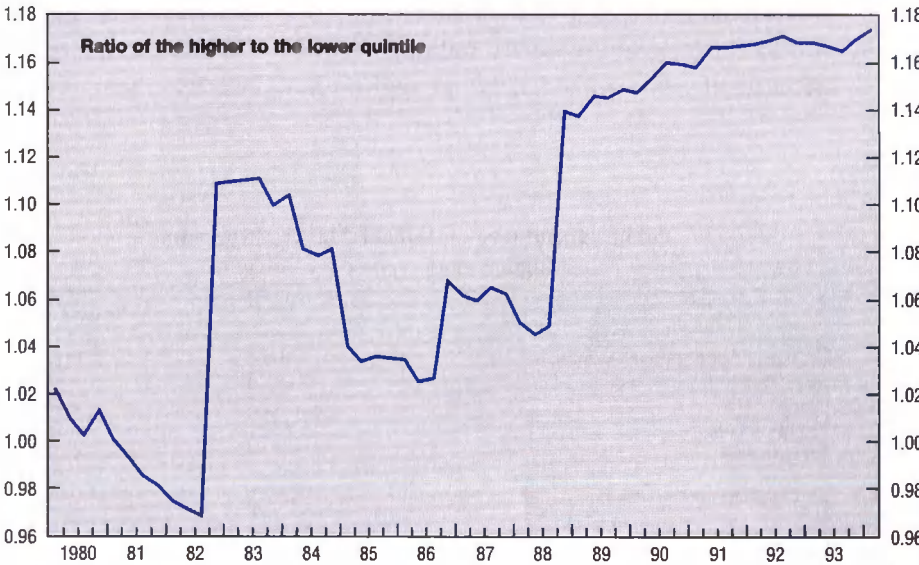
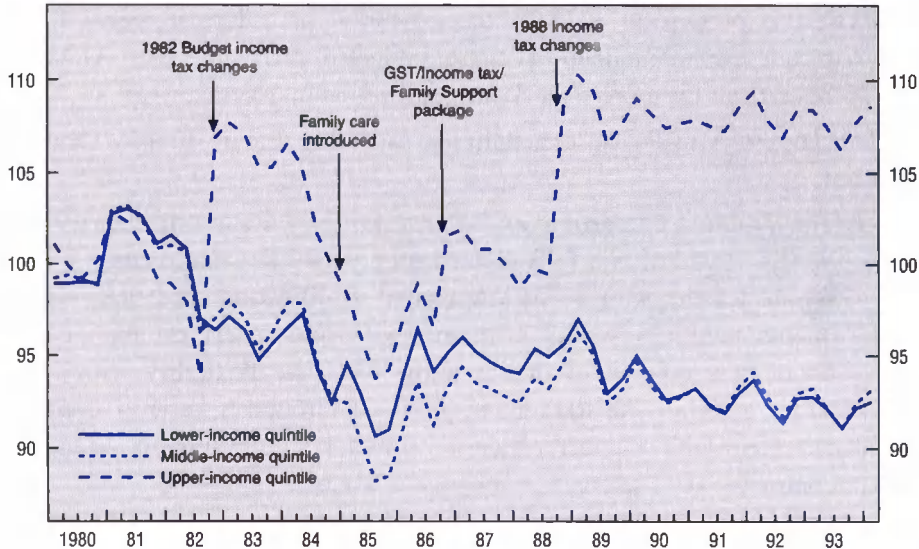
Active labour market policies

As the unemployment rate has fallen, total spending on active and passive labour market policies have dropped from nearly 3 per cent of GDP in the early

Figure 23. THE EVOLUTION OF REAL DISPOSABLE INCOME
Full-time wage and salary earners

Index, year ended March 1981 = 100

Index, year ended March 1981 = 100



Source: Statistics New Zealand.

1990s to under 2 per cent in 1994-95. At the same time, the proportion of total expenditure devoted to active labour market policies (ALMPs) (Table 12) has risen from about 30 to 35 per cent, which is slightly above the OECD average. Moreover, this proportion is likely to rise further in future if recent falls in unemployment are maintained, because budgeted provisions for ALMPs in 1995/96 have risen by more than 3 per cent in nominal terms.

The largest ALMPs by expenditure (excluding Public Employment Services) are:

- The *Training Opportunities Programme* (expenditure of NZ\$ 191 million in 1995/96) is a fully-funded programme targeted mainly at recent school leavers with no or low formal qualifications and the long-term unemployed (26 weeks or more) with low levels of qualifications, although a number of quotas allow for some flexibility within these target criteria. The training is provided through a variety of training providers with whom the Education and Training Support Agency has contracts.
- *Taskforce Green* (expenditure of NZ\$ 38 million in 1995/96) sponsors projects which are of benefit to the environment or community. The programme provides a subsidy for each participant who has been unemployed for at least 26 weeks, although certain "priority client" groups are also eligible immediately on registration. Priority clients include

Table 12. **Public expenditure on Labour Market Programmes**

1994/95 (June year)

	NZ\$	Per cent of GDP
1. Public Employment Services and Administration	100.4	0.12
2. Labour market Training	290.5	0.34
3. Youth Measures	62.8	0.07
4. Subsidised Employment	132.1	0.15
5. Measures for disabled	8.8	0.01
6. Total Active Measures (Sum 1 to 5)	594.6	0.69
7. Unemployment Compensation	1 115.1	1.29
8. Total (6 + 7)	1 709.7	1.97

Source: New Zealand Treasury.

people returning to the workforce after long-term unregistered unemployment, older job seekers, refugees, ex-TOP trainees (after four weeks on the register) and people with disabilities.

- *Job Plus* (expenditure of NZ\$ 97½ million in 1995/96) is a temporary wage subsidy paid to employers who provide permanent full-time work for those who have been unemployed for at least 26 weeks. As with Taskforce Green, "priority clients" are also eligible immediately upon registration.
- *Youth Action* and *Job Action* (funded out of NZ\$ 78 million available for the public employment service in 1995/96). *Youth Action* is a programme of individualised assistance for 16 to 20 year old job seekers. Following an initial interview, participants are referred to activities which will help them find work, or directly to a job. *Job Action* is a similar programme which now covers all people unemployed for more than two years and some people unemployed for one year or more.

Experience across OECD countries suggests that the Public Employment Service can play an important role in ensuring that the long-term unemployed maintain job search and availability for work. In this respect the results from the new initiative *Job Action* (modelled on a similar programme in the United Kingdom), appear promising. *Job Action* is an employment assistance programme for those unemployed for two years or more, consisting of an interview, workshop and follow-up case management. An evaluation study³⁷ suggests that the programme has had a positive, but modest, effect in moving participants into paid full-time work, as well as improving job search commitment. The scale of this programme has so far been small: the budget for 1994/95 was only NZ\$ 5 million (less than 1 per cent of total spending on ALMPs) and in mid-1995 the number of people being "case-managed" was about 30 per cent of the total stock of those who have been unemployed for more than two years. However, from the beginning of 1996 the government has extended the programme (as part of the *Focus on Employment* package, discussed further below) to include all those unemployed for more than two years, with participation a requirement for continued receipt of benefit. This move towards the provision of intensive individualised assistance to the very long-term unemployed has been made possible to a large extent by the improvements in the labour market which have enabled many short-term job seekers to move into employment with the

minimum of assistance. If the expansion of *Job Action* proves to be successful, given the indefinite duration of benefits in New Zealand, there may be a case for further extending the policy to make acceptance of a place (if offered) on such a programme, or some other form of ALMP, a requirement for continued receipt of benefit by shorter durations of the long-term unemployed (such as those unemployed for over one year). Finally, as in other OECD countries, further efforts should be made to evaluate existing ALMPs, in order that the design and implementation of future programmes can be improved.

Increasing the knowledge base, efficiency and innovative capacity

Upgrade skills and competencies

During the 1980s, productivity growth in New Zealand continued to be, as it was in the 1960s and 1970s, among the lowest in the OECD. Low levels of labour force qualifications may partly explain this poor performance.³⁸ Indeed at the present time, survey evidence suggests that employers are finding it very difficult to hire skilled labour. An additional concern is that an important cause of the varying incidence of unemployment faced by different ethnic groups may be differing levels of educational attainment.

The historical problem in school education is not one of academic performance, which is reasonable to good (depending on subject) in international comparisons, but rather a weak emphasis on vocational training and low participation in education among New Zealanders in their late teens. It was only as recently as 1993 that the age for compulsory education was raised from fifteen to sixteen. Moreover, while in most OECD countries the vast majority of pupils continue with either full-time or part-time education, up until the late-1980s the majority of teenagers in New Zealand had left the education system by the age of seventeen.

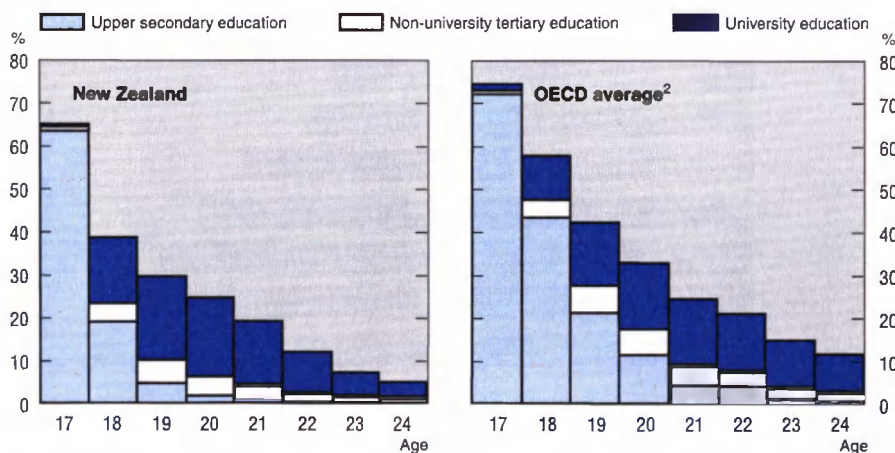
Participation in formal education has, however, increased sharply in recent years with the enrolment rates of seventeen and eighteen year-olds having risen to 65 per cent and 39 per cent in 1992, from 35 per cent and 19 per cent in the mid-1980s, respectively.³⁹ There are a number of possible explanations for this change: the greater relative availability of jobs which benefit from extended education; increased returns to further education; the increased availability of vocational courses for senior secondary school students; and rising unemploy-

ment which discouraged teenagers from entering the job market. However, while it has narrowed, a substantial gap with enrolment rates in other OECD countries still remained by 1992, as illustrated in Figure 24.

Enrolment rates are imperfect indicators of educational achievement: some students may be repeaters and others may not complete the level. Nevertheless, data on the educational attainment of the population show that 43 per cent of the population of 25 to 64 year olds in 1992 had less than an upper secondary education. Although this share is not markedly different from an average of OECD countries, it is more than double that of countries with the lowest share (Figure 25). While some workers do acquire “informal” qualifications through various forms of education and training,⁴⁰ it remains true that there are still large numbers of adults with few formal qualifications.

In contrast, New Zealand has a relatively high attainment rate in the area of tertiary education, with one of the highest proportions of the population with such education (particularly non-university) of any OECD country (Figure 25). Although unemployment across all levels of educational attainment rose during

Figure 24. **ENROLMENT RATES IN FULL-TIME EDUCATION¹**

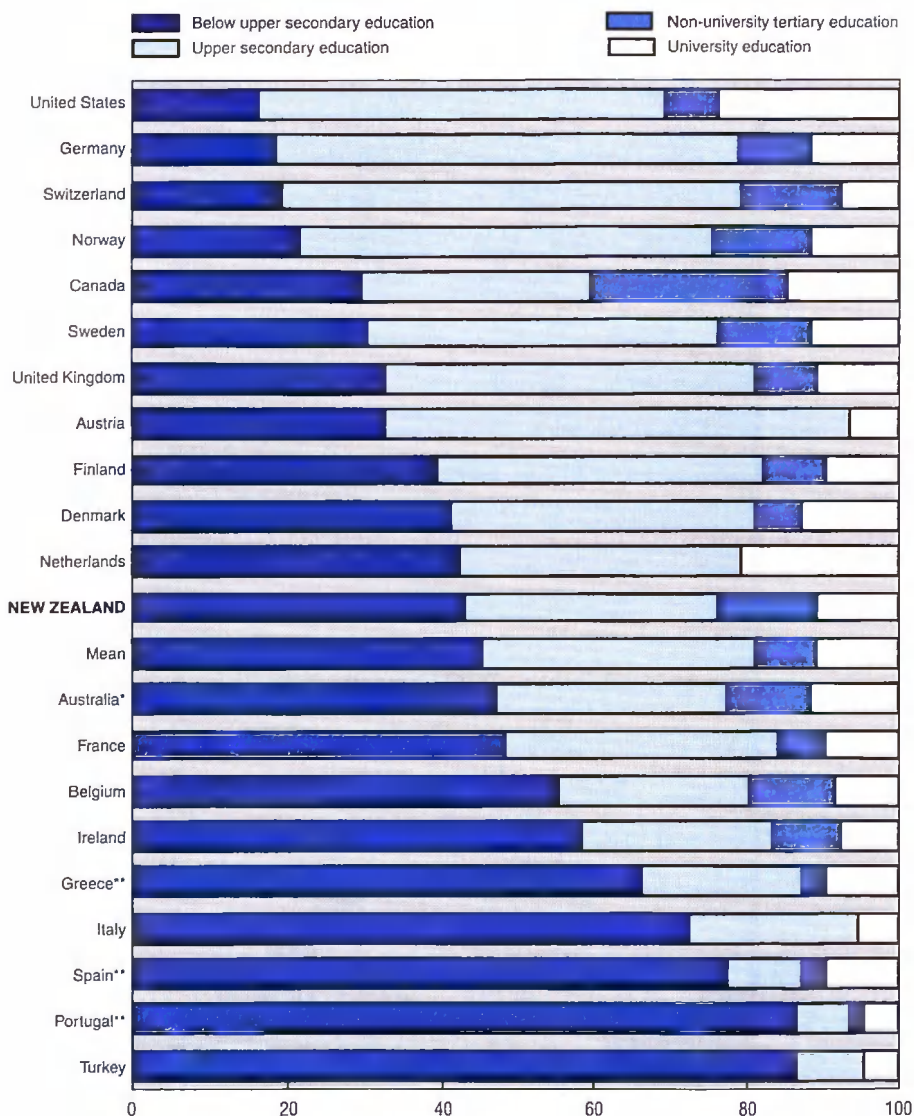


1. 1992. Net full-time enrollment rates by level of education in public and private institutions.

2. Excludes Germany, Italy, Luxembourg and Portugal.

Source: OECD, *Education at a Glance*.

Figure 25. **EDUCATIONAL ATTAINMENT IN OECD COUNTRIES¹**



1. Percentage of the population 25 to 64 years of age that has attained a specific highest level of education in 1992 (* 1993 data; ** 1991 data).

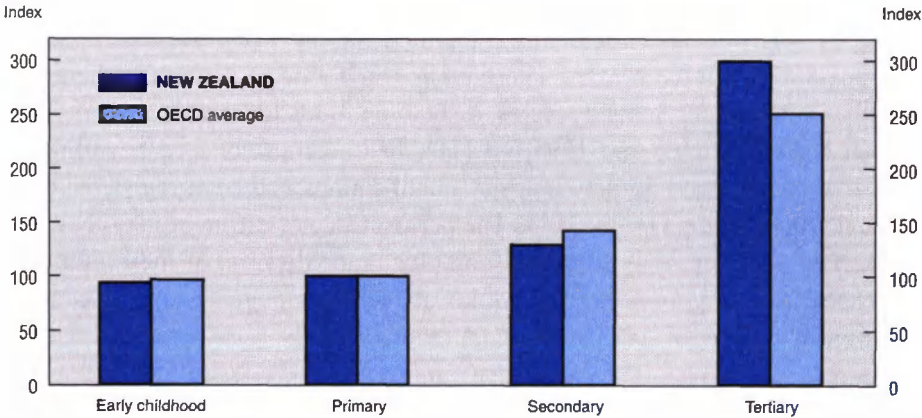
Countries are ranked by proportion of the population attaining educational levels below upper secondary.

Source: OECD, *Education at a Glance*.

the recent recession, those with a higher level of education tended to fare better: in 1992 the average unemployment rate for a person aged 25 to 64 with tertiary education qualifications was about half the aggregate unemployment rate of the same age group, whereas the unemployment rate for someone without even a secondary education was 40 per cent above the aggregate rate (a similar distribution can be found across an average of OECD countries).⁴¹ High enrolment in tertiary education is probably in part a reflection of the relatively high rates of subsidy which it receives in comparison with other levels of education (Figure 26).

Recent reforms in the structure and financing of tertiary education will lead to greater autonomy and a reduction in tuition subsidies (for further discussion see Chapter IV). The reforms are intended to bring overall subsidy levels closer in line with the perceived net public benefits of further education, as well as to encourage students to take a more considered view of the cost of their tertiary education choices and so put greater pressure on tertiary institutions to be more responsive to students needs. At the same time there are also increased possibili-

Figure 26. **RELATIVE EXPENDITURE PER STUDENT
BY LEVEL OF EDUCATION¹**
Primary education = 100



1. 1992. Calculated for public and government-dependent private institutions.
Source: OECD, *Education at a glance*.

ties for institutions to respond to demand, by opening up new option and degree programmes. There is some evidence that the reforms have had some effects in this direction. For example, there has been a growth in the number of students taking vocationally orientated degrees and institutions have been increasingly engaged in attempts to market themselves and compete on price.

In order to improve the general recognition of tertiary qualifications as well as to try to break down the division between academic and vocational qualifications, a new government agency, the New Zealand Qualifications Authority (NZQA), was set up in 1993 with the view to developing a National Qualifications Framework. This framework is competency-based on units of learning, with achievement assessed according to clearly defined standards, and spans general, vocational as well as industry-based education and training across the post-compulsory sector. A key aim of such a framework is to provide a high degree of flexibility so that students are able to combine learning units across various qualifications from different places, working at their own pace. Initial feedback from employers' organisations suggests that, although there is general support for the initiative, there is scope for substantial simplification, which would have the further advantage of speeding up implementation.

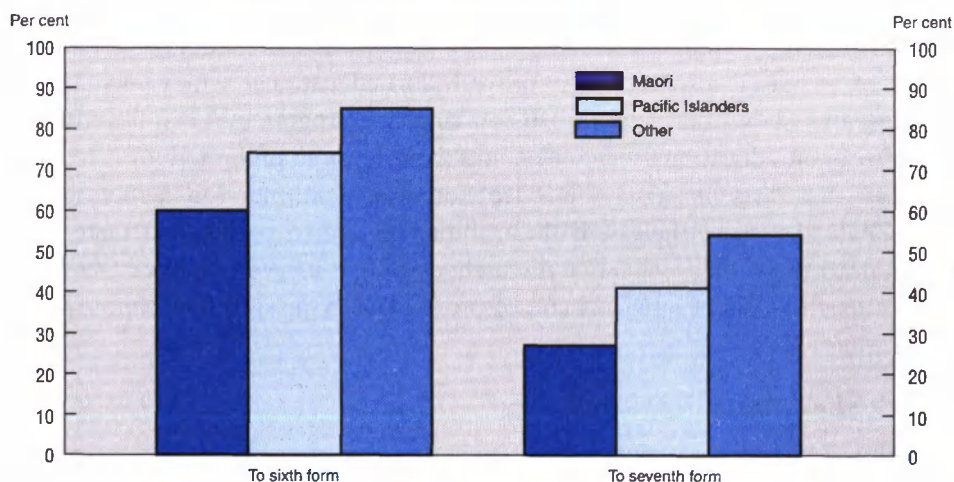
The government has also established a new system of industrial training following the passage of the Industry Act in 1993. This system is industry-led, with Industry Training Organisations (ITOs), which are partly government funded and partly industry funded, being given the sole responsibility in legislation for setting standards for training qualifications in their respective industries in co-operation with the NZQA. These bodies do not provide training themselves but rather act as supervising agencies, disbursing funds to training providers on a contract basis. Up until mid-1995, 46 ITOs had been established covering over half the workforce and 55 new industry qualifications had been registered on the National Qualifications Framework. The performance of different ITOs has so far been mixed and there may be some scope for rationalisation of their number. In this respect, the largely voluntary nature of the ITOs augurs well for continual evolution of training in the direction of industry needs.

Maori and Pacific-Islanders have much lower rates of educational attainment than the rest of the population, and this factor, together with a youthful demographic structure, explains a large part of their higher incidence of unemployment.⁴² Although educational outcomes for these two groups have been

improving over the past decade, so has the educational status of the rest of the population – leaving a persistent gap. The retention rates of Maori, and to a lesser extent Pacific Islanders, are consistently lower throughout all levels of secondary school education. Thus, for example Maori retention rates in the seventh form⁴³ are half those of other students (Figure 27). The gap is even more marked in tertiary education, with non-Maori 19-year-olds three times more likely to be in school than Maoris of the same age. Moreover, at all levels of secondary school Maoris and Pacific-Islanders are less likely to achieve above average grades, more likely to leave school without any qualification, and less likely to obtain any post-school qualification (Table 13).

There are, however, important differences both between the educational attainment of those Pacific-Island people who are New Zealand-born and those who are overseas-born, and across generations. Such differences are consistent with what might be expected from a migrant population. Thus, the older (mostly migrant) generation has few qualifications, whereas the disparity between younger generations of Pacific Islanders, who are more likely to have been born

Figure 27. **SECONDARY SCHOOL RETENTION RATES¹**



1. 1995. Secondary education is completed at either form 5, 6 or 7 (ages 15 to 17).

Source: Ministry of Education.

Table 13. Educational qualifications, by age and ethnic group

1991 data

Age	No qualifications (per cent)			Post-school qualification (per cent)				
	Pacific Islands	Maori	Total New Zealand	Pacific Islands	Maori	Total New Zealand	Pacific Islands New Zealand-born	Pacific Islands Overseas-born
15-24	26	37	19	17	18	25	17	18
25-34	41	51	26	26	26	45	32	24
35-44	54	56	32	22	27	45	35	20
45-54	63	64	42	20	22	40	35	19
55+	75	68	45	11	15	27	26	11
Total	44	50	32	20	22	25	22	19

Source: Census. Statistics New Zealand.

in New Zealand, and the rest of the population is less marked (Table 12). This would suggest that part, but not all, of the problem of the lower educational attainment of Pacific-Islanders can be attributed to the transitional difficulties following recent immigration.

The problem of persistent Maori under-achievement has led to the creation of new Maori educational structures and an extension of bilingual and other Maori-focused programmes in mainstream schools, and in particular to the allocation of increased resources to improve Maori educational achievement. Overseas research shows that total immersion language programmes can have beneficial effects on educational outcomes, and there is some preliminary evidence to suggest that this is also the case for Maori immersion education in New Zealand.⁴⁴ Nevertheless, if these initiatives are to be pursued there is an urgent need for further evaluative research, as well as a need to address shortages both of teachers fluent in Maori and of professionally-produced teaching materials in Maori.⁴⁵

Product market competition

New Zealand implemented a comprehensive programme of structural reform beginning in the mid-1980s, seeking to enhance its competitiveness and promote economic growth. Nevertheless, there remains scope for further initiatives to ensure continuing improvements in efficiency, and to sustain economic growth

and job creation. The following paragraphs highlight two particular areas where further actions could promote competition, namely more rapid reductions in selective tariffs and action to limit the role of Producer Boards in the processing and marketing of agricultural products.

- Reductions in selective tariffs

Although it was heavily protected throughout the 1970s and early 1980s, there was a major effort to increase the openness of the New Zealand economy in the mid-1980s.⁴⁶ This involved the phasing out of import licensing, the rationalisation of the tariff structure and the removal of distortionary specific tariffs. A five-step tariff reduction programme was implemented over the period 1988-92; a subsequent programme was put in place to cut tariffs by another third by 1996. Currently New Zealand has no import licensing, a comparatively high proportion of imports which are tariff-free and an overall average tariff rate which is similar to most other OECD countries (Table 14). Following the latest round of cuts, most *ad valorem* tariffs will be in the range 8 to 12 per cent by July 1996. However, tariffs in a selected number of goods are particularly high. This is reflected in the fact that "tariff spikes" (defined as those exceeding three times the overall simple average tariff rate) are more prevalent than in other OECD

Table 14. Structure of Most Favoured Nation (MFN) tariffs in OECD countries¹

Indicators	Per cent									
	United States		EU		Japan		Australia		New Zealand	
	1988	1993	1988	1993	1988	1993	1988	1993	1988	1993
Overall simple average MFN tariff rate	6.6	6.8	7.5	7.6	7.2	6.5	15.6	9.0	14.9	8.5
Average MFN rate for all lines subject to duty	8.0	7.9	8.3	8.5	9.6	10.0	17.1	13.3	23.3	16.5
Tariff-free items	17.4	14.4	10.5	10.8	24.8	35.1	15.0	7.0	15.0	8.0
Weighted average for all MFN tariff rates ²	4.2	4.2	6.0	6.1	4.3	3.4	8.6	42.9	36.0	48.7
Domestic tariff "spikes" ³	4.7	3.6	2.3	2.4	5.1	7.0	2.4	8.9	2.5	6.2

1. The MFN tariff rate should be distinguished from the so-called "collected" tariff rate, namely tariff revenue as a proportion of the value of a given group of imported products. The MFN tariff rate bears a better relation to the "marginal" tariff rate, which is the most appropriate indicator of the potential incentive effects of such duties.

2. OECD import weights.

3. Domestic tariff "spikes" are defined as those exceeding three times the overall simple average MFN rate.

Source: OECD Secretariat.

Table 15. Programme of future tariff reductions¹

Tariff in 1996		Tariff in 2000
Under 5 per cent		0 per cent
5-15 per cent	General, some textiles, motor vehicle components	5 per cent ²
15-20 per cent	Tyres, some textiles	10 per cent
Over 20 per cent	Carpets, apparel, footwear, motor vehicles	15 per cent

1. To be implemented in four approximately equal annual steps from July 1997 to July 2000. Other specific tariffs will be reduced in line with the associated *ad valorem* rate of duty, with the exception of those applying to imported used motor vehicles which are to be reviewed.

2. Motor vehicle components is an exception with the planned tariff reduction to 10 per cent in 2000.

Source: New Zealand Treasury.

countries, with a high proportion (about 15 per cent) of tariff items still set at over 20 per cent. Thus, even after the latest round of tariff cuts have been implemented, certain sectors will remain sheltered by high tariffs, including clothing (30 per cent), footwear (30 per cent for adults and 25 per cent for children), passenger motor vehicles (25 per cent), carpets (23 per cent), and textiles (20 per cent or less). Although the immediate prospects for the domestic textile, clothing and footwear industries (which currently account for about 2½ per cent of total employment) would deteriorate following a reduction in their current level of protection, it is likely that there would be some compensating increase in the number of firms moving into the higher value-added niche markets.⁴⁷ However, it is expected that job losses in the motor vehicle assembly industry (which accounts for less than 1 per cent of total employment) are likely without the current high levels of protection. A recent review introduced a further programme of progressive tariff reductions to be implemented from July 1997, with the objective of roughly halving the tariffs on many goods and achieving a maximum of 15 per cent by the year 2000 (Table 15). A further review of post-2000 tariffs is scheduled to take place in 1998. The Government has stated that it will determine in the 1998 review how to move towards a zero end point under a unilateral domestic tariff reduction programme.

- Producer boards

Although New Zealand is one of the few OECD economies to have comprehensively liberalised its agricultural production, this is not the case for processing and marketing. The latter remain firmly controlled by a host of regulations including statutory export monopolies, restrictions on entry, and institutional

control over marketing. Most of this regulation is implemented by Producer Boards, at present influencing approximately 80 per cent of all agriculture and horticulture exports.⁴⁸ The major marketing boards include the Apple and Pear, Dairy, Kiwifruit, Meat Producers, Wool, and Game Industry Boards, as well as the Horticultural Export Authority. Their functions fall into three main categories: regulatory (*e.g.* licensing exports, quality control and transportation organisation), commercial (*e.g.* processing, marketing and purchasing), and servicing (*e.g.* advisory services, research and development, and marketing strategies).

Of the Boards' roles, it is their commercial activities which have consistently come under criticism. These generally concern their potential stifling effect on enterprise, innovation and competition (both in production and distribution) and their distorting effect on price signals to producers. One example is the "bundling"⁴⁹ of prices from several activities into a single payment to farmers, which may not reflect current market prices, implying the cross-subsidisation of different product lines and the inclusion of a margin for the Board's marketing and other functions.

Over recent years there has been gradual change in the operation of the Producer Boards, including the removal of most price stabilisation and producer income support policies, particularly in the meat and wool industries, and the development of more explicit commercial performance indicators. Gradual change is also occurring to the organisational structure of the Boards, with moves towards a more transparent separation of commercial and regulatory activities.⁵⁰ Nevertheless, further and more rapid change is desirable.

Technology and innovation

The capacity of an economy to adapt to change and to improve living standards depends partly on its ability to harness new technologies and to innovate successfully. As in other small OECD economies research expenditures in New Zealand show a large dependency on public funds, with government financing about 60 per cent of total research. While total research and development expenditures remain low by OECD standards, this is perhaps not surprising for an economy dominated by small businesses (90 per cent of all businesses employ less than ten staff), where the industrial structure reflects the natural resource base of the economy. Moreover, it is likely that increased competition (particularly through reductions in tariff protection) has led to an economy which is more

adaptable and so better placed to take advantage of changes in technology. Overall, therefore, the policy implications in this area are not clear cut and any more activist stance would need to be judged against two criteria: *first*, the presence of market failure; *second*, the ability of the authorities to correct them in a cost-effective manner.

Recent policy actions

Over the last twelve months the Government has announced a number of major initiatives aimed at improving working incentives and strengthening both the obligations on and the assistance available to beneficiaries to find work. This has culminated in the most recent announcement in February 1996 of significant tax rate reductions and changes to family assistance.

In response to the growing numbers claiming Invalids Benefit and Sickness Benefit the government indicated in the 1995 Budget that it would be tightening eligibility to these benefits through a range of measures. In particular: only doctors nominated by the Department of Social Welfare will be able to assess eligibility for Invalids benefit; there will be second opinion examinations of applicants for Sickness and Invalids benefits by doctors familiar with the legislative requirements; initial medical certificates for Sickness benefit applicants will be for shorter periods than at present; doctors will specify dates when Invalids beneficiaries should have their medical condition re-assessed; and there will be targeted re-assessments of existing Invalids beneficiaries, to ensure they are eligible for the benefit (*e.g.* some may have qualified under earlier, less strict criteria, and have remained on the benefit). Overall, these changes are designed to ensure that where appropriate Invalids and Sickness beneficiaries move onto benefits more suited to their individual circumstances (for example, unemployment benefit) or off benefit completely.

A number of labour market initiatives were announced in the *Focus on Employment* package in October 1995.⁵¹ Together with a new *Youth Employment Strategy* and the 1995 Budget measures, the estimated total cost of new labour market initiatives announced in 1995 was about NZ\$ 500 million (about 1/2 per cent of GDP) over a three-year period.

As part of the *Focus on Employment* package, extensions to a number of active labour market policies were announced such as: widening the eligibility of

the *Youth Action* programme to all 16 to 20 year olds registered as unemployed for thirteen weeks or more, phased in from January 1996; extending the *Job Action* programme to all job seekers registered as unemployed for two years or more and to 5 000 job seekers assessed as being "at risk" of very long-term unemployment at 52 weeks registration; and allowing those unemployed for two or more years to participate in *Taskforce Green* Projects for up to one year (rather than the six months at present) at the discretion of their case manager. In addition, the Government announced a range of new initiatives targeted at assisting Maori and Pacific Island disadvantaged job seekers.

In mid-1995, the Government announced that it would be raising the school-leaving age to 17 years from the beginning of the 1998 academic year. In the meantime, the major new spending initiative announced in the 1995 Budget related to increased expenditure on education: over the next three years expenditure is planned to rise by 7.2 per cent in nominal terms.

In October 1995, the Government took a number of measures aimed specifically at improving the educational achievement of Maori and Pacific Island students. An additional NZ\$ 15.6 million will be spent over the next three years on improving Maori educational achievement. Just over half of this will be spent on *Kura Kaupapa Maori*, schools where the Maori language is the medium of instruction, with the remainder being spent on Maori language teacher training. The major initiative concerning Pacific Islanders was the spending of NZ\$ 3 million over three years in order to increase the number of licenced early childcare centres serving the Pacific Island population.

