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# Structural Reform in New Zealand: A Review

SUOMEN PANKIN KESKUSTELUALOITTEITA • FINLANDS BANKS DISKUSSIONUNDERLAG

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## Abstract

This paper discusses the reasons for the change in economic policy direction adopted in New Zealand in 1984. The paper briefly outlines the economic history of New Zealand in the period from the early 1970's to 1996. The ultimate test of the success of the economic reforms is whether they have increased the growth rate of potential per capita output in the economy. I discuss the evidence on this hypothesis and conclude that the evidence does support the hypothesis of a structural change in this measure. Five of the major areas of reform are discussed, these areas are goods, capital and labour market liberalisation and the fiscal and monetary policy framework adopted in New Zealand.

Keywords: economic policy reform, New Zealand

## Tiivistelmä

Tässä keskustelualoitteessa käsitellään Uudessa-Seelannissa vuonna 1984 aloitetun talouspolitiikan suunnan muutoksen syitä. Siinä myös hahmotellaan lyhyesti Uuden-Seelannin historiaa 1970-luvun alusta vuoteen 1996 saakka. Taloudellisten uudistusten onnistuminen testataan viime kädessä siinä, miten ne ovat lisänneet talouden potentiaalisen kansantuotteen kasvuvauhtia. Käsittelen hypoteesiin perustuvaa aineistoa, jonka katson tukevan rakennemuutokseen perustuvaa hypoteesia tässä suhteessa. Tarkastelun kohteena on viisi keskeistä uudistusaluetta: hyödyke-, pääoma- ja työvoimamarkkinoiden vapauttaminen sekä Uudessa-Seelannissa omaksuttu finanssi- ja rahapolitiikka.

Avainsanat: talouden rakennemuutos, Uusi-Seelanti

# Contents

# Introduction

Since the late 1970s many countries have adopted a more liberal market oriented economy to increase the living standards of their citizens; New Zealand is one such country. At this stage, it is still difficult to say whether the reforms have been a success, but evidence strongly points us in this direction. As a result of this success, Governments and academics from around the world have become interested in the approaches taken in New Zealand in an attempt to understand their impact and to study the feasibility of adopting them in their own country.

The aim of this paper is to shed some light on the reforms undertaken in New Zealand and their likely effects. The paper starts in Chapter 1 with a discussion of the background that led New Zealanders to dramatically change an economic course that was set by the Labour Government in 1935. The goals of the reforms and the main areas of reform are discussed in Chapter 2. Chapter 3 analyses the effect of the reforms on the potential output of the economy. Five key areas of reform are selected and briefly analysed in Chapter 4. Conclusions are presented in Chapter 5. The paper contains two appendices. The first appendix is a list of the reforms completed, while the second is a graphical appendix of the major macroeconomic variables.

# 1 Background

The New Zealand economy has been highly regulated since its colonial days. Last century New Zealand's primary reason for existence was to provide cheap meat, dairy products and wool for the United Kingdom. Even today, many elderly New Zealanders refer to the United Kingdom as the "mother country". During times of war, New Zealand provided the UK with soldiers. New Zealand also accepted rationing of its plentiful food resources so that they could be exported to the UK at little more than cost, to sustain the war effort. New Zealand's foreign policy could be stated in five words; "Where Britain stands, we stand."

Reliance on the UK market proved to be very favourable to the UK during wartime and to New Zealand in peace time. In fact, by the mid-1950s New Zealand was the worlds third richest country in per capita terms. New Zealand was heavily reliant on exports to one market and on only a few core commodities which required little value added, little marketing and a relatively uneducated workforce.

New Zealand's wealth allowed politicians to set up a system of "cradle to the grave" welfare which was heavily directed from Wellington (the capital) via an incomes policy, industrial policy, trade policy and fiscal and monetary policy. Use of these policies was never very coherent and more often than not policy was used to adjust for a perceived social injustice rather than on economic grounds.

The primary focus of economic policy was on the labour market, and in particular, full employment within the labour market. Wages were bargained for at the industry level with the Unions goal to achieve the highest real wages possible for their workers and the Government's goal to achieve full employment. This resulted in disequilibrium in the labour market which was sustained by manipulation of trade, industrial, fiscal and monetary policy tools in order to achieve the Government's goal. Thus trade policy and industrial policy were directed towards import substitution and export promotion via subsidies, tariffs, quotas and import licences. When world trade policy forced New Zealand to lower tariffs, the reaction was to increase non-tariff barriers.

Monetary policy was directed towards manipulation of a Keynesian Phillips curve and the Reserve Bank Act of 1964 directed the Reserve Bank to use monetary policy to maintain the highest level of output, employment, trade and lowest level of inflation possible. Monetary policy tools consisted of a fixed exchange rate, fixed interest rates, reserve asset ratios and investment ratios which allowed the Government to determine where the private sector could invest their money. Fiscal policy was used to supply the Government with revenue to finance the system of subsidies and welfare payments and was also used to dampen economic cycles.

During the period from the second world war, New Zealand experienced higher average inflation than its trading partners, and slower economic growth. However, the primary problem New Zealand suffered was low productivity growth. Thus New Zealand's income per capita in relation to other OECD countries fell continuously from the 1950s to the early 1990s.

Between 1972 and 1975 New Zealand suffered a series of externally sourced economic shocks. The first shock was a positive but temporary rise in agricultural prices resulting in a major rise in the terms of trade.

The rise in the price of agricultural products in 1972/73 was caused by a series of frosts across the northern hemisphere which destroyed much of the grain crop. The rise in agricultural product prices caused the terms of trade to rise from 98.9 in September 1971 to a peak of 145.4 in June 1973[1]. Because the exchange rate was not floating, the appreciation in the exchange rate was not enough to fully offset the rise in the terms of trade, thus demand grew rapidly with capacity utilisation reaching record levels of 92 percent in June 1973 and unemployment falling to 0,25 percent by March 1974. This rise in demand was soon translated to rising prices. Consumer price inflation rose from 5.5 percent in the year to June 1972 to 10.2 percent in the year to June 1973 (inflation peaked in March 1980 at 18.4 percent)[2]. Adjustment to this shock was compounded by the actions of Government, which appears to have viewed the shock as permanent. Government expanded welfare payments, introduced a Government provided accident compensation scheme and a partly funded national superannuation (which was replaced in 1976 by an unfunded scheme). These policies locked the Government into a higher level of spending resulting in a structural budget deficit.

By 1974 world agricultural prices began falling and the first oil shock impacted on the economy. These problems were compounded by the entry of the United Kingdom into the European Economic Community. The terms of trade fell from a peak of 145.4 in June 1973 to a trough of 80.5 in December 1975. Although the exchange rate fell by 20 percent between June 1974 and September 1975, this fall was insufficient to insulate the economy and intensified inflationary pressures.

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[1] The index is adjusted so that March 1970 = 100.

[2] Headline CPI inflation briefly rose to 20 percent per annum in 1986 as a result of the introduction of the Goods and Services Tax (GST) of 10 percent on all goods and services.

The ineffectual policy response to the shocks to the terms of trade in 1972–1974 was to last until 1984. Although many different policies were tried, they were not followed consistently and were often based on either short term stabilisation or political expediency. Evans, Grimes, Teece and Wilkinson point out that New Zealand's poor macroeconomic performance resulted primarily from the inward looking regulatory economic policies followed from the 1930's. However, the shocks to the terms of trade were significant in highlighting the unsustainability of these policies.

In December 1974 the New Zealand dollar was worth US 1.31, by December 1984 it was worth 49 US cents. Unemployment rose at every successive business cycle regardless of Government attempts to maintain full employment. New Zealand suffered continual and rising Government budget and current account deficits. GDP growth between June 1977 and June 1984 averaged 1.8 percent.

In comparison, growth over the seven years from June 1988 to June 1995 averaged 2.5 percent (between June 1991 and June 1995 growth averaged 4.6 percent). New Zealand's current account is still in deficit but the Government budget posted a surplus of 3 percent of GDP in 1994/95 and forecast to post a larger surplus in 1995/96. Unemployment rose throughout the early phases of the reform programme. At the time of the introduction of the Employment Contracts Act unemployment was 10 percent (in the June quarter of 1991). Unemployment peaked at 11.1 percent in March 1992 and has since fallen sharply to 5.9 percent in September 1995. Since 1991, employment has grown by over 180 000. The New Zealand dollar has strengthened and is currently worth around 67 US cents. What makes the performance of New Zealand post 1991 unusual, is the fact that the expansion in economic activity has been accompanied by a weak international outlook, strong fiscal discipline, price stability and unprecedented consumer confidence. Typical expansions in New Zealand are either accompanied by a world boom or activist fiscal or monetary (or both) policies.

To understand why the reforms took place and the type of reforms implemented, one has to understand the period from 1972 to 1984. The reforms did not just appear, many of the policies implemented were developed or discussed long before implementation, with at least two attempts to move down the reform path between 1975 and 1984[3].

[3] The first attempt at liberalisation occurred in 1979 with the relaxation of price controls and import regulations. The second attempt was a failed leadership bid by a known reformer Mr Derek Quigley, in 1980.

# 2 The reform process

Much of the reform process in New Zealand has been focused on improving the microeconomic allocation of resources. Traditional macroeconomic policies designed for short-run stabilisation and growth have been replaced by macroeconomic policies aimed at achieving longer-term objectives combined with increased transparency of policy action to provide agents with superior information with which to make rational decisions.