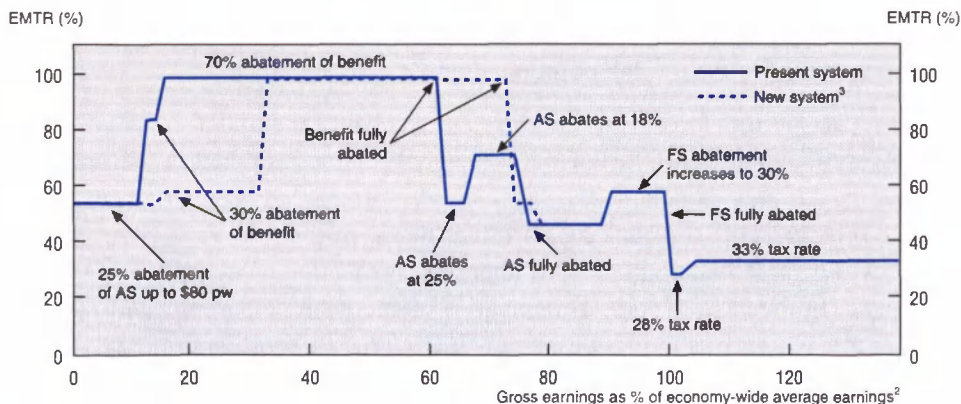
As part of the *Focus on Employment* package a number of changes to benefits were announced. The current abatement regime, as noted in the previous section, means that beneficiaries can face very high EMTRs (in many cases around 100 per cent) from taking part-time work. Starting in July 1996 beneficiaries will be able to earn NZ\$ 80 (rather than NZ\$ 50 at present) before benefit is reduced. In the case of some beneficiaries, namely single parents, widows and invalids, for whom it is thought that part-time work is a more appropriate option than full-time work, additional changes to the benefit abatement regime were announced (to be implemented in July 1996) which should further encourage them to take part-time work. In particular, these beneficiaries will be able to earn NZ\$ 180 per week⁵² (rather than NZ\$ 80 per week as at present) before the abatement rate rises to 70 per cent. The effect which this change will have on the

EMTR faced by a single parent beneficiary, who is considering taking part-time work, is illustrated in Figure 28.

In addition to providing incentives to take part-time work, there will be some further tightening in the eligibility for benefit as from July 1997. Single parents with a youngest child aged fourteen or over will be required to seek part-time work, or take part in some activity which will improve their employment prospects, as a condition of full benefit entitlement. In addition, spouses of unemployment beneficiaries with either no children or a youngest child aged fourteen or over will be required to seek full-time work, or take part in some activity which will enhance their employment prospects, as a condition of full benefit entitlement. Furthermore, a number of other changes to benefit stand down conditions and sanctions for non-compliance with work test requirements were made to improve the willingness of people to move into employment and strengthen the effectiveness of obligations on them to actively look for work.

According to government plans announced in February 1996, the first two instalments of future tax cuts, envisaged for July 1996 and July 1997 will include: a cut in the main effective marginal rate of income tax, initially from

Figure 28. **THE EFFECTIVE MARGINAL TAX RATE FACED BY A SOLE PARENT BENEFICIARY¹**



1. The EMTR is calculated for gross annual earnings received in addition to benefit.
2. Average earnings for the whole economy are taken to be NZ\$ 30 000.
3. The new system does not take into account the changes to income tax rates which will be implemented in mid-1996.

Source: Treasury and OECD Secretariat calculations.

28⁵³ to 24 per cent, and then to 21 per cent; an increase in the income threshold at which the higher (33 per cent) rate of income tax is paid by about 10 per cent in each year; and the introduction of a new independent family tax credit,⁵⁴ which will only be available to those families which are not strongly reliant on state assistance. These changes will address some of the disincentive problems faced by working families highlighted in the earlier discussion (Figure 22): they will reduce the EMTR by at least 7 percentage points for most people in work on below average earnings, and by 12 per cent for those families who no longer face the higher 33 per cent rate of tax as a result of the increase in the upper threshold. By rewarding full-time earning families the Independent Family Tax Credit will help to improve incentives for beneficiary families to move into full-time work while the changes to the abatement regime will improve the incentives to part-time work where this is appropriate. Nevertheless, some people paying the higher rate of income tax (on about 115 per cent of average earnings) and entitled to Family Support, may still face an EMTR of around 60 per cent.

Assessment and scope for further action

The labour market in New Zealand is currently probably one of the most deregulated in the OECD. After a decade of major structural reforms, there now seems to be increasing evidence of more favourable labour market outcomes. There has been a sustained period of strong employment growth and the unemployment rate has fallen continuously since 1991 to levels which are now well below the OECD average, with as yet little sign of any significant generalised pressure on wages. It is also the case that wage relativities are now much more likely to respond to particular skill shortages than was previously the case under the more rigid system of industry-wide occupational awards. Nevertheless, the role of labour market reforms – largely embodied in the Employment Contracts Act – in promoting economic growth needs monitoring to make sure that the framework is consistent over time.

Perhaps the major challenge which now needs to be faced is that of improving labour force skills and competences as a means of raising income, living standards and hence also decisively improving the poor historical record on trend productivity growth. In this respect the recent announcement that the school-leaving age is to be raised to seventeen from 1998 is to be welcomed, particularly

since the net enrolment of 17 year-olds in secondary education is currently amongst the lowest in the OECD.⁵⁵ Nevertheless, further actions are required, which should aim to reduce the numbers of persons leaving school early by ensuring that secondary education includes a vocational option leading to recognised industry qualifications. This should imply courses and/or work experience developed in the context of improved school-industry linkages. In this respect, the authorities should continue with the implementation of a framework for nationally recognised school, vocational and academic qualifications to ensure that skills and competences acquired through experience are adequately recognised and ensure that the training provided through the Industry Training Organisations and the Training Opportunities Programme operated by the Education and Training Support Agency are linked to the framework. The framework itself, its linkages with various training providers, and its general usefulness in measuring and recognising formal and informal work-related learning, should be monitored and evaluated. Some initial feedback suggests there may be scope for simplification in the number of unit standards which are recognised. At the same time steps need to be taken to improve further the quality and efficiency of tertiary education by bringing public subsidies more in line with the public benefits of tertiary education as well as rationalising payment of subsidies to public and private institutions so they are treated equally. More generally, the government's educational reforms, which put a high weight on autonomy and choice, will need to evolve in the light of experience (for example to co-ordinate evaluation and accountability efforts, to cope with unevenness in parent involvement etc.).

High priority should be given to addressing the marked difference between the labour market performance of different ethnic groups. The fact that the unemployment rate of Pakeha (those of European origin) is already close to 4½ per cent suggests that, unless the unemployment of Maori and Pacific-Island people is brought down from rates which are nearly four times higher, any further progress in reducing the aggregate unemployment rate may be limited. In this context, perhaps the most promising direction for policy is to try and close the persistent gap between the educational attainment of these groups and the rest of the population. There have been a range of recent initiatives, such as an increase in the scale of Maori-medium schools, which need to be assessed in order to determine how resources can be most effectively spent. The relatively youthful demographic

structure of these ethnic groups clearly offers a positive opportunity to raise the average educational attainment of the entire population relatively quickly.

In comparison with other OECD countries, New Zealand operates a quite restrictive income support arrangement for the unemployed, at least in the early stages of benefit. The most significant problem may be related more to the indefinite duration of benefits, and there would seem to be a case for imposing a greater requirement to participate in either job search activities and intensive assessments or other ALMPs after a long period on benefit. A second problem associated with income support arrangements is the high abatement of benefit in relation to levels of earnings consistent with part-time work. The recent announcement that benefit abatement will be reduced over such levels of earnings for certain beneficiaries for whom part-time work is thought appropriate (mainly single parents) is to be welcomed. Extending this principle more generally to the unemployed does not appear to be a feasible option as it would increase their effective replacement ratio and thereby possibly discourage full-time employment.

Due to New Zealand's strong fiscal position, substantial tax cuts should be possible over the medium term (see previous chapter). As noted, the Government has already announced the details of planned future tax cuts over the next two years which will be concentrated on low and middle-income earners, particularly through reductions in the main rate of income tax and an increase in the threshold at which the higher rate of income tax is paid. Targeting tax cuts in this way has two major advantages. *First*, income distribution data suggests that many low and middle-income earners may have experienced little, if any, increase in real disposable income over the period of the reforms. Thus, for a possibly large proportion of the population this may be the most tangible evidence to date of the reforms' success and may therefore be important in ensuring continued popular support for those already in place. *Second*, the tax cuts will enable some of the disincentive effects of high EMTRs (of up to 63 per cent) faced by many working families on, or just below, average earnings, to be addressed and the changes to family assistance will help to reduce replacement rate disincentives for beneficiaries with children. Nevertheless, many working families on just above average earnings (particularly those with more than two children) will continue to face high EMTRs. More generally, the tax and benefit system should be kept under constant review with the aim of further reducing work disincentives.

In the field of product market competition, particularly through the reduction in levels of trade protection, the economy has gone through a major transformation in the past decade. The planned future reductions in tariffs to zero are to be welcomed as establishing a continued trend improvement in the degree of openness of the economy. Nevertheless, more rapid progress in reducing tariffs in those areas where protection is particularly high might be expected to bring further significant benefits from improved resource allocation. While there has been some change in the operation of the Producer Boards in recent years, further reform is desirable. However, given their relative importance to New Zealand's export performance, future changes are likely to be incremental rather than to involve the complete dismantling of the Producer Boards. One change providing minimum disruption, but potentially large gains, would be the transparent separation of the Boards' regulatory and commercial functions. The "unbundling" of farmgate prices would also provide a better indication of the marginal costs and benefits of production.⁵⁶ Such a change would remove incentives to over-produce, encourage the development of new product lines as well as reduce barriers to new farmer and investor entry.

New Zealand currently has probably the most deregulated system of wage formation in the OECD. Nevertheless, there are a couple of issues in this respect which are deserving of policy attention. *Firstly*, evidence both from a range of OECD countries as well as from New Zealand suggests that a minimum wage, even at low levels (relative to average earnings) can have an adverse impact on the employment of young workers. The employment performance of teenagers should therefore be carefully monitored to see whether the recent extension of the minimum wage (albeit at a reduced rate) to cover 15 to 19 year-olds has any adverse effect. There may, nevertheless, be a case for maintaining a low level adult minimum wage on equity grounds, especially given how deregulated the labour market is following the collapse in collective bargaining arrangements. If a minimum wage is to be maintained, it would be important that it not be uprated regularly in a manner which risks setting a general precedent for wage bargaining. *Secondly*, further action needs to be taken to curb the escalating cost of the Accident Compensation Scheme. In particular this might involve ending the monopoly provision by the Accident Rehabilitation and Compensation Insurance Corporation and introducing private competition.

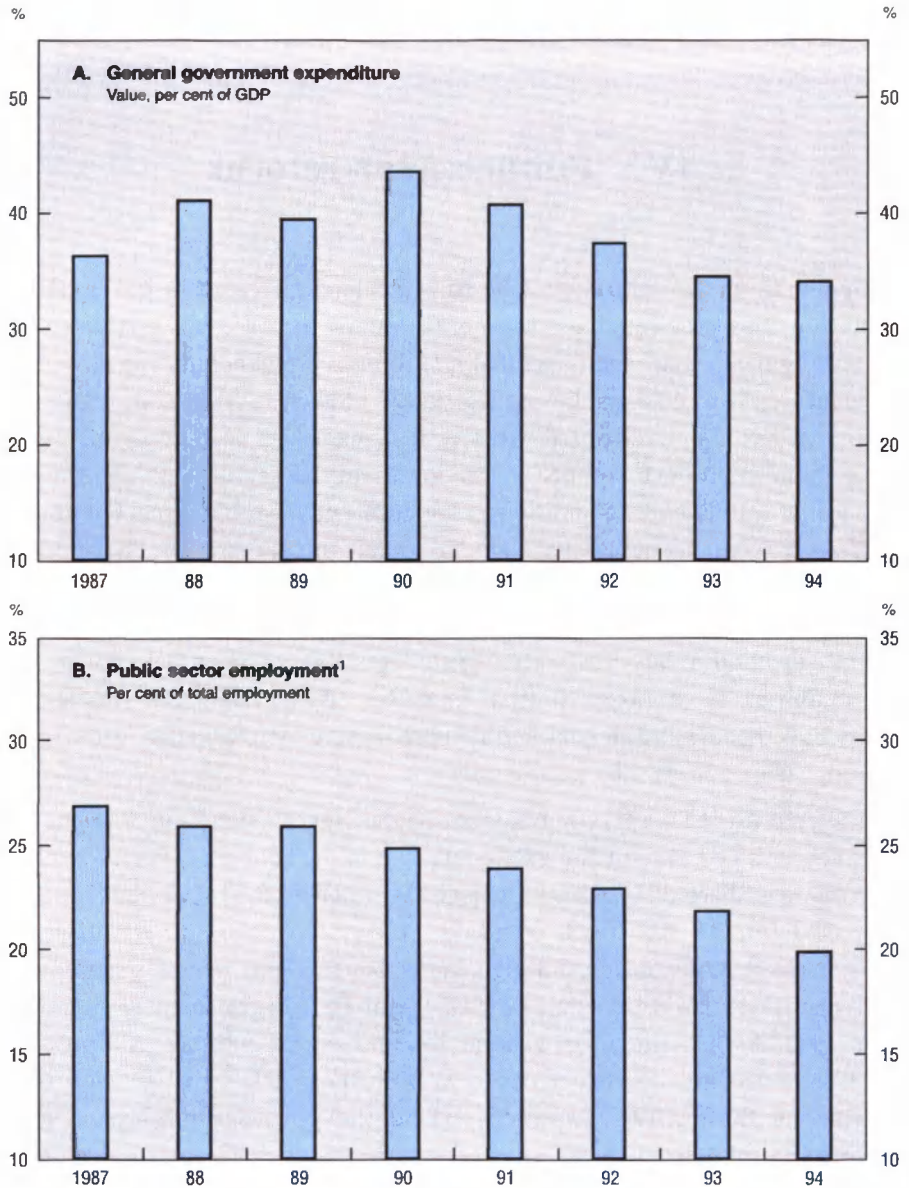
IV. Public-sector reform

Beginning in the mid-1980s, the New Zealand government has undertaken an ambitious and wide-ranging reform of the public sector. It has privatised many of its trading operations, and those that it still owns are generally run as commercial businesses without subsidies or legislative protection from competition. The government has also overhauled the way it manages its core departments, contracting them to produce outputs and giving them the authority to choose which inputs to use to this end. In addition, it has replaced cash-based accounting with private-sector-like accounts that, among other things, provide balance-sheet information for departments, agencies as well as the government as a whole. In health care, it has, among other things, separated purchasers from providers, while in education, it has moved to give students and parents more choice. While other countries have taken similar measures, New Zealand's public-sector reforms have been more radical and comprehensive, in particular in the area of budgeting, management and accounting.

The reforms have not only transformed the New Zealand government's role but also contributed to reducing its significance in the economy. For example, the public sector's share of total employment has fallen from 27 per cent in 1987 to 20 per cent (Figure 29). Much of this decline results from the privatisation of many government businesses, but the general government⁵⁷ sector's share of total employment has also dropped somewhat (from 16½ in the late 1980s to below 15 per cent). At the same time, general government expenditure as a proportion of GDP has declined to 36 per cent. On both measures, New Zealand is now again among those OECD countries where the government plays a smaller relative role in the economy.

New Zealand's government continues to be relatively centralised. There is no federal system, and functions such as health care, education and welfare are carried out by the central government. Any powers of local government to levy

Figure 29. **THE GOVERNMENT'S SHARE OF THE ECONOMY**



1. Public sector includes central and local governments' trading operations.

Source: Statistics New Zealand.

taxes and to regulate are granted by the unicameral Parliament. Although the local government sector accounts for a significant proportion of public investment, its share in general government expenditures overall is less than one-tenth. The local government has also undergone radical reforms along the lines of those implemented at the central level.

This chapter examines some of the major public-sector reforms undertaken in recent years. In so doing, it updates the special study in the 1988/89 Survey – and, regarding education, the 1992/93 Survey – focusing on changes made since then, and considering new evidence about the effects of the earlier reforms. Several topics are covered in some detail: the corporatisation and privatisation of government-owned businesses; the government's new management, budgeting, and accounting systems; health care; education; and local government. Before discussing these issues, the chapter considers some of the fundamental problems of public-sector governance addressed by the reforms.

Motivation of the reforms

Although the reforms have been numerous and diverse, there are common threads running through them. They have aimed at clarifying objectives and devising incentive structures which promote good performance; monitoring performance against clear expectations; and enhancing transparency. In particular, their major elements can be seen as attempts to solve some fundamental problems that have traditionally impaired government performance.⁵⁸

First, government agencies often do not face strong competition in their product markets. Rather, they tend to provide services under monopoly conditions. While this is sometimes desirable, monopolist government organisations are not faced with a major incentive for improved performance: the potential loss of customers and profits to competitors; their efficiency may be consequently poorer.⁵⁹ Many of the New Zealand Government's reforms attempt to respond to this problem. Government-owned businesses have had legislative monopolies removed; educational and health providers have been encouraged to compete with each other for public funds; government service suppliers have been required to institute user charges, so as to encourage competition, where possible, from private providers and induce people to make decisions which reflect to some degree the costs of the services they are consuming; capital charges have been

introduced for government agencies to improve allocative efficiency; and the “contestability” of government departments’ advice to ministers has been emphasised.

Second, government agencies are typically not affected by competition in a market for their ownership. If a private firm performs poorly, new investors may offer to buy the firm from its current owner, in the expectation that they can profit by improving the firm’s administration or strategy. This possibility encourages good management and increases the chance that bad managers will be replaced by better ones. No such force operates on government agencies. In New Zealand, as in other countries, the Government has responded by selling many of the businesses it used to own, so as to subject them to this capital-market monitoring and achieve better performance. In addition, it has facilitated the entry of privately-owned providers in education, health, and elsewhere into the market for public funding.

Third, government agencies have often had complex and incoherent goals, and unclear accountability for their achievement. Relatedly, governments have often had poor information about what agencies have been doing and at what cost. As a result, the agencies themselves may not have known what was expected of them, and the government has had difficulty assessing and improving their performance. Almost all of the major public-sector reforms in New Zealand have attempted to address this problem. Parliament legislated, for example, to make the heads of government departments more clearly accountable to ministers. It also made government-owned trading enterprises – which formerly pursued commercial, regulatory, and social welfare objectives – responsible solely for commercial goals. Likewise, it made the head of the central bank clearly accountable for price stability, and nothing else. At the same time, the Government developed new information and accounting systems to help it monitor its agencies’ work, and new mechanisms for encouraging better performance, such as the replacement of permanent tenure for agency heads with fixed-term contracts and the use of performance-related pay.

Fourth, government agencies have often had limited authority to make decisions about how to attain objectives as public-sector regulations have heavily constrained their choices. Those regulations may have had advantages but they are commonly believed to have prevented agencies from efficiently achieving the Government’s goals. In New Zealand, the authorities therefore chose to drop

most controls on input choices throughout the public service and to rely instead on the mechanisms noted above – and in particular the monitoring of departments' performance in producing the outputs the Government has asked them to provide.

Finally, the nature of the political decision-making processes means that governments may face incentives to pursue policies with widely distributed or disguised costs and concentrated or salient benefits. Measures that have immediate benefits but ultimately greater costs may appear appealing when voters are more aware of the short-term consequences. This may be the case, for example, with policies leading to high inflation or long-standing deficit spending. Similarly, measures that bring large benefits to a small, well-organised group, while imposing costs on a bigger, poorly organised group, can be appealing, even if the total costs are greater than the benefits. Tariffs on imports competing with locally made products and the *absence* of controls on pollution may be examples.

A number of the public-sector management reforms in New Zealand have been aimed at ameliorating this problem by requiring the Government to provide more information to the public on its activities and their costs. The *Official Information Act 1982*, which predates the other reforms discussed here, does this in a general way by obliging the authorities to release, with limited exceptions, government documents requested by members of the public. The reforms of government-owned businesses commit the Government to pay explicit subsidies to the businesses if it wants them to perform non-commercial functions. The *Public Finance and Fiscal Responsibility Acts* require the Government regularly to provide information on its strategic and detailed budgetary plans and on its subsequent performance. In some cases, the reforms simply make more information available; in others, they act to make certain information more *salient*. The *Reserve Bank Act* draws public attention to the inflation rate, and the *Fiscal Responsibility Act* to the Government's financial debt and net worth, for example.

The key reforms

Commercialisation and privatisation

One of the first major reforms was to turn many government agencies that sold goods and services to the public into commercially run businesses. Subse-

quently, many public enterprises were privatised. The reform was motivated by a concern that government-owned trading operations, which accounted for 12 per cent of GDP in the mid-1980s, were performing poorly.⁶⁰ Measures in this area address all of the problems outlined above, by increasing competition in product and capital markets, by clarifying goals, increasing managerial discretion over inputs, and by making government policies and their costs more transparent to the public.

The State-Owned Enterprises (SOE) Act 1986 established a framework for the operation of government-owned businesses⁶¹ and provided for the corporatisation of nine departments into SOEs.⁶² Current SOEs are listed in Table 16. According to the Act's framework, SOEs' primary goal is to operate as a successful business.⁶³ In its role as owner, the Government monitors the SOEs by considering information on their profitability but does not control their input decisions. If it wants to use the SOEs to pursue non-commercial objectives, it can explicitly contract with them to do so, compensating them financially for the loss of profit. SOEs must pay tax and are subject to the regulations that govern private businesses, and in general have no legislative advantage over private competitors.

Table 16. State-owned enterprises

At 31 December 1995

	Book value of Government's equity holding in NZ\$ million
Electricity Corporation of New Zealand	2 979
Forestry Corporation of New Zealand	1 894
Trans Power New Zealand	1 322
Land Corporation	433
New Zealand Post	305
Television New Zealand	255
Government Property Services	171
Timberlands West Coast	116
Works and Development Services Corporation	107
Coal Corporation of New Zealand	104
Airways Corporation of New Zealand	65
Meteorological Services of New Zealand	10
The Radio Company	9
Vehicle Testing New Zealand	5
Total value of State-owned enterprises	7 586

Source: New Zealand Government Financial Statements to 31 December, 1995, p. 51.

They borrow on private credit markets, and their debt is not guaranteed by the Government.

Practice does not always conform to this framework, however. For example, TransPower (the national electricity grid) and the Airways Corporation – which are entirely and to a large extent, respectively, a natural monopoly – have agreed with their Government shareholders that they will aim over time to provide a return on the shareholders' equity equal to its risk-adjusted cost of capital. By voluntarily taking this approach, the two SOEs have adopted a pricing policy which they expect will both be acceptable to the light-handed regulatory regime authorities and provide an economic return on the Government's equity investment. In that way, they expect to avoid incurring potentially expensive compliance costs – including disputes with regulatory authorities – and bad will from their respective customers.⁶⁴ At the same time, there is a general preference that SOEs do not expand the scope of their business.⁶⁵ Moreover, the authorities have been clearly concerned about the pricing decisions of any monopoly business, private or public.⁶⁶

The SOE framework has brought about a radical and enduring change in the government's policies towards its trading enterprises. In its role as owner, it generally has acted as a private-sector owner would, and, with the exceptions noted above, it has not used its ownership as an instrument for achieving regulatory or social policy goals. But where the government is not doing that, there is no clear reason why it should own the business. Indeed, there are grounds for preferring private ownership in this case. As noted earlier, for example, government ownership means that capital-market competition is not being brought to bear on the problem of improving business performance. For this reason, the Government has sold several of its commercial assets, including many of its SOEs (Table 17). Such divestments have had the added benefit of reducing the net public debt-to-GDP ratio. The Government has in general followed a policy of selling assets to the highest bidder.⁶⁷ It has not attempted to increase profits by selling firms with government-granted monopolies and has not aimed to foster "popular capitalism", as the British Government did, by offering shares directly to the public.

It is hard to determine what the effects of commercialisation and privatisation have been, because of the difficulty of isolating their impact from that of other economy-wide influences and, in the case of privatisation, the paucity of

Table 17. Assets sold by the government since 1985

Asset	Year of sale	Sale price (NZ\$ million)
New Zealand Steel Limited	1988	327
Petrocorp	1988	801
Health Computing Service	1988	4
Development Finance Corporation	1988	111
Post Office Bank Limited	1989	678
Shipping Corporation of New Zealand	1990	32
Air New Zealand	1989	660
Landcorp financial instruments	1989-90	77
Rural Bank	1989-92	688
Communicate New Zealand	1989	0
Government Printing Office	1989-93	39
National Film Unit	1990	3
State Insurance Office	1990	735
Tourist Hotel Corporation	1990	72
New Zealand Liquid Fuel Investment	1990	(203)
Maui Gas	1990	254
Synfuels stocks and current assets	1990-95	206
Telecom Corporation	1990	4 250
Forestry cutting rights	1990	1 027
Export Guarantee Limited	1990-93	20
Housing Corporation mortgages	1991-95	1 316
Government Supply Brokerage	1992	3
Taranaki Petroleum mining licences	1992-93	118
New Zealand Timberlands Limited	1992	366
Bank of New Zealand	1992	850
New Zealand Rail Limited	1993	328
Fletcher Challenge shares	1993	418
Government Computing Services Limited	1994	47

Source: New Zealand Treasury. New Zealand Government Asset Sales as at 31 December 1995.

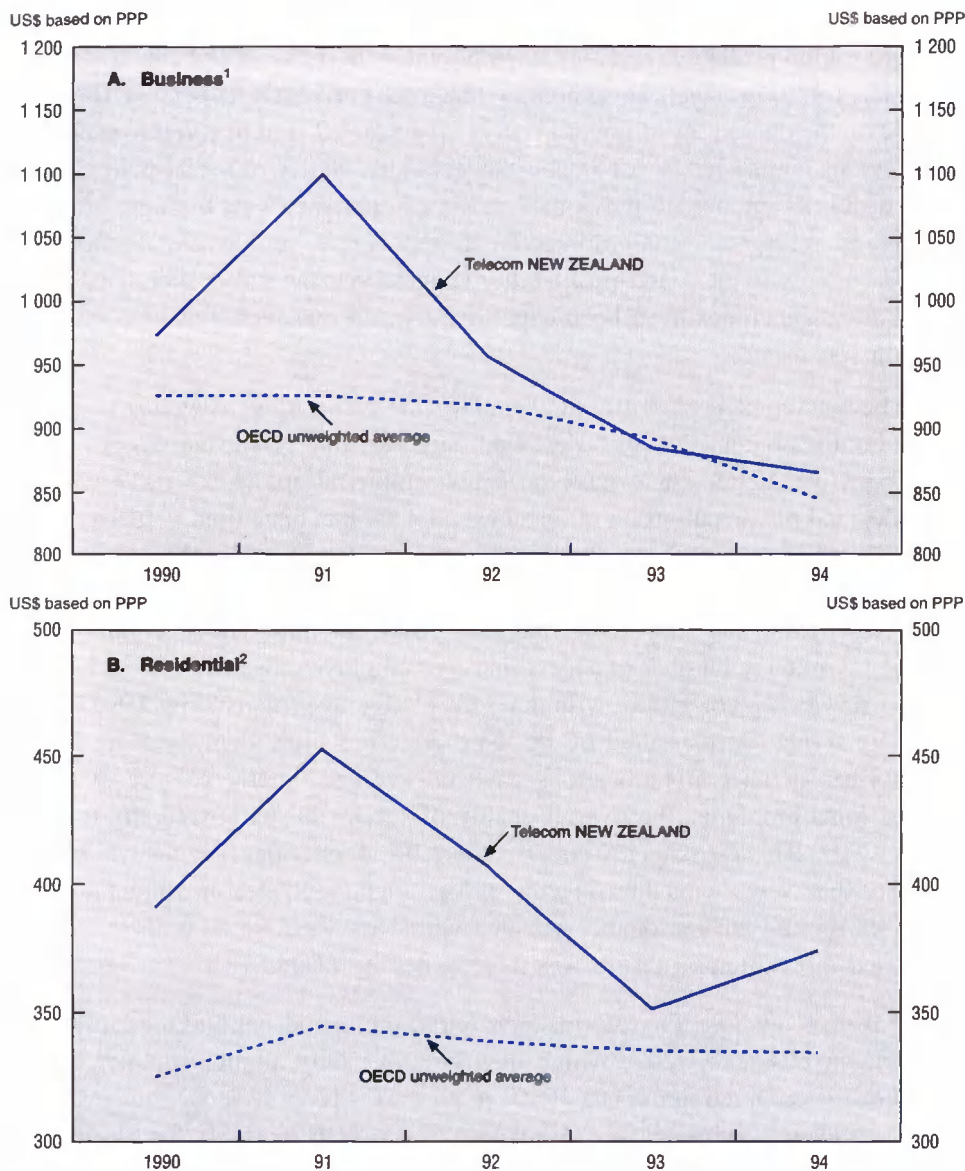
empirical studies. There is evidence suggesting that corporatisation and deregulation have positive effects on the efficiency of government businesses in performing commercial services, while empirical findings as to their influence on the achievement of social goals are generally unavailable. According to a detailed study, the reforms have required "major organisational and cultural change rather than incremental tinkering with existing structures and systems".⁶⁸ As discussed in more detail in Annex IV, corporatisation and deregulation have led to very large reductions in employment in the businesses concerned, and similarly large increases in productivity. On the whole, the changes appear to have been associated with real price cuts and increases in quality, and the businesses' profitability has in general improved as well. The lack of evidence on the effects

of the reforms on the achievement of non-commercial goals may reflect the fact that objectives of the pre-corporatised businesses were never clearly spelled out. Corporatisation probably increased unemployment at the time and caused serious problems for some small communities that had previously depended for their income on the operations of government businesses.⁶⁹ It is unlikely, however, that the previous regime led to good decisions about the choice of social-policy tools, since it did not encourage the consideration of alternatives or the cost of using businesses to pursue non-commercial goals. Some simple comparisons of changes in employment and profitability suggest that the pre-corporatised businesses may sometimes have been expensive even if considered as employment-creation schemes.

The theoretical desirability of capital market monitoring, as well as evidence from countries other than New Zealand,⁷⁰ suggests that privatisation is likely to have been beneficial. There have been few empirical studies of the effects of New Zealand privatisations on efficiency, and none that have tried to isolate them from other contemporaneous changes in, say, regulation and technology. However, there is evidence of significant improvements in the performance of Telecom, by far the largest privatisation. Staff numbers have continued to decline,⁷¹ while the number of access lines per employee rose from 86 in 1990 to 214 in 1994 (as compared with an OECD average of 168 in 1992). The company's value as measured by its share price has more than doubled. Moreover, prices of telecommunications have on average fallen⁷² (Figure 30) and, despite some problems, the overall quality of service appears generally to have risen.⁷³ The *World Competitiveness Report 1994* provides suggestive survey evidence that New Zealand businesses, at least, rank NZ Telecom among the best in the world and are reasonably satisfied with New Zealand's corporatised and privatised infrastructural enterprises more generally (Table 18).

Taken as a whole, the reforms have led to a much leaner and more efficient government business sector, which now employs only about a quarter of the workforce it occupied in the late 1980s (Figure 31). There is scope, however, for further efficiency gains. *First*, a weakness of the SOE model is the absence of capital market disciplines on companies. *Second*, since the standard accounting information on their profitability that SOEs currently provide neglects the cost of equity, it obscures the fact that the government loses money when SOEs make profits that are lower than the opportunity cost of the government's equity.

Figure 30. TELECOMMUNICATION PRICES



1. Business telecommunication basket (excluding tax).

2. Residential basket total charges (including tax).

Source: OECD, *Communications Outlook*.

Table 18. Relative survey rankings of selected infrastructure services in New Zealand¹

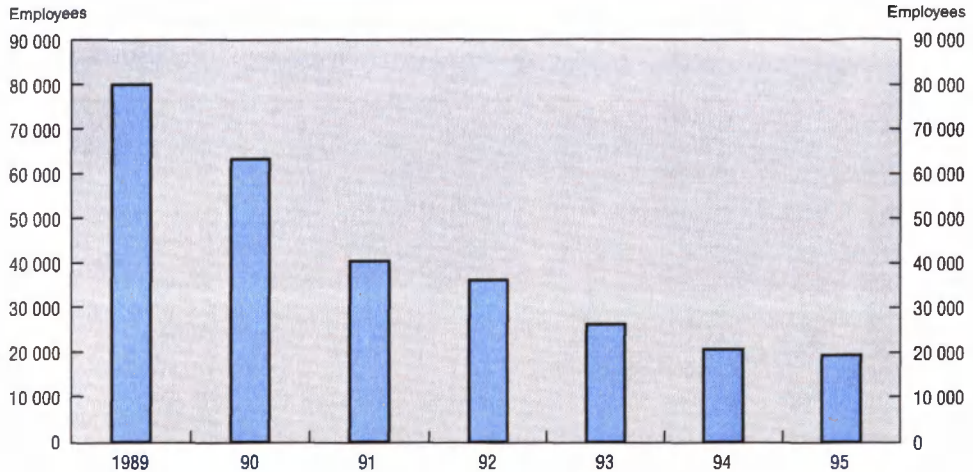
Service	Status of New Zealand providers	Ranking of New Zealand's service out of 37 countries in 1993	Ranking of New Zealand's service out of 41 countries in 1994	Countries whose services were ranked higher than New Zealand's in 1994 by order of ranking
Air transport	Air NZ privatised in 1989. Airports government owned	3	6	Singapore, Denmark, USA, Switzerland, Germany
Railroads	Privatised in 1994	12	8	Switzerland, Denmark, Japan, France, Finland, Germany, South Africa
Power Supply	Corporatised in 1987	12	7	Denmark, Singapore, Switzerland, Norway, Hong Kong, Sweden
Telecommunications	Privatised in 1990	3	2	Singapore
Infrastructure as a whole		11	8	Singapore, Switzerland, Hong Kong, Denmark, Austria, Germany, France

1. For the individual infrastructure services, respondents were asked to rate whether each of the following infrastructure services "meets business requirements very well" or "does not meet business requirements very well" in their own country. For infrastructure as a whole, they were asked whether "the level of reinvestment/investment in the infrastructure" was "adequate" or "inadequate". The table excludes roading and ports, because they were not affected by central government's programme of corporatisation or privatisation. The *Report* also includes various survey indicators of the performance of the banking industry, which in New Zealand was affected by the privatisation of the Development Finance Corporation, the Post Office Savings Bank, the Rural Bank, and the Bank of New Zealand. The rankings vary considerably according to the indicator, but do not suggest large-scale problems. Some relevant rankings in 1994 out of 41 are as follows: local capital markets being accessible to foreign companies (1), the availability of venture capital for business development (19), the effect of the banking sector on industry (15), public confidence in financial intermediaries (12), public trust in bankers (14), the autonomy of financial institutions not being a source of concern (1), legal regulation of financial institutions being adequate for financial stability (7), the level of sophistication of financial markets being a competitive advantage for business development (8), and credit flowing easily from banks to businesses (9).

Source: *World Competitiveness Report* (1994).

Additional financial information would make that clear, and the Government has begun work on value-based reporting for public companies which would simulate some capital market disciplines and credibly communicate to the shareholder the full cost of operating and financing the business. *Third*, and more fundamentally, privatisation of the remaining SOEs would probably generate further improve-

**Figure 31. FULL-TIME EQUIVALENT EMPLOYEES
IN THE CENTRAL GOVERNMENT TRADING SECTOR**



Source: Statistics New Zealand.

ments in the businesses' performance. Some SOEs, such as Forestry Corporation, Government Property Services and Works and Development Services, have no major monopoly power, and their privatisation raises no major regulatory issues. The same is true for Landcorp and Coalcorp but their sale is complicated by claims by Maori groups. The Government is currently examining options for the future of Forestry Corporation and a number of the other SOEs are in the process of divesting subsidiaries or restructuring in a way that will allow more private involvement.

In other cases, the SOEs do have natural monopoly power. The most important one is electricity, an area in which significant reforms have recently occurred. The Government has separated the businesses of generation and transmission, carving a new SOE, TransPower, out of the Electricity Corporation (ECNZ). Since it is electricity transmission that is most affected by natural monopoly power, this isolates that problem, and is a necessary but not sufficient condition to facilitate competition in the market for generation. In addition, the Government has split ECNZ into two government-owned but competing generat-

ing companies. The larger of the two electricity generation SOEs retains the name “ECNZ”, while the new one is known as “Contact Energy”. ECNZ is also expected to sell some small power stations to private companies, further increasing the possibilities for competition. The Government has announced that it will maintain ownership of the two main power-generating companies, considering that reform in this area should be prudent and evolutionary. However, there do not appear to be any regulatory or social reasons for doing so, and it remains to be seen how competition between two publicly-owned companies works.⁷⁴ Indeed, in several OECD countries, including the United States, Japan, and the United Kingdom (as well as in some developing countries, such as Chile) electricity generation is partly or entirely privately-owned.

TransPower poses more public-policy questions because of its natural monopoly. But even here ownership is not necessarily part of the best regulatory strategy. The problem is to get the natural monopolies to produce their output at least cost and at the same time to price that output appropriately.⁷⁵ The Government is relying to some extent on the monopolistic SOEs exercising self restraint in their pricing strategies, rather than risk either engaging in potentially costly disputes under the light-handed regulatory regime, or possibly even, precipitating the introduction of a heavier-handed regulatory regime. Such restraint is consistent with a prudent commercial strategy. While the Government can use its position as owner to get information on the appropriate output price, it could also use its legislative power as a regulator to get information from a privately owned firm. Information asymmetry problems would continue to apply whether TransPower remains in government ownership or is sold to private-sector interests. Government ownership, however, provides the Government with the ultimate ability – as a last resort “insurance policy” – to exercise its ownership control rights to achieve its wider economic policy goals.

Notwithstanding the relatively slow pace of reform in electricity generation and transmission, there has been very substantial activity to reform the distribution and retailing end of the sector. The distributors (of which there are now 42) have been corporatised and are now variously owned by community and consumer trusts, local authorities, private shareholders or a mixture of them all. They are regulated under the general competition law, with a new information disclosure regime requiring information on the operations of these bodies, including an

economic-based value of worth. Local authority supply franchise areas were abolished by April 1994.

New Zealand Post's degree of natural monopoly appears low, especially now that private courier firms and alternative electronic forms of communication have proliferated. The Government is considering ending the *statutory* monopoly on standard letters, following the example of other countries (such as Sweden and Finland). Having done that, it could privatise New Zealand Post and – if considered necessary – regulate it explicitly.⁷⁶

Budgeting, management, and accounting methods

The Government has also changed its budgeting, management, and accounting procedures for its non-commercial activities. In different ways, these reforms address all of the fundamental problems of public governance outlined earlier, in particular the problems of fuzzy goals and accountability, limited managerial discretion over inputs, and disguised costs. Key elements of the new framework are a mandated cycle of budgeting and reporting, with specific requirements about dates and content; accrual reporting, using generally-accepted accounting practice and full balance sheets; as well as the use of full costs of output purchases as the basis for budgeting.

At the strategic level, the *Fiscal Responsibility Act 1994* is intended “to improve the conduct of fiscal policy by specifying principles of responsible fiscal management and by strengthening the reporting requirements of the Crown”.⁷⁷ The Act sets out several general “principles of responsible fiscal management”, such as reducing total Crown debt to “prudent levels” by running operating surpluses each year until that has happened.⁷⁸ It does not set specific targets for any indicator of fiscal performance, and the Government can depart from the broad principles of responsible fiscal management outlined above, so long as it explains why it has done so, how long it expects to depart from them, and how it envisages to return to sound fiscal management. However, by obliging the Government to provide detailed information on its fiscal policies and performance, the Act is likely to deter casual departure from the legislated principles. The *Fiscal Responsibility Act* also requires the Government to declare in its forecasts all risks it knows of to the fiscal projections, and any contingent liabilities.

Specifically, the Act requires that, at various times during the year,⁷⁹ the Government publish reports outlining its fiscal plans and forecasts for five meas-

ures of fiscal performance: operating expenses, operating revenue, the resulting budget balance, public debt, and the Government's net worth. At the same time, the *Public Finance Act* calls for regular reporting on the actual budget performance according to these, and other, measures. The legislation requires the Government's reports to conform to "generally accepted accounting practice" (GAAP), which is determined independently of the Government by the "New Zealand accounting profession" rather than by the Government itself. Unless there are good reasons for doing otherwise, the standards that apply to private firms will apply to the Government. The independence and sector neutrality of the accounting framework enhances the credibility of financial reporting. Among other things, GAAP requires accrual, as well as cash, accounting. For example, the operating statement recognises pension liabilities for government employees as they accrue, not as payments are made. In addition to the operating (or profit-and-loss) statement, the Government publishes a balance sheet and statement of cash flows, similar in many respects to those prepared by companies. Although the new accounting practices involve some difficulties,⁸⁰ they provide a more accurate picture of the fiscal position. Purchases of capital equipment are clearly distinguished from current consumption, and a full balance sheet allows an appropriate treatment of capital transactions (see Annex II).

The *Fiscal Responsibility Act* also encourages the Government to think strategically by requiring it to publish a Budget Policy Statement several months before it tables its detailed Budget. This allows Parliament and the public to debate fiscal objectives and review them against the above general principles. However, the Government has in the last year also chosen to take a more formal approach to strategic planning in ways not required by the Act. In particular, before the last Budget it agreed upon and published a list of its "strategic result areas" (SRAs).⁸¹ These priorities are intended to inform the budget-allocation process and the work of departments.

As well as these higher-level budgeting and fiscal management procedures, the Government has significantly changed the way it reports the details of its expenditure and manages departments. Many of these initiatives were discussed in the OECD 1988/89 Survey, though most had not been implemented by then. By and large, the system now operates in the way envisaged earlier. The reforms affect both the relationship between the legislature and the executive and, within the latter, between ministers and departments.

The annual budget that the executive proposes to the legislature is now based on outputs, rather than inputs. The Government asks Parliament to approve spending on each of a large number of output classes, such as policy advice, administration of regulations or production of goods, rather than on inputs, such as staff or operating costs. Thus, for example, the 1995 Budget grants the Government the authority to spend up to NZ\$ 76.9 million on a class of outputs involving the "assessment and collection" of tax, and notes some measures of the quantity, quality, and timeliness of the outputs being bought. Agencies are required to report on performance against these specifications.

The reforms *within* the executive began by clarifying the accountability of departmental heads to the Government. The *State Sector Act 1988* ended the permanent tenure of departmental "chief executives" who are now employed on contracts of up to five years' duration.⁸² They are appointed by the State Services Commissioner, who is in turn appointed by the Government. Chief executives are accountable for their overall performance to a particular responsible minister, and have a *performance agreement* with that minister that sets out some key expectations of them in the year ahead, including their contributions to the collective ownership interests of government. In addition, they have a *purchase agreement* with each minister who buys services from them, it being possible for several ministers to purchase outputs from one department,⁸³ the terms of which allow managers to be held accountable for the delivery of the specified output.

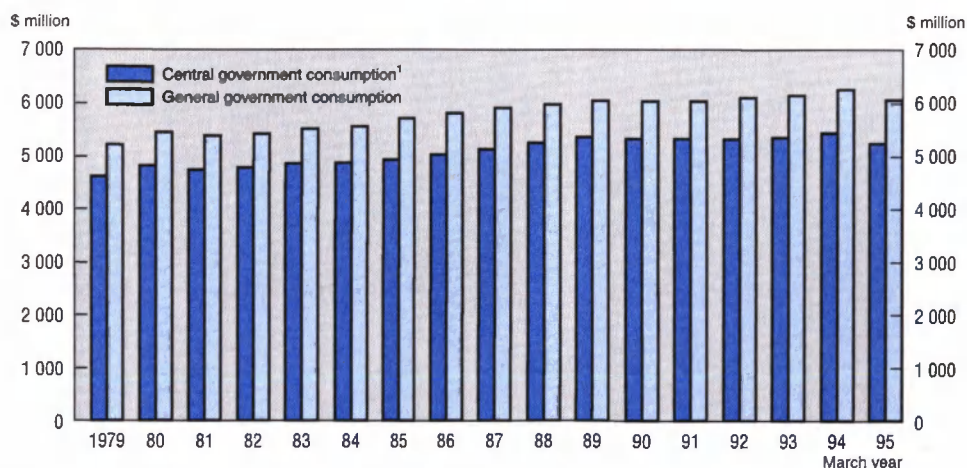
Chief executives choose which inputs to use to supply the outputs they have agreed to produce. They may buy in external services. Within the overall limit set by the cost of the output they are providing, they decide how much to spend on personnel, how much on accommodation, and so on. The chief executives are the legal employers of the staff of their departments. They decide how many people to employ and what to pay them; there are no longer any "staff ceilings" setting limits on the number of people working in a department or any public-sector-wide employment classifications. Before the reforms, departments had to conform to some 2 000 detailed instructions governing conditions of employment set out in a Public Service Manual and a similarly large number of Treasury Instructions on financial management. The former has since been abolished and the latter reduced to a fraction of their former length.⁸⁴

The introduction of accrual accounting has significantly changed departments' capital budgeting. They now have balance sheets and are required to pay

the Government, as their owner, a specified return on the capital invested in them. Such an approach has enabled the authorities to reflect the cost of capital in their budgeting decisions. Moreover, departments no longer need approval to invest so long as their total net assets do not increase. They can buy assets with the money they get from selling others or with the funds they put aside to cover depreciation of existing assets.⁸⁵

An empirical assessment of the effects of these reforms is inevitably difficult. Existing evidence comes from various before-and-after comparisons that do not control for other factors affecting performance. At the macro level, the management and accounting reforms have been associated with the achievement of budget surpluses, but, although the reforms may have contributed to this outcome, other influences have also been important. It may be useful, therefore, to look at changes in the current consumption of central government (Figure 32), a measure which at least excludes the effects on tax revenue and social-welfare-benefit expenditure of macroeconomic developments as well as certain policy changes unrelated to the reforms under consideration. Although the effects of the

Figure 32. **REAL GOVERNMENT CONSUMPTION**
1982/83 prices



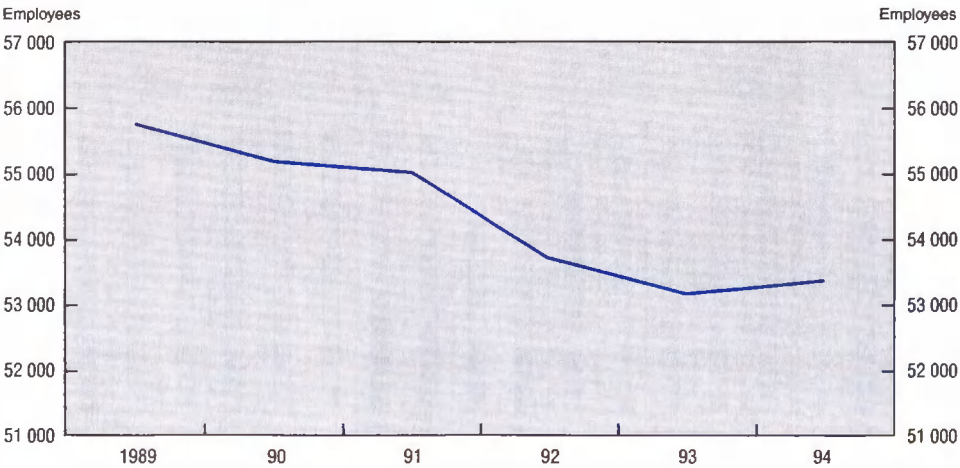
1. Deflated by the general government deflator.

Source: Statistics New Zealand and OECD.

public-management reforms cannot be isolated from, say, the changing preferences of politicians, the new management regime appears to be consistent with the restraint of expenditure in the 1990s. In fact, the move to output budgeting, for example, may have helped, by allowing ministers to make clear decisions about what they were no longer going to purchase or what “prices” they were going to reduce.

Similarly, the removal of maximum staff limits for government departments in 1988 does not appear to have entailed any long-term increase in employment; instead, total employment in core government has fallen markedly since then (Figure 33). Quantitative evidence of the effects of the reforms on the operations of government departments is scarce. One study⁸⁶ looks at changes in the costs of producing a few outputs, which were selected because they are measurable and have not changed much in nature over the period of reforms. In all but one case, the study finds evidence of improvements, either throughout the post-reform period or in later years. Further gains in performance can be expected as depart-

Figure 33. **EMPLOYMENT IN CENTRAL GOVERNMENT ADMINISTRATION AND DEFENCE**



Source: Statistics New Zealand.

ments are making effective use of the flow of information provided by the reforms.

In another study, a sample of senior managers – though generally supportive of the new framework – mostly agreed that “there is a lack of budget incentives”, “there is a high compliance cost for small agencies”, “performance indicators for the quality of policy advice are generally not well developed”, “too much non-essential reporting is required”, and that the process of change had been managed badly.⁸⁷ Another problem seems to be that the strengthening of lines of accountability running from agencies to ministers may have weakened horizontal co-ordination between agencies and between ministers.⁸⁸ Similarly, the accountability of government agencies that are neither SOEs nor departments may sometimes be weak.⁸⁹ Finally, it has been questioned whether there is sufficient attention to outcomes – as opposed to outputs – and to the nature of the public service which is needed to support this focus.⁹⁰

For the most part, however, the management and accounting reforms appear to enjoy widespread, though qualified, support among politicians and senior public-service executives, as well as among people who have reviewed the changes.⁹¹ Reviews commissioned by the Government have recommended modifications of the management system, but have endorsed its fundamental elements.⁹² Several politicians who have worked in this system have said it gives them better control over the operation of government.⁹³ The *World Competitiveness Report*’s 1995 New Zealand survey respondents give the New Zealand Government an increasingly positive rating for “transparency and communicat[ing] its intentions successfully”, rising from twentieth out of 41 two years ago to ninth out of 48 last year, and rank the Government well in several other relevant categories (Table 19).

The reforms of budgeting, management and accounting methods are now embedded throughout the government sector. but the extent to which behaviour has changed varies across public-sector institutions,⁹⁴ and continued pressure for improved performance will be necessary to prevent inertia, particularly given projections of continuing fiscal surpluses and of falling public debt (see Chapter II).

In addition, there are some areas where the system still has weaknesses. *First*, as noted, governments generally tend to implement policies with concentrated or salient benefits and widely distributed or disguised, but ultimately

Table 19. The Government's ranking on selected indicators of budgeting and management performance

Survey question	NZ Government's rank	Governments ranked higher
"In your country, state interference" hinders/does not hinder the development of business	2	Hong Kong
"The government" successfully/does not successfully control the efficiency of the health system	17	Singapore, Malaysia, Hong Kong, Japan, Finland, Denmark, Germany, Sweden, Australia, United Kingdom, etc.
"Bureaucracy" hinders/does not hinder business development	3	Hong Kong, Singapore
"Improper practices" prevail/do not prevail "in the public sphere	1	
"Lobbying by special interest groups" distorts/does not distort "government decision making"	2	Singapore
"Public sector contracts" are/are not "available to foreign bidders"	5	Hong Kong, Argentina, Denmark, Turkey
"Fiscal policy" discourages/encourages entrepreneurial activity	2	Hong Kong
"Fiscal policy" does not treat/treats "private and public enterprises in an equitable manner" ¹	1	

1. It must be stressed that the overall first ranking of the New Zealand Government is not especially relevant here, because it relates to much more than public-sector management issues.

Source: *World Competitiveness Report* (1995).

greater, costs. In New Zealand, the *Fiscal Responsibility Act*, the *Public Finance Act*, and the *Reserve Bank Act* address this problem in the fields of fiscal and monetary policy, by requiring the Government to make its policies and their costs clearer to the public, as well as to itself. But the issue may be at least as important in the domain of regulation. Because the costs of a regulation do not show up in a budget, they are likely to be obscure to voters and other monitors of government performance. In addition, expenditure programmes typically need to be approved anew each fiscal year, while regulations typically stay in force *unless* something major happens. As a result, the risks of poor policies of the sort discussed may be greater for regulation than for expenditure. For instance, the

reforming New Zealand Government of the mid-1980s quickly phased out fiscal subsidies to farmers and exporters, while import-competing manufacturers still receive the implicit subsidies given by tariffs, albeit at lower levels.

One way to alleviate this problem is a requirement for governments to estimate the costs and benefits of new regulations and to publish those estimates. Certainly, such a policy does not, to take just one example, address regulations that should be passed but, because of the distribution and visibility of their costs and benefits, are not.⁹⁵ It would also be important not to frame it in a way that simply discouraged *all* new regulation, by imposing excessive informational burdens. A well-designed policy may, however, help politicians make better decisions and tend to discourage interest groups from lobbying for, and politicians agreeing to, spuriously appealing regulations. The experience of the United States Federal Government, which since 1981 has required cost-benefit analyses of proposed regulations, appears to have been positive.⁹⁶

The New Zealand Government is currently considering various methods for improving the processes and framework for making and reviewing regulation. Formal requirements for cost-benefit analyses are not thought to be an effective mechanism for ameliorating the quality of regulation because of the difficulty in constructing a sufficiently rigorous framework upon which to base such calculations. Given the strong emphasis on contestability of policy advice and departmental accountability, a flexible and relatively informal approach is considered desirable, including promoting the use of best practice techniques for assessing regulations, and improving the availability and quality of information on their impact.

Second, there is scope for enhancing the government sector's ability to learn and innovate. The link between its policies (the outputs the government purchases, the regulations it passes, the taxes it collects) and goals (higher incomes, less crime, etc.) is often poorly understood. Moreover, improving policies may be particularly difficult for governments compared with the private sector because their operations are generally monopolistic. There are two ways governments can respond to this problem. The first is to introduce competition where possible, in order to increase the likely variety of practices and policies on which selection can operate and to allow good ones to flourish. The second is to try to improve policies in a more deliberative way, analysing alternative strate-

gies and trying to select the most promising. To some extent, governments can draw on the experience of other countries and of businesses. But they can also attempt to learn systematically from their own experience.⁹⁷

In New Zealand, the Government does experiment with trial programmes and policies. But it typically does not plan the trials in ways that facilitate the assessment of the programmes' likely effects, as opposed, say, to the ease of their implementation.⁹⁸ Likewise, the Government has often not attempted to evaluate carefully the effects of large-scale changes, such as privatisations. Its reforms have put considerable emphasis so far on the clear description of existing policies (in particular, the specification of agencies' outputs) but relatively little on empirical assessments of the effects of those outputs on outcomes.⁹⁹ To learn more from its experience, the Government would have to make systematic, empirical evaluations of policies a matter of routine, although these could be selective, rather than comprehensive, focusing on major policies that are amenable to evaluation, in areas of concern. Because such assessments are likely to be useful overall to the Government, but sometimes embarrassing either to particular agencies or to politicians, the process needs somehow to be institutionalised. The experiences of Australia, France, Canada and the United States may help with the design of such an evaluation policy.¹⁰⁰

Third, the Crown entity sector – generally made up of semi-autonomous bodies – sits somewhat uneasily between the core departments and the State-owned enterprise sectors. Accountability and performance problems may arise given any lack of clarity about the roles and responsibilities of some Crown entities *vis-à-vis* departments and the relevant ministers. The sector accounts for NZ\$ 11 billion of government equity and is a major supplier of health, education and scientific research services. Particular issues concerning health and education are dealt with below.

Fourth, some problems are associated with the system's reliance on output contracting between ministers and agencies as a mechanism for enhancing efficiency. The introduction of contracting has probably been helpful.¹⁰¹ The Government now knows more about what it is buying, for what cost. Government agencies have a better idea about what they are being asked to do, and since their performance is more easily assessed, they probably face somewhat stronger pressures to perform well. The power of minister-agency output contracts is

hampered, however, by the difficulty of accurately specifying and valuing the outputs of many government agencies. Moreover, ministers may have limited interest in monitoring actual agency performance in providing outputs that are not politically salient or, like policy advice, consumed directly by the minister concerned.¹⁰² To some extent, the situation can be ameliorated by giving ministers more help in contracting with suppliers. But addressing some other shortcomings may also serve to improve the system's performance and ensure that requirements of future governments are met. In particular:

- Although the recent reforms have helped, pay rates for public-sector agency heads may not always be high enough to attract sufficiently good people and labour law makes it difficult for poorly-performing people at all levels to be replaced. Increasing permissible pay rates for agency heads and revising job-security legislation may alleviate this problem.
- Members of the public often know and care more about certain aspects of agency performance; taxpayers see, for example, how quickly the tax department answers questions. Some government agencies already make use of this form of public monitoring by publishing the standards its customers can expect. But they are not required to publicise their relevant performance goals and to encourage public comment and criticism.¹⁰³ The “citizen’s charters” of France, Belgium, and the United Kingdom, in particular, may offer useful guidance in this respect.¹⁰⁴
- Finally, there is scope for the Government to make the supply of the services it buys truly contestable. Although the newly-improved specification of outputs should help in this regard, so far there appears to be little real competition for the supply of government-purchased outputs. A possible solution to this problem is introducing “market testing” policies similar to the United Kingdom’s, in which government-owned suppliers are required to seek tenders to supply outputs from alternative sources.¹⁰⁵

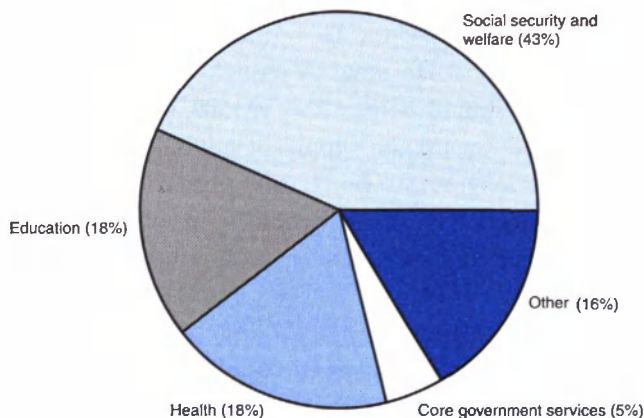
While there is scope for refinements, it should be recognised that the contracting system has its limits. Apart from the difficulties in measuring some outputs, there is a risk of an unduly short-term focus and a possible loss in “civil service culture”. Hence, care has to be taken that over-reliance on contracting does not lead to a decline of performance along the less verifiable dimensions.

Health care

Major reforms have also been implemented in the area of health care which, in terms of expenditure, is almost as important as core and “other” government services¹⁰⁶ (Figure 34). Indeed, in New Zealand, about 80 per cent of health care costs are met by the central government and related spending accounts for about 18 per cent of the budget.¹⁰⁷ The Government’s performance in this area is thus central both to that of the country’s health system and to that of the total public sector. While health spending as a proportion of GDP is lower than in the OECD as a whole, New Zealanders’ health status appears similar to the OECD average (Table 20), as does real spending per person relative to comparable countries.

Prior to the reforms, primary health care and disability support was financed directly by the central government, while public hospitals were operated by locally elected Hospitals Boards that were publicly-funded. In 1989, the authorities moved to strengthen accountability for their health spending by creating fourteen Area Health Boards, with some members appointed by the Minister of

Figure 34. **COMPOSITION OF GOVERNMENT EXPENDITURE**¹



1. 1994/95. Excludes finance costs and net foreign exchange losses.

Source: Treasury.

Table 20. **Health status indicators¹**

	New Zealand	Average for OECD (unweighted)
Female life expectancy	78.7	79.2
Male life expectancy	72.8	72.9
Female life expectancy at age 60	22.5	22.5
Male life expectancy at age 60	18.4	18.3
Female life expectancy at age 80	8.6	8.0
Male life expectancy at age 80	6.8	6.5
Perinatal mortality	0.74	0.80
Infant mortality	0.73	0.91

1. Data are for 1992 or the latest year available. Perinatal mortality is the number of deaths in the first week of life as a per cent of live and stillbirths. Infant mortality is the number of deaths of children one year or less as a per cent of live births.
Source: Oxley and Mac Farlan (1994).

Health. More wide-ranging changes were announced in 1991 and implemented in 1993.¹⁰⁸ Among other things, they aim to:

- encourage efficiency, flexibility and innovation in the delivery of health care;
- improve the allocation of resources between different types of health care (*e.g.* primary and secondary);
- reduce the politicisation of decisions about resource allocation;
- restrain the growth of expenditure;
- widen the choice of hospitals and health care services for consumers; and
- facilitate the access for all New Zealanders to health care.¹⁰⁹

The new system integrates primary, secondary, tertiary and disability purchase, while separating the functions of funding and providing to reduce the incentives to buy from publicly-owned facilities. It created what has been called a “contract system” of health care,¹¹⁰ similar for example to that operating in the United Kingdom. On the purchasing side are four Regional Health Authorities (RHAs). On the provider side, there are a range of private providers and public hospitals have been made into 23 Crown Health Enterprises (CHEs). The RHAs contract with CHEs and other providers for the supply of health services, with some contracts specifying a particular volume of a particular service for a particular price.¹¹¹ Initially, the Government announced that it would permit people to use public funding to purchase a health-care plan from someone other than their

local RHA, thus allowing for competition among health *purchasers* as well as producers. Subsequently, however, it decided not to proceed with this change, although the Accident Compensation Corporation will shortly commence purchasing elective surgery.

The health reforms, like many other recent public-sector reforms in New Zealand, emphasise the distinction between purchase and ownership interests: the Government contracts with RHAs to pursue its *purchase* interest in CHEs (and other providers), while it uses the Treasury and a new Crown Company Monitory and Advisory Unit (CCMAU) to monitor its *ownership* interests in CHEs. As owner of the CHEs, the Government intends to require them to make a return on the capital it has invested. The purchase-ownership distinction is also reflected at the level of ministers: RHAs are responsible to the Minister of Health, while CHEs are responsible to the Minister of Finance and a new Minister for CHEs.

The reforms simplify and further strengthen the central government's formal control over the level and allocation of public health expenditure. Previously, health funding was channelled through the Department of Health, the Department of Social Welfare, and Area Health Boards that were, in part, locally elected. Decisions on subsidies for pharmaceuticals and doctors' visits, for example, were set by central government regulation and the level of expenditure was determined by demand. The reforms make RHAs fully accountable to the central government and give them responsibility for allocating resources over almost all types of government-funded health care. Subject to policy directives – which, for example, limit the amount patients may be asked to pay in user charges for some services – RHAs now choose how to allocate the expenditure between subsidies for doctors' visits, pharmaceuticals, hospital treatment, and so on. The RHAs are given a fixed budget, determined by a formula based on their population and its demographic characteristics, and directed to keep their total expenditure within that budget.