The basic thrust of the reforms in New Zealand are to:

1. Promote the optimal use of scarce resources by the creation and maintenance of a competitive market environment in which the role of Government is primarily to ensure competitive behaviour of private agents and secure rights and assign costs where it is believed that there is market failure.
2. Ensure that any Government intervention in the market is to improve competition and be as neutral between market participants as possible.
3. Ensure that Government actions are aimed at improving the medium term outlook.
4. Ensure that Government actions are transparent in such a manner that market participants can make informed decisions regarding the results of Government actions.

The reforms can be broken into three different groups (see Appendix 1 for the timing of reform policies).

### 1. Structural reforms

- Trade liberalisation
- Liberalisation of industrial policy
- Labour market liberalisation
- Taxation reforms
- Liberalisation of the capital account
- Sale of Government market enterprises
- Liberalisation of foreign direct investment
- Promote sustainable use of scarce resources
- Promote multilateral international trade agreements
- Liberalise immigration laws

### 2. Fiscal reforms

- Reduction and then maintenance of Government debt at prudent levels
- Transparency of fiscal policy
- Improve Government sector productivity
- Corporatisation of remaining Government market enterprises
- Introduction of user charges for Government services where costs can be assigned

### 3. Monetary reforms

- Autonomy of operation for the central bank
- Targeting monetary policy at inflation
- Transparency in monetary policy
- Removal of interest rate and credit controls

## Timing of the reforms

The reform process began with the election of the Labour Government in July 1984. The Labour Government reacted to a foreign exchange crisis, which occurred during the election, by devaluing the New Zealand dollar by 20 percent and removing interest rate controls. Monetary policy was tightened to regain control of the money supply and restrictions on the payment of interest on short-term bank deposits and cheque accounts were removed. Controls on New Zealanders borrowing overseas were also removed. The Budget of 1984 removed the wage and price freeze (in place since 1982) and introduced measures to control public expenditure, including phasing out of land-based subsidies. Prices for electricity and coal were raised over time, to levels which reflected the costs of production. Finally, the tax base was widened.

Financial liberalisation was continued in December 1984, with the removal of controls on the purchase of foreign exchange. This was followed on March 4 1985 with the floating of the New Zealand dollar.

Trade reform continued, with the schedule for phasing out of import licences and tariff reductions finalised in September 1985. Further tariff reductions were implemented to ease the implicit tax on agriculture resulting from subsidies being removed faster than tariffs. In 1986, the main focus of the Government was on taxation reform and the reform of state enterprises (especially those which operated in a market environment). These state industries were reorganised in the first stage of privatisation. Taxation changes consisted of a flat Goods and Services Tax (GST) of 10 percent, which was introduced on 1 October 1986, combined with a fall in marginal tax rates on companies and labour incomes.

The Government "corporatised" major industrial activities into State Owned Enterprises (SOE's) on 1 April 1987. These new Government corporations included Electricity Corporation, Forestry Corporation, Land Corporation, Telecom New Zealand, New Zealand Post, the Post Office Bank, Coal Corporation, Airways Corporation and Government Property Services. The corporatisation process was the second stage towards privatisation of these enterprises. Corporatisation effectively gave the Government the rights of a 100 percent shareholder and gave management responsibility for the efficient operation of the businesses.

On December 17 1987, the Government announced a major fiscal initiative (the "flat tax package") including;

1. A programme of asset sales to be used to repay 1/3 of Government debt by 1992,
2. A single personal income tax (flat tax) on income, to be announced in February 1988 and take effect on 1 October 1988,
3. A reduction in company income taxes,

4. A four year programme of tariff reduction on goods not subject to industrial plans.

In February 1988, the Prime Minister suspended the flat tax package. The top marginal income tax rate decided upon in 1988 was 33 percent (between 1986 and 1988 the top marginal tax rate on income was 48 percent, prior to 1986 the top marginal tax rate was 66 percent). The rejection of the taxation package of December 17 1987 highlighted the rising tensions that had developed between the Minister of Finance and the Prime Minister, and heralded a slow-down and weakening of the pace of reform.

1988 was a difficult year for the New Zealand economy as a recession spread from agriculture and manufacturing to construction and services. Although output fell further in the recession of 1991 (than 1988), the recession in 1988 was in many ways deeper. In particular, business confidence fell lower in 1988 than in 1991, labour force participation plunged from 66.5 to 63 percent of the labour force and total hours worked fell further in 1988 than 1991.

The main reform introduced in 1989 was the Reserve Bank Act. This Act came into effect on 1 February 1990. The Government also removed restrictions on the ownership of New Zealand ports and further reduced tariff rates. In June 1990, the largest privatisation of a Government owned corporation occurred when Telecom New Zealand was sold for 4.25 Billion New Zealand dollars. Education policy was also changed in 1990 with a flat fee of 1250 dollars charged on all university students.

In October 1990, the conservative National party was elected Government. The Government was faced with a large increase in the budget deficit and forecasts of worsening deficits, a bank bail-out and a substantial recession. After six years of reform it seemed to many that New Zealand was in fact worse off in 1990 than it had been in 1984. The response of the Government to this crisis was to ignore much of its social policy campaign promises and launch its Economic and Social Initiative. This package introduced the Employment Contracts Act, froze Government pension payments for one year, reduced benefits, (including the unemployment benefit and minimum wage) and tightened the eligibility of benefits. User pays in education was also increased with the setting of student fees transferred to Universities, the means testing of Government support and the introduction of a student loans system. The policy of contracting fiscal policy in the face of a recession was criticised by many including economics professors and members of the Government. However, the peak of the recession was in the first half of the first year of the new administration (1991) and by September 1991 the recovery had begun.

The Government increased the pace of reform in the Budget of 1991, introducing a new immigration system based on eligibility points that emphasised skills. The Budget also introduced user charges for health services and raised the age of entitlement for national superannuation from 60 to 65 years (to be raised in stages). The Resource Management Act (1991) was passed by Parliament, this Act aims to co-ordinate policies directed to the sustainable use of natural resources. The Government also introduced policies increasing the rental on public owned housing to market levels and allowing long-term tenants of public housing to purchase their house.

Pressure on the Government to slow the pace of the reforms mounted from 1991, with some National members of Parliament rebelling against the Government.

The response of the Government has been to slow the pace of change down and introduce, especially in the field of social services, more inter-party discussion. Strong public pressure against the present First Past the Post (FPP) electoral system resulted in a referendum on whether to change the electoral system to a Proportional Representation (PR) system. The first Mixed Member Proportional (MMP) representation election will occur in November 1996.

Over the course of 1994, New Zealand received a credit upgrade by Moody's credit rating service, placing New Zealand's long-term Government debt credit rating above that of Australia. The Government announced a small surplus for the fiscal year 1993/94 and forecast larger surpluses for 1994/95 and 1995/96. Over 1993/94, the recovery moved to the service and construction sectors of the economy, with general GDP growth of 5,1 percent (Q4/Q4) in 1993 and 6.1 percent (Q4/Q4) in 1994. 1994 was also the year that the Fiscal Responsibility Act was passed. The Fiscal Responsibility Act aims to improve fiscal discipline by forcing Governments to follow prudent fiscal policies, the Act uses tighter standards on reporting, accounting, timing of reports as a method of making Government accountable for its actions (See chapter 4 for details). At the end of 1994, Standard and Poors followed Moody's and upgraded New Zealand's foreign currency debt rating from AA- to AA.

The Government produced a surplus operating balance of 2.6 billion New Zealand dollars for the fiscal year 1994/95 and forecast 1995/96 surplus to be 3.2 billion dollars. In the June quarter of 1995, the Reserve Bank breached its inflation target with an annual inflation rate of 2.2 percent, largely as a result of unexpectedly robust growth in 1994.

In December 1995 the Government announced a tax cut/social policy initiative to be implemented in July 1996. The focus of the tax cuts would be on lowering the marginal tax rate on lower and middle income brackets. Social spending would be increased in the fields of education and health. It is forecast that this fiscal loosening will not endanger either the existence of further surpluses or the inflation target. It is planned for there to be further tax cuts in the future. In January 1996, Standard and Poors further upgraded New Zealand's foreign currency debt rating.

# 3 The effect of the reforms: Potential output

The most important measure of the success or failure of the reforms in New Zealand is the effect that they have on the rate of potential output growth. The measurement of potential output in New Zealand is complicated by the lack of data on the capital stock. Measures of the capital stock using the Perpetual Inventory Method (PIM)[4] are not going to be very accurate as the reforms resulted in much capital scrapping and so it would be difficult to determine the average life of an investment in any particular industry[5]. Thus the production function approach to the measurement of potential output is not going to yield reliable results. Similarly, univariate filters such as simple moving averages or the Hodrick-Prescott (1980) filter will also tend to yield biased results. Therefore, less traditional approaches must be used to determine the effect of reform on potential output.

Levine and Renelt (1992) studied the economic policies of 109 countries from 1969 to 1989 and found that the countries with the fastest economic growth tended to have higher investment/GDP ratios, lower Government consumption/GDP ratios, high export/GDP ratios, lower inflation, a higher stock of human capital and fewer trade and capital control distortions. The IMF studied international data on potential output growth, and concluded that higher potential output growth is robust (in the Leamer (1983), (1985) sense) to increases in the investment/GDP ratio which in turn is systematically related to the trade share of GDP. In other words, countries with higher average growth tend to have higher rates of import penetration and higher investment ratios. The other effects identified by Levene and Renelt may be significant but were not empirically robust in the presence of the investment/GDP ratio. This may be because of a problem of causation ie. These policies cause higher investment and therefore appear non-robust in the regression estimation.