Coinciding with the reforms there was an increase in the range of services for which middle- and high-income patients were charged. There had previously been user charges for some services (such as visits to general practitioners), but not for others (such as out-patient services provided by hospitals). The Government introduced means-tested user charges for some services that had previously been free to patients, in order to encourage patients and doctors to take some

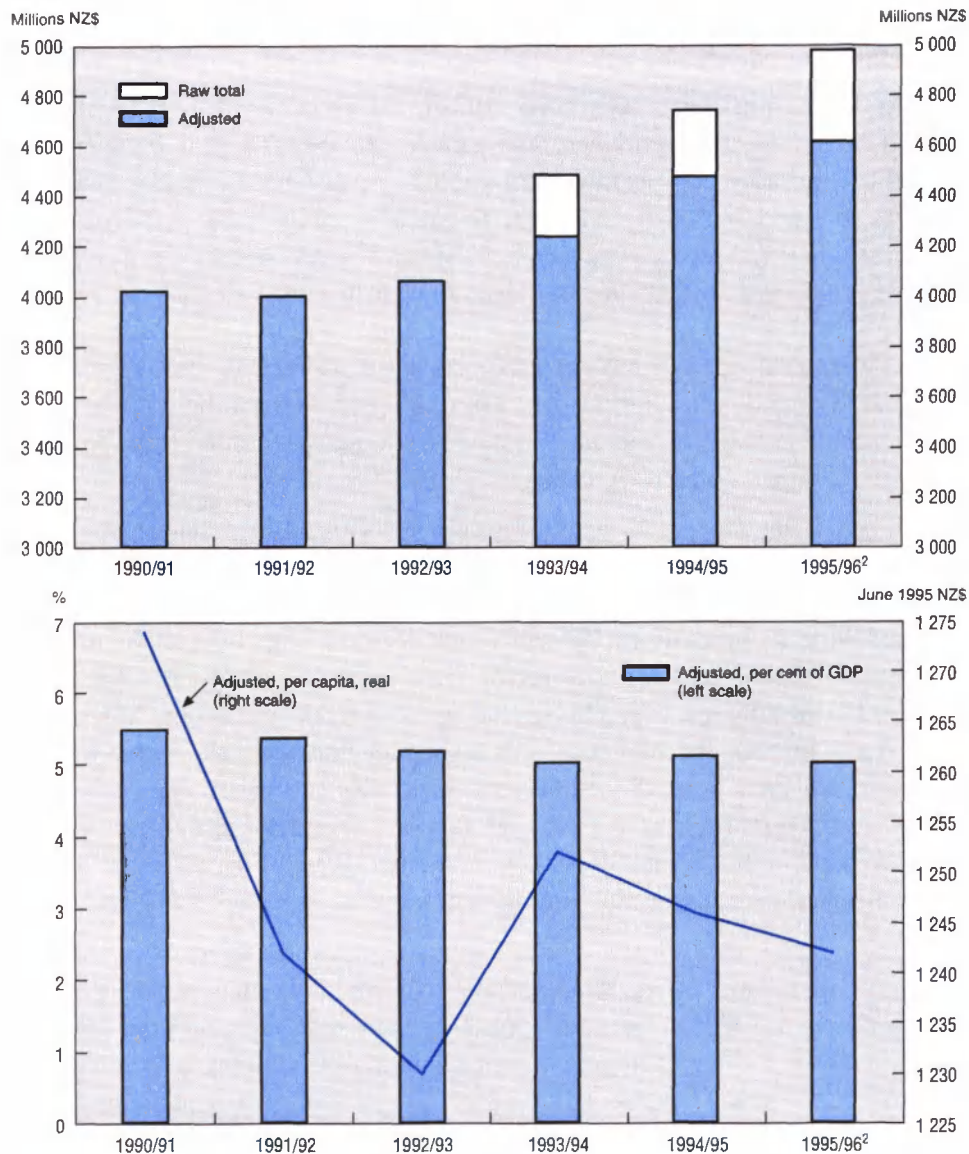
account of the costs of alternative services and to reduce expenditure.¹¹² It has dropped some of the new user charges, however, in the face of public opposition and refusals to pay the fees.¹¹³

As the reforms have been controversial, the Government has deliberately slowed their impact on providers and patients. In the first year of operation, 1993/94, it asked RHAs to buy from publicly owned hospitals the bundle of services that they had provided in the previous year. In 1994/95, RHAs acted cautiously, mostly making only small adjustments to the system. Change seems to have accelerated in 1995/96. But, even though the system is now in its third year of operation, it is not yet clear how the reforms will ultimately affect health care in New Zealand. It is too early to observe their effects on health outcomes and also to discern what impact they will ultimately have on the outputs of the health sector as well as the organisation of output provision. It is possible, however, to report some early changes.

When it announced the health reforms, the Government said it could not afford to solve problems by spending more.¹¹⁴ In fact, since the implementation of the reforms in 1993, adjusted¹¹⁵ public health expenditure has increased but changed little in real per capita terms and declined slightly relative to GDP (Figure 35). To some extent its recent rise represents a belated response to problems created by real expenditure reductions under the old system. It has been pointed out that, in the past, hospitals were reducing their net worth to fund operating deficits, a practice facilitated by inadequate accounting and monitoring procedures.¹¹⁶ A comprehensive asset revaluation has resulted in a rise in depreciation expenditure by around 35 per cent in the first years of the CHEs operation, while asset values have declined from NZ\$ 4 billion to NZ\$ 2½ billion.

The volume of hospitals' output appears to have increased when the new system was implemented in 1993/94, and provisional data suggest that it continued to rise in 1994/95 (Figure 36). Volumes were also growing under the old system, however, even when government funding was declining in real terms.¹¹⁷ Because of the slow implementation of the new system, it will probably take a few years before the effects of the changes on volumes and per-unit costs can be discerned. One common measure of health systems' performance is the average length of time patients stay in hospital, shorter times being generally considered to indicate greater efficiency. Continuing its downward trend, the length of hospital stays declined at the beginning of the new system's implementation, but

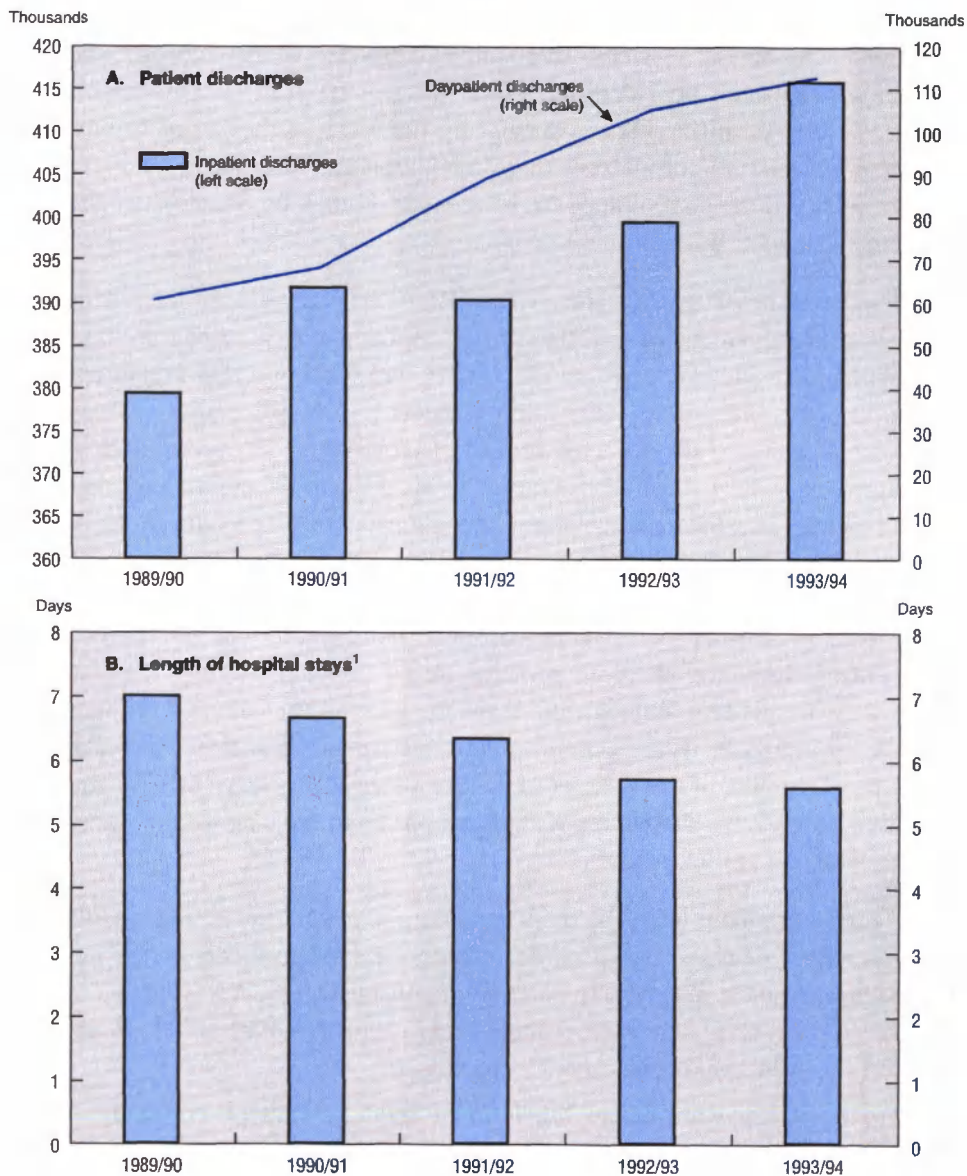
Figure 35. **GOVERNMENT HEALTH EXPENDITURE¹**



1. Total appropriations in Vote health. Adjustments have been made for the transfer of Disability Support Services and other functions to the health budget.
2. Forecast.

Source: New Zealand Government.

**Figure 36. VOLUME OF HOSPITAL SERVICES:
PATIENT DISCHARGES AND HOSPITAL STAYS**



1. Average length of stay in hospitals: unweighted average of data for 21 hospitals groups.
Source: Ministry of Health.

not by an amount that would have been unexpected under the former regime (Figure 36, second panel).

For most health services, there appears so far to have been little real competition between providers, either because of natural local monopolies or because of RHAs' difficulties in specifying the services they want to buy with sufficient precision to permit tendering. In addition, the reforms do not appear yet to have achieved the goal of depoliticising decision-making about which services government-owned hospitals will provide.¹¹⁸

There are, however, two areas where RHAs have developed interesting new contracting arrangements. *First*, there has been competition among providers for the supply of residential care for the elderly and for some non-urgent surgery, which, in turn, "has led to some improvements in both price and quality in the rest home area and to a lesser extent for elective surgery".¹¹⁹ *Second*, RHAs have introduced some new forms of contracting with general practitioners that may lead to better decision-making about the allocation of expenditure on health. Previously, general practitioners received fee-for-service subsidies from the Government. Now about 6 per cent have "capitation" contracts, in which they are given a fixed subsidy per patient enrolled, reducing the incentive for over-treatment.¹²⁰ Moreover, about 36 per cent are on "budget-holding" contracts, in which they are given a budget to hold for the pharmaceuticals and/or laboratory tests they prescribe.¹²¹ If the general practitioner spends less than this budget, he or she can use some of the savings to pay for other health services. The adoption of similar practices in the United Kingdom appears to have slowed the growth of expenditure on pharmaceuticals.¹²²

Because the new health system is recent, however, and in the middle of a change-management process, it is too early to see clear results from the reforms, and assessment must rely largely on *a priori* considerations. A key element of the reforms is to generate better information and incentives which should, over time, lead to improved health outcomes. In particular:

- the new accounting and financial information, which is emerging, should increasingly enable policy makers and others to make better decisions;
- the requirement, not yet successfully implemented, that CHEs make a return on equity should, over time, improve the allocation of health resources, by making clear the full costs of different services;

- the devolution of decision-making authority to four RHAs and the comparative monitoring done by the Government should encourage learning and productive innovation;
- last but not least, making the RHAs responsible for almost all forms of publicly-funded health care should facilitate better allocation of resources between different types of care. Integrating the purchase of all personal health services – primary, secondary, tertiary and disability support – is expected to reduce cost shifting, lead to better use of community-based and outpatient care, facilitate case management, and encourage greater technical efficiency and quality of care.

Some work undertaken in the OECD that considered how health systems could best be structured – taking into account the advantages and disadvantages of different arrangements – argues that the integrated funder-provider contract system that the New Zealand has adopted is a promising way of responding to patient demands while containing costs.¹²³ In addition, at least some aspects of the United Kingdom's health-care system appear to have improved following the introduction of a contracting system similar to New Zealand's.¹²⁴

The Government's current priorities in the health sector are: refining contracting of procedures (for example, improving service and definition, pricing and risk sharing); developing better outcome measures; targeting key health gain areas; and enhancing procedures to manage demand effectively and equitably (for example, booking systems). This orientation should help consolidate the new framework in the short run. In the longer term, it might be useful to address some other issues, such as the right balance between public and private care; possible advantages of greater integration of primary/secondary provision; or the feasibility of the originally-envisioned policy of purchase competition.

Education

Like health care, education is one of the New Zealand Government's major areas of activity: almost all direct expenditure on education is public,¹²⁵ accounting for 18 per cent of the budget (Figure 35). Education reforms, their motivation, and some of their results, were discussed in detail in the 1992/93 Survey of New Zealand, in the context of human-capital development generally. Recent initiatives to enhance skill acquisition are discussed in Chapter III of this Survey. Here, attention is restricted to key organisational issues, namely the gradual

decentralisation of decision-making in education that the Government has undertaken in the last decade. This policy can be considered as an attempt to address at least two of the problems outlined in the earlier discussion of the factors afflicting the performance of governments: the frequent absence of product-market competition or strong customer monitoring, on the one hand, and the limited discretion on the part of government agencies on the other.¹²⁶

The reforms in education have aimed to give parents and students more opportunities to influence the performance of educational providers and to accord the latter greater autonomy to respond to that pressure. The power of parents and students has been enhanced in three distinct ways. *First*, they have been given more choice over which provider students attend. *Second*, they have been granted greater opportunities, in the school sector, to influence directly the behaviour of providers. *Third*, providers' funding has been linked more closely to the decisions of students and parents, allowing them to have a greater impact on providers. At the same time, the latter have been gradually given more authority over decisions about which resources to use to provide education. The Government has, however, retained considerable central control over the school curriculum.

Decentralisation is most advanced in the pre-school sector. Parents can now choose from a large variety of providers, all of which are privately owned. The Government accords a per-child cash grant that, in general, treats equally all providers meeting certain quality standards.¹²⁷ It also gives extra subsidies to low-income parents. Providers have full control over the resources they use.

In the school sector, "zoning" has been abolished, so that parents can get fully subsidised education for their children at any public or any "state integrated" private school that teaches the standard national curriculum and adopts the same accountability arrangements as public schools.¹²⁸ Parents can also get 13 to 14 per cent of that subsidy if they send their child to a non-integrated private school that meets certain quality standards. In the public and state-integrated system, funding roughly corresponds to the number of students (see below). Each school is managed by a Board of Trustees, which hires the school principal and teachers and is elected locally.¹²⁹ Thus parents can influence their school by democratic means, as well as by choosing between various providers. Most schools do not have full discretion over input choices: they get a cash grant for their operating expenses, which they choose how to spend; but the government gives them most of their resource in the form of teachers. The number of

students determines how many teachers each school is entitled to, although schools get extra resources for teachers in discrete steps as the number of enrolled students reaches certain thresholds. While the Boards of Trustees are the legal employers of their teachers, the central Government determines teachers' wage rates and grading classifications in negotiations with teacher unions.

Beginning in 1992 a small number of schools chose to enter a three-year trial scheme, in which they received all their operational funding in cash (except for the costs of capital, for which schools are not charged) and could choose how to spend it. With the end of that trial, all schools have now been given another option to receive a grant for all their operating expenses. The Government has forecast that this "direct resourcing" option, which also gives schools greater total funding, will be chosen by 20 per cent of all schools; others have forecast that as many as 75 per cent of all schools will join.¹³⁰ However, teachers' wages and payscales continue to be determined by central negotiation, even under the direct resourcing scheme, reducing the ability of schools to respond with flexibility in the face of changing demands.

Under the Government's post-compulsory education and training policy, providers are self managing with substantial control over the way resources are allocated and over the curriculum they offer, while students have some influence over the choice of courses and allocation of resources. Universities, polytechnics, and teachers' training colleges are funded according to the number of full-time equivalent students they have, weighted by the type of course the students are taking.¹³¹ On average, the Government pays about 80 per cent of what it has estimated are the average costs for various broad categories of courses, such as science, humanities, commerce, law, medicine, and dentistry. The subsidy will fall to 75 per cent over the next five years. Post-compulsory educational institutions thus get a form of "direct resourcing". The system is partially decentralised, with educational providers deciding which courses to offer based on anticipated demand. Each year the Government fixes the number of full-time equivalent places it wishes to subsidise. These are then allocated to individual providers. There is no limit as to the number of students a provider can accept, as institutions are free to charge fees, and in practice, most of them choose to cross-subsidise so-called "unsubsidised students".

It is difficult to assess the effects of these organisational changes. While they have been accompanied by increases in the proportion of young people

receiving education and school qualifications,¹³² these developments have wider causes than the initiatives discussed here.¹³³ At a more detailed level, empirical evidence of the impact of school reforms is scarce. It appears that the devolution of greater autonomy to schools has placed their management under greater stress, as they adjust to greater responsibility in an environment of strict budget control.¹³⁴ At the same time, tertiary institutions are still coming to terms with increased need to manage cost structures and revenue streams in an environment of increasing enrolments and gradually declining per-student government subsidies.

Overall, however, the reforms are likely to be beneficial. Although parents and students have imperfect information about the quality of education, they may be better than a central agency at monitoring and assessing the performance of schools, and thus at choosing between them.¹³⁵ Likewise, local school managers are probably in a better position than any central government institution to decide which resources they should use to provide education. A decentralised system is also likely to foster beneficial innovations. Giving providers discretion over which inputs to use and which educational services to supply can be expected to generate variations in their practices, while giving students and parents choice between providers leads to the selection of the methods that appear to work best. The improvements can happen both deliberately – as providers with good practices are imitated by others – and “blindly” – as successful providers attract students and grow, while unsuccessful providers lose students and shrink. The Government’s pre-school policy appears good when looked at in this light. But there are probably gains to be made by continuing to decentralise decision-making and enhance demand responsiveness in the school and post-school sectors.

There are a number of issues that need to be kept in mind as the Government looks to raise school performance further. The school curriculum should remain flexible enough to permit innovation and responsiveness to the reasonable interests of parents and students. Higher funding for non-state providers could also foster competition and innovation.¹³⁶ Complete direct resourcing (“bulk funding”) of schools is making slow progress. Further progress is desirable and some schools may need additional support to help make the transition. It will be important that moves to strengthen the quality of professional leadership and create a performance-based culture in schools continue.¹³⁷ Ongoing improve-

ments in the quality of information on the performance of educational institutions¹³⁸ will also be needed for competition to create pressure for improved outcomes. A choice model may create concerns¹³⁹ about the quality of education received by students who remain in poorly-performing schools. Finally, some additional resources may be required alongside schools' management changes to improve educational outcomes for particularly disadvantaged students.¹⁴⁰

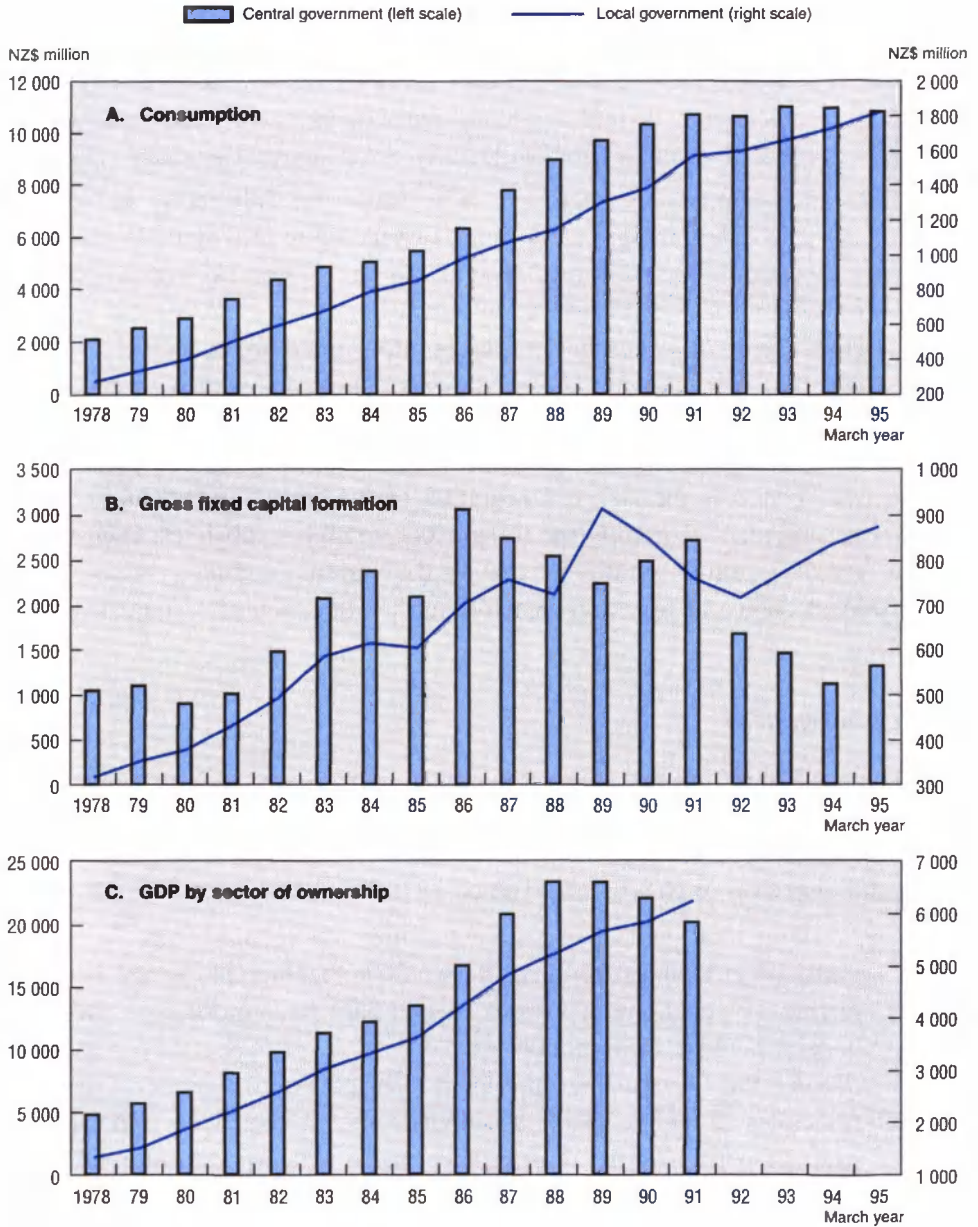
In the post-compulsory sector, there is scope for enhancing the role of student choice in determining the allocation of funding to providers. One way of achieving this would be to move away from the current system of central administrative control over the allocation of subsidised places. A broader role for student choice would mean that resources are shifted to providers offering courses that best meet the demand of students. This combined with continued reductions in per-student subsidies¹⁴¹ would encourage students to take into account the cost of courses in making decisions as to which courses to take. A second issue concerns the lack of integration of funding arrangements for state and private providers. Currently the former receive higher subsidies, even where courses are of a similar nature. Integrating the various funding systems would allow student choice to play a greater role in the allocation of resources among providers.

Local government

The wave of reform that swept through the public sector in New Zealand did not leave local government untouched. In 1989, new central government legislation introduced what has been described as the most significant reorganisation of local administration in New Zealand since 1876.¹⁴²

- *First*, the total number of local authorities was reduced from 705 to 93, partly by grouping several smaller districts together and partly by transferring the functions of various special-purpose authorities to the main general-purpose local authorities.¹⁴³
- *Second*, the Government applied to local government some of the new principles of public-sector governance that it had been imposing on itself. In particular, the reforms encouraged the corporatisation of local-authority businesses and, in the case of ports, airports, bus, and energy companies, imposed it.¹⁴⁴ They called for the operational separation of local authorities' regulatory and service-delivery functions. They

Figure 37. **LOCAL AND CENTRAL GOVERNMENT**



Source: Statistics New Zealand and OECD.

required local authorities to adopt accrual accounting and to report in more detail on their budgetary plans and performance. They also changed their management structure, by requiring local authorities to appoint a chief executive (or team of managers) for a term of no more than five years, who would have responsibility for all lower-level appointments.¹⁴⁵

More recently, the Government has proposed legislation that would remove some remaining restrictions on the power of local authorities to borrow and at the same time impose on them transparency and accountability disciplines similar to those introduced for central government by the Fiscal Responsibility Act.

By some measures, these reforms have reduced the size and scope of local governments' involvement in the economy. Employment, for example, has fallen in recent years. But other indicators give a slightly different picture. Total consumption by local government has continued to increase and its investment activity has remained relatively strong. Various comparisons with central government suggest that, overall, local government grew less rapidly in the mid-1980s but has not contracted so much since then (Figure 37).

Much of the difference probably arises in the area of commercialisation and privatisation. Where corporatisation was facilitated but not required, not much change appears to have happened.¹⁴⁶ As a result, local governments still own many businesses including commercial forests, quarries, refuse collection and disposal, rental housing, public transport, off-street parking, ports, airports, and electricity supply.¹⁴⁷ The arguments discussed earlier suggest that local government should pursue a more vigorous privatisation programme. In some cases, however, central government may need first to review its regulation of those businesses, ensuring both that it is not protecting them from competition and that natural monopolies are well regulated.

Overall assessment

Since the mid-1980s, New Zealand has implemented a wide-ranging and ambitious programme of reform, which can be viewed as a remarkably coherent attempt to address some fundamental problems traditionally afflicting public-sector governance. These reforms have brought about a marked reduction in the

scope of the Government's activities and in its size relative to the rest of the economy. Although empirical evidence is relatively scarce, the above analysis suggests that the reforms have been helpful.

Corporatisation introduced market mechanisms into the operation of state-owned enterprises, increasing managerial incentives and discretion over inputs. This has contributed to large gains in the companies' efficiency and profitability. There are also indications that the privatisation programme has produced significant improvements in companies' performance. Budget, management and accounting reforms in the core public sector have given departments clear and transparent objectives and the autonomy to achieve them, while strengthening accountability mechanisms. The new framework appears to enjoy widespread, though qualified, support among those involved, if not the general public, and the few evaluation studies available all show improvements in departments' cost performance. At the local government level, the number of authorities has been drastically reduced and reforms have been introduced along the lines implemented for central government. Elements of the new health-care system that should, over time, have beneficial effects include improved information and accounting, the requirement to make a return on equity, the devolution of decision making to regional authorities, and – last but not least – the integration of the purchase of health services combined with the separation of the functions of funding and providing care. Finally, education reforms have aimed to give parents and students more opportunities to influence the performance of providers while increasing the latter's autonomy, notably in respect of the use of resources. Nonetheless, there is scope for further action.

In state-owned enterprises, despite the improved measurement of costs, financial reporting information could be further improved to simulate some capital market discipline and provide a better picture of the companies' profitability. Moreover, many businesses still owned by both the central and local governments – including those in the area of electricity generation – could be privatised without major regulatory problems. This would probably further enhance their performance. In the few cases where the enterprises have natural monopoly power they could be regulated explicitly.

In the core public sector, although considerable progress has been made, the Government could still do more to pressure and enable its agencies to improve their performance. For instance, there is scope to make the supply of services it

buys truly contestable. To enhance its own ability to learn and innovate, the Government could put in place better systems for evaluating policies empirically. Indeed, it has often not attempted to assess the likely effect of programmes, nor to monitor public satisfaction with the outcomes. Moreover, it is questionable whether the reliance on the contractual framework alone is sufficient, in particular where outputs are difficult to measure. Finally, to improve the quality of regulatory decision-making, the Government could apply to this area the same principles it has successfully brought to bear in the field of monetary, fiscal and expenditure policy, by requiring more transparency about the cost of specific policies.

In health care, where the reforms are more recent, considerable work needs to be done to get the new system working well. Regional Health Authorities have made promising beginnings in purchasing services from a more appropriate range of providers. Their performance might be further enhanced by introducing increased purchaser competition, although care would need to be taken to prevent purchasers from selecting only the healthiest individuals. The hospitals are facing a challenging task in developing the necessary costing and information systems and restructuring services appropriately to the new competitive environment.

In the school and post-school sectors, much still remains to be done to decentralise decision-making and make the system more responsive to parental and student demand. So far direct resourcing (including teachers) has been introduced only in a limited number of schools. School trustees need to be given further opportunity to translate their dedication and skill into efficient school governance. The progressive implementation of a performance management system offers a valuable opportunity to further develop management flexibility and the quality of the professional environment. Centralised wage negotiations affect the schools' capability to manage their resources in the manner that best meets their needs. Developing information about the quality of education is crucial to enable parents and students to assess the performance of schools and choose between them. In the post-compulsory sector, the role of student choice could be increased by eliminating administrative control over the allocation of subsidised places and by integrating funding arrangements for public and private providers. Strengthening of governance arrangements and incentives to efficiently manage resources in the tertiary sector could also lead to better outcomes.

V. Conclusions

The recovery of the New Zealand economy that began in 1991 has proved to be durable, suggesting that the wide-ranging reforms of the past decade are bearing fruit. Although output growth has slowed in response to tighter monetary conditions, from the high rates of 5 to 6 per cent achieved in 1993 and 1994, it has remained above the OECD average. As a result, employment has continued to rise rapidly and the unemployment rate has fallen to 6 per cent. At the same time, despite some inflationary pressure, price performance has remained good by both historical and international standards, and the external deficit, albeit widening, has stayed well below the high levels recorded in past periods of strong growth. With the economic upturn entirely private-sector based, public-sector retrenchment and the buoyant activity have been reflected in the emergence of sizeable budget surpluses.

Despite these excellent results, continued robust growth will be required to reverse past declines in living standards relative to other OECD countries. Prospects in this regard appear to be favourable. Indeed, New Zealand is projected by the Secretariat to remain one of the fastest growing economies in the OECD area. Latest indicators suggest that GDP growth has troughed following its deceleration during 1995. With the implementation of tax cuts in mid-1996, growth is likely to receive a boost and is projected to exceed 3 per cent again in 1997. Private consumption is expected to increasingly replace investment as the main impetus to economic expansion in the period ahead. Exports are also projected to strengthen but are unlikely to expand at the high rates recorded in the first half of the 1990s, given the adverse effects of exchange-rate appreciation on price competitiveness. As a result, the current account deficit should remain substantial, although improving terms of trade are expected to prevent it from widening significantly. With slower growth and the strengthening of the currency over the past year, underlying inflation is expected to fall towards the middle of the

0 to 2 per cent target range before picking up again in 1997 as the expansion in activity gathers momentum.

While, on the basis of information currently available, this would seem to be the most likely outcome, other scenarios cannot be ruled out. On the one hand, notwithstanding positive recent indicators, the period of slower growth could be more protracted than assumed, as high real interest rates may hold back domestic demand and exporters may find it difficult to cope with the high exchange rate or suffer from a slowdown in foreign demand. On the other hand, strong growth could resume more quickly than expected if private consumption and investment pick up in anticipation of the tax cuts. This appears quite possible given continued high consumer confidence and the recent improvement in the business climate. Faster growth at a time when the economy is still operating near capacity could re-ignite inflationary pressures, however, necessitating a tightening of monetary conditions. Policy makers might thus face the difficult task of maintaining inflation within the target range while avoiding a hard landing for the economy in the medium term.

The monetary policy framework put in place in 1989 by the *Reserve Bank Act*, which makes price stability the sole objective of monetary policy, has, so far, proved effective in keeping inflation low in the face of a strong recovery. However, the target range for inflation – which is defined in a performance contract between the Governor of the Reserve Bank and the Minister of Finance – was breached by a small margin in the second quarter of 1995 and the Bank's measure of underlying inflation has remained at the top of the range since then. Indeed, in early 1994, the Bank – like other forecasters – failed to recognise the momentum of the economy and the extent of inflationary pressures building in the construction and housing sectors. It now acknowledges that, even though it moved to tighten monetary conditions well before inflation actually picked up, greater firming should have taken place despite the upward pressure on the New Zealand dollar. This instance demonstrates the careful management required to maintain inflation within the tight band defined as part of the framework.

In the light of these developments, the Reserve Bank is now giving a greater weight to interest rates in the conduct of policy and has announced its intention to aim continuously at delivering inflation in the middle of the target range. Such an approach is undoubtably correct, given the possibility of forecasting errors and inflation shocks. However, on the basis of the Bank's latest inflation forecasts, it

leaves little room for monetary easing in the medium term. Moreover, it means that exposed sectors of the economy – notably manufacturing and agriculture – continue to bear a high burden of monetary tightening, although, as noted, a major source of the problem has been the construction and property sectors. With output currently above potential and underlying inflation at the top of the target range, these tensions are likely to persist in the near future, thus providing a further test of the current monetary policy framework.

The measurement of the inflation rate that is targeted has emerged as a problem with the operation of the framework. At present, the Reserve Bank calculates the indicator, *i.e.* “underlying” inflation, by which the Governor’s performance is largely assessed and, in doing so, applies significant judgement as to whether the effect of specific price shocks should be eliminated. The credibility of such a measure to all parties is important to wage formation and price expectations, in particular if – as in the recent period – “headline” and the estimated “underlying” inflation diverge markedly. It would be preferable to see this confusion removed by defining underlying inflation so as to allow its calculation by an outside agency. At the same time, the official measure of inflation should be changed to make it more relevant, in particular by excluding mortgage interest payments. These adjustments would serve to enhance the credibility of the framework.

Fiscal restraint in recent years has also helped contain inflation pressures during the economic upswing. Indeed, the improvement in New Zealand’s government finances has been impressive, even allowing for cyclical influences. The scale of the turnaround is indicated by the fact that the net public debt-to-GDP ratio has fallen from over 50 per cent in the early 1990s towards 35 per cent most recently. With many OECD countries having experienced the opposite movement and currently striving to improve their fiscal position, New Zealand’s recent performance appears to be particularly noteworthy: *first*, it is a prime example of the “maxim” that budget consolidation is more likely to be successfully achieved through reductions in expenditure than through increases in taxation; *second*, as discussed below, extensive public-sector reforms have played an important role, not just in enhancing the efficiency of the public sector, but also in strengthening financial control; *third*, the swing in the budget balance into surplus has generated a virtuous circle in which debt reduction has led to lower

interest rates, reduced debt service payments, and further improvements in the fiscal position.

The underlying soundness of the fiscal position will create new challenges for the government since claims are likely to be made for the distribution of the gains from fiscal consolidation. In these circumstances, the effectiveness of budget procedures – established in an era of fiscal weakness – will need to be continually assessed to prevent the dissipation of these gains. In particular, it remains to be seen whether the existing budgetary framework will be able to withstand the emerging pressures for increased expenditure.

The *1994 Fiscal Responsibility Act* represents a commendable approach to the conduct of fiscal policy. Establishing benchmarks against which the public can assess policies, it requires the Government to set out its long-term and short-term objectives and to publish a substantial array of fiscal indicators through the year. Although vigilance will be needed in order to maintain expenditure restraint, the income tax cuts announced by the Government would seem to be consistent with the Act's principles of prudent fiscal management, given the prospect of growing budget surpluses under present policy settings. Moreover, there are a number of disincentive problems – in particular with respect to high marginal effective tax rates faced by certain groups of low and middle-income earners – which the tax cuts could usefully address. At the same time, it should be recognised that, with underlying inflation currently at the top of the target range, the tax reductions risk putting further strain on monetary policy, even though they only imply a move in the fiscal stance from restriction to broad neutrality.

This suggests that a gradual approach to the cutting of taxes would be appropriate. The Government has itself stated that it will monitor macroeconomic conditions and, if necessary, the second round of tax cuts, scheduled for 1997, could be retailored. From current projections, it looks likely that, over time, further tax reductions will be needed to offset a rise in fiscal surpluses. The transitional issues associated with these tax cuts – notably concerning inflation and balance-of-payments pressures – will require very careful consideration. These considerations will have to be balanced, however, against the potential gains from lowering the cost of capital through a progressive reduction of the tax burden.

Together with transparent and predictable macroeconomic policies, structural reforms have contributed to creating an environment for sustained growth. In particular, there is increasing evidence that the reforms introduced in the labour market have been positive. As noted, there has been a sustained fall in unemployment to well below the OECD average with as yet little sign of wage pressure. In addition, wage relativities now show greater responsiveness to particular skill shortages than was previously the case under the more rigid system of industry-wide occupational awards. Applying the *OECD Job Study* analysis to New Zealand, the overriding impression is that there are, compared to other countries, fewer areas where urgent policy attention is required. Among major outstanding issues which do need to be tackled are the improvement of labour-force skills and competences and the reduction of the gap between the labour-market performance of the different ethnic groups. In addition, as mentioned, the announced tax cuts and social programmes measures will provide the opportunity to alleviate the problem of "dependency traps" resulting from the interaction of the tax and benefit systems.

Although the economy has been substantially liberalised over the past decade or so, more remains to be done. The New Zealand Government has retained quite substantial commercial interests. These could be privatised and, in some cases, the relevant product markets made more competitive with ensuing allocative and productive efficiency gains. Similarly, the mandated powers of producer boards remain an anomaly, being a barrier to innovation and entrepreneurial activity in the agricultural sector. Deadweight losses could also be reduced through ongoing reforms of the tax base and reductions in the top personal income tax rate, as well as through the Government's announced longer-term plan to lower tariffs to zero. Furthermore, the monopoly accident compensation scheme looks likely to impose escalating costs on employment in the absence of substantial changes to both the scheme design and delivery. At the very least, there is no reason why extensive private delivery could not be introduced, with probable gains to premium payers and beneficiaries.

Regarding skill development, the recent announcement that the school-leaving age will be raised to seventeen in 1998 is to be welcomed. Nevertheless, further action would be required to reduce the numbers of persons leaving school early by ensuring that secondary education includes a vocational option leading to recognised industry qualifications. In this respect, the authorities should perse-

vere with the implementation of a framework for nationally recognised school, vocational, and academic qualifications to make sure that skills and competences acquired through experience are adequately acknowledged. At the same time, however, they should consider whether there would be benefits from the more rapid completion of a less ambitious framework. The progress in Industry Training Organisations, which to date has been promising, should, as well, be monitored to ensure that their coverage continues to increase. Regarding the problem of widely different labour-market outcomes of Maori and Pacific Islanders in comparison to people of European origin, probably the most promising approach to take is to try and close the persistent gap between the educational attainment of these groups and the rest of the population, *e.g.* by further increasing the number of schools where Maori is the main language of instruction.

Over the past decade, New Zealand has also undertaken radical structural reforms in the public sector. The initiatives came in several waves. Priority was first placed on shrinking the government provision of marketable goods and services by corporatising and eventually privatising a large number of operations. Subsequently, the government overhauled its management of core departments, contracting them to produce well-defined outputs, giving them discretion in the choice of inputs, and introducing private-sector-like accounting. *The Fiscal Responsibility Act* was the culmination of these reforms, in that it made accrual-based budget forecasts mandatory for the whole of government. In education, parents and students were given more opportunities to influence the performance of providers, and the latter greater autonomy to respond to that pressure. Finally, health reforms integrated the purchase of almost all forms of publicly-funded services while separating the functions of funding and providing health care.

These reforms have brought about a marked reduction in the scope of the government's activities and its size relative to the rest of the economy. Empirical evidence, though limited, generally suggests that the initiatives have increased incentives and enhanced efficiency. Nonetheless, there is still unfinished business. While corporatisation has introduced market mechanisms and improved the measurement of costs, additional financial reporting information could be provided to simulate some capital market discipline and provide a better picture of the companies' profitability. Moreover, many businesses still owned by the central and local governments could be privatised, without raising regulatory issues. In the core public sector, the Government could do more to pressure and

enable its agencies to improve their performance by putting in place better systems for evaluating policies empirically and by applying to this area the same principles that it has successfully implemented in the field of monetary and fiscal policy. Improving the efficiency of local authorities as a major supplier of infrastructure services would be an important step to raising the performance of the government sector. Measures such as the expected changes to the *Local Government Act*, which enhance the accountability and transparency of local government finances, would reinforce underlying improvements that are taking place.

In health care, where the reforms are more recent, hospitals are facing a challenging task to restructure services in a way appropriate for the new competitive environment and also to develop the necessary costing and information systems to manage demand effectively and equitably. Finally, in the education sector, much remains to be done to generalise direct resourcing of schools, improve the functioning of school boards, develop information on the quality of institutions, and make the system more responsive to parental and student demand. More specifically, the continuation of centralised practices in the contracting of teachers and in the negotiation of their wage rates acts as a rigidity to the ability of schools to move swiftly in meeting emerging demands.

While the ongoing reforms have seen the general budgeting, management and accounting methods imbedded throughout the government sector, the extent to which behaviour has changed varies across public sector entities. The efficiencies that are possible from the freedom of chief executives to manage agencies and the specification of outputs will only continue where accountabilities are enforced. In some cases, these accountabilities could be clearer, particularly with regard to the Crown entity sector. One way to address this problem would be through the continuation of improvements in monitoring the performance of agencies and the clarification of responsibilities for this monitoring. Useful mechanisms which could be applied in this regard include an encouragement of market testing and the introduction of more transparent forms of service delivery standards. Additionally, as noted, greater empirical evaluation of existing interventions is likely to assist the quality of decision-making and be a spur for continuing innovation in their design and delivery.

In *summary*, following a period of substantial restructuring, the New Zealand economy has posted a strong recovery since 1991, outperforming

most other OECD countries. The challenge to policy makers now is to manage the transition from a cyclical rebound to sustained growth. The strength of the upturn has put strains on available domestic resources, leading to inflationary pressure and a deterioration of the current account. While, so far, these imbalances have been less pronounced than they typically used to be in the past, vigilance is required. Although the announced tax cuts, following a marked improvement in the fiscal position, should increase incentives to work, and thereby enhance the economy's growth potential, they should be implemented in such a way as to minimise the risk that further monetary tightening will be needed. Notwithstanding the considerable progress achieved in reforming the labour market, additional structural initiatives would be useful, notably in the area of skill development, with a view to promoting productivity, which is ultimately the basis for the population's standard of living.

Notes

1. Note that real investment series reflect the interaction of a substantial fall in the deflator for computers, a large increase in computer spending, and a dated (1982/83) base period used in the national accounts. The move to a more recent base period in June is likely to lead to a downward revision of real investment growth.
2. Thus, although the unemployment rate averaged about 4½ per cent over the period 1982-84, it is likely that, in the absence of the wage and price freeze, it would have had to much higher to keep inflationary pressures in check.
3. Before survey methods were implemented in 1986, unemployment was measured according to registration methods. The data in Figure 13 prior to 1986 have been constructed by splicing the registration series onto the official survey-based measure. The data prior to 1986 therefore need to be treated with caution, since it is likely that the registration series may understate the true extent of unemployment in the 1970s and early 1980s as only those eligible for unemployment benefit are likely to have registered.
4. *Employment Outlook*, July 1995, OECD, Paris.
5. The labour force participation rate has been affected by regulatory changes. The school-leaving age was raised from fifteen to sixteen in January 1993. The age of eligibility for retirement benefits has also risen, as detailed below.
6. Estimates of the responsiveness of the labour force to employment changes rank New Zealand seventh out of 23 countries analysed over the period 1970-91. See "Unemployment and Labour Force Participation – Trends and Cycles" by Jorgen Elmeskov and Karl Pichelman, OECD Economics Department *Working Paper No. 130*, 1994.
7. There is not, however, a one-to-one effect of net migration on the labour force, because not all migrants will be active in the labour force. In addition migration reduces or increases both the labour force and the working age population.
8. The retirement age, or as it is called in New Zealand, the superannuation qualification age, is being raised progressively from 60 to 65 in one-yearly steps, eighteen months apart, and will be completed in 1998. This measure was announced in the 1991 Budget.
9. Maori in the Labour Force", B. Easton in "Labour Employment and Work in New Zealand", ed., P. Morrison, Proceedings of the Sixth Conference, 24-25 November, Victoria University of Wellington, 1994.

10. The form of this intervention varied between moral suasion and tripartite negotiation to a complete wage-price freeze over the period 1982-84.
11. See "Globalisation and the World of Work", R. Harbridge and K. Hince, Victoria University, 1994.
12. See "Has New Zealand's Employment Contracts Act increased Employment and Reduced Real Wages", Tim Maloney, University of Auckland Discussion Paper No. 135, July 1994.
13. See Harbridge and Hince (*op. cit.*).
14. See "Labour Market Adjustment under the Employment Contracts Act", Whatman, Armitage and Dunbar, New Zealand Journal of Industrial Relations, 1994, Vol. 19(1).
15. For the pre-ECA period, estimates of the responsiveness of employment to output rank New Zealand nineteenth out of 23 OECD countries analysed over the period 1970-91. See "Unemployment and Labour Force participation – Trends and Cycles" by Jorgen Elmeskov and Karl Pichelman, OECD Economics Department Working Paper No. 30, 1994.
16. See for example Annex III in the 1987 *OECD Economic Survey*.
17. See Reserve Bank Bulletin, Volume 56, No. 3, 1994.
18. There is empirical evidence to suggest that in the early 1980s wage relativities remained fairly rigid, with particular industries acting as wage "leaders". See "An Examination of the New Zealand Wage Inflation", A. Grimes, Reserve Bank of New Zealand Research Paper No. 36, November 1982.
19. See Maloney (*op. cit.*).
20. See "Does the Adult Minimum Wage Affect Employment and Unemployment in New Zealand?", Tim Maloney, *New Zealand Economic Papers*, 29(1), 1995.
21. Additionally, an earner premium covers the cost of non-work injuries (currently levied at a flat rate of 0.8 per cent on gross income) while a premium on vehicle licenses provides cover for motor vehicle accidents and the government provides revenue for accidents sustained by non-earners (*e.g.* children, the unemployed etc.).
22. Experience of the provision of Workers' Compensation Insurance in Australia, where there is a mix of public/private market structure across different states, may be informative in this respect. The 1994 Industry Commission's report on "Workers' Compensation in Australia" recommended that "where private insurers operate in a market, there be private underwriting of workers' compensation insurance, under adequate monitoring of premium setting, prudential supervision and 'nominal insurance' arrangements".
23. The OECD summary measure of benefit entitlements is an average of a large number of "typical case" unemployment-related benefit replacement rates as a proportion of some measures of average earnings, see "Measures of Replacement Rates for the Purposes of International Comparison: A Note", J.P. Martin, *OECD Economic Studies* (forthcoming).
24. See, for example, *OECD Employment Outlook*, 1991.
25. See S. Blöndal and M. Pearson (1994), "Unemployment and other non-employment benefits" *Oxford Review of Economic Policy*, Volume 11, No. 1.

26. People with a record of bad health are more likely to run a higher risk of becoming unemployed, and unemployment has been shown to have adverse effects on health.
27. This is based on cross-country comparisons over the years 1988-1990, see *OECD Employment Outlook*, 1991.
28. Figures for other countries relate to 1990, see Blöndal, and Pearson (*op. cit.*).
29. See J. Compton and R. Euller (1992), "Effective Marginal Tax Rates", in M. Prebble and P. Rebstock (eds.), *Incentives and Labour Supply: Modelling Taxes and Benefits*.
30. Family Support Tax Credit is paid to low and middle-income parents to contribute to the costs of raising children. The amount paid per child varies according to the number and age of children. The value of the benefit is abated at a rate of 18 per cent once a family income of NZ\$ 20 000 is reached, and at a rate of 30 per cent for income over NZ\$ 27 000. The income level at which no Family Support is available depends on the number and age of the children (for a family with two children it is about NZ\$ 35 000). Average earnings for the economy as a whole are about NZ\$ 30 000.
31. The example is for a non-beneficiary couple with two children receiving Family Support and eligible for GMFI once they work 30 hours (*i.e.* assuming they earn NZ\$ 10 per hour they would become eligible at a gross income of NZ\$ 15 600). The most striking feature is the almost 100 per cent EMTR faced by those families who qualify for "Guaranteed Minimum Family Income" (GMFI). In practice, however, the number of families claiming GMFI is small, at about 5 000. Guaranteed Minimum Family Income (GMFI) provides a minimum level of income for working families with children. To qualify a sole parent must work a minimum of 20 hours per week and a couple must work a combined minimum of 30 hours per week. GMFI tops up the amount of income earned from this work to give an after-tax income of NZ\$ 14 456 per annum. Families are not eligible for GMFI if their gross income is over NZ\$ 18 363 per annum. The top-up nature of GMFI means that recipients face a 100 per cent abatement rate for any marginal increase in their income.
32. The range of income over which an EMTR of 58 per cent or more can be faced is from about 90 per cent of average earnings to an upper limit which is dependent on the number of children in the family. For a family with only two children (the example illustrated in Figure 23) the upper limit is equivalent to about 115 per cent of average earnings, but for a family with five children the upper limit is about 160 per cent of average earnings.
33. Providing time series evidence on income distribution in New Zealand is problematic: available studies often only cover a short span of years and are not easily comparable because they use different data sources.
34. However, these developments have to be seen in the context of the weak performance in per capita GDP over the period as a whole.
35. The percentage change in the real income of the upper quintile is very sensitive to the base year chosen, as can be seen from the Figure. There are also a number of problems with interpreting these measures of income distribution as indicators of inequality. In particular, they are "snapshot" profiles which provide no information about mobility across quintiles.
36. It has been estimated that the household income of beneficiaries fell from 72 per cent of the mean equivalent disposable income to 58 per cent in 1993 as a result of the benefit cuts

- implemented in the 1991 Budget. (See "The Fall and Rise of Household Incomes", M. Mowbray and N. Dayal, *Social Policy Journal of New Zealand*, 2, 1994.)
37. "Evaluation of Job Action", Department of Labour, August 1995.
 38. For a more detailed assessment of human capital development and economic performance, see Chapter 4 of the 1993 *OECD Economic Survey of New Zealand*.
 39. See the *OECD Employment Outlook*, 1994, Chapter 1 and *OECD Education at a Glance*, 1995.
 40. On-the-job-training is the most important of these forms: a survey conducted in mid-1991 found that 14.5 per cent of workers participated in formalised on-the-job training, 8.3 per cent participated in off-the-job training, and 1.7 per cent in formal education (Harper and Malcolm, 1991).
 41. See *OECD Education at a Glance*, 1995, Table R21.
 42. The following paragraphs draw heavily on "Examining Labour Market Outcomes for Maori" by Dave Maré, and "Pacific Islands peoples in the Labour Market" by Michael Fletcher. Both papers are published in *Labour Market Bulletin*, 1, Department of Labour, 1995.
 43. The majority of children begin secondary school at age thirteen (form 3), which is completed at either forms 5, 6 or 7 (ages fifteen to seventeen).
 44. "The Benefits of Kura Kaupapa Maori", Ministry of Maori Development.
 45. See *Annual Report 1994/95*, Education Review Office, presented to the House of Representatives.
 46. For further information on the international openness and the importance of trade to the New Zealand economy see Chapter 4 of the 1994 *OECD Economic Survey of New Zealand*.
 47. See "Sectoral Projections, Medium Term Outlook to 2000", September 1995, New Zealand Institute of Economic Research.
 48. A more detailed discussion of the Producer Boards can be found in Chapter 4 of the 1994 *OECD Economic Survey of New Zealand*.
 49. This is carried out by the Dairy Board for example, where a single payment (based on the quantity of milkfat) is paid to the farmer, despite this incorporating returns from several business activities unrelated to farm production (*e.g.* marketing, processing and other non-agricultural industry activities).
 50. Two of the boards have made public statements in support of a separation between regulatory and commercial functions, although nothing in substance has occurred yet. In particular, both the Meat Board and the Wool Board have announced their intentions to sell commercial companies which they currently own in their respective industries, although this would still leave them with other investments in their respective industries.
 51. *Focus on Employment* was the final part of the Government's response to the Employment Task Force. The Employment Task Force, a multi-party task force comprising primarily private sector members, was established following the 1993 general election to identify potential solutions to the problem of unemployment. The Employment Task Force released

an *Interim Report on Youth Employment* in October 1994 and its final report in November 1994. This report was considered by a multi-party group who set the parameters for the Government's response in their *Memorandum of Understanding*. The Youth Employment Strategy (November 1994), the 1995 Budget measures and the Focus on Employment initiatives announced in October 1995 together make up the Government's response to the Employment Task Force's final report.

52. At a typical hourly rate for part-time work of NZ\$ 10 per hour, this would allow the beneficiary to work 18 hours per week.
53. The main statutory rate for most taxpayers is 24 per cent, but this is equivalent to an effective 28 per cent after adjusting for the Low Income Earner Rebate.
54. Any families without significant support from ACC or the State will get NZ\$ 7.50 a week per child from July 1996, rising to NZ\$ 15 a week from July 1997. It will be available in full to families on incomes up to NZ\$ 20 000. Abatement starts at 18 per cent to NZ\$ 27 000 and 30 per cent above that.
55. See Chart PO3(A1) in "Education at a Glance", OECD, Paris, 1995.
56. Two aspects of the restructuring of the Dairy Board may address the problem of bundling in the dairy industry to some extent. Under the restructuring proposal, shares will be issued to co-operatives on the basis of milk production. As a consequence of this, farmers entering the dairy industry will face an indicative cost of using the Board's marketing facilities for marketing this "new milk". In addition, the proposal allows the Board to pay a dividend on shares. This may permit returns from marketing milk to be at least partially separated from those on the use of the Board's assets. In the apple and pear industry, an amendment to the Act governing the Apple and Pear Board stipulated that the Board had to pay growers primarily on the basis of market returns, thus reducing the incentive of the Board to cross-subsidise between varieties.
57. Central and local government excluding trading operations.
58. For a discussion of these problems and ways government can address them, in New Zealand and elsewhere, see, for example, DeJulio, Garvey, and Kettl (1993), Downs and Larkey (1986), OECD (1995c), Scott and Gorringer (1989), and Scott, Bushnell, and Sallee (1990).
59. See Hirschman (1970). In the author's framework, the mechanism of *exit* does not operate to improve performance. What does work is the mechanism of *voice*: customers can put pressure on government organisations to improve by complaining to their management or to politicians. Although this is not emphasised here, various reforms in New Zealand can be considered as attempts to enhance the ability of the politicians or the public to improve government services through the voice mechanism.
60. See OECD (1989), p. 49 and following.
61. In 1993, the Government introduced a similar framework for the operations of its research institutes and its hospitals, the latter reform being discussed further below. While not covered by the SOE Act, these organisations are intended to make a commercial return on the capital invested in them and to pay dividends to the Government as their owner. Unlike the SOEs, they sell most of their output to the Government. The Government distinguishes, however, between its interest in Crown Health Enterprises and Crown Research Institutes as their *owner* and its interest as the *purchaser* of their services. Moreover, it pursues its

purchase interest in Crown Health Enterprises and Crown Research Institutes through separate, Government-funded purchasing agents.

62. When SOEs were formed, the policy-advisory and regulatory organisations that had been associated with them were made into separate departments or placed in other departments.
63. See OECD (1989) for a more detailed description.
64. In the case of New Zealand Post, which is a legislated monopoly in the market for some letters (*i.e.* standard rate letters), the SOE has chosen to reduce by about 11 per cent its price for delivering such letters. This price reduction, however, was initiated by the SOE on commercial grounds to protect its market share from increasing competition from close substitutes for communication via standard letter mail. This approach has been acceptable to the Government shareholders on the basis of complying with the SOE's primary goal of being a successful business.
65. Although the business plan is the company board's responsibility, the participation of the minister in the annual planning round ensures that the shareholder's preferences are taken into account.
66. For instance, when in 1991 the Electricity Corporation (ECNZ) indicated to the shareholders its plans to phase in substantial price increases, the Government publicly made it clear to the company that it would be concerned if ECNZ gave a signal that inflation was taking off. This reflected the fact that the proposed pricing strategy incorporated inflation assumptions which the Government questioned. In the event, ECNZ chose to increase its prices by a more modest extent (see, for example, Kelsey, 1995).
67. In the case of Rail, the highest bid was not accepted because it included conditions that were considered onerous. Since bids are not publicised, it is, however, impossible to be sure what policy has been followed. Air New Zealand was sold subject to a condition that controlling ownership stay in the hands of a New Zealand company, which may have reduced the price received. The rationale for this condition arose out of the requirement in international aviation agreements that a carrier must be "substantially owned and effectively controlled" by nationals of the country designating. If an airline was deemed not to meet this test it could be refused landing rights by another government.
68. Spicer, Emanuel, and Powell (1995, p. 4).
69. State Services Commission (1994).
70. See Downs and Larkey (1986) and Boardman and Vining (1989) for a critical review of empirical evidence on privatisation as well as Høj, Kato and Pilat (1995) for a more recent overview.
71. Employment fell from 26 500 in 1987 to 12 338 in 1993 and 8 568 in 1995 (Telecom Corporation of New Zealand Limited, p. 27).
72. The so-called "Kiwi share" retained by the Government, among other things, restrains increases in telephone rentals and ensures universal service to residential users. In general, however, Telecom is subject to the same light-handed regulation as other companies.
73. The number of repeat faults and total downtime increased around the time of privatisation (Boles de Boer and Evans 1995, p. 16). However, the increases may have resulted from an internal company reorganisation that occurred late in the period of government ownership

and was later reversed, rather than from privatisation. Repeat faults were nevertheless still higher in 1993 than they had been in the late 1980s. On the other hand, total faults have continued to decline, and digitalisation of the network, which tends to be correlated with quality of service, continued to increase after privatisation, reaching 98 per cent in 1994 (Boles de Boer 1995 and ITU/OECD/Eurostat data). Finally, the number of people waiting for connections has also fallen to negligible levels (Boles de Boer and Evans 1995), and various measures of the volume of telecom services also show increases between 1991 and 1995 (Telecom Corporation of New Zealand Limited 1995, p. 27).

74. The most likely difficulty would arise if one company were to appeal to the shareholding Ministers for an intervention to stop a competitive practice of the other company.
75. Admittedly, considerable judgement is required in establishing what is an appropriate cost of capital for these businesses and, furthermore, the valuation of their assets is the subject of much debate.
76. The role of other monopolies, in particular the agricultural producer boards and accident insurance, is discussed in Chapter III of the Survey.
77. The Crown reporting entity includes ministers and government departments, the central bank, SOEs and "Crown entities". The net surplus/deficit attributable to SOEs and Crown entities, as well as the Crown's equity holdings in these entities, are reported separately in the financial statements.
78. As noted briefly in Chapter II, the other principles are: maintaining prudent debt levels, once they have been achieved, by realising at least a budget balance, not necessarily every year but on average over a "reasonable" period of time; achieving and maintaining levels of Crown net worth that provide a buffer against shocks; "managing prudently the fiscal risks facing the Crown"; and "pursuing policies that are consistent with a reasonable degree of predictability about the level and stability of tax rates for future years".
79. For details see 1993/94 OECD Economic Survey of New Zealand, pp. 34-35.
80. Accrual accounting for governments requires sometimes difficult decisions about whether to record an asset on the balance sheet and, if so, at what value (what is the monetary value of a national park, for example?). But even though some valuations are problematic, this is clearly preferable to having no balance sheet showing public assets and liabilities.
81. Prime Minister (1995). As an example, the first SRA is called "Maintaining and Accelerating Economic Growth", which is elaborated by the description "Creating and maintaining a stable, secure and resilient economic environment which will engender greater confidence amongst: individuals and families to work, save and invest in skills; business to invest, export and create employment; overseas investors to invest in New Zealand". There follow six more specific goals, such as "maintaining price stability within the framework of the Reserve Bank Act".
82. It must be noted, however, that New Zealand's Employment Court has in the past ruled that fixed-term contracts are permissible only when the work being done has a fixed duration.
83. Some departments administer several portfolios; ministers who make occasional one-off purchases from departments would not have purchase agreements with the chief executive.
84. Office of the Auditor General of Canada (1995, p. 20).

85. Depreciation cost is part of the price paid by the Government or by a third party for the purchase of a particular output.
86. Effects of Financial Management Reform'', New Zealand Treasury, August 1995.
87. Stace and Norman (1995).
88. Steering Group (1991).
89. There is a large number of such "Crown entities", such as the Accident Rehabilitation and Compensation Insurance Corporation, the Broadcasting Standards Authority or the Transport Accident Investigation Commission.
90. Holmes and Shand (1995).
91. See Office of the Auditor General of Canada (1994), Laking (1994), Pallot (1991*a* and 1991*b*), OECD (1995*c*), and J. Whitcombe, "The Accountability Relationship Between Chief Executive and Minister under the State Sector Act 1988, MPP Thesis, Victoria University of Wellington, cited in Boston (1991, p. 110).
92. Steering Group (1991). Working Party (1994).
93. See, for example, Douglas (1990) and East (1994).
94. As shown, for example, in a survey of departmental costing systems carried out by Coopers and Lybrand in 1995 for the New Zealand Treasury.
95. If tax expenditures could be satisfactorily defined, it would be helpful for the government to require itself to publish at least an estimate of their cost in terms of foregone revenue.
96. OECD (1995*c*), which among other things discusses ways of improving the process of making regulation, notes that the US Government "believes that the costs of new regulations have been reduced by billions of dollars as a result" of the requirement.
97. See Levitt and March (1990) and March (1994) for discussions of organisational learning and innovation.
98. For example, as discussed below, the Government ran a trial of a new method of funding teachers' salaries but, as the authors of the programme's evaluation note in their report, "The participating schools self selected and at the beginning of the trial 94 per cent of these benefited financially as a result of being included. Because this is so unrepresentative of the national situation, the results of this research cannot be generalised to all New Zealand schools" (Hawke and Hill 1994, p. 1).
99. Holmes and Shand (1995), Irwin (1995) and Laking (1994). Because outcomes are affected not only by the output or programme being reviewed, good evaluations must somehow isolate their effect, which requires the collection of new data and application of new techniques.
100. For an introduction, see OECD (1995*c*).
101. Irwin (1995).
102. Irwin (1995), Scott and Gorringer (1989).
103. In terms of Hirschman's (1970) analysis, such measures aim to improve the operation of voice.

104. Turton (1994) and Foreign and Commonwealth Office (no date) briefly describe the United Kingdom's Citizen's charter and the latter provides further references. OECD (1994b) and (1995c) discusses the issue more generally.
105. See OECD (1995c). Scott and Gorringer (1989) argue that there is likely to be a bias against contracting out in public agencies that needs somehow to be counteracted.
106. Other government services include defence as well as law and order.
107. Oxley and MacFarlan (1994, p. 62), Minister of Finance (1995, p. 110).
108. The reforms were outlined in the 1992/93 Survey of New Zealand.
109. See Minister of Health (1991), Minister of Finance (1991).
110. Oxley and MacFarlan (1994, p. 18).
111. A RHA might, for example, contract a CHE to perform 1 000 hip replacements in the coming year at a cost of x dollars. It might, however, also purchase all the required hip replacements for an agreed annual cost or contract general practitioners to provide primary health care services to patients, offering each of them a certain payment per enrolled client.
112. Minister of Health (1991, p. 27).
113. Oxley and MacFarlan (1994, p. 50).
114. Minister of Finance (1991, p. 11), Office of the Minister of Health (1991, p. 2).
115. Among other things, adjustments have been made for the transfer of Disability Support Services and other functions to the health budget.
116. Nahkies (1995, p. 16) writes, "Area Health Boards in recent years managed growing deficits by disposing of the 'family silver' (e.g. surplus property) and by simply not spending on plant and equipment maintenance and replacement, staff training nor on any other form of 'discretionary' activity. Many CHEs also inherited expired employment contracts and the accompanying pent-up pressure for renegotiation upwards".
117. The volume of unadjusted inpatient discharges does not show any increase between 1989/90 and 1992/93. If an adjustment is made for "the relative complexity of cases" treated, however, volumes did increase (Ministry of Health 1995, p. 106). Adjusted volumes appear to be a better indicator of performance. Day patient discharges, for which no adjustment is given, also increased. Between 1990/91 and 1991/92, nominal expenditure in Vote Health fell by about 0.5 per cent; in the next year, it rose by about 1.5 per cent.
118. Hawkins (1995).
119. Ministry of Health (1995, p. 7). See also Wilson (1995, p. 12).
120. Ministry of Health's "Quarterly Performance Report on PHC and RHAs for April to June 1995".
121. *Ibid.*
122. OECD (1994c, p. 76). In New Zealand, the new pharmaceutical purchasing agency, PHARMAC, also aims at encouraging competition between providers and thus reducing the growth of expenditure on pharmaceuticals.
123. Oxley and MacFarlan (1994).
124. OECD (1994c).

125. OECD (1993, p. 85).
126. The reforms also address the problem of government agencies having unclear goals and accountability. See, for example, Minister of Education (1994).
127. For historical reasons, kindergartens get a higher rate of subsidy. The Government plans to pay a higher per-child subsidy to providers that meet higher quality standards.
128. There is an exception, however, for some schools with full rolls, and sometimes, of course, there may be no more than one school nearby.
129. Teachers also have one representative on the Board, which may have between three and seven representatives elected by parents. The elected members may also co-opt others (Minister of Education 1994, p. 22.)
130. At the time of writing, about 9 per cent of schools, covering about 10 per cent of pupils, had chosen this option.
131. It is also taken into account whether the student is a school leaver or not.
132. The proportion of school students who stay until the "sixth form" (when they are typically sixteen years old) increased, for example, from 57 to 81 per cent between 1984 and 1994 (Ministry of Education, 1995). The share of 18 to 24 year olds involved in education increased from about 20 per cent in 1985 to 30 per cent in 1994. Between 1986 and 1994, that of the labour force with university degrees has risen from 6 to 12 per cent, while the proportion with no educational qualifications at all has fallen from 36 to 25 per cent.
133. See OECD (1993).
134. According to a Secondary Principals Association Survey, 60 per cent of area and secondary schools are running deficits on their activities grants, and expenditure on maintenance is declining significantly. The situation in the primary sector is more positive, however.
135. In its 1994/95 Annual Report, the Education Review Office notes, however, that it "remains unproven" whether parents can "be relied upon to have the most powerful incentives to demand high quality education" as assumed by the reforms. Moreover, it considers that "parents may lack the information, confidence, experience and skill required to analyse their own expectations and translate these into effective and appropriate forms of demand".
136. For a brief description of such reforms, see OECD (1994d). Sweden's recent experience with the incorporation of private schools in to the publicly funded system may be useful in this regard.
137. Education Review Office (1995).
138. At present, the Government's Education Review Office examines all schools every three years or less and publicises its conclusions. In addition, comparative data on achievement at secondary school level are published yearly.
139. It has been argued that decentralised systems would create problems for disadvantaged students, because the best schools will take the best students. Good students may leave the less-effective schools, making them less effective still.
140. The Government currently increases schools' per-student funding according to estimates of the proportion of poor families in the school's geographical area, and it is testing a

programme that would give poor families subsidies to send their children to private schools. Either or both of these programmes could be extended.