New Zealand has achieved a rise in the investment/GDP ratio from about 25 percent prior to the reforms to 31 percent in 1994/95. According to Levine and Renelt, a one percent rise in the investment/GDP ratio leads to an average increase in the growth rate of potential output of 0.175 percent per year. A six percent rise in the investment/GDP ratio is therefore consistent with a rise in potential growth of 1.05 percent per annum.

Fischer (1991) presents a panel data study that indicates that the reduction in inflation has had a considerable influence on the increase in investment experienced in New Zealand. Inflation influences investment by increasing the interest rate risk premium charged on capital (increases investors risk aversion) and lowers total factor productivity by creating price distortions of the type outlined in Lucas (1973). Fischer's panel regression estimates would imply that the increased investment rate was responsible for a rise in potential output of 0.75 percent while the decline in inflation was responsible for an increase of about 0.14 percent[6].

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[4] The PIM determines the size of the capital stock by adding up the growth of investment each year and assigning an average lifetime to each investment category based on its likely depreciation rate. See Mayes and Young (1994) for a discussion.

[5] The Reserve Bank of New Zealand is currently funding research into the construction of a capital stock series but the results so far are not encouraging.

[6] The work of Fischer implies that there exists a downward sloping long-run supply curve, which I find difficult to accept without further evidence. Garrison and Lee (1995) challenge the findings of Fischer regarding the effect of inflation on growth.

Estimates of the pre-reform rate of per capita output growth between 1950 and 1985 are in the order of 1.6 percent per year. If we accept the work of Levine and Renelt and Fischer then per capita output growth has been raised to a minimum of 2.6 percent per year. Population growth in New Zealand is in the region of 1 percent therefore potential output growth is in the range of 3.5 to 4 percent per year. This result accords well with the prior beliefs of the Treasury and Reserve Bank, who believe that it is in the range of 3 to 4.5 percent per year[7]. This is a lower bound estimate because it only allows for the investment/GDP ratio effect which was the only robust determinant in Levene and Renelt.

The growth rate of investment in plant and machinery[8] continues to be high despite considerable tightening of monetary conditions. This indicates that the investment/GDP ratio may still be rising. With the continuation of the reform programme, especially tariff reductions and fiscal consolidation, and with the lagged effects of the reforms still coming through, the potential output growth rate may also still be rising[9].

Ten year Government bond rate averaged 7.86 percent over the period between September 1991 and December 1995. If we assume that the Reserve Bank of New Zealand does not have perfect credibility and therefore the expected inflation rate is the upper point of the target band, ie 2 percent, it leaves the real interest rate on ten year Government bonds at 5.86 percent. A real interest rate at this level is considered by most economists to be high, yet investment in plant and machinery over the same period has averaged 20.7 percent per annum. Investment is at present responding to restrictive monetary policy but the underlying growth rate appears to be considerably higher post 1991.

One explanation of this high real interest rate is that it is consistent with New Zealand moving to a higher equilibrium level of the capital stock[10]. Thus the reforms resulted in the optimal capital stock rising while at the same time the removal of tariffs and subsidies resulted in the scrapping of redundant capital. This had the effect of increasing the gap between the current capital stock and the desired capital stock and therefore raised the marginal product of capital and hence the equilibrium real interest rate. As the capital stock increases, the marginal product of capital will decline and therefore the real interest rate will also decline towards the utility rate of time preference. This process is taking time because international capital markets are not perfect and investment projects take time to build. The high real interest rates are also an indication that the economy has a great deal of latent growth with which to sustain a high rate of growth in potential output.

The conclusion that can be tentatively drawn from this analysis is that potential output growth has undergone a structural change, with New Zealand moving to a higher growth path. This will ultimately result in a higher sustainable consumption path for New Zealanders.

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[7] *Monetary Policy Statement*, Reserve Bank of New Zealand, Dec 1995, p. 39.

[8] Because of the major fall in the price of computers, and the fact that New Zealand's National Accounts are still based in 1982/83, the computer deflator inflates the total investment statistics creating a major distortion. Investment in plant and machinery avoids this deflator problem by excluding computer investment.

[9] Because of the short time since the reforms, it is statistically difficult to determine whether there has been a structural break and if there has been one, what size it is.

[10] See Barro, R. J. (1984), *Macroeconomics*. John Wiley and Sons, pp 278–281.

# 4 What were the key reforms

Determining what the key reforms New Zealand implemented were, is a complex empirical question. In the absence of extensive econometric analysis (and a sophisticated econometric model), the selection of the reforms that contributed most to the increase in potential output in New Zealand then becomes one of subjective judgement and is of course open to debate.

I have selected five reforms which I believe have contributed extensively to the increase in potential output experienced in New Zealand. The selection of these reforms is not arbitrary. The first three reform areas target the goods, capital and labour markets. The remaining two reforms govern the two main instruments of policy; monetary and fiscal policy. Of these five reforms, trade reform has increased the efficiency of the goods market by opening New Zealand businesses, both exporters and importers, to international competition. The Employment Contracts Act (1991) opened New Zealand's labour market to competition through enterprise and individual level wage bargaining. Capital market liberalisation has allowed individuals, firms and banks to invest their money consistent with their individual risk/return trade-offs. The Reserve Bank Act (1989) lays the foundations of responsible and stable monetary policy. Finally, the Fiscal Responsibility Act (1994), encourages the Government to follow "prudent" fiscal policies.

In the selection of these five reforms, I do not belittle other reforms which will have a profound impact on the New Zealand economy and the people of New Zealand. The Resource Management Act aims to increase the sustainable use of natural resources, as does the transferrable fishing quota system. Immigration policy now emphasises the skills of prospective immigrants. The privatisation programme has undoubtedly raised the productivity of those enterprises privatised, as well as (generally) improved their services. The cuts to welfare benefits and the reduction in the minimum wage (to below the labour market equilibrium) have lowered workers reservation wage, increasing employment and improving the Government's accounts. New Zealanders are putting increasing emphasis on education and training. Changes to taxation have removed many of the high marginal tax rates faced by low income earners and has broadened the tax base. Increasing the emphasis of taxation on consumption has lowered the disincentives to labour effort, and because the consumption tax is equally applied to all goods, it has reduced the distortionary effects that the old system of sales taxes contained. Finally, the liberalisation of the trading environment New Zealand faces, in the form of the free trade agreement with Australia and the GATT Uruguay round, has increased New Zealand's export opportunities (manufactures to Australia, primary commodities to the EU, US, Japan and Korea).

New Zealand is yet to see some of the longer term benefits of the reforms. The Government has announced its intention to increase spending on health and education and provide for successive annual tax cuts from July 1996[11]. Similarly, New Zealand is moving to a mixed member proportional representation electoral system, so the path of Government policy in the future is difficult to determine.

[11] See the Conclusion for an outline of the tax package.

**Trade reform**

By 1979 it was realised that New Zealand's high rate of trade protection was weakening competition, placing upward pressure on inflation and an implicit tax on exporters. The Government began a programme of protection reduction and introduced Supplementary Minimum Prices (SMP's) for agriculture in an effort to reduce the implicit tax on agriculture. The Government later opened up dialogue with Australia on the possibility of improved access to the Australian market.

By 1984, the cost of SMP's were rising, placing a burden on public finances. SMP's were distorting agricultural production (leading to a rise in sheep numbers when they should have been falling), building themselves into land prices and resulting in a deadweight loss to society. The new Government in 1984 rapidly removed agricultural support, including SMP's. However, the implicit tax on agriculture remained, contributing to an agricultural recession from 1984 to 1989. The Government dismantled a host of export incentives, producer board subsidies and trade restrictions. The Government also began to seriously remove import protection.

The first step of the programme of import protection removal consisted of dismantling the system of import licences, this was completed in 1992. The second stage of the programme was tariff reduction. In 1987 a five step tariff reduction plan was put into effect covering the period 1988–1992. Another plan was affected later, covering the period 1992–1996, cutting tariffs by 1/3. In 1994 a further tariff reduction plan was formalised for the period 1996–2000.

Table 1. **Global Rates of Assistance**

| March Years | 1985/86 | 1987/88 | 1989/90 | 1992/93 | 1996/97 |
|---|---|---|---|---|---|
| Import substitution sector | | | | | |
| Nominal | 27 | 21 | 16 | 12 | 7 |
| Effective | n.a. | 36 | 28 | n.a. | n.a. |
| **TRUE** | **3** | **3** | **3** | **2** | **1** |
| Export Sector | | | | | |
| Nominal | 10 | 5 | 4 | 3 | 2 |
| Effective | n.a. | 5 | 6 | n.a. | n.a. |
| **TRUE** | **−11** | **−11** | **−8** | **−6** | **−4** |

Source: Duncan et al. (1992)

As at 1996, high (by OECD standards) tariffs still remained on carpets, other textiles, clothing, footwear, new and used motor vehicles and some types of machinery, the tariff reduction plan starting in 1996 aims to lower tariffs on these goods.