141. The Government currently plans to increase the number of places it subsidises in the main post-compulsory educational institutions from 137 224 in 1994 to 151 784 in 1999. (In 1991, 114 109 places were subsidised.) At the same time, it intends to reduce its funding per student, but the increase in places is greater, so that total funding is expected to grow.
142. Horner (1989), which is also the source of the other information in this paragraph, except where noted.
143. There are now 92 local authorities in total.
144. New Zealand Business Roundtable (1995, p. viii).
145. Previously, some lower-level positions had been political appointments.
146. New Zealand Business Roundtable (1995, p. viii). There are, however, exceptions, such as port/airport operations, where significant changes have occurred from their corporatisation.
147. *Ibid.*

Bibliography

- BARZEL, Yoram (1982), "Measurement Cost and the Organisation of Markets", *Journal of Law and Economics*, Vol. XXV, April.
- BIRCH, Bill (1994), Speech given to New Zealand Society of Accountants at the Infrastructural Assets Forum, Wellington, New Zealand, 17 October 1994.
- BOARDMAN, Anthony E. and Aidan R. VINING (1989), "Ownership and Performance in Competitive Environments: A Comparison of the Performance of Private, Mixed, and State-Owned Enterprises", *Journal of Law and Economics*, Vol. XXXII (1).
- BOLES DE BOER, David and Lewis EVANS (1995), "The Economic Efficiency of Telecommunications in a Deregulated Market: The Case of New Zealand". Graduate School of Business and Government Management, Victoria University of Wellington, Working Paper 8/95.
- BOSTON, Jonathan (1991), "Chief Executives and the Senior Executive Service", in Boston *et al.* (1991).
- BOSTON, Jonathan, John MARTIN, June PALLOT and Pat WALSH (eds), *Reshaping the State: New Zealand's Bureaucratic Revolution*. Auckland: Oxford University Press.
- DEIULIO, John J., Gerald GARVEY and Donald F. KETTL (1993), *Improving Government Performance: an Owner's Manual*, Washington, DC: the Brookings Institution.
- DOUGLAS, Roger (1990), "State Sector Management and Reform in New Zealand". *Australian Journal of Public Administration*, Vol. 49, No. 3.
- DOWNS, George W. and Patrick D. LARKEY (1986), *The Search for Government Efficiency: from Hubris to Helplessness*, Philadelphia: Temple University Press.
- DUNCAN, Ian and Alan BOLLARD (1992), *Corporatisation and Privatisation: Lessons from New Zealand*. Auckland: Oxford University Press.
- EAST, Paul (1994), address by the Minister of State Services to the Public Service Senior Management Conference 1994.
- EASTON, Brian (1994), "Economic and Other Ideas Behind the New Zealand Reforms", *Oxford Review of Economic Policy*, Vol. 10, No. 3.
- EDUCATION REVIEW OFFICE (1995), *Annual Report 1994/95*, presented to the House of Representatives.
- FISCAL RESPONSIBILITY ACT 1994.

- FOREIGN AND COMMONWEALTH OFFICE (no date), "Raising the Standard: Britain's Citizen's Charter and Public Service Reforms".
- HAWK, Kay and Jan HILL (1994), *Evaluation of the Teacher Salaries Grant Scheme Trial: the Third Year*, a report presented to the New Zealand Ministry of Education.
- HAWKINS, Lorraine (1995), "Purchasing Health Services". *Public Sector: the Journal of the New Zealand Institute of Public Administration*, Vol. 18, No. 1.
- HIRSCHMAN, Albert O. (1970), *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organisations, and States*, Cambridge, MA: Harvard University Press.
- HORNER, Tim (1989), "Local Government Reform: Links to Public Sector Reform". *Public Sector: the Journal of the New Zealand Institute of Public Administration*. Vol. 12, No. 3.
- HØJ, Jens, Toshiyasu KATO and Dirk PILAT (1995), "Regulation and Privatisation in the Service Sector", *OECD Economic Studies* 25, 1995/II.
- HOLMES, Malcolm and David SHAND (1995), "Management Reform: Some Practitioner Perspectives in the Past Ten Years", *Governance*, Vol. 8, No. 4, October.
- IRWIN, Tim (1995), "An Analysis of New Zealand's New System of Public Management", forthcoming in PUMA publication.
- KELSEY, Jane (1993), *Rolling Back the State: Privatisation of Power in Aotearoa/New Zealand*, Wellington: Bridget Williams Books.
- KELSEY, Jane (1995), *The New Zealand experiment*, Auckland University Press.
- LAKING, R. G. (1994), "The New Zealand Management Reforms", *Australian Journal of Public Administration*, Vol 53, No. 3.
- LEVITT, Barbara and James G. MARCH (1990), "Chester Barnard and the Intelligence of Learning", in *Organisation Theory: From Chester Barnard to the Present and Beyond*, ed. Oliver E. Williamson, New York: Oxford University Press.
- MARCH, James G. (1994), *A Primer on Decision Making: how Decisions Happen*, New York: the Free Press.
- MINISTER OF EDUCATION (1994), *New Zealand Schools 1993: A Report on the Compulsory School Sector in New Zealand*, Wellington: Ministry of Education.
- MINISTER OF FINANCE (1991), *Budget Speech*.
- MINISTER OF FINANCE (1995), *Economic and Fiscal Outlook: 1995*.
- MINISTER OF HEALTH (1991), *Health Policy: Your Health and the Public Health: Summary*, 30 July.
- MINISTRY OF EDUCATION (1995), *Education in New Zealand 1995*.
- MINISTRY OF HEALTH (1994), *Purchasing for Your Health: a Performance Report on the First Year of the Regional Health Authorities and the Public Health Commission*.
- NAHKJES, Graham (1995), "Health Sector Contracting a Progress Report from a Provider Perspective". *Public Sector: the Journal of the New Zealand Institute of Public Administration*, Vol. 18, No. 1.
- NEW ZEALAND BUSINESS ROUNDTABLE (1995), "Submission to the Internal Affairs and Local Government Committee on the Local Government Law Reform Bill", March.

- NEW ZEALAND GOVERNMENT (1995a), *Financial Statements of the Government of New Zealand for the Six Months Ended 31 December 1994 (unaudited)*.
- NEW ZEALAND GOVERNMENT (1995b), *Estimates of Appropriations for the Government of New Zealand for the Year Ending 30 June 1996*.
- OECD (1989), *OECD Economic Surveys: New Zealand*.
- OECD (1993), *OECD Economic Surveys: New Zealand*.
- OECD (1994a), *OECD Economic Surveys: New Zealand*.
- OECD (1994b), "Service Quality Initiatives in OECD Member Countries", Background Paper (Note by the Secretariat) for Symposium held at OECD, Paris, 7-8 November 1994, PUMA/PAC(94)13.
- OECD (1994c), *OECD Economic Surveys: United Kingdom*.
- OECD (1994d), *OECD Economic Surveys: Sweden*.
- OECD (1995a), *Communications Outlook*.
- OECD (1995b), "Assessing Financial Management Reforms: Overview". Paper for Meeting of Senior Budget Officials, Chateau de la Muette, Paris, 12-13 June 1995. PUMA/SBO(95)4.
- OECD (1995c), *Governance in Transition: Public Management Reforms in OECD Countries*.
- OFFICE OF THE AUDITOR GENERAL OF CANADA (1995), *Toward Better Governance: Public Sector Reform in New Zealand (1984-94) and its Relevance to Canada*.
- OFFICE OF THE MINISTER OF HEALTH (1991), "New Zealand's Health System – Radical Surgery Needed", Media Statement, 30 July 1991.
- OXLEY, Howard and Maitland MACFARLAN (1994), "Health Care Reform: Controlling Spending and Increasing Efficiency", OECD Economics Department Working Papers No. 149.
- PALLOT, June (1991a), "Financial Management Reform" in Boston *et al.* (1991).
- PALLOT, June (1991b), "Accounting, Auditing, and Accountability" in Boston *et al.* (1991).
- PERRY, Martin K. (1989), "Vertical Integration: Determinants and Effects" in Schmalensee and Willig (1989).
- PRIME MINISTER (1995), "Strategic Result Areas for the Public Sector 1994-1997".
- SCHMALENSEE, Richard and Robert D. WILLIG (1989), *Handbook of Industrial Organisation*, Amsterdam: North Holland.
- SCOTT, Graham and Peter GORRINGE (1989), "Reform of the Core Public Sector: the New Zealand Experience", *Australian Journal of Public Administration*, Vol. 48, No. 1.
- SCOTT, Graham, Peter BUSHNELL, and Nikitin SALLEE (1990), "Reform of the Core Public Sector: New Zealand Experience", *Governance: an International Journal of Policy and Administration*, Vol. 3, No. 2.
- SPICER, Barry, David EMANUEL, and Michael POWELL (1995), *Transforming Government Enterprises*, University of Auckland.
- STACE, Doug and Richard NORMAN (1995), "Re-invented Government: the New Zealand Experience", Centre for Corporate Change, Australian Graduate School of Management, University of New South Wales, CCC Paper No. 050.

- STATE SERVICES COMMISSION (1994), "New Zealand's Reformed State Sector", Wellington: State Services Commission.
- STATISTICS NEW ZEALAND (1995), *New Zealand Official Yearbook 95*.
- STEERING GROUP (1991), *Review of the State Sector Reforms*, Wellington: State Services Commission.
- TELECOM CORPORATION OF NEW ZEALAND LIMITED (1995), *Annual Report*.
- TREASURY (1990), *Briefing to the Incoming Government 1990*, Wellington.
- TREASURY (1994), "SOE Performance", 28 October 1994.
- TREASURY (1995), "Effects of Financial Management Reform".
- TURTON, Genie (1994), "Current and Future Developments in Service Quality Initiatives: Service Quality Initiatives: United Kingdom", paper for symposium held at OECD, Paris, 7-8 November 1994.
- WILLIAMSON, Oliver E. (1985), *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting*, New York: the Free Press.
- WILSON, Garry (1995), "Health Purchasing: a Regional Health Authority Perspective", *Public Sector: the Journal of the New Zealand Institute of Public Administration*, Vol 18, No. 1.
- WORKING PARTY Party (1994), *Review of Accountability Requirements*. Report of the Working Party to the Advisory Group, October.
- WORLD ECONOMIC FORUM AND IMD (1993), *World Competitiveness Report 1993*.
- WORLD ECONOMIC FORUM AND IMD (1994), *World Competitiveness Report 1994*.
- WORLD ECONOMIC FORUM AND IMD (1995), *World Competitiveness Report 1995*.

Annex I

Estimating potential output and the output GAP

Estimating potential output for New Zealand is problematic. This is mainly because the extent of structural change over the past decade has been so great that all time series methods, which to some degree involve extrapolating past trends and/or utilising relationships estimated on historical data, are likely to be unreliable. Nevertheless, some estimate of potential output and the implied output gap is essential in forming any judgement about the appropriate stance of macroeconomic policy.

The OECD production function method

The method currently adopted by the OECD Secretariat for deriving potential output for most countries,¹ is based on a production function approach. Table A1, which summarises the contributions to growth from increases in labour and capital, and measures of partial and total factor productivity (tfp) with respect to these inputs, shows that there is as yet no clear sign of an improvement in tfp growth in New Zealand in the period since 1985, when the structural reforms began. However, this conclusion has to be qualified in at least two respects, both of which also highlight difficulties in applying a production function based technique to derive potential output.

- *Firstly*, the overall figure for tfp growth since 1985 of only 0.9 is dominated by the 0.3 per cent per annum increase during the cyclical downturn of 1987-92, whereas tfp growth at 2.3 per cent per annum in the expansion period since 1992 surpasses the performance in the previous cyclical upturn. This represents a problem for any production function method, which involves smoothing actual tfp growth, because it is not clear whether the recent strong rise in tfp should be filtered out as being cyclical or taken as evidence of a trend improvement.²
- *Secondly*, whatever data there exists on the capital stock is unreliable,³ because reforms are likely to have led to an acceleration in scrapping which is difficult to quantify. This problem may be further aggravated by the treatment of computing investment in the national accounts.⁴ Both these factors are likely to mean that estimates of total factor productivity and capital productivity are biased downwards significantly.

Table A1. Sources of real GDP growth¹

	Pre-reform 1978-85	Post-reform 1985-95	Over business cycle		
			Expansion 1979-87	Contraction 1987-92	Expansion ² 1992-95
Average percentage rates of growth					
Real GDP	2.4	1.8	2.5	0.1	4.8
Labour quantity	0.6	-0.2	0.4	-1.8	2.7
Capital quantity	2.5	2.3	2.5	2.3	2.1
Total factor productivity	1.2	0.9	1.3	0.3	2.3
Labour productivity	1.8	1.9	2.0	1.9	2.0
Capital productivity	-0.1	-0.6	0.0	-2.2	2.7
Percentage point contributions to growth					
Labour quantity	0.4	0.0	0.3	-1.1	1.6
Capital quantity	0.8	0.9	0.9	0.9	0.8
Total factor productivity	1.2	0.9	1.3	0.3	2.3
Real GDP	2.4	1.8	2.5	0.1	4.8

1. March years.

2. Reflects year to March 1995 in current expansion period (peak and trough are not yet determinable).

Source: "New Zealand's Economic Growth: Fantastic, Feeble or Further Progress needed?", V.B. Hall, Economics Group, Victoria University, Wellington, March 1996.

A further difficulty of applying the OECD production function technique to derive potential output for New Zealand is that it relies on estimates of the Non-Accelerating Inflation Rate of Unemployment (NAIRU). The most common basis for such an estimate is some empirical relationship between wages and unemployment. However, as discussed in Chapter III, it is hard to discern any relationship between wages and unemployment in the pre-Employment Contracts Act (ECA) period, and although it seems more likely to exist in the post-ECA period, there are insufficient observations to provide any reliable statistical estimates.

An alternative method utilising information on inflation

In order to overcome some of the difficulties described above, in particular the absence of reliable estimates of the capital stock and the NAIRU, an alternative method has been applied to derive potential output and the output gap. This method, based on that described in Laxton and Tetlow (1992), involves the use of a bivariate filter which smoothes output but also incorporates information on movements in inflation, on the assumption that if output is above potential output, then there will be upwards pressure on inflation, and *vice versa*. It is also one of the techniques preferred by Gibbs (1995) who surveys a range of methods of calculating potential output and their application to New Zealand.

The method starts with an initial estimate of potential output which is derived from a Hodrick-Prescott (HP) filter, which minimises the sum of squared deviations of (logged) output, y , from its trend (*i.e.* potential output), τ , subject to a smoothing factor λ , which penalises squared variations in the growth of the trend series. Thus, τ is chosen so as to minimise the expression:

$$Y_{HP} = \sum (y_t - \tau_t)^2 + \lambda \sum [(\tau_{t+1} - \tau_t) - (\tau_t - \tau_{t-1})]^2, \quad (1)$$

where λ is here set to the commonly used value of 1600. The resulting series is then used to provide an estimate of the output gap ($y_t - \tau_t$) in estimating a reduced form equation for inflation which takes the form:

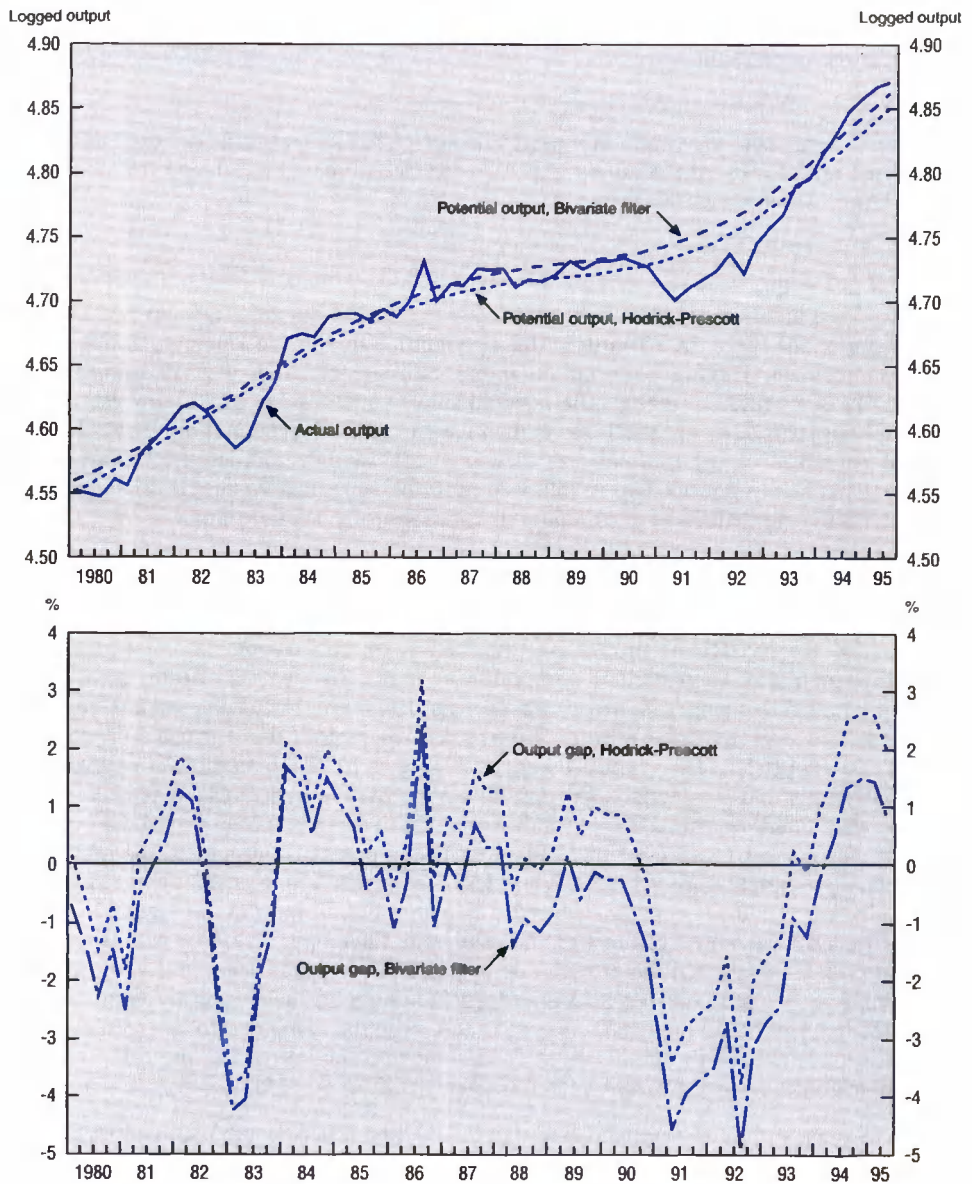
$$\pi_t = \pi_t^e - \beta(L) (y_t - \tau_t) + \varepsilon_t, \quad (2)$$

where π is the quarterly rate of CPI inflation (excluding interest rate and GST effects), π^e is expected inflation (which is here proxied by a fourth order autoregressive function of lagged inflation), $\beta(L)$ is a fourth order polynomial in the lag operator and ε is the equation residual. Having obtained an initial estimate of $\beta(L)$, the HP minimisation criteria (1) is modified to include the residual sum of squares $\sum \varepsilon_t^2$ and a new estimate of potential output is derived. The latter is then used to re-estimate equation (2) to obtain revised estimates of $\beta(L)$, which are then included in the modified HP minimisation criteria. This iterative procedure is followed until the estimated values of $\beta(L)$ converge, at which point the values of τ are taken as estimates of potential output.

There are advantages from following this procedure over the standard production function method in estimating potential output for New Zealand: firstly, no estimates of either the capital stock or the NAIRU are required; secondly, despite the fact that no estimate of the NAIRU is necessary, information on movements in inflation can be utilised, which may be particularly important if it is possible that reforms have led to relatively marked changes in trend tfp growth. By taking into account the fact that inflation has generally been falling over the reform period, the estimates of potential output are increased. This is illustrated in Figure A1, which compares estimates of potential output and the output gap from both a simple Hodrick-Prescott filter and from the bivariate filter, described above (both with λ set to 1600). According to the bivariate filter, it was not until mid-1994 that output exceeded potential output and the magnitude of the positive output gap in 1995 Q2 was less than 1 per cent. Conversely, according to the Hodrick-Prescott filter, output exceeded potential output in mid-1993 and the magnitude of the positive output gap in 1995 Q2 was more than 2 per cent. The results from the bivariate filter suggest that the growth rate of potential output in 1994 and 1995 is in the range of 3 to 3½ per cent per annum, which is similar to that found by Gibbs (1994) when using a similar method and value of λ , and might be compared to an estimate of the average potential growth rate of about 2 per cent per annum for the pre-reform period of 1977-84.

However, it should be emphasised that the method described above involves considerable judgement (not least in the choice of the smoothing factor, λ , as demonstrated by Gibbs 1994). Nevertheless, utilising information on recent inflation trends tends to suggest that currently both the magnitude of any positive output gap is smaller and the growth rate of potential higher than is obtained from more conventional methodologies.

Figure A1. MEASURES OF POTENTIAL OUTPUT
AND THE OUTPUT GAP



Source: OECD Secretariat.

References

- GIBBS, D. (1995), "Potential Output: Concepts and Measurement", Labour Market Bulletin, No. 1, New Zealand Department of Labour.
- HALL, V.B. (forthcoming), "Growth", chapter in *A Study of Economic Reform: The Case of New Zealand*, eds. A. Bollard, R. Lattimore, B. Silverstone (eds.), North Holland.
- LAXRON, D., and R. TELOW (1992), "A simple multivariate filter for the measurement of potential output", Bank of Canada Working paper.
- PHILPOTT, B.P. (1994), "Data base of Niminal and Real Output, Labour, and Capital Employed by SNA Industry Group", Research Project on Economic Planning Paper No. 265, Victoria University of Wellington.
- GIORNO, C., P. ROCHARDSON, and D. ROSEVEARE and P. VAN DEN NOORD (1995), "Potential Output, Output Gaps and Structural Budget Balances", *OECD Economic Studies* No. 24, No. 1.

Annex II

Changes to government accounting procedures

New accounting standards were introduced for government departments in the late 1980s and made mandatory for the whole of government for fiscal forecasting purposes by the *Fiscal Responsibility Act* in 1994. According to this Act, in every budget the Government is now obliged to present three-year projections of a new set of financial statements, which include an *operating statement*, a *statement of cash flows* and a *balance sheet*. The aim of the change is to provide more information about the medium-term fiscal stance and increase both the transparency and credibility of the public accounts by adopting *generally accepted accounting practice* (GAAP), *i.e.* standards commonly applied in the private sector. In order to highlight the differences between GAAP and the more traditional representation, government accounts for the same financial year, 1992/93, are compared below under both approaches (see Table A2).

Under the traditional representation of the government fiscal position, the primary indicator was the "financial balance" [line (G7) in Table A2], which is the difference between two large cash flows: tax and non-tax receipts (G3); and financial net expenditure (G6), which includes operating payments (net of revenue from sales or user charges) and net purchases of physical assets. The "adjusted financial balance" (G9) was used to provide a more informative comparison of forecast and actual results, by removing items not included in the forecasts (mainly exchange-rate gains on foreign reserves). Under GAAP, the measure most closely related to the financial balance is "net cash flows from operations" (C1) from the *statement of cash flows*. These two measures differ in Table A2, but it is mainly because the reporting entities are different. The GAAP series includes the Reserve Bank and the Crown's (*i.e.* Government's) interest in state-owned enterprises and Crown entities.

Although the statement of cash flows continues to provide information on the cash financing requirement, under GAAP the primary focus of the Government's fiscal position has shifted to the "operating balance" (O9), *i.e.* the difference between revenue (O3) and expenses (O7) in the *operating statement*. Revenue is separated into two categories: revenue levied through the Crown's sovereign power to tax (O2) and revenue raised from operations (O1). The main difference between the operating balance and the net cash flow from operations is that the former is calculated on an *accrual* basis rather than a cash basis. Under accrual accounting all expenses, revenue, borrowing and lending are recorded when they are earned or incurred, regardless of when the cash payment is

Table A2. **Alternative representations of government accounts for 1992/93**

GENERALLY ACCEPTED ACCOUNTING PRACTICE		TRADITIONAL GOVERNMENT ACCOUNTS	
	NZ\$ million		NZ\$ million
OPERATING STATEMENT			
Revenue		Receipts	
(01) Revenue from Crown's Sovereign power	25 963	(G1) Taxation receipts	25 980
(02) Revenue from operations	3 872	(G2) Non-tax receipts	1 649
(03) Total revenue	29 835	(G3) Total receipts	27 629
Ratio to GDP (per cent)	38.2	Ratio to GDP (per cent)	35.3
Expenses		Financial net expenditure	
(04) Functional expenses	27 172	(G4) Functional expenditure	25 519
(05) Finance costs	3 961	(G5) Debt servicing	3 899
(06) Net foreign exchange loss/(gain)	296		
(07) Total expenses	31 429	(G6) Total financial net expenditure	29 418
Ratio to GDP (per cent)	40.2	Ratio to GDP (per cent)	37.6
Revenue less expenses		Financial balance	
(08) Net surplus from SOEs and Crown entities	775	(G7) Financial balance	(1 789)
(09) Operating surplus/(deficit)	(819)	(G8) Currency realignment	(34)
Ratio to GDP (per cent)	(1.0)	(G9) Adjusted financial balance	(1 823)
		Ratio to GDP (per cent)	(2.3)
BALANCE SHEET			
Assets		(G7) Financial balance	(1 789)
(B1) Current assets	12 558	(G10) Lending minus repayments	1 782
(B2) Non-current assets	39 649	(G11) Surplus/(deficit) before borrowing	(7)
(B3) Total assets	52 207	Ratio to GDP (per cent)	0.0
Liabilities			
(B4) Current liabilities	(17 958)		
(B5) Non-current liabilities	(41 944)		
(B6) Total liabilities	(59 902)		
(B7) Crown balance	(7 695)		
STATEMENT OF CASH FLOWS			
(C1) Net cash flow from operations	(1 201)		
(C2) Net cash flow from investments	(50)		
(C3) Net cash flow from operations and investments	(1 251)		
Financed by			
(C4) Net cash flows from financing	986		
(C5) Net movement in cash	265		
(C6) Total financing	1 251		

Source: Financial Statements of the Government of New Zealand for year ended 30 June 1993.

made. In practice, the most important non-cash revenues or expenses included in the operating statement have been for depreciation, unrealised foreign exchange gains or losses, changes in the pension liabilities of public employees, changes in working capital, and changes in the valuation of forests owned by the Crown (see Table A3, which

Table A3. **Reconciliation between financial balance, net cash flows from operations, and operating balance**

	1992/1993	
	(NZ\$ million)	(Per cent of GDP)
(G7) Financial balance	-1 789	-2.3
(G8) Plus: currency realignment	-34	-0.0
(G9) Adjusted financial balance (AFB)	-1 823	-2.4
<i>Minus: Items included in AFB but not in net cash flows from operations</i>	-287	-0.4
Purchase of physical assets	-679	-0.9
Sale of physical assets	392	0.5
<i>Plus: Items included in asset sales and purchases above but not in AFB</i>	174	0.2
Sale of assets to Crown research institutes and other Crown entities	174	0.2
<i>Plus: Items included in net cash flows from operations but not in AFB</i>	161	0.2
Cash flows from operations attributable to RBNZ and housing agency account	144	0.2
Other operating revenue	17	0.0
(C1) Net cash flows from operations	-1 201	-1.6
<i>Plus: Items included in operating balance but not in net cash flows from operations</i>	382	0.5
Non cash expenses	-287	-0.4
Unrealised losses arising from changes in the value of commercial forests	766	1.0
Net losses on foreign exchange	-309	-0.4
Depreciation	-839	-1.1
Writedown of Fletcher Challenge Limited shares	-74	-0.1
Net deficit attributable to SOEs and Crown entities	775	1.0
Movements in pension liabilities	-664	-0.9
Other non cash items	58	0.1
Movements in working capital	344	0.5
Decrease in taxes receivable	-16	-0.0
Increase in payables	413	0.5
Decrease in other receivables	-64	-0.1
Decrease in inventories	11	0.0
Other deductions	325	0.4
Gain on sale of Bank of New Zealand	283	0.4
Asset sale clawbacks	183	0.2
Loss on sale of assets	-99	-0.1
Other investing and financing items	-42	-0.1
(09) Operating balance	-819	-1.1

Source: Financial Statements of the Government of New Zealand for the year ended 30 June 1993.

provides a reconciliation of the financial balance, net cash flows from operations and the operating balance).

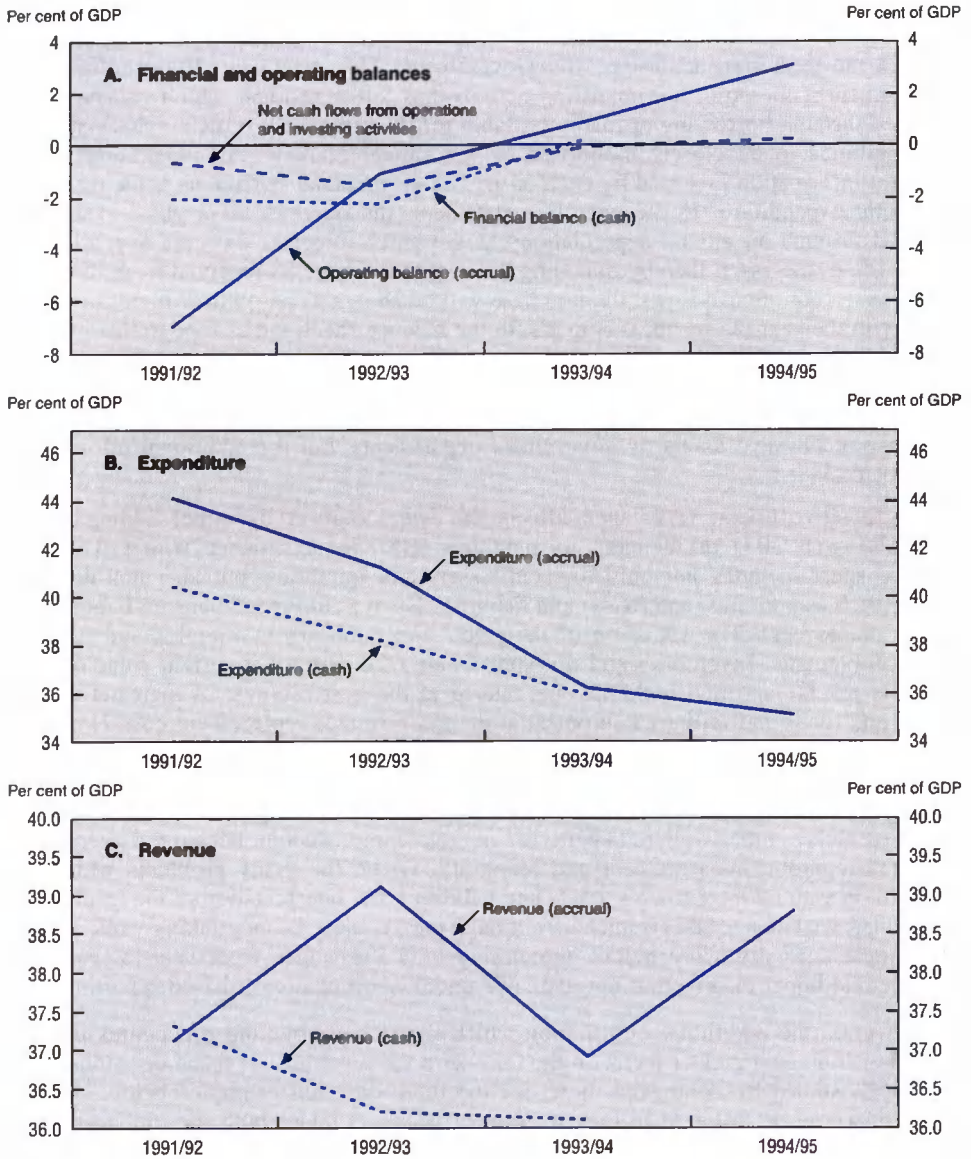
Whereas the operating statement gives a measure of the Government's financial performance by matching its revenue and expenses, the statement of cash flows summarises the cash transactions of the Government. This statement discloses how the Government's operating and investing activity has left a residual which can be either financed through borrowing or made available for the repayment of debt. This statement has continued to be closely monitored by the capital markets. An illustration of the different information provided by each of the GAAP financial statements is the treatment of capital expenditure. In the operating statement, the purchase of a physical asset is reported through an annual depreciation charge which allocates the cost over the economic life of the asset, thereby matching the cost to the benefits received from the asset. In the statement of cash flows, the purchase will be shown as an outflow under investing activity in the year the payment is made. In the balance sheet, the change in the financial position is represented by a reduction in one asset, cash, while the amount shown for physical assets increases by a commensurate amount. Under the traditional accounting system, financial net expenditure included some capital expenditure, such as the net purchase of physical assets by government departments, but the additional information was not provided.

A positive operating balance affects the *balance sheet* by either adding to the Crown's assets (B3) or reducing its liabilities (B6). In accordance with GAAP, the balance sheet includes not only financial assets and liabilities, but also non-financial assets (such as buildings and roads) and liabilities (such as unfunded pension liabilities of public employees). The valuation of the assets and liabilities is complex and in some cases problematic. Inventories and investments are recorded at net current value or cost. Physical assets, land and buildings are entered at the best estimate of their net current value, and roads and military equipment at their depreciated replacement cost. However, no allowance is made for the government's ability to tax on the asset side, in part because of the problems of valuation. Moreover, although future pensions of government employees are included under liabilities, future payments of pensions to the general public as well as other welfare benefits are not taken into account, because of accounting concepts regarding measurement and reliability. Given the many problems which are apparent in valuing the Crown's assets and liabilities, the interpretation of the level of the overall Crown balance (B7) is unclear, although the Treasury is undertaking work on this. Nevertheless, as discussed below, monitoring how it changes from year-to-year does provide additional information not available under traditional cash-based reporting.

Overall, the additional information which the new accounting procedures provide should encourage a greater focus on the long-term sustainability of fiscal decisions. This can be illustrated by contrasting how, for the three different examples below, a fiscal measure would be reflected in the government accounts under both the old cash-based system and the GAAP system:

- Raising government employees' pension benefits in the future may appear less attractive under an accrual accounting system, because the costs of accrued future pensions would be immediately recorded as employees' work and so as an expense in the

Figure A2. A COMPARISON OF CASH AND ACCRUAL-BASED FISCAL MEASURES¹



1. Data relate to years ending in June.
Source: New Zealand Treasury.

operating balance, rather than being recorded as expenditure only in the year in which the pension is actually paid out, as under a cash-based accounting system.

- A short-sighted approach to reducing a (cash) deficit which relied on cutting capital expenditures would be very transparent under an accrual-based system: there would be no direct effect on the operating balance and it would be reflected in a reduction in fixed assets recorded in the balance sheet.
- Similarly, an attempt to reduce a (cash) deficit by privatising State-owned enterprises would show up immediately in the balance sheet, and not lead to any direct improvement in either the operating balance or the overall Crown net worth.

The change in accounting systems means that there is a break in the series in government fiscal data, although there are three years, 1991/92 to 1993/94, when accounts have been produced on both a cash and accrual basis. As argued above, there is quite a close correspondence between the “new” measure of net cash flows from operations and investments and the “old” measure of the financial balance, since both are cash-based (Figure A2). However, there can be major differences between the accrual and cash-based measures of expenditure and revenue, as well as between the cash-based financial balance and the GAAP measure of the operating balance, due for example to the inclusion of depreciation, unrealised exchange rate gains and other non-cash expenditures in the accruals-based indicators.

Finally, it is interesting to speculate what difference adopting this style of budget presentation would make in other OECD countries. Clearly, the additional information which is provided would, in a number of situations (as described in the examples above), lead to greater transparency in government fiscal actions, and hence possibly lead to a greater emphasis on their long-run sustainability. The biggest potential impact would arise if future unfunded pension liabilities were to be recorded in the government accounts – although it should be noted that even New Zealand only accrues the pension liabilities of public employees and not of the general population. If a measure of the unfunded liability of the wider definition of pensions was to be included, then the budget situation in many OECD countries (particularly in Continental Europe) would appear even more difficult than under present accounting methods.

Annex III

Econometric evidence of structural changes in the labour market

This annex reports the estimation of the wage and employment equations, which are used to examine whether there is any evidence of structural change in the labour market following the introduction of the Employment Contracts Act (ECA), and which are referred to in Chapter III. Given the relatively small number of observations available in the post-ECA period, any conclusions drawn from these results should be regarded as being tentative.

The wage equation reported in the first column of Table A4 shows that over the pre-ECA period real wage growth responded to skill shortages, as signified by a positive statistically significant coefficient on the skill shortage variable "SKILL". However, when the equation is estimated over the full sample, the effect from the SKILL variable is negligible in the post-ECA period, as signified by the fact that the coefficient on a variable which is the product of the SKILL variable and a post-ECA dummy gives a coefficient which is about equal in magnitude and opposite in sign (*i.e.* negative) to the

Table A4. Estimation results for the change in real wages

Dependent variable: $\Delta (w-p)$
Estimated by Ordinary Least Squares (t-ratios in brackets)

Sample estimation Period:	1980Q2-1991Q2	1980Q2-1995Q2
Constant ($\times 100$)	0.2831 (1.5)	0.1775 (1.3)
$\Delta [p - p(-4)]$	-0.4589 (-5.1)	-0.4752 (-5.7)
SKILL (-2)	0.0139 (2.0)	0.0158 (2.5)
ECA $\times$ SKILL (-2)	-	-0.0161 (-1.8)
FREEZE ($\times 100$)	-1.3757 (-4.0)	-1.2855 (-4.2)
R-Squared	0.7865	0.7560
S.E. of Regression ($\times 100$)	0.7528	0.8795
Serial Correlation	F(4,34) = 0.41	F(4,49) = 0.46
Functional Form	F(1,37) = 1.21	F(1,52) = 2.33
Normality	$\chi^2 (2) = 1.81$	$\chi^2 (2) = 2.24$
Heteroscedasticity	F(1,43) = 1.38	F(1,59) = 2.43

Note: Seasonal dummies for the pre-ECA period were included in both equations but are not reported in the table.

Source: OECD Secretariat.

coefficient on the SKILL variable (so the two effects combined, cancel each other out in the post-ECA period). In order to consider the counter-factual case of what real wage growth might have been in the absence of the ECA (as illustrated in Figure 20) the equation in the first column of Table A4 is used to project real wage growth out-of-sample.

The estimated equation shown in Table A5 explains employment in terms of real GDP (with an imposed long-run elasticity of unity) and real wages (with an unconstrained long-run elasticity of about -0.44). Of particular interest is the coefficient on the change in real output, since this provides some indication of the short-run responsiveness of employment. In order to examine the effect of the ECA on the responsiveness of employment, this dynamic output variable is split into two variables: one for the pre-ECA period (Δq^{PRE}) and one for the post-ECA period (Δq^{ECA}). To the extent that there has been no structural change following the introduction of the ECA, the coefficients on these two variables should be similar. In practice, the coefficient on the post-ECA variable is higher, at 0.31, than that on the pre-ECA variable at 0.10. Moreover, a Wald test rejects the hypothesis that the two coefficients are the same at the 10 per cent significance level ($\chi^2(1) = 3.09$). This suggests that employment responds more quickly to a change in output in the post-ECA period than in the pre-ECA period: in the former case the equation suggests that median lag of employment with respect to output is just over 2 quarters, whereas in the latter case it is between 4 and 5 quarters.

Table A5. Estimation results for the change in employment

Dependent variable: Δn
 Estimated by Ordinary Least Squares over the period 1986Q3 to 1995Q2

	Coefficient (t-ratios in brackets)	
Constant	0.0409	(0.4)
$\Delta n (-1)$	0.3637	(3.4)
Δq^{PRE}	0.1012	(1.4)
Δq^{ECA}	0.3084	(3.6)
$\Delta(w-p)$	-0.1065	(-1.5)
$(n-q) (-1)$	-0.0934	(-3.2)
$(w-p) (-1)$	-0.0411	(-1.4)
R-Squared	0.8244	
S.E. of Regression ($\times 100$)	0.3739	
Serial Correlation	$F(4,24) = 0.21$	
Functional Form	$F(1,27) = 1.69$	
Normality	$\chi^2(2) = 0.80$	
Heteroscedasticity	$F(1,34) = 4.04^*$	

Note: A dummy variable for the quarter 1987Q1 was also included in the regression, but is not reported in the table above.

Source: OECD Secretariat.

Key to variables used in Tables A4 and A5:

All lower case variables are logged and Δ denotes the first difference operator. Letters in brackets denote Statistics New Zealand's variable codes.

- w: Hourly earnings in the private sector (QESQ.SDSHSB).
p: Producer price index of output for all market groups (PPIQ.SO2).
n: Total employment (HLFQ.SII3).
y: Real GDP, output measure (SNBQ.SY299).
SKILL: Skill shortage variable is the net percentage of respondents who perceive it to have become more difficult to find skilled labour as reported in the Quarterly Survey of Business Opinion
ECA: A dummy variable taking the value zero up until the introduction of the Employment Contracts Act in 1991 Q2 and unity thereafter.
FREEZE: A dummy variable for the wage and price freeze, taking the value unity in the periods 1982 Q3 to 1984 Q4 and zero elsewhere.

Details of diagnostic tests reported in Tables A4 and A5:

- Serial correlation: A Lagrange multiplier test for up to fourth order serial correlation.
Functional form: Ramsey's RESET test using the square of fitted values.
Normality: Jarque-Bera test for normality of the residuals, testing skewness and kurtosis of residuals.
Heteroscedasticity: Based on the regression of squared residuals on squared fitted values.

The failure of any test at the 10 per cent or 5 per cent significance level is denoted by one and two asterisks, respectively.

T-ratios are reported along-side the coefficient estimates in brackets. In some cases, because of restrictions imposed on the coefficients, the t-ratios are not available (denoted by "n.a.").

Annex IV

Effects of corporatisation and deregulation

This annex summarises some of the evidence referred to in Chapter IV on the likely effects of corporatisation and deregulation on the enterprises' output, employment, prices, product quality and overall financial performance, as well as on social goals.

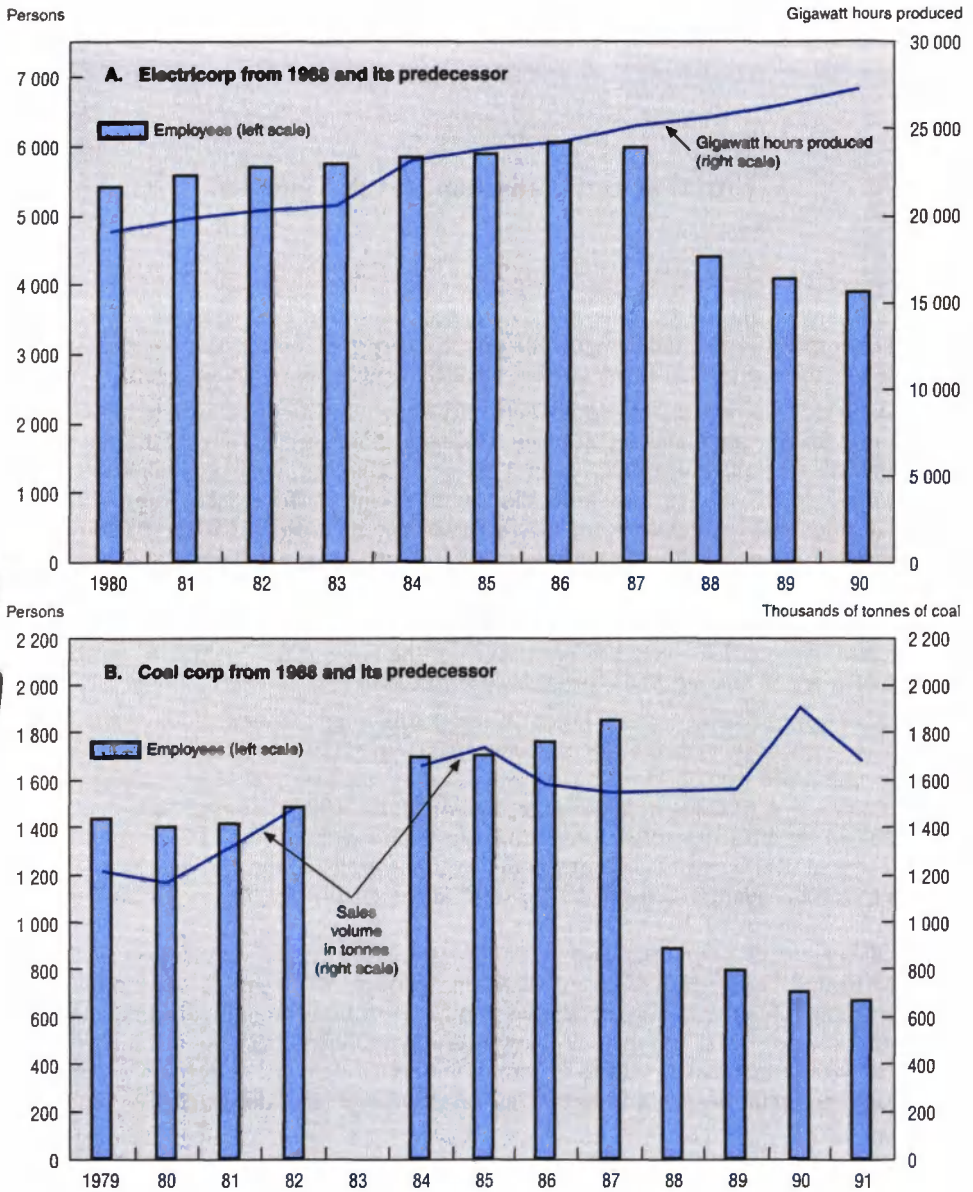
Available empirical results do not generally allow to distinguish clearly between the effects of corporatisation and deregulation, since they happened at roughly the same time. And, indeed, they do not usually control for other changes, such as improvements in technology. Most studies conclude that commercial performance improved after corporatisation and deregulation for most State-owned enterprises (SOEs) by looking at time series of data covering the period before and after corporatisation.

Figure A3 depicts changes in employment and a measure of output in some large SOEs. These results appear to be typical.⁵ According to one study,⁶ employment fell by 53 per cent between 1987 and 1992 in "seven of the large SOEs" while in "all but one or two of fourteen studied SOEs productivity increased".

Prices appear often to have fallen in real terms after corporatisation while output quality has, where there is evidence, generally increased. For instance, the real price of electricity dropped from 4.90 cents per kWh in 1988 – the first year after establishment of Electricorp – to 4.70 cents in 1990 (expressed in March 1987 dollars).⁷ Real coal prices increased in the pre-corporatisation period and declined thereafter.⁸ In telecommunications – at least over a period including both corporatisation and then privatisation – prices fell and, overall, quality seems to have risen.⁹ In the post office, prices for bulk mail to households were cut by 30 to 50 per cent in the first two years after corporatisation. The price of sending a single standard letter has decreased in real terms, recently being reduced from 45 to 40 New Zealand cents, and appears to be among the lowest in the OECD (Table A6). The quality of service to some customers probably declined as many post offices were closed, but there are now many more outlets that provide at least some postal services, such as the selling of stamps.¹⁰ Service delivery performance improved by 5 to 10 per cent, despite an increase in the volume of mail delivered.¹¹

One of the main goals of the reforms was to improve the profitability of government-owned businesses, and in this respect they have been successful. According to one study, "across seven of the larger SOEs, revenue rose by 15 per cent between 1988 and 1992, and after-tax profits quadrupled from NZ\$ 262 million to NZ\$ 1 023 billion".¹² Another study, which examined five SOEs in detail, found that "it is reasonable to

Figure A3. **OUTPUT AND EMPLOYMENT
IN SELECTED STATE-OWNED ENTERPRISES**



Source: Spicer, Emanuel and Powell (1995).

Table A6. Price of sending a standard letter in selected OECD countries¹

	Price in New Zealand cents
New Zealand	45
United States	52
Canada	56
Australia	57
Finland	64
United Kingdom	65
Sweden	72
Switzerland	76
France	79
Netherlands	82
Belgium	84
Italy	89
Denmark	103
Japan	105
Germany	108

1. The table lists the price of sending a standard letter in selected OECD countries in 1994, based on the exchange rate prevailing on 31 March 1994.
Source: Statistics New Zealand (1995), p. 279.

conclude that Electricorp, CoalCorp, and Television New Zealand are more profitable than their predecessor organisations [and] Government Computing Service is less profitable on average, but operates with much smaller margins and with a much enhanced operating efficiency".¹³ It appears also that New Zealand Post and PostBank became more profitable with corporatisation.¹⁴ Although the Government still provides large effective subsidies to some businesses in general via trade protection (OECD 1994a), the level of fiscal subsidies to businesses – both private and public – has, because of corporatisation and other changes, fallen to the lowest level in the OECD, at about 1/4 per cent of GDP.¹⁵

These indicators by themselves do not permit a full comparison of the pre- and post-corporatisation policies, since previously the businesses did not have purely commercial goals, and cannot be judged by their commercial performance alone. The theoretical rationale for not requiring SOEs to pursue social policies, unless explicitly paid to do so, was twofold: first, giving businesses both commercial and social objectives can make it difficult to hold them accountable for either, and, second, social policies are probably best pursued explicitly, in a decision-making context that facilitates consideration of the alternative policies and their costs. This is plausible, but empirical evidence to test the most economically efficient approach is hard to find for New Zealand.

It appears, however, that the cost of the social policies pursued by government businesses has been high. The increase in Electricorp's pre-tax profits between 1987 and 1990, for example, was 162 million (in 1987 NZ dollars) or 77 669 dollars for each "surplus" person employed in 1987. For Television New Zealand, on the other hand, a

similar calculation gives only NZ\$ 1 972 for each “surplus” worker.¹⁶ For Telecom, there is one study that tries to estimate the change in total consumer and producer welfare after corporatisation, deregulation, and then privatisation.¹⁷ Ignoring improvements in quality, the total benefits of the Telecom reforms were put at around NZ\$ 500 to 575 million (in 1987 prices).

Notes

1. See Giorno *et al.* (1995).
2. One approach to overcoming this “end-point” problem, suggested by Giorno *et al.* (1995), is to add to the current data set projections of output and factor inputs which cover the period to the end of the current cycle. However, in the case of New Zealand, where there is such a high degree of uncertainty regarding future growth of potential output this is an unsatisfactory solution – rather estimates of potential output growth are required to provide informed projections of output and factor inputs.
3. There is no official capital stock data. The estimates used in Table A1 are taken from Phillpot (1994) and are estimates of the *gross* capital stock. In New Zealand the growth rate of the gross capital stock is consistently above that of the net capital stock and provides a further reason why the estimates of total factor productivity growth in Table A1 may appear low by international standards.
4. Aggregate fixed investment is calculated by using fixed weights derived from 1982/83 prices. However, the substantial fall in computer prices since 1982/83, implies a disproportionately large weight for investment in computers, which has also probably dominated the capital stock growth rate in the post-reform period.
5. Another large SOE, the Forestry Corporation, reduced its staff from 7 070 to 2 770, with no reduction in log production (Treasury, “SOE Performance”, 28 October 1994; note that the post-corporatisation employment number “includes wage and salary staff and contractors and their employees”).
6. Duncan and Bollard (1992).
7. Spicer, Emanuel, and Powell (1995).
8. *Ibid.*
9. Boles de Boer and Evans (1995).
10. Statistics New Zealand (1995, p. 279).
11. Scott, Bushnell and Sallee (1990, p. 150).
12. Office of Auditor General of Canada (1994, p. 23), citing “studies carried out by the New Zealand Institute of Economic Research”.
13. Spicer, Emanuel, and Powell (1995). The organisations covered were chosen by the New Zealand Treasury, who commissioned the study, and the authors note that, in addition to having different establishment dates, the selected SOEs varied along other dimensions (for example, in the prior form of organisation ranging from government departments to a

statutory corporation and in terms of size, industry, and the competitive environments faced by the company).

14. New Zealand Treasury (1990, p. 90).
15. *World Competitiveness Report* 1994, p. 361. In the same Report, business executives are asked whether "Government subsidies ... keep obsolete industries alive [or] are directed towards future winners", whether "State control of enterprises ... distorts fair competition in your country [or] does not distort fair competition in your country", and whether "Investment in the economy ... is highly directed by government [or] free from government intervention". On the basis of the answers, the report ranks the New Zealand Government second, fourth, and first, respectively, out of 41 countries, under each category of questions.
16. Spicer, Emanuel, and Powell (1995). Of the three other SOEs studied in that report, no calculation is made for Works Corp and CoalCorp, because no time-series data on earnings before interest and tax are provided and no calculation is made for Government Computing Service because it increased its employment.
17. Boles de Boer and Evans (1995).

Annex V

Chronology of main economic events

1994

March

The New York based credit rating agency Moody's raised the government's long-term debt rating from AA3 to AA2, matching that of Australia's. This compares to consecutive downgradings from AAA prior to 1984 to AA in October 1984 and AA3 in August 1986.

The Minister of Finance announced that he expects a broadly balanced budget for the 1993/94 financial year.

April

The Government announced a small budget surplus for the eight months till the end of April, almost NZ\$ 1 billion ahead of the pre-election forecasts released in October 1993.

May

The Debt Management Office announced that the bond tender scheduled for May would be cancelled.

The Government released its Fiscal Update. The financial balance from the 1993/94 fiscal year was projected to be a NZ\$ 422 million surplus. The last official forecast, contained in the October Pre-Election Economic and Fiscal Update, was for a deficit of NZ\$ 1 422 million.

The Debt Management Office announced that the bond tender scheduled for June would be cancelled because of the improved fiscal position.

June

The 1994 Budget was presented. The main statements were:

- The estimated adjusted financial balance for the 1993/94 financial year showed a surplus of NZ\$ 527 million. This was projected to rise to NZ\$ 730 million in 1994/95 and NZ\$ 4 531 million in 1996/97.
- The Crown balance (net worth) was forecast to improve from NZ\$ -6 254 million on 30 June 1994 to NZ\$ +3 571 million on 30 June 1997.
- Net public debt was forecast to fall from NZ\$ 35 557 million (42.1 per cent of GDP) on 30 June 1994 to NZ\$ 28 128 million (28.7 per cent of GDP) in June 1997.
- Funding was increased for the health system and the education and training systems.
- The favourable fiscal outlook would create the potential for tax cuts once prudent debt levels were achieved.

October

Audited Crown Financial Accounts were released, showing an operating balance surplus for the 1993/94 financial year of NZ\$ 755 million on an accrual basis (NZ\$ 792 million on the adjusted financial balance basis).

November

The Government announced a NZ\$ 1 billion envelope, and other policies, to settle Treaty of Waitangi claims.

December

Standard and Poor's upgraded New Zealand's foreign currency credit rating to AA from AA- with a stable outlook. The upgrade reflected the substantial strengthening which had been achieved in New Zealand public finances against the background of sustained economic growth, low inflation and structural transformation of the economy.

The Government announced its decision to apply all its fiscal surpluses to eliminate the Crown's NZ\$ 10 billion net foreign-currency debt.

The Government announced its intention to introduce wholesale inflation-indexed bonds in the 1995/96 fiscal year.

1995

February

The Minister of Finance released a Budget Policy Statement, which outlined *inter alia* pre-conditions that would need to exist before tax cuts could be implemented:

- Net public debt would need to be within 20 to 30 per cent of GDP.
- There should be no risk of a return to deficits in the foreseeable future (*i.e.* debt reduction must be sustainable).
- There would be no scope for tax cuts if there were significant risks of strong inflationary or balance-of-payments pressures emerging.

March

Net public debt fell below 40 per cent of GDP.

May

The Government settled the Tainu claim for NZ\$ 170 million (first recognised in November 1994).

June

The 1995 Budget was presented. The main statements were:

- Rising surpluses are reflected in the net public debt forecast to fall by over NZ\$ 14 billion, or over 40 per cent, by 1997/98 compared with 1994/95. Tax cuts would be introduced in the year in which net public debt is projected to fall below 30 per cent of GDP. The pre-conditions for tax cuts are that they should not cause significant risks of strong inflationary pressures, be undertaken in a prudent manner, and be consistent with ongoing fiscal surpluses and further debt reduction. On current projections, debt would fall below 30 per cent of GDP in 1996/97.
- The estimated actual operating surplus in 1994/95 was NZ\$ 2 603 million, 3 per cent of GDP, and was projected to be a surplus of NZ\$ 7 809 million, 7.7 per cent of GDP, by 1997/98.
- Net public debt was forecast to fall from NZ\$ 33 152 million (37.9 per cent of GDP) on 1 June 1995 to NZ\$ 18 876 million (18.7 per cent of GDP) in June 1997/98.

- Social security and welfare, health and education spending all continued to increase in response to policy decisions, demographic changes and indexations of benefits.
- A first multi-year appropriation was introduced to provide for implementation of the claim settlement envelope over a ten-year period.

August

The Reserve Bank cut its settlement cash target from NZ\$ 20 million to NZ\$ 15 million, and then to NZ\$ 5 million, in order to keep monetary conditions firm.

October

Crown Financial Statements for the year ended 30 June showed the Crown's net worth had improved to NZ\$ –3 159 million from NZ\$ –5 628 million a year ago. The operating balance for the year was a surplus of NZ\$ 2 695 million, compared to an estimated forecast of NZ\$ 2 603 million.

November

A first tender of NZ\$ 75 million of inflation-index bonds was held.

December

In its Economic and Fiscal Update, the Government announced the size and timing of the 1996 Budget package, the major elements of which are tax and family assistance initiatives focused on low and middle-income earners. The cost of the package will be NZ\$ 1.7 billion in 1996/97 and a further NZ\$ 1.3 billion in 1997/98.

1996

January

Standard and Poor's raised New Zealand's long-term foreign-currency credit rating to AA+ from AA because of the country's "prudent fiscal and monetary policies".

February

Moody's raised the government's debt rating to AA1, reducing the number of countries rated ahead of New Zealand to nine.

The Government announced that, at the end of 1995, its assets outstripped its liabilities by NZ\$ 1.8 billion. Since the first Crown balance sheet was produced in 1992, the Government's net worth has improved by nearly NZ\$ 10 billion.

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STATISTICAL ANNEX AND STRUCTURAL INDICATORS

Table A. Selected background statistics

	Average 1986-95	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
<i>A. Percentage change in constant 1982/83 prices</i>											
Private consumption	1.8	4.6	1.4	2.3	0.8	0.2	-2.0	0.2	3.0	4.4	3.5
Gross fixed capital formation	5.4	-1.7	1.7	0.2	6.5	-0.6	-16.0	5.2	17.7	23.3	18.0
Public investment	..	5.0	-13.8	-4.2	-10.6	13.3	-15.7	-11.8	-12.5	11.3	..
Private investment	..	-4.6	9.0	1.9	12.5	-4.4	-16.1	10.8	25.7	25.5	..
Residential construction	..	-2.9	-4.1	4.5	15.0	2.2	-15.9	6.2	17.3	12.3	..
Private non-residential	..	-5.1	13.1	1.1	11.8	-6.3	-16.2	12.3	28.1	29.1	..
GDP	1.1	1.0	-0.7	3.9	-1.4	0.1	-3.7	0.3	5.5	4.1	2.2
GDP price deflator	5.8	14.3	15.3	6.8	7.9	3.2	2.5	2.4	1.5	1.6	2.1
Employment	0.5	-0.4	0.8	-3.2	-2.6	0.9	-1.4	0.4	2.0	4.2	4.7
Compensation of employees (current prices)	6.2	20.1	14.5	6.1	3.5	2.4	-1.2	0.8	2.6	6.1	6.9
Productivity (real GDP/employment)	0.6	1.4	-1.5	7.2	1.3	-0.8	-2.3	-0.1	3.5	-0.1	-2.3
Unit labour costs (compensation/real GDP)	5.0	18.9	15.3	2.1	4.9	2.3	2.6	0.5	-2.8	1.9	4.6
<i>B. Percentage ratios</i>											
Gross fixed capital formation as per cent of GDP at constant prices	27.1	25.0	25.6	24.7	26.6	26.4	23.1	24.2	27.0	32.0	36.9
Stockbuilding as per cent of GDP at constant prices	1.1	0.4	0.2	0.0	2.5	1.3	-0.9	0.9	2.2	2.0	1.7
Foreign balance as per cent of GDP at current prices	1.5	-1.4	0.4	3.7	0.6	0.5	3.2	2.0	2.7	2.3	1.0
Compensation of employees as per cent of GDP at current prices	45.9	49.6	49.6	47.4	46.1	45.7	45.7	44.9	43.0	43.1	44.2
Direct taxes as per cent of household income	..	23.5	21.5	21.3	20.6	21.2	19.9	19.5	20.2	20.3	..
Unemployment rate	7.3	4.0	4.1	5.6	7.1	7.8	10.3	10.3	9.5	8.2	6.3
<i>C. Other indicator</i>											
Current balance (billion US dollars)	..	-1.7	-1.8	-0.5	-1.6	-1.2	-1.0	-1.2	-0.8	-1.1	..

Source: Statistics New Zealand and OECD.

Table B. Gross domestic product and expenditure

NZ\$ million, current prices

Year ending 31 March	1987	1988	1989	1990	1991	1992	1993	1994	1995
Compensation of employees	27 095	30 458	31 869	32 959	33 368	33 001	33 659	34 695	37 416
Operating surplus	16 994	18 039	20 377	21 637	22 139	22 548	23 735	26 603	28 900
Consumption of fixed capital	4 492	5 230	5 764	6 168	6 525	6 884	7 325	7 727	8 279
Indirect taxes	6 735	9 081	9 398	10 848	11 135	10 837	10 787	11 268	11 964
less: subsidies	292	271	180	206	205	241	286	294	255
Gross domestic product	55 024	62 536	67 228	71 406	72 962	73 030	75 220	79 999	86 304
Final consumption expenditure									
Private	32 962	37 432	40 523	43 455	45 760	45 937	46 974	48 743	52 006
General government	8 930	10 128	11 023	11 733	12 291	12 269	12 658	12 692	12 682
Increase in stocks	887	503	767	2 083	709	725	1 626	2 147	1 949
Gross fixed capital formation	12 363	13 382	12 892	14 303	13 795	11 541	12 367	14 712	17 260
Statistical discrepancy	0	62	-426	-350	0	238	-291	-694	700
Gross national expenditure	55 142	61 445	65 206	71 573	72 555	70 473	73 625	78 295	83 896
Exports of goods and services	15 122	16 663	18 064	19 154	19 935	21 519	23 698	25 104	26 924
less: Imports of goods and services	15 240	15 635	15 616	18 972	19 527	19 201	21 812	22 706	25 216
Expenditure on gross domestic product	55 024	62 474	67 654	71 756	72 963	72 791	75 511	80 693	85 604
Gross domestic product at 1982-83 prices									
Index 1982-83 = 100	110.9	112.3	111.3	113.2	112.4	111.7	114.1	120.4	127.6

Source: Statistics New Zealand.