Other factors had important consequences for New Zealand's trade position. In 1990, New Zealand completed a free trade agreement with Australia. New Zealand has also put considerable resources into pushing for a GATT Uruguay round settlement which includes agriculture. The successful completion of the GATT will result in potentially substantial benefits to New Zealand. New Zealand also supports APEC's move towards a free trade area in the Pacific, and multilateral free trade in general. New Zealand would stand to loose more than most countries if trade was to break down into large international trading blocks.

## The Employment Contracts Act (1991)

The ECA is designed to increase efficiency in the labour market. The Act provides for freedom of association (voluntary unionism) and the choice of workers to determine who represents their interests. The Act also allows employers to negotiate directly with individual workers if both parties agree.

The success of this Act must also be seen in the light of Government reductions in the minimum wage and the unemployment benefit[12]. Theory suggests that this has lowered workers reservation wage and hence lowered the natural rate of unemployment[13].

Beaumont and Jolly (1993) state that the primary effect of the ECA was to enhance the fall-back position of employers in wage bargaining by making strikes and lockouts less costly. Beaumont and Jolly also point out that the Act reduces the bargaining power of unions by allowing employers to initiate direct negotiations with employees, and in the event of a strike, to hire non-union labour.

One of the principal benefits of the ECA to the Reserve Bank is that it decentralises bargaining from occupational and industry awards to individual and enterprise awards. This increases the cost to firms of increases in wages. An increase in the real wage that is not offset by an increase in productivity, will directly weaken the firm's profitability and competitiveness relative to other firms. Thus firms have an increased incentive to prevent excessive wage rises. This tightens the relationship between real wages and productivity and makes real wages more responsive to changes in unemployment. The implication for monetary policy is that less pressure from monetary instruments is required to impact on wage inflation, reducing the costs of a dis-inflationary policy in terms of output and unemployment.

While changes to the wage bargaining structure reduce the real wage at any rate of unemployment, the possibility of negotiating employment structures that result in increased productivity means that the overall impact of the ECA on real wages is uncertain. By allowing individual bargaining, the ECA has increased labour demand and employment.

## Capital market liberalisation

The Government abolished interest rate controls on deposits and lending in mid-1984 and moved Government budget deficit financing to a fully funded periodic tender system. The new system replaced a system based on financial institution asset ratios and suppression of market interest rates to make Government offered rates more competitive.

The maintenance of artificially low market interest rates had created increased credit demand and discouraged private sector saving. This policy resulted in increased current account imbalances and higher inflationary pressures. This system also resulted in financial disintermediation.

In January 1985 the Government abolished asset ratio requirements. Prior to

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[12] The unemployment benefit is based on an across the board minimum living allowance which is not related to an individuals pre-unemployment income. If workers want income insurance, they have to access the private insurance market.

[13] This is an empirical question and the author is unaware of any research in New Zealand which attempts to measure the effect of these policies on the natural rate.

1985 compulsory asset ratios were applied to financial institutions, forcing them to hold a percentage of their portfolio in Government stock, cash and different sectors of industry. These asset ratios were ineffective tools of monetary policy and proved to have no real prudential supervisory role, as many financial institutions would have preferred to hold higher cash stocks when real interest rates on lending to Government and industry were very low or negative.

The third major market reform was the removal of foreign exchange controls and the floating of the New Zealand dollar. Foreign exchange controls were removed in December 1984 and the dollar was floated in March 1985. Since 1985, the Reserve Bank has not actively intervened in the foreign exchange market to move the exchange rate. However, indirect movements of the exchange rate through open market operations (and statements by the Governor) have become the primary tool of monetary policy.

Changes to the capital markets continue to be made, especially with regard to regulations governing foreign direct investment and banking supervision.

### The Reserve Bank Act (1989)

The Reserve Bank Act of 1964 set the goals of the Reserve Bank as maintaining the highest level of trade, employment and growth possible and the lowest rate of inflation possible. This Act was replaced by the Reserve Bank Act of 1989 in which the sole objective of monetary policy was price stability. The Reserve Bank achieved its inflation target in late 1991. However, underlying inflation breached the target in the June quarter of 1995.

The Reserve Bank Act gives the Reserve Bank considerable autonomy in the implementation of monetary policy. The Reserve Bank Act provides for a contract to be signed by the Minister of Finance and the Governor of the Reserve Bank, setting out the explicit goal of monetary policy and removes the Government from the daily running of policy. This is the essence of the Policy Targets Agreement (PTA)[14].

The Act was designed with the rules versus discretion and natural rate literature in mind. The Act follows two of McCallum's (1988) rules for an optimal monetary policy:

1. The design of the rule "should recognise the profession's ignorance about the short-run effects of monetary policy on output and unemployment, for neither theory nor evidence points convincingly to any one of the many competing models of the dynamic interaction between nominal and real variables.
2. Its design should also recognise our knowledge about the long-run relation between output and monetary expansiveness, namely, that over long spans of time output and employment levels will essentially be independent of the average growth rate of nominal variables."

The PTA set the goal of a 0–2 percent inflation target range for the annual rate of inflation in the headline consumers price index. The PTA also made allowance for specific "caveats" which can be invoked if the target is not reached. These caveats

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[14] See Mayes and Chapple (1995) pp. 244–245.

are; the interest rate components of the CPI and various supply shock components such as a terms of trade shock, Government charges or indirect taxes and natural disaster or livestock disease outbreak. Apart from the interest rate component, these other shocks have to be considered "significant" which is determined by a mechanical rule.

The choice of a narrow target zone of annual 0 to 2 percent underlying inflation was made for two reasons. The first reason was that it was estimated that the Laspeyres CPI contained an upward drift due to biases[15], guessed to be in the order of 1 percent, meaning that a mid point of the target band of 1 percent would be consistent with price stability. The second reason for the selection of such a narrow band was because it may result in a credibility effect which would grow if the Bank succeeded in attaining and maintaining the target.

One problem with such a narrow target band is that it may cause instrument instability, which could result in increased fluctuations in real variables and eventually force a change in the framework. The Reserve Bank takes a great deal of notice of research into the areas of instrument instability and optimal band width[16]. If there is convincing evidence supporting a change in the target band, the Reserve Bank will not hesitate to request a change in the PTA.

McCallum (1995) describes the Reserve Bank Act as designating "an appropriate target for monetary policy – non-inflationary growth of a nominal variable – and then provides the Reserve Bank with considerable insulation from day to day political pressures. Such insulation is important because these pressures inhibit patience. In addition, the "contract" between the Governor and the Minister of Finance provides some reinforcing motivation for the Bank and also constitutes a constraint on the Minister, and on the Government more generally, that is at least as important as constraining the Bank."

## The Fiscal Responsibility Act (1994)

Many people are familiar with the failure of the Gramm-Rudman Act (1985) to limit the growth of the US public debt and will see the FRA as a similar vain attempt to enforce fiscal discipline on politicians in a time inconsistent way. This view would, however, ignore the intent of this Act.

The primary intent of the FRA is to impose fiscal discipline on politicians by improving the reporting of Government policy and Government forecasts. The Minister of Finance is personally responsible to both Parliament and to the people of New Zealand for presenting the goals of Government and explaining how they constitute prudent fiscal policy. It is hoped that improvements in the quality and scope of fiscal reporting will aid markets, and in particular financial markets, to impose discipline on fiscal policy.

The aim of the Act is to "improve the conduct of fiscal policy by specifying principles of responsible fiscal management and by strengthening the reporting requirements of the crown..." In this vein, the Act is similar to the Trustee Act where

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[15] See Crawford (1993), also Mayes and Chapple (1995) pp. 235–238.

[16] See Fillon ant Tetlow (1993) and Debelle and Stevens (1995) for a discussion of optimal band width.

trustees are personally responsible for the prudent management of trust funds.

The architects of the FRA accepted that there was no way of binding future Governments to particular revenue and expenditure paths, and that to attempt to do so would be economically and socially sub-optimal. Instead it is hoped that by making Government report its financial position and goals more frequently and clearly, financial markets could impose fiscal discipline and voters would make superior electoral decisions. The FRA stipulates that the Government must produce an Economic and Fiscal Update prior to a general election.

The FRA sets out prudent fiscal management as being:

- a reduction of the total Crown debt to "prudent levels" by running fiscal surpluses,
- once achieved, the Government is to maintain prudent debt levels by ensuring that on average over a reasonable length of time, the total operating expenses of the Crown do not exceed its total operating revenues,
- achieve and maintain sufficient levels of Crown net worth to provide a buffer against adverse future events,
- manage prudently the fiscal risks facing the crown,
- pursue policies that are consistent with a reasonable degree of predictability about the level and stability of tax rates for future years.

To improve the quality of the Government's fiscal data the Generally Accepted Accounting Practice (GAAP) was adopted. The GAAP implies that the Government is required to produce its accounts on an accrual basis rather than a cash basis and that the Government must publish a statement of the Crown's net worth. Thus the New Zealand Government produces accounts in the same way as the private sector.

The Minister of Finance must, no later than 31 March of each year, publish the Budget Policy Statement. The statement is required to contain forecasts of the following variables;

- crown total operating expenses;
- crown total operating revenues;
- the balance between total operating expenses and revenues;
- the level of Crown total debt;
- the level of Crown total net worth.