Table C. **Gross domestic product by kind of activity**

NZ\$ million, current prices

Year ending 31st March	1986	1987	1988	1989	1990	1991	1992	1993
Agriculture and hunting	3 060	3 078	3 704	4 156	4 570	3 909	4 486	4 388
Fishing	177	218	232	258	254	237	231	267
Forestry and logging	892	1 039	1 137	1 369	1 415	1 505	1 597	1 904
Mining and quarrying	582	628	589	641	830	1 014	1 084	1 077
Food, beverage and tobacco	2 570	3 284	3 593	3 910	4 015	4 259	4 470	4 512
Textiles, apparel and leather	856	970	923	800	866	814	811	815
Manufactured wood products	718	734	700	715	752	720	723	865
Paper products and printing	1 206	1 341	1 659	1 673	1 826	1 965	1 941	1 859
Chemicals, petroleum, rubber, plastic	1 318	1 751	1 503	1 602	1 775	1 524	1 476	1 649
Non-metallic mineral products	401	413	405	427	413	424	381	433
Basic metal products	350	333	253	298	459	423	476	649
Fabricated metal products	2 368	2 627	2 800	2 691	2 848	2 601	2 556	2 758
Other manufacturing	134	121	128	144	151	142	122	134
Electricity, gas, water	1 442	1 712	1 765	1 982	2 110	2 099	2 094	2 153
Construction	2 551	2 791	2 938	2 991	3 218	2 808	2 396	2 299
Trade, hotels and restaurants	8 494	9 615	9 807	10 412	10 093	11 391	10 449	11 086
Transport, storage	2 372	2 810	3 100	3 462	3 708	3 666	3 678	3 734
Communication	1 156	1 600	2 091	2 126	2 199	2 384	2 521	2 453
Finance, Insurance and real estate	5 981	7 731	9 496	10 268	10 740	10 574	10 538	10 546
Dwellings	2 756	3 405	4 060	4 907	5 275	5 914	6 213	6 119
Community, social, personal services	1 766	1 903	2 331	2 614	2 684	2 846	3 122	3 272
Imputed bank service charge	-1 553	-2 162	-2 847	-2 818	-2 996	-3 000	-2 935	-2 688
Total, market production groups	39 597	45 941	50 368	54 628	57 203	58 217	58 431	60 283
Producers of Government services	5 136	6 359	7 195	7 873	8 414	8 612	8 469	8 599
Other producers	406	485	566	644	698	769	852	882
Total, non-market production groups	5 542	6 844	7 761	8 517	9 112	9 381	9 321	9 481
Total, all production groups	45 139	52 785	58 129	63 146	66 315	67 598	67 752	69 764
Indirect taxes		2 239	4 407	4 082	5 091	5 364	5 279	5 455
Gross domestic product	45 777	55 024	62 536	67 228	71 406	72 962	73 030	75 220

Source: Statistics New Zealand.

Table D. Labour market

Thousand

Yearly average	1987	1988	1989	1990	1991	1992	1993	1994	1995
Civilian employment, total	1 557	1 508	1 468	1 481	1 461	1 467	1 496	1 559	1 632
<i>of which:</i>									
Agriculture	161	156	151	157	157	159	158	162	158
Industry	425	393	372	364	343	334	351	390	410
Other activities	965	956	941	955	957	971	985	1 006	1 064
Unemployment	66	89	113	125	168	169	157	138	110
Unemployment rate (per cent of civilian labour force)	4.0	5.6	7.1	7.8	10.3	10.3	9.5	8.2	6.3

Source: Statistics New Zealand.

Table E. Prices

Yearly average	1987	1988	1989	1990	1991	1992	1993	1994	1995
December quarter 1993 = 1000									
Consumer' price index									
Food	794	843	915	982	991	992	1 003	999	1 012
Total	794	845	893	948	972	982	995	1 012	1 050
Producer prices (inputs)	797	839	898	940	948	968	992	1 005	1 013
Export prices	828	880	997	983	941	1 019	1 045	1 003	997
Import prices	892	884	954	961	970	1 035	1 031	995	993
Terms of trade	928	995	1 045	1 023	970	985	1 014	1 008	1 004

Source: Statistics New Zealand.

Table F. **Monetary aggregate components**

NZ\$ million, end quarter

	1993		1994				1995			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Notes and coin held by the public	1 097	1 198	1 217	1 209	1 217	1 365	1 300	1 314	1 326	1 486
Total transaction account balances	8 719	9 516	9 547	10 367	9 784	9 842	9 502	10 058	9 572	10 449
Less: Inter-institutional trans balances	54	174	271	77	65	25	39	35	152	39
Less: Government deposit	3	3	18	19	18	10	17	18	17	19
M1	9 759	10 537	10 475	11 480	10 918	11 172	10 746	11 319	10 729	11 877
Total other call funding	18 101	17 280	19 371	20 021	19 190	18 848	20 268	21 181	21 444	22 487
Less: other call interinstitutional funding	1 810	1 684	2 495	2 389	1 664	1 194	2 531	1 894	2 174	1 520
M2	26 050	26 133	27 351	29 112	28 444	28 826	28 483	30 606	29 999	32 844
Total term funding	45 500	47 033	45 341	43 965	48 334	48 954	50 503	50 898	52 678	53 579
Less: Inter-institutional term funding	6 325	6 661	6 815	6 292	8 133	6 858	7 945	8 482	7 959	6 923
Less: Government deposit	666	632	546	672	1 420	1 387	1 315	1 088	865	789
M3	64 559	65 873	65 332	66 113	67 225	68 151	69 726	71 934	73 853	78 711

Source: *Reserve Bank Bulletin*.

Table G. Central government revenue and expenditure

NZ\$ million

Year ending June ¹	1992	1993	1994	1995
REVENUE				
Levied through the Crown's Sovereign Power				
Direct taxation	15 371	16 591	17 585	19 843
Indirect taxation	8 530	9 221	10 120	10 370
Compulsory fees, fines, penalties and levies	159	151	190	225
Total Revenue Levied through the Crown's Sovereign Power	24 060	25 963	27 895	30 438
Earned through the Crown's Operations				
Unrealised gains/(losses) arising from revaluation of commercial forests	0	766	-292	-65
Investment income	1 683	1 646	1 368	2 170
Sales of goods and services	841	669	713	667
Other operational revenue	762	791	499	438
Total Revenue Earned through the Crown's Operations	3 286	3 872	2 288	3 210
TOTAL REVENUE	27 346	29 835	30 183	33 648
EXPENSES				
By functional classification				
Social security and welfare	..	12 071	11 479	11 724
Health	..	4 168	4 602	4 886
Education	..	4 539	4 627	4 803
Core government services	..	1 464	1 723	1 340
Law and order	..	1 173	1 150	1 190
Defence	..	1 054	1 049	1 013
Transport and communications	..	781	815	796
Economic and industrial services	..	744	711	673
Primary services	..	372	299	309
Heritage, culture and recreation	..	310	241	233
Housing and community development	..	260	39	46
Other	..	236	14	181
Finance costs	4 415	3 961	3 788	3 757
Net foreign-exchange (gains)/losses	1 764	296	-898	-551
TOTAL EXPENSES	32 495	31 429	29 639	30 400
REVENUE LESS EXPENSES	-5 149	-1 594	544	3 248
Net surplus/(deficit), less distributions attributable to State-owned enterprises and Crown entities	..	775	211	-553
OPERATING BALANCE	..	-819	755	2 695

1. From 1992/93 onward, the reporting entity includes all SOEs and Crown entities, as well as the Reserve Bank of New Zealand.

Source: Financial Statements of the Government of New Zealand.

Table H. **Balance of payments¹**

US\$ million

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Exports	5 597	5 823	7 217	8 814	8 828	9 183	9 579	9 743	10 458	11 966
Imports	5 631	5 736	6 629	6 664	7 877	8 274	7 504	8 119	8 727	10 598
Trade balance	-34	87	588	2 149	951	909	2 075	1 624	1 731	1 368
Services, net	-1 659	-1 927	-2 475	-2 741	-2 723	-2 478	-3 396	-2 979	-3 162	-3 412
Balance on goods and services	-1 693	-1 841	-1 887	-591	-1 772	-1 569	-1 321	-1 355	-1 431	-2 044
Private transfers, net	128	130	137	148	235	393	438	478	721	979
Official transfers, net	-60	-39	-40	-43	-26	-44	-45	-55	-46	-78
Current balance	-1 624	-1 749	-1 789	-487	-1 564	-1 220	-928	-932	-756	-1 143
Net transactions of monetary authorities	-316	2 262	-240	-240	306	994	-1 336	133	-51	455
Miscellaneous official accounts	-81	-160	-99	-460	-57	0	0	0	0	0
IMF credit	-54	0	0	0	0	0	0	0	0	0
Allocation of SDR's	0	0	0	0	0	0	0	0	0	0
Change in reserves	-451	2 102	-338	-701	249	994	-1 336	133	-51	455
a) Gold	0	0	0	10	-10	0	0	0	0	0
b) Currency assets	-450	2 098	-327	-721	219	994	-1 354	54	-51	455
c) Reserve position in IMF	0	0	0	11	41	-1	18	78	0	0
d) Special Drawing Rights	-1	4	-11	-1	-1	1	0	0	0	0

1. On a settlement basis.

Source: OECD.

Table I. Imports: value, volume, prices and commodity groups

US\$ millions

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Value	5 998	6 134	7 256	7 305	8 776	9 484	8 497	9 205	9 304	11 901
Volume index (1989 = 100)	82	81	89	82	100	107	97	107	112	130
Price index (1989 = 100)	100	98	93	93	100	101	102	109	108	104
Value of principal commodity groups:										
Live animals, beverages and tobacco	343	371	451	513	590	584	604	609	664	832
Minerals, chemicals and plastic materials	1 639	1 390	1 578	1 597	1 843	2 082	1 985	2 073	2 155	2 533
Manufactured goods	357	390	493	544	622	697	656	740	723	879
Textiles and textiles articles	346	378	429	414	487	506	502	538	534	678
Metals and articles of metals	451	435	545	530	585	576	536	551	552	696
Machinery and mechanical appliances	1 220	1 332	1 575	1 789	2 014	2 243	1 973	2 099	2 215	2 913
Vehicles and aircraft	707	827	1 006	819	1 368	1 477	1 033	1 387	1 200	1 841

Source: Statistics New Zealand and OECD.

Table J. Exports: value, volume, prices and commodity groups

US\$ millions

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Value	5 732	5 943	7 189	8 807	8 867	9 378	9 759	9 789	10 223	12 185
Volume index (1989 = 100)	98	96	99	103	100	106	117	120	125	137
Price index (1989 = 100)	81	79	83	88	100	99	95	102	105	101
Value of principal commodity groups:										
Total meat	1 095	1 013	1 242	1 356	1 441	1 483	1 542	1 599	1 582	1 662
Dairy produce	755	744	815	1 050	1 099	1 260	1 347	1 318	1 470	1 660
Fruit, vegetables, prepared food-stuff, beverage and tobacco	561	615	792	882	831	920	1 013	1 012	983	1 226
Forest products	363	394	510	697	741	913	983	1 009	1 292	1 497
Minerals, chemicals and plastic materials	425	423	475	645	713	937	1 001	926	986	1 335
Metals and articles of metals	416	408	500	716	763	752	751	683	676	804
Manufactured goods	1 560	1 709	2 167	2 658	2 434	2 298	2 249	2 287	2 550	3 143

Source: Statistics New Zealand and OECD.

Table K. **Foreign trade by area**
US\$ millions

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Exports, total	5 732	5 943	7 189	8 807	8 867	9 378	9 759	9 789	10 223	12 185
OECD countries	3 927	4 104	5 163	6 185	6 255	6 453	6 497	6 424	6 565	8 085
EEC	1 180	1 179	1 605	1 662	1 659	1 661	1 618	1 583	1 546	1 902
<i>of which:</i>										
Germany	134	156	174	191	189	228	236	240	241	314
France	103	95	133	123	117	94	113	117	119	134
Italy	133	138	165	187	165	163	132	110	116	171
United Kingdom	547	501	684	632	633	666	606	629	621	735
United States	833	960	1 087	1 197	1 164	1 217	1 247	1 209	1 185	1 342
Japan	839	874	1 157	1 558	1 539	1 523	1 564	1 436	1 491	1 868
Australia	934	942	1 128	1 533	1 678	1 797	1 833	1 940	2 043	2 607
Non-OECD countries	1 805	1 839	2 025	2 622	2 612	2 925	3 261	3 365	3 659	4 101
Asia	708	811	991	1 420	1 418	1 482	1 770	1 988	2 082	2 563
Others	1 097	1 028	1 034	1 202	1 194	1 442	1 491	1 377	1 576	1 538
Imports, total	5 448	5 619	6 651	6 691	8 018	8 691	7 768	8 493	8 568	11 014
OECD countries	4 458	4 722	5 549	5 461	6 518	7 044	6 216	6 719	6 780	8 756
EEC	1 194	1 258	1 532	1 372	1 577	1 673	1 433	1 535	1 516	1 968
<i>of which:</i>										
Germany	305	326	381	329	338	408	328	357	375	507
France	86	96	116	104	120	161	174	149	144	191
Italy	97	110	136	121	145	189	191	202	219	239
United Kingdom	504	530	649	577	729	641	508	546	506	690
United States	877	990	1 069	1 122	1 347	1 570	1 299	1 667	1 529	2 119
Japan	1 130	1 201	1 259	1 136	1 456	1 309	1 196	1 243	1 391	1 677
Australia	940	912	1 334	1 447	1 672	1 776	1 731	1 796	1 841	2 380
Non-OECD countries	989	897	1 102	1 230	1 500	1 647	1 552	1 773	1 788	2 258
Asia	654	651	731	820	945	958	940	1 186	1 210	1 574
Others	336	246	371	410	554	688	612	587	577	684

Source: Statistics New Zealand and OECD.

Table L. **Production and employment structure**

March year	Per cent of GDP ¹					Per cent of total employment				
	1991	1992	1993	1994	1995	1991	1992	1993	1994	1995
Tradeables										
Agriculture, fishing and hunting	9.3	8.9	8.6	8.6	8.2	10.5	11.0	10.7	10.5	10.2
Mining and quarrying	1.9	2.2	2.1	2.2	1.9	0.3	0.2	0.2	0.3	0.3
Manufacturing	20.4	20.3	20.8	20.8	21.0	17.2	16.7	16.5	17.3	18.2
Non-tradeables										
Electricity, gas and water	3.4	3.6	3.4	3.5	3.5	1.0	0.9	0.7	0.7	0.7
Construction	4.6	3.9	3.7	4.0	4.5	6.0	5.2	5.4	5.5	6.0
Trade, restaurants and hotels	17.2	17.1	17.1	17.3	17.9	21.0	20.6	21.3	21.0	21.1
Transport, storage and communication	11.2	11.8	12.2	12.5	12.7	6.4	6.4	6.1	5.9	6.0
Finance, insurance, real estate and business services	14.1	14.4	14.4	14.2	14.0	9.9	10.6	10.6	10.0	10.3
Community, social and personal services	4.6	4.9	4.8	4.7	4.7	27.2	28.2	28.4	28.6	27.1

1. 1982/83 prices.

Source: Statistics New Zealand.

Table M. Labour market indicators

Calendar years	1992	1993	1994	1995
A. Labour market performance				
Unemployment rate: Total	10.3	9.5	8.2	6.3
Male	10.9	10.0	8.5	6.3
Female	9.6	8.9	7.7	6.3
Youth ¹	18.5	17.2	15.0	11.8
B. Structural or institutional characteristics				
Labour Force (per cent change)	0.4	1.1	2.7	2.6
Participation rate: ² Total	63.4	63.3	64.2	64.8
Male	73.2	73.2	73.8	74.3
Female	54.0	53.9	55.0	55.8
Employment/population (15 and over)	56.8	57.3	58.9	60.7
Employment shares ³				
Agriculture	10.8	10.5	10.4	9.7
Industry	22.8	23.4	25.0	25.1
Services	66.2	65.9	64.5	65.1
of which: public sector ⁴	18.3	17.9	17.0	16.1
Part-time work (as per cent of total employment) ⁵	21.6	21.1	21.6	21.5
Wage or salary earners (per cent of total)	78.3	78.4	78.6	78.7

1. 15 to 24 years old.

2. Total labour force as a per cent of population 15 and over.

3. Per cent of total employment.

4. Approximation using QES central and local government non-trading employment as per cent of QES total employment. This excludes agriculture.

5. Part-time is less than 30 hours per week.

Source: Statistics New Zealand, *Household Labour Force Survey*.

Table N. **Financial markets**¹

End December

	1989	1990	1991	1992	1993	1994
Sector size						
Credits distributed by financial markets/GDP ²	1.567	1.724	1.813	1.959	2.042	2.086
Domestic financial assets/GDP ³	1.822	2.098	2.171	2.373	2.377	2.381
Internationalisation of markets						
Foreign business of the banking sector						
Assets ⁴	0.053	0.055	0.040	0.033	0.045	0.040
Liabilities ⁵	0.123	0.133	0.114	0.116	0.127	0.132
Efficiency of markets						
Developments of interest rate margin ⁶	3.36	3.42	3.01	3.11	3.00	3.0

1. All M3 financial institutions.

2. NZ\$ claims of registered banks and all M3 financial institutions.

3. Total assets less foreign currency claims.

4. Assets: foreign currency claims/total claims.

5. Liabilities: foreign currency funding/total funding.

6. Interest rate margin: between registered banks average weighted interest rates for NZ\$ funding and claims.

Source: Reserve Bank of New Zealand.

Table O. **The public sector**

As percentage of GDP

Year ending June	1991	1992	1993	1994	1994 ¹	1995 ¹
Budget indicators						
Current receipts (excluding interests)	37.4	35.5	35.6	35.9	36.2	37.9
Non-interest expenditures (financial)	35.3	33.9	33.4	31.3	31.6	30.8
Primary budget balance	2.1	1.6	2.1	4.6	4.7	7.2
Net interest (including net capital transfers)	5.6	4.9	4.5	3.7	4.0	3.4
General government budget balance (adjusted financial balance/operating balance)	-3.5	-3.3	-2.4	1.0	0.9	3.1
Structure of expenditure and taxation						
Government expenditure						
General expenditure						
Education	6.1	6.0	5.9	5.7	5.7	5.5
Transportation	1.1	1.1	0.9	1.0	1.0	0.9
Health	5.5	5.2	5.1	5.0	5.6	5.6
Tax receipts						
Personal income tax	18.1	16.8	16.7	16.8	16.5	17.1
Corporate tax	2.4	2.5	3.0	3.9	3.7	4.6
Other indicators						
Income tax as a percentage of total tax	63.4	62.1	62.0	63.7	63.5	65.7
Gross public debt as a percentage of GDP	60.5	63.8	62.2	56.7	56.7	50.9

1. Calculated using accrual basis. It is not possible to reconcile with the previous system.

Source: New Zealand Treasury, OECD.

BASIC STATISTICS:
INTERNATIONAL COMPARISONS

BASIC STATISTICS: INTERNATIONAL COMPARISONS

	Units	Reference period ¹	Australia	Austria	Belgium	Canada	Denmark	Finland	France	Germany	Greece	Iceland	Ireland	Italy	Japan	Luxembourg	Mexico	Netherlands	New Zealand	Norway	Portugal	Spain	Sweden	Switzerland	Turkey	United Kingdom	United States
Population																											
Total	Thousands	1994	17 840	8 031	10 124	29 251	5 206	5 088	57 960	81 407	10 430	267	3 571	57 190	124 960	398	93 010	15 382	3 526	4 337	9 900	39 150	8 781	6 994	60 573	58 375	260 651
Inhabitants per sq. km	Number	1994	2	96	332	3	121	15	106	228	79	3	51	190	331	153	47	377	13	13	107	78	20	169	78	238	28
Net average annual increase over previous 10 years	%	1994	1.4	0.6	0.3	1.6	0.2	0.4	0.5	2.9	0.5	1.1	0.1	0	0.4	0.8	2	0.6	0.8	0.5	-0.1	0.2	0.5	0.7	2.1	0.3	1
Employment																											
Total civilian employment (TCE) ²	Thousands	1994	7 680 (93)	3 737	3 724 (92)	13 292	2 508	2 015	21 781 (93)	35 894	3 790	138	1 168 (93)	20 152 (93)	64 530	162 (91)	32 439	6 631	1 560	1970 (93)	4 372	11 760	3 926	3 772	19 664	25 044 (93)	123 060
of which: Agriculture	% of TCE	1994	5.3 (93)	7.2	2.6 (92)	4.1	5.1	8.3	5.1 (93)	3.3	20.8	9.4	12.7 (93)	7.5 (93)	5.8	3.7 (91)	25.8	4	10.4	5.6 (93)	11.5	9.8	3.4	4	44.8	2.2 (93)	2.9
Industry	% of TCE	1994	23.7 (93)	33.2	27.7 (92)	22.6	26.8	26.8	27.7 (93)	37.6	23.6	26.1	27.7 (93)	33 (93)	34	31.5 (91)	22.2	23	25	23.1 (93)	32.8	30.1	25	28.8	22.2	26.2 (93)	24
Services	% of TCE	1994	71 (93)	59.6	69.7 (92)	73.3	68.1	64.9	67.2 (93)	59.1	55.5	65.2	59.7 (93)	59.6 (93)	60.2	64.8 (91)	52.1	73	64.6	71.3 (93)	55.7	60.2	71.6	67.2	33	71.6 (93)	73.1
Gross domestic product (GDP)																											
At current prices and current exchange rates	Bill. US\$	1994	331.6	198.1	227.9	544	146.7	97.2	1 328.5	1 832.3	73.1 (93)	6.2	52	1 017.8	4 590	10.6 (92)	371.2	334.3	51.2	103.4 (93)	87	482.4	196.6	257.3	130.7	1 019.5	6 649.8
Per capita	US\$	1994	18 588	24 670	22 515	18 598	28 181	19 106	22 944	27 826	7 051 (93)	23 199	14 550	17 796	36 732	27 073 (92)	3 991	21 733	14 513	23 984 (93)	8 792	12 321	22 389	36 790	2 157	17 468	25 512
At current prices using current PPP's ³	Bill. US\$	1994	327.9	162.3	204.2	596.7	107	82.5	1 111.8	1 601.7	118	5.1	54.3	1 068.4	2 593.7	11.7	673.3	285.9	57.3	95.3	122	531.7	153	167.4	319.3	1 030.2	6 649.8
Per capita	US\$	1994	18 382	20 210	20 166	20 401	20 546	16 208	19 201	24 325	1 450	19 271	15 212	18 681	20 756	29 454	7 239	18 589	16 248	21 968	12 335	13 581	17 422	23 942	5 271	17 650	25 512
Average annual volume growth over previous 5 years	%	1994	2.2	2.5	1.6	1.1	1.9	-1.6	1.1	2.6	1.4 (93)	0.6	4.7	1	2.1	4.1 (92)	3	2.3	2.5	2.1 (93)	1.4	1.5	-0.3	0.5	3.6	0.8	2.1
Gross fixed capital formation (GFCF)																											
of which: Machinery and equipment	% of GDP	1993	9.8	8.7	7.8	6.2	7.2	5.90	8.10	7.5	7.8	3.9	6.3	7.4	11.5	..	9.4	8.6	9.3	..	..	5.7	5.7	7.5	10.3	7.3	7.7
Residential construction	% of GDP	1993	5.2	6.3	4.6	6.1	2.9	3.7	4.9	6.5	3.6	4.4	4.1	5.3	5.4	..	4.9	5.1	4.9	..	..	4.1	4	14.9 ¹⁰	9.1	3.1	4
Average annual volume growth over previous 5 years	%	1994	0.8	3.7	0.4	-0.1	-2.8	-12.9	-1	0.8	2.7 (93)	-4	1	-2.3	1.4	6.5 (92)	7.7	0.4	5.8	-3.93	2.7	-1.2	-7.6	-0.4	5.1	-2.1	4.6
Gross saving ratio⁴																											
	% of GDP	1994	16.8	25.3	22	16	17	16.6	19	21	15.5 (93)	16.9	19.5	18.8	31.2	60.2 (92)	15.1	24.4	20.7	21.9 (93)	24.2	18.8	13.7	29.3	22.5	13.5	16.2
General government																											
Current expenditure on goods and services	% of GDP	1994	17.5	..	15	20.2	25.3	22.4	19.6	17.7	19.1 (93)	20.6	16	17.1	9.8	17.1 (92)	11.8 ⁹	14.2	14.7	22.1 (93)	17.2	16.9	27.3	14.1	11.7	21.6	16.4
Current disbursements ⁵	% of GDP	1993	36.9	48.4	55.3	49	61.1	58.9	51.5	45.6	51.2	34.9	..	53.2	26.9	..	..	55.4	..	..	..	43.7	67.3	36.7	..	42.7	35.8
Current receipts	% of GDP	1993	33.5	48.6	50.1	43	58.3	52.5	46.8	45.7	40.2	35.9	..	47.1	32.9	..	..	54.5	..	..	..	40.1	59	36	..	36.8	31.7
Net official development assistance																											
	% of GNP	1993	0.34	0.31	0.41	0.46	1.03	0.76	0.66	0.44	..	..	0.15	0.42	0.27	0.34 (92)	..	0.88	0.22	1.23	0.36	0.32	1.33	0.49	..	0.34	0.19
Indicators of living standards																											
Private consumption per capita using current PPP's ³	US\$	1993	10 803	10 546	12 090	11 863	10 042	8 814	11 395	10 733	6 367	11 546	7 750	11 029	11 791	15 545	4 853	10 726	9 266	9 826	7 780	8 412	9 240	13 730	3 617	10 942	16 444
Passenger cars, per 1 000 inhabitants	Number	1990	430	382	387	469	311	386	413	480 ⁸	169	464	228	478	282	470	85	356	440	378	260	307	418	441	29	361	568
Telephones, per 1 000 inhabitants	Number	1991	464	432	410	586	577	544	511	420 ⁸	413	527	300	400	454	511	70	477	436	515	273	340	687	603	143	445	553
Television sets, per 1 000 inhabitants	Number	1991	480	478	451	639	536	501	407	556 ⁸	197	319	276	421	613	267	148	485	443	423	187	400	468	406	175	434	814
Doctors, per 1 000 inhabitants	Number	1993	2.2 (91)	2.3	3.7	2.2	2.8 (92)	2.6 (92)	2.8	3.2 (92)	3.8 (92)	3	1.7 (92)	1.7 (91)	1.7 (92)	2.1 (92)	1	2.5 (90)	2	3.2 (92)	2.9	4.1	3	3	0.9	1.5 (92)	2.3 (92)
Infant mortality per 1 000 live births	Number	1993	6.1	6.5	8	6.8	5.4	4.4	6.5	5.8	8.5	4.8	5.9	7.3	4.5 (92)	8.5 (92)	18	6.3	7.3	5	8.7	7.6	4.8	5.6	52.6	6.6	8.5 (92)
Wages and prices (average annual increase over previous 5 years)																											
Wages (earnings or rates according to availability)	%	1994	3	5.5	3.7	3.3	3.5	4.8	3.5	5.2	14.6	..	4.6	5.9	2.4	..	5.3	3.2	2.1	4	..	7.2	5.4	..	..	6.7	2.8
Consumer prices	%	1994	3	3.4	2.8	2.8	2.1	3.3	2.5	3.3	16.2	6.3	2.7	5.2	2	3.1	16.1	2.8	2.5	2.7	9	5.6	5.7	3.9	73	4.6	3.6
Foreign trade																											
Exports of goods, fob*	Mill. US\$	1994	47 363	44 881	137 259 ⁷	165 358	41 850	29 514	235 337	422 243	8 958	1 628	34 125	189 802	396 149	..	60 882	155 084	12 169	34 645	17 072	73 129	61 122	70 467	18 456	205 170	512 627
As % of GDP	%	1994	14.3	22.7	60.2	30.4	28.5	30.4	17.7	23	11.5 (93)	26.3	65.7	18.6	8.6	..	16.4	46.4	23.8	30.9 (93)	19.6	15.2	31.1	27.4	14.1	20.1	7.7
Average annual increase over previous 5 years	%	1994	5	6.7	6.5	7.1	8.3	4.9	5.6	4.4	3.4	2.7	10.5	6.2	7.6	..	21.7	7.6	6.5	5	6.1	10.5	3.4	6.4	9.5	6.1	7.1
Imports of goods, cif*	Mill. US\$	1994	49 731	55 071	126 006 ⁷	148 297	35 932	23 091	220 508	376 566	21 111	1 464	25 812	167 690	274 916	..	79 346	139 800	11 859	27 345	25 967	92 182	51 730	68 126	22 976	227 026	663 256
As % of GDP	%	1994	15	27.8	55.3	27.3	24.5	23.8	16.6	20.6	30.1 (93)	23.6	49.7	16.5	6	..	21.4	41.8	23.2	23.3 (93)	29.9	19.1	26.3	26.5	17.6	22.3	10
Average annual increase over previous 5 years	%	1994	4	7.2	5	5.4	6.1	-1.3	3.5	6.9	5.4	0.7	8.1	1.9	5.5	..	25.5	6.1	6.1	2.9	6.6	5.2	1	3.2	37.9	2.8	7
Total official reserves⁶																											
	Mill. SDRs	1994	7 730	11 523	9 505 ⁷	8 416	6 203	7 304	17 986	52 994	9 924	201	4 189	22 102	86 214	..	4 301	23 655	2 540	13 033	10 627	28 475	15 929	23 790	4 911	28 094	43 350
As ratio of average monthly imports of goods	Ratio	1994	1.9	2.5	0.9	0.7	2.1	3.8	1	1.7	5.6	1.6	1.9	1.6	3.8	..	0.7	2	2.6	5.7	4.9	3.7	3.7	4.2	2.6	1.5	0.8

* At current prices and exchange rates.

1. Unless otherwise stated.

2. According to the definitions used in OECD *Labour Force Statistics*.

3. PPPs = Purchasing Power Parities.

4. Gross saving = Gross national disposable income minus private and government consumption.

5. Current disbursements = Current expenditure on goods and services plus current transfers and payments of property income.

6. Gold included in reserves is valued at 35 SDRs per ounce. End of year.

7. Data refer to the Belgo-Luxembourg Economic Union.

8. Data refer to western Germany.

9. Refers to the public sector including public enterprises.

10. Including non-residential construction.

Sources: Population and Employment: OECD, *Labour Force Statistics*. GDP, GFCF, and General Government: OECD, *National Accounts*, Vol. I and OECD *Economic Outlook*, Historical Statistics. Indicators of living standards: Miscellaneous national publications.

Wages and Prices: OECD, *Main Economic Indicators*. Foreign trade: OECD, *Monthly Foreign Trade Statistics*, series A. Total official reserves: IMF, *International Financial Statistics*.

November 1995

EMPLOYMENT OPPORTUNITIES

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The Economics Department of the OECD offers challenging and rewarding opportunities to economists interested in applied policy analysis in an international environment. The Department's concerns extend across the entire field of economic policy analysis, both macro-economic and microeconomic. Its main task is to provide, for discussion by committees of senior officials from Member countries, documents and papers dealing with current policy concerns. Within this programme of work, three major responsibilities are:

- to prepare regular surveys of the economies of individual Member countries;
- to issue full twice-yearly reviews of the economic situation and prospects of the OECD countries in the context of world economic trends;
- to analyse specific policy issues in a medium-term context for the OECD as a whole, and to a lesser extent for the non-OECD countries.

The documents prepared for these purposes, together with much of the Department's other economic work, appear in published form in the *OECD Economic Outlook*, *OECD Economic Surveys*, *OECD Economic Studies* and the Department's *Working Papers* series.

The Department maintains a world econometric model, INTERLINK, which plays an important role in the preparation of the policy analyses and twice-yearly projections. The availability of extensive cross-country data bases and good computer resources facilitates comparative empirical analysis, much of which is incorporated into the model.

The Department is made up of about 80 professional economists from a variety of backgrounds and Member countries. Most projects are carried out by small teams and last from four to eighteen months. Within the Department, ideas and points of view are widely discussed; there is a lively professional interchange, and all professional staff have the opportunity to contribute actively to the programme of work.

Skills the Economics Department is looking for:

- a) Solid competence in using the tools of both microeconomic and macroeconomic theory to answer policy questions. Experience indicates that this normally requires the equivalent of a Ph.D. in economics or substantial relevant professional experience to compensate for a lower degree.
- b) Solid knowledge of economic statistics and quantitative methods; this includes how to identify data, estimate structural relationships, apply basic techniques of time series analysis, and test hypotheses. It is essential to be able to interpret results sensibly in an economic policy context.
- c) A keen interest in and extensive knowledge of policy issues, economic developments and their political/social contexts.
- d) Interest and experience in analysing questions posed by policy-makers and presenting the results to them effectively and judiciously. Thus, work experience in government agencies or policy research institutions is an advantage.
- e) The ability to write clearly, effectively, and to the point. The OECD is a bilingual organisation with French and English as the official languages. Candidates must have excellent knowledge of one of these languages, and some knowledge of the other. Knowledge of other languages might also be an advantage for certain posts.

- f) For some posts, expertise in a particular area may be important, but a successful candidate is expected to be able to work on a broader range of topics relevant to the work of the Department. Thus, except in rare cases, the Department does not recruit narrow specialists.
- g) The Department works on a tight time schedule with strict deadlines. Moreover, much of the work in the Department is carried out in small groups. Thus, the ability to work with other economists from a variety of cultural and professional backgrounds, to supervise junior staff, and to produce work on time is important.

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The salary for recruits depends on educational and professional background. Positions carry a basic salary from FF 305 700 or FF 377 208 for Administrators (economists) and from FF 438 348 for Principal Administrators (senior economists). This may be supplemented by expatriation and/or family allowances, depending on nationality, residence and family situation. Initial appointments are for a fixed term of two to three years.

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