The Budget Policy Statement must explain how the Government's long-term objectives accord with the objective of prudent fiscal management as specified in the Act. The Budget policy statement must state the broad strategic priorities of the Government and assess how these accord with the objective of prudent fiscal management. If these objectives do not accord with prudent fiscal management, the Minister must explain how long (s)he intends to depart from a policy of prudent fiscal management, how the Government intends to return to prudent management and what time frame this departure will last.

The aim of this statement is thus to provide economic agents with information on the goals of Government before the budget passes the legislation into law. The statement is also designed to make Government think about the longer term goals of policy.

# 5 The Future Prospects

At present New Zealand is experiencing a slowdown in economic activity as a result of firm fiscal and monetary policies and the slowdown in international activity. However, activity is forecast to reach a trough in the first half of 1996 and then pick up strongly as a result of fiscal expansion, stable monetary policy, a pick up in international activity and completion of a stock cycle. It appears at this stage that a soft landing of the economy has been achieved. More to the point, economic activity is forecast to trough at an annual rate of growth of around 1.5 percent with possibly no negative quarterly growth rates recorded.

The general consensus is that inflation will ease back near the middle of the target range over 1996 and that growth will pick up strongly as a result of the tax cut/expenditure increase scheduled for 1 July 1996 and repeated again on 1 July 1997. The expected pick up in the US, Japanese and Australian economies over this period, will also underpin the revival of economic growth. If the Treasury's predictions are correct, it means that New Zealand will have achieved continual positive annual GDP growth from 1992 to 1999 and beyond. This would represent possibly the largest economic expansion in the country's history. More importantly, this expansion has been, and will continue to be, supported by sound Government and business balance sheets, low inflation, low unemployment, strong rates of growth in investment, consumption and productivity.

Table 2 gives The Treasury's latest economic forecasts for the New Zealand economy.

Table 2. **Economic Forecast***

| Annual average % change<br>March years | **1994/95**<br>Actual | **1995/96**<br>Forecast | **1996/97**<br>Forecast | **1997/98**<br>Forecast | **1998/99**<br>Forecast |
|---|---|---|---|---|---|
| Private Consumption | 4.6 | 2.9 | 5.2 | 5.5 | 4 |
| Private Investment | 26.1 | 4.8 | 2.8 | 11.5 | 4 |
| GDP | 6.1 | 2.6 | 3.5 | 4.5 | 3.5 |
| Current Account Balance | -3 | -3.7 | -3.5 | -3.5 | -3 |
| Unemployment rate (%) | 6.6 | 6.2 | 5.5 | 5 | 5 |
| 90 day bill rate (%) | 9.4 | 8 | 8.5 | 8 | 8.5 |
| Underlying Inflation | 1.9 | 1.5 | 1 | 1.5 | 1.5 |

* Source: New Zealand Treasury. December Economic and Fiscal Update (1995)

Downside risks to these projections are provided by the possibility of continual weakness in the international environment, stronger than anticipated inflationary expectations, and political risk arising from the first proportional representation election due in late 1996.

The strength of the Government budget position has opened up the possibility that Government debt can be reduced significantly. Between June 1993 and June 1996, the Government will have reduced its net public debt by more than 7 billion NZ dollars. The sustainability of the surpluses means that the Government will be able to reduce significantly the level of taxes and increase the spending on training, health and inferstructure projects, adding to the sustainability of higher economic growth.

Table 3 gives the Governments proposed 1996 Budget package which combines substantial new expenditure on health care, education and employment training, with substantial tax cuts.

Table 3. **1996 Budget Package ***

| Million NZ dollars | 1996/97 | 1997/98 | 1998/99 |
|---|---|---|---|
| Tax reductions | 1000 | 2100 | 2300 |
| Initiatives announced since 1995 budget | | | |
| Health | 185 | 170 | 180 |
| Employment task force | 110 | 125 | 120 |
| Primary teachers wage settlement | 65 | 90 | 90 |
| Other | 40 | 40 | 40 |
| Provision for initiatives under development (including Family assistance, Education, New Zealand Superannuation) | 280 | 520 | 710 |
| **Total** | **1680** | **3045** | **3440** |
| **Budget Surplus** | **2929** | **3150** | **3993** |
| % of GDP | 3.30 % | 3.30 % | 4 % |
| Net public debt % of GDP | 33.4 % | 29.2 % | 23.7 % |

* Source: New Zealand Treasury December Economic and Fiscal Update (1995)

The ultimate sustainability of the reforms in New Zealand and their effects are yet to be tested. However, with the gains from the reforms filtering through to the general population in the form of increasing real incomes and improved financial and employment security, evidence points to their sustainability.

## References

Barro, R. J. (1984) *Macroeconomics.* John Wiley and Sons.

Beaumont, C. And P. Jolly (1993), "Wage Bargaining and the Employment Contracts Act," Discussion Paper G93/6, *Reserve Bank of New Zealand*

Blanchard O. J. and S. Fischer (1989) *Lectures on Macroeconomics.* MIT Press.

Crawford, A. (1993), "Measurement Biases in the Canadian CPI," Technical Report # 64, *Bank of Canada.*

Debelle, G., and G. Stevens (1995), "Monetary Policy Goals for Inflation in Australia," Research Discussion Paper, *Reserve Bank of Australia.*

Dennis, R. (1995), "The Hodrick-Prescott Filter with Time-Varying Smoothing Parameter," Research Note (forthcoming), *Reserve Bank of New Zealand.*

Duncan, I., (1992) "Dismantling the Barriers: Tariff Policy in New Zealand," Research Monograph 57, *New Zealand Institute of Economic Research*, Wellington.

Evans, L., A. Grimes, D. Teece and B. Wilkinson (1995) "Economic Reform in New Zealand 1984:1994: The Triumpth of Efficiency, Consistency and Contestability," *Journal of Economic Literature* Forthcoming.

Fillon, J. F., and R. Tetlow (1993), "Zero Inflation or Price Level Targeting? Some Answers from Stochastic Simulation on a Small Open Economy Macro Model," in *Economic Behaviour and Policy Choice under Price Stability*, Bank of Canada.

Fischer, S., (1991) "Growth , Macroeconomics, and Development," *National Bureau of Economic Research Macroeconomics Annual.*

Fischer, S., (1993) "The Role of Macroeconomic Factors in Growth," *Journal of Monetary Economics*, 32, 485–512.

Garrison C. B., and F. Lee (1995), "The Effect of Macroeconomic Variables on Economic Growth Rates: A Cross-Country Study," *Journal of Macroeconomics*, 17, 2, 303–317.

Hodrick, R., and E. Prescott (1980), "Post War US Business Cycles: An Empirical Investigation," Working Paper, *Carnegie-Mellon University.*

Leamer, E.E. (1983), "Lets Take the Con out of Econometrics," *American Economic Review*, 73, 31–43.

Leamer, E. E. (1985), "Sensitivity Analyses Would Help," *American Economic Review*, 75, 308–313.

Levene, R. And D. Renelt (1992), A Sensitivity Analysis of Cross-Country Growth Regressions," *American Economic Review*, 82, 942–963.

Lucas, R. E. (1973). "Some International Evidence on Output-Inflation tradeoffs," *American Economic Review*, 63, 326–334.

Mayes. D., and G. Young (1994), "Improving the Estimates of the UK Capital Stock," *National Institute Economic Review*, Feb, 84–96.

Mayes D., and B. Chapple (1995), " Defining an Inflation Target," Conference Papers and Proceedings, Bank of England.

McCallum, B. T. (1988), "Robustness Properties of a Rule for Monetary Policy," *Carnegie-Rochester Conference Series on Public Policy*, 29, 173–203.

McCallum, B. T. (1995), "New Zealand's Monetary Policy Arrangements: Some Critical Issues", Discussion Paper G95/4, *Reserve Bank of New Zealand.*

New Zealand Government, (1995), *Employment Contracts Act (1991) and Amendments.* Wellington.

New Zealand Government, (1995), *Fiscal Responsibility Act (1994).* Wellington.

New Zealand Government, (1995), *Reserve Bank Act (1989) and Amendments.* Wellington.

New Zealand Reserve Bank, (1995), *Monetary Policy Statement.* December, Wellington.

New Zealand Treasury, (1995), *December Economic and Fiscal Update.* Wellington.

Organisation for Economic Co-operation and Development (various dates) *Economic Surveys: New Zealand.* OECD Paris.

Walsh, C. E. (1995), "Is New Zealand's Reserve Bank Act of 1989 an Optimal Central Bank Contract," *Journal of Money Credit and Banking*, 27, 4, 1179–1191.

# Appendix 1

The following is an excerpt from the OECD country report on New Zealand published in 1994. Summary of structural reforms since 1984.

## International trade and monetary system

| | *Date of implementation* |
|---|---|
| **Import protection** | |
| Phasing out of import licencing requirements | 1983–1989 |
| Reduction of import tariffs on Swiss formula from average 28 to 10 percent | 1986–1992 |
| Further one-third reduction in import tariffs planned | 1992–1996 |
| Removal of special protection features for eighteen specific "industry plan" sectors and incorporation into general tariff reform programme | 1984–1992 |
| Slower reduction of tariffs on two remaining "special" industries (motor vehicles/components and textiles/clothing/footwear) | 1987–1996 |
| **International capital controls** | |
| Removal of controls on outward investment/borrowing | 1984 |
| Free entry of foreign direct investment (rubber-stamped by the Overseas Investment Commission, except farmland, offshore islands, fishing) | 1985–1989 |
| Very liberal regime for portfolio investment/repatriation of profits | 1985 |
| **Exchange rate** | |
| Deregulation of foreign exchange trading | 1984 |
| Devaluation 1984 20 percent against a basket of currencies | 1984 |
| Free float of currency on foreign exchange markets without direct control | 1985 |
| **Monetary policy** | |
| Devotion of monetary policy instruments to dis-inflation with a target of "price stability" (0–2 percent price increase by 1992/93) | 1989 |
| Independence of Reserve Bank from Government, formalised through Reserve Bank Act | 1989 |

**Industry and service sectors**

| | Date of implementation |
|---|---|
| **Finance** | |
| Abolition of credit growth guidelines | 1984 |
| Removal of separate requirements for trustee banks, building societies, finance houses and stock brokers | 1985–1987 |
| Removal of quantity restrictions and other entry barriers to banking | 1985–1986 |
| End of formal financial controls (reserve ratio requirements, sector lending priorities) | 1985 |
| Removal of interest rate controls | 1984 |
| Abolition of export credit guarantees | 1984 |
| Removal of ownership restrictions on financial institutions | 1985 |
| Liberalisation of stock exchange | 1986 |
| **Energy** | |
| Corporatisation of State Coal Mines | 1987 |
| Financial restructuring of oil industry | 1988–1991 |
| Liberalisation of oil company ownership of service stations | 1988 |
| End of price controls (except on gas) | 1984–1988 |
| Sale of Crown gas exploitation/distribution interests | 1988–1990 |
| Sale of other Crown energy holdings | 1990–1992 |
| Corporatisation and restructuring of electricity generation, transmission and distribution | 1986–1991 |
| **Transport** | |
| Removal of restrictions on road/rail carriage | 1983–1986 |
| End of quantity licencing of trucking | 1984 |
| Corporatisation of state rail, air and bus services | 1982–1984 |
| Tendering of local authority bus services and liberalisation of licencing requirements | 1990–1991 |
| Deregulation of taxi industry | 1990 |
| Opening up of domestic aviation industry | 1987 |
| Granting of number of land and on-flying rights to foreign airlines in NZ | 1989 |
| Corporatisation/sale of airports and Airways Corporation | 1989 |
| Corporatisation of ports | 1989 |
| Deregulation of stevedoring industry | 1990 |
| Removal of cabotage on coastal shipping | 1991 |
| **Agriculture** | |
| Termination of Supplementary Minimum Prices on agricultural products | 1984 |
| Agricultural tax concessions removed | 1985 |
| Termination of concessional financing of primary producer stocks held by producer boards | 1986–1988 |
| Review of compulsory producer board marketing arrangements | 1987 |
| Termination of domestic boards for eggs, milk and wheat | 1984–1988 |

**Industry and service sectors**

| | *Date of implementation* |
|---|---|
| **Research and development** | |
| Removal of concessions for research and development to put on equal footing with all investment | 1984 |
| Cost-recovery of public R&D work | 1985 |
| Establishment of a contestable pool of public funds (Foundation of Research Science and Technology) | 1990 |
| Corporatisation of government research bodies (Crown Research Institutes) | 1992 |
| **Labour Market** | |
| Introduction of voluntary unionism | 1983 |
| More market based bargaining under Industrial Relations Act Amendment: compulsory unionism re-instituted | 1984 |
| Some contestability in union coverage under Labour Relations Act | 1987 |
| Radical reform via Employment Contracts Act (voluntary unionism, contestable unions of any size, any arrangements for employer/employee bargaining at the joint or individual level) | 1991 |
| **Business law** | |
| Establishment of Commerce Act as liberal efficiency-based regime to govern mergers and trade practices | 1986 |
| Fair Trading Act governs consumer rights | 1986 |
| Review of securities legislation and takeover law | 1988–1991 |
| Review of whole intellectual property regime (Patent, Copyright, Trademark and Design Acts) | 1990–1991 |
| Review of Town and Country Planning | 1987–1990 |
| Resource Management Act to govern more liberal planning and environmental legislation | 1991 |
| Crown Minerals Act to clarify property rights to mineral resources | 1991 |
| **Other deregulation measures** | |
| End of wage and price freeze | 1984 |
| Termination of price control, and replacement by (unused) price surveillance powers under Commerce Act | 1984–1988 |
| Removal of quantity licencing in almost all industries, and end of quality regulation on most | 1986–1988 |
| End of all state regulated monopoly rights (except letter post, air traffic control and milk distribution) | 1984–1989 |
| Removal of some occupational licencing | 1985–1990 |
| Removal of producer co-operative tax advantages | 1989 |
| Termination of restrictions on shop trading hours | 1989 |
| Termination of export market development incentive schemes | 1984 |
| Phase-out of export performance incentives | 1984–1987 |

**Government sector**

| | *Date of implementation* |
|---|---|
| **State trading operations** | |
| Removal of almost all state regulated monopoly rights | 1984–1989 |
| Corporatisation of 24 state-owned enterprises (in transport, finance, tourism, forestry, broadcasting, utilities and service industries) | 1987–1988 |
| Restructuring to isolate natural monopoly elements of State-Owned Enterprises | 1989–1991 |
| Full or partial privatisation of Air New Zealand, Bank of New Zealand (A commercial bank not the central bank), Petroleum Corporation, Tourist Hotel Corporation, Shipping Corporation, Rural Bank, Government Life, Forestry Corporation, Post Office Bank, Telecom Corporation, and others | 1987–1991 |
| Further privatisation planned via divestment of asset sales, sales of rights, share rights, etc | 1991+ |
| Privatisation of Railways, Radio New Zealand | 1993–1996 |
| Requirement for local authorities to corporatise Local Authority Trading Enterprises (LATEs) and tender out services | 1990–1991 |
| Encouragement to local authorities to sell holdings in airports, port companies and local utilities | 1991 |
| Sale of other assets, e.g. irrigation schemes, fishing rights | 1983–1988 |
| **Taxation** | |
| Broadening tax base through "Goods and Services Tax" on virtually all final consumption without exception (currently 12.5 %) | 1986 |
| Flattening and lowering of personal income tax rate, with top rate standardised to corporate tax levels, and aimed to minimise poverty traps | 1988 |
| Standardisation and simplification of corporate taxation to minimise evasion and cut administration costs | 1985 |
| Removal of most other indirect taxes | 1986–1991 |
| Removal of tax concessions for savings, etc to put on neutral footing | 1987 |
| Review of international tax regime | 1992 |
| **Expenditure control** | |
| Attempts at reduction in government expenditure, especially in areas of administration and industry development | 1985+ |
| Assignment of proceeds of sale of state-owned enterprise assets to replay public debt | 1987+ |
| Public sector management reform through Public Finance Act | 1989 |
| Reform of core government departments on corporate lines through the State Sector Act 1988 with separation of policy, provision, funding | 1986+ |
| User-pays principles for remaining state trading activity | 1986+ |

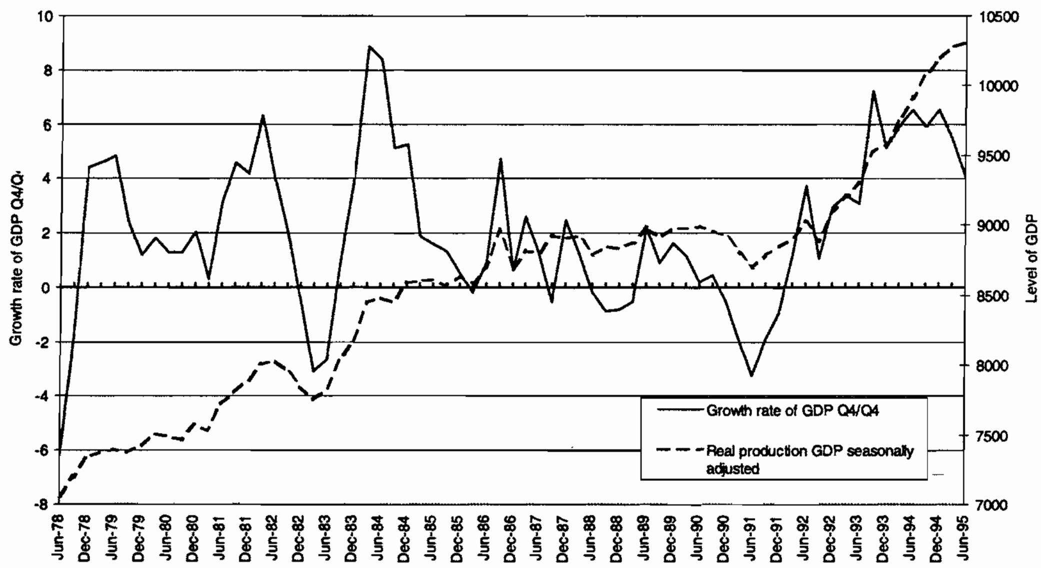
| | *Date of implementation* |
|---|---|
| **Expenditure control** (continued) | |
| Redesign of government accounts on more commercial basis, accrual accounting, output-based monitoring systems through Public Finance Act | 1988 |
| Abolition of 50 quasi-government organisations | 1987 |
| Renewed attempt at reduction in social spending (education, health, social welfare, superannuation) | 1991 |
| Fiscal Responsibility Act aims to improve the quality of fiscal policy decisions and reporting of fiscal policy | 1994 |
| **Social services** | |
| Reform of compulsory education system, based on elected Boards of Trustees | 1988–1990 |
| Quasi corporatisation and fee-paying for tertiary education institutions | 1992 |
| Integration of state housing assistance into private sector rental and mortgage provision | 1991 |
| Tightening of requirements and reduction of levels of unemployment benefits and other Government social transfers | 1990 |
| Tightening of requirements, extension of age, and reduction of benefits for government funded old age pension scheme | 1989–1992 |
| Separation of funding provision of state health services and establishment of Crown Health Enterprises | 1992 |
| Development of private funding arrangements for health provisions | 1992 |

# Appendix 2

**Output variables**

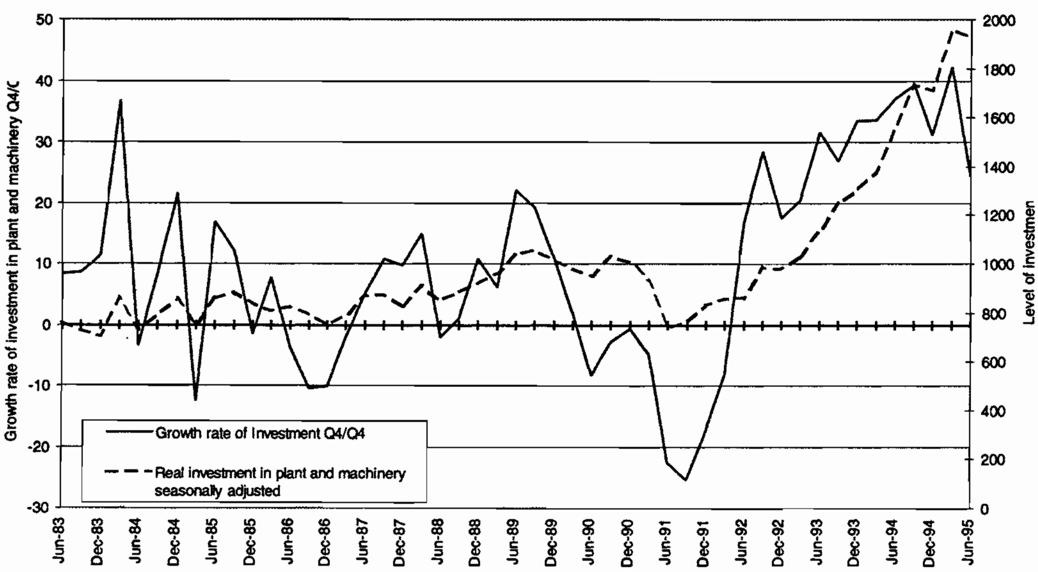
The growth rate of production GDP (Q4/Q4) and the level of production GDP.

**Real Production GDP (seasonally adjusted) and its Growth Rate**

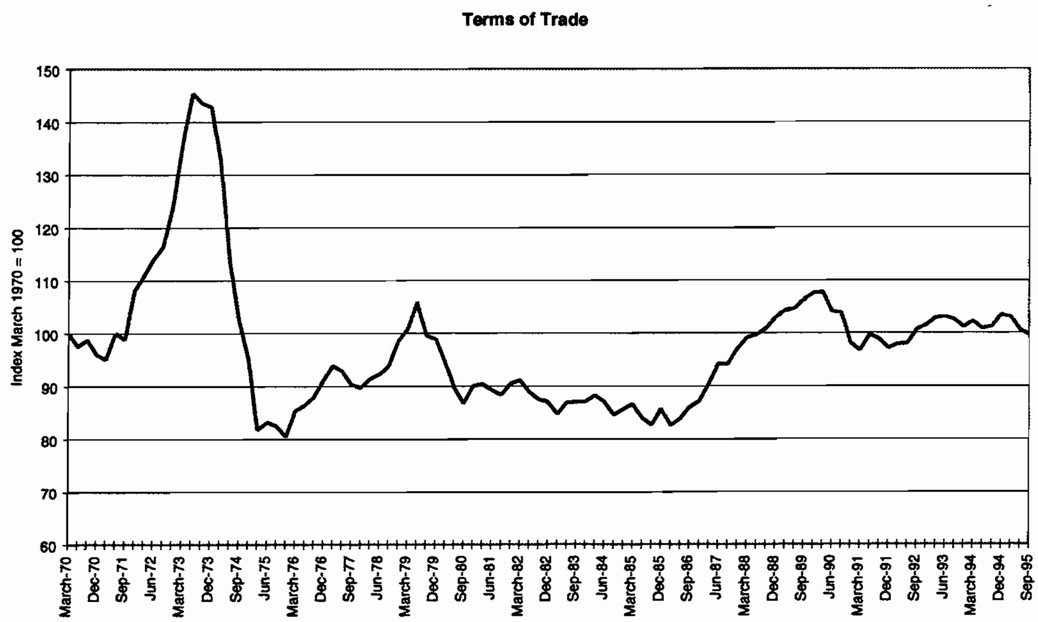



The growth rate of investment in plant and machinery (Q4/Q4) and the level of investment in plant and machinery.

**Real Investment in Plant and Machinery (seasonally adjusted) and its Growth Rate**



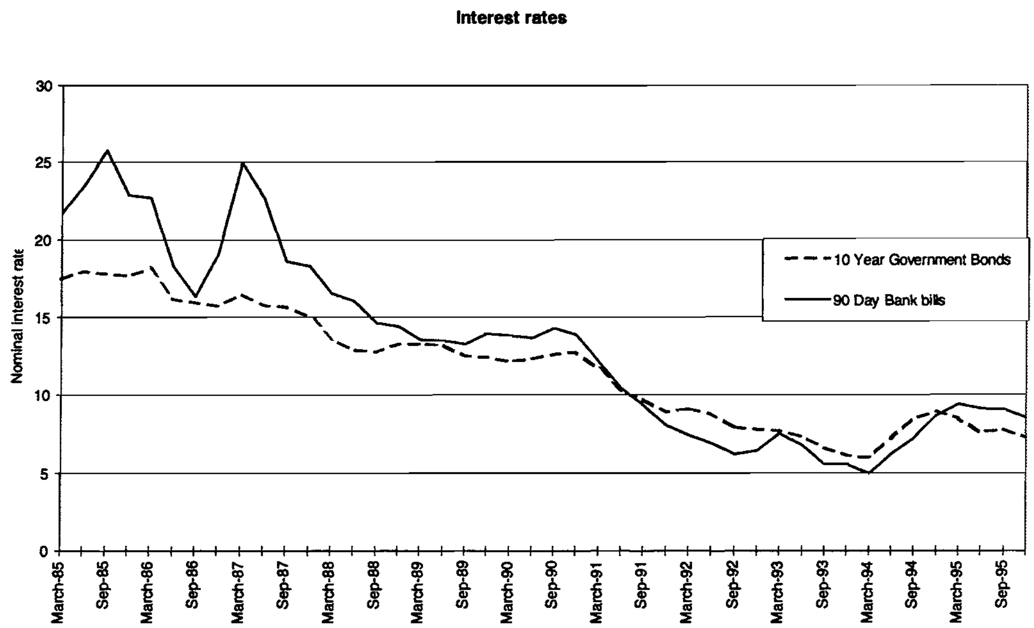
**External sector indicators**
The terms of trade defined as the price of exports/ price of imports.



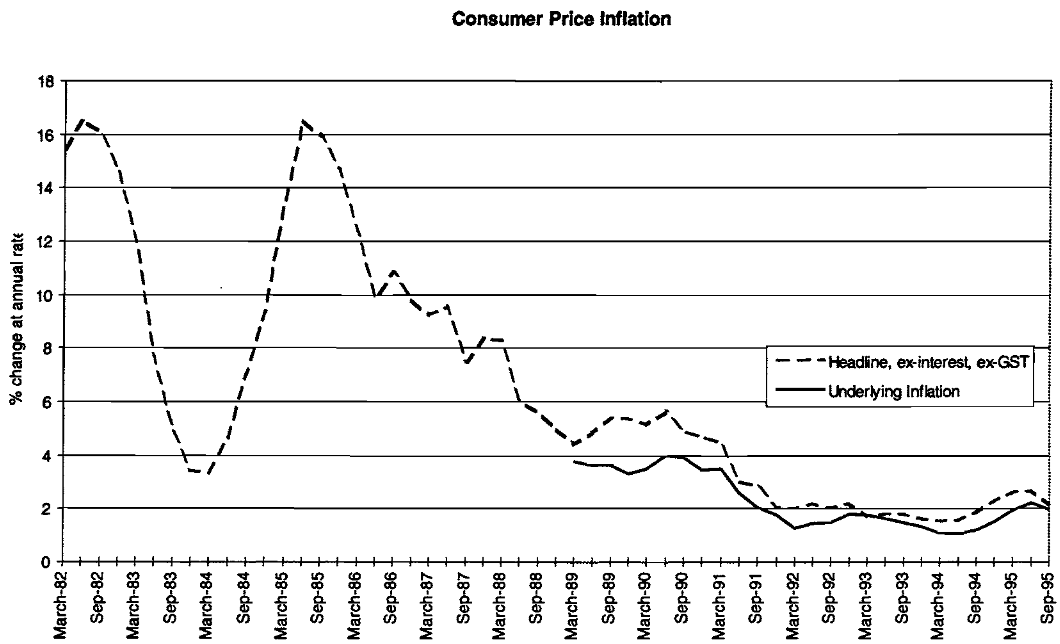

The real exchange rate = ((nominal exchange rate * domestic price level)/ foreign price level). The price levels used are the producer price indices of manufactured outputs of the five largest trading partners. The nominal exchange rate used it the trade weighted exchange rate index of the exchange rates of New Zealands five largest trading partners.

**Monetary indicators**

90 day Reserve Bank Bills and 10 year Government stock.

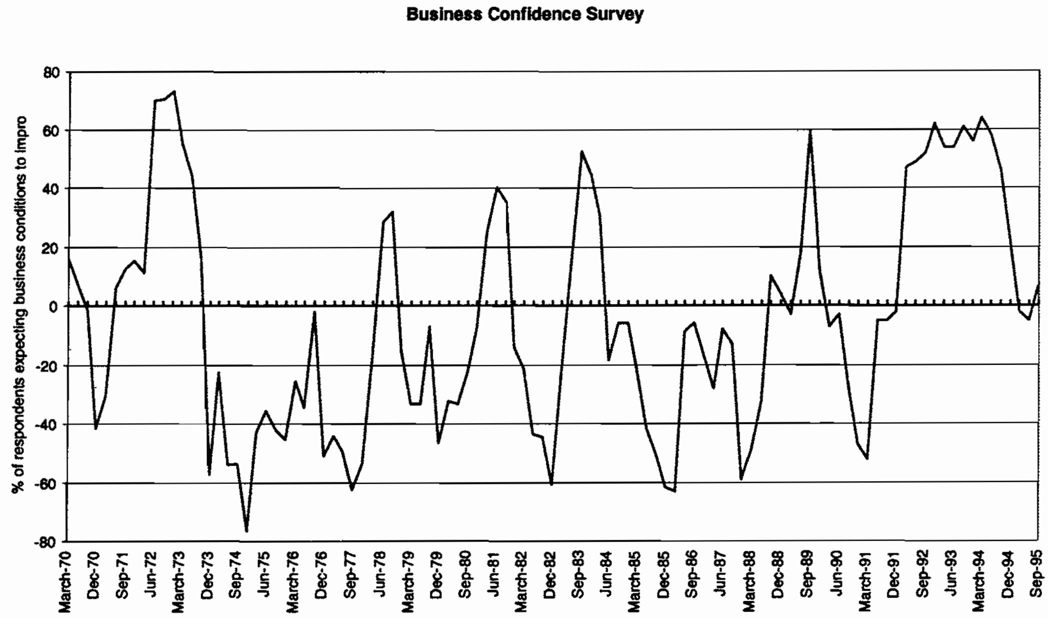



Consumer Price Inflation.

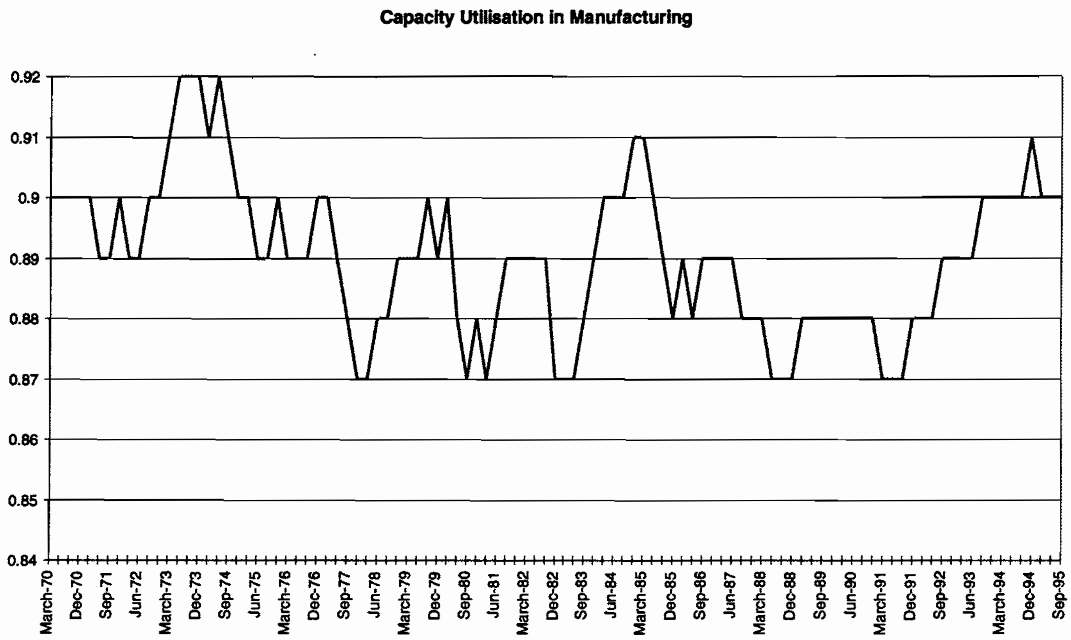


## Business Conditions

Business Confidence based on the Quarterly Survey of Business Opinion (QSBO).

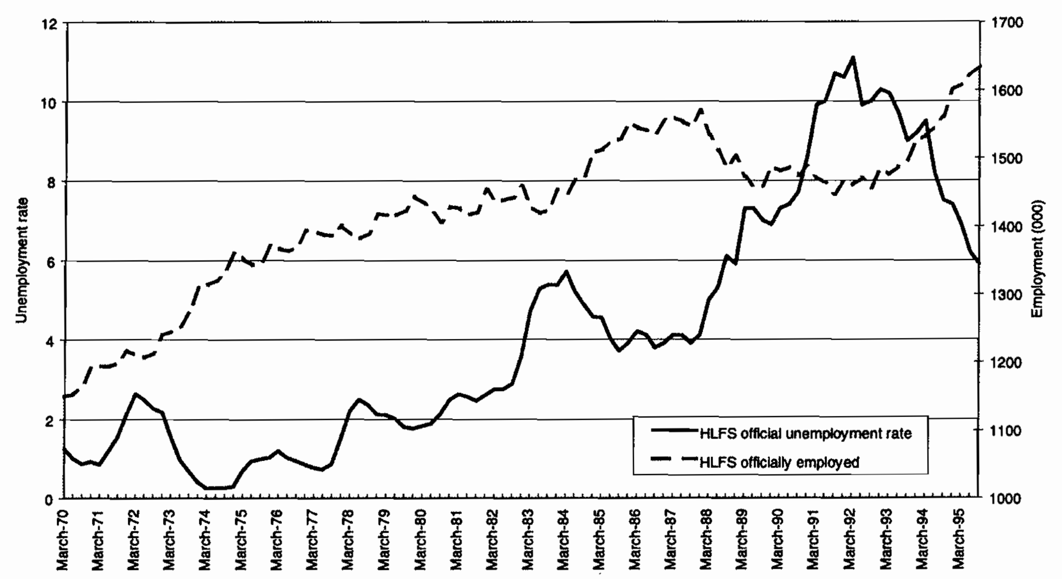



Capacity Utilisation in manufacturing based on the QSBO.

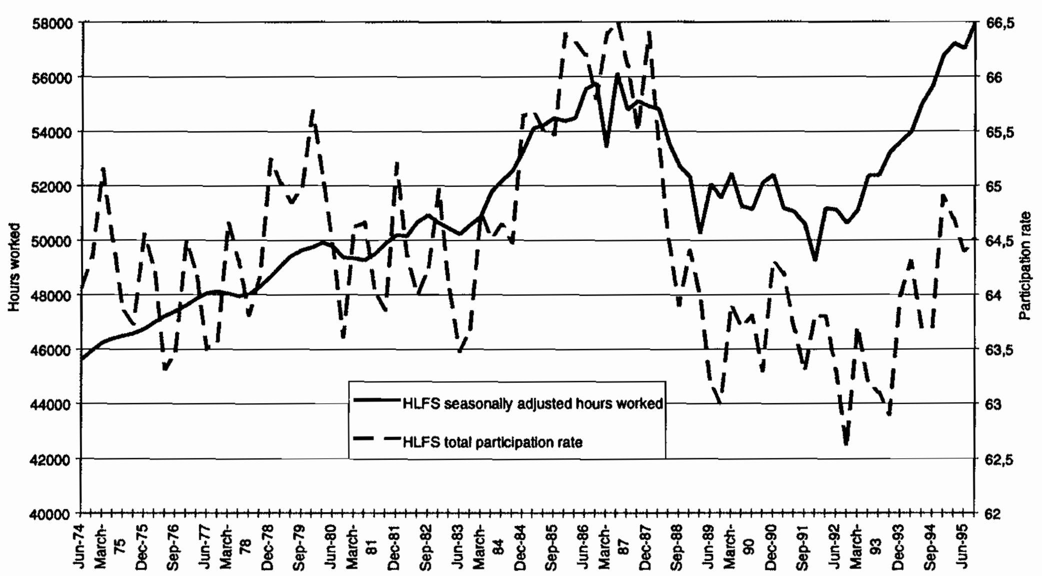


# Labour market indicators

Household Labour Force Survey (HLFS) Employment/Unemployment Rate




Household Labour Force Survey (HLFS) Participation Rate and Hours Worked



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