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# **New Zealand's macro-economic performance**

**in the 1990s:**

## **trends and policy debates**

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### **Abstract:**

A quick comparison of the 1990s with previous decades in New Zealand shows that some key indicators improved; chiefly inflation and the government operating balance, others merely treaded water; chiefly GDP growth, and others deteriorated, such as the current account deficit. The direction of the policy debates over the 1990s reflects these outcomes. The monetary and fiscal debates are increasingly focused on ensuring that achieving the primary objectives (inflation and the operating balance, net debt) is not too costly in terms of other economic outcomes, but the framework put in place at the start of the 1990s remains. The debates around saving and the current account remain undecided as the appropriate role for government. In contrast the productivity debate is considering that perhaps there is a role for a more active role for government, reflecting New Zealand's continued disappointing productivity outcomes after initially assuming that the government's role was to ensure a level playing field.

### Acknowledgments:

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The views expressed are those of the author(s) and do not necessarily reflect the views of the Treasury.

# 1. Introduction

This paper provides an economic overview of New Zealand's economic performance over the 1990s and a synthesis of the policy debates around productivity performance, saving, the current account deficit, fiscal policy and monetary policy.

The 1990s were a key period in New Zealand's economic history as they include the bedding down and adjustment to the reforms. The reforms over 1984-1995 were one of the most comprehensive of any OECD country in recent decades (Evans et al, 1996).

	New Zealand		Australia	OECD
	1980s	1990s	1990s	1990s
Real GDP Growth (AAPC) <sup>1</sup>	1.9	2.4	3.5	2.6
Standard Deviation (quarterly)	1.3	1.0	0.7	
Per capita GDP Growth (AAPC)	1.3	1.2	2.3	
Standard deviation (quarterly)	1.3	1.0		
CPI Inflation	11.4	1.7	2.3	5.0
Standard deviation(quarterly)	1.6	0.5	0.6	
Unemployment Rate	4.3	7.9	8.9	7.0
Employment growth				0.9
Current account balance (% GDP)	-2.9	-4.5	-4.4	-0.2
Government operating balance (%GDP)	-1.8	0.5	-2.5	-3.0
10 year interest rates <sup>2</sup>	15.2	8.1		
NZ 10 year rate less US	6.4	1.5		

1. Production based GDP. Geometric average of December year annual average percent changes  
2. Data starts from 85Q1

Source: Statistics New Zealand, Gruen and Stevens (), OECD 2000, outlook 68) and The Treasury

A quick look at the two decades shows that while some economic indicators improved dramatically, others did not – or even deteriorated. Section 2 provides a brief summary of the trends in the key economic indicators over the 1990s.

New monetary and fiscal arrangements were accompanied by dramatic reductions in inflation and a return to operating surpluses. 10-year bond rates dropped reflecting the low inflation and the premium between New Zealand and US government bonds narrowed. In the final quarter of 1999 there was only 2 basis points (0.02%) difference between New Zealand and US 10 year bonds. These results helped contribute to the bedding in of the new arrangements – such that by the end of the decade there was limited debate around changing the institutions of macro-economic policy. The debate focused instead on the operational aspects such as the need to incorporate social goals more into fiscal policy, and to take more account of monetary policy's effect on output. Sections 3 and 4 discuss the policy debates in fiscal and monetary policy respectively over the 1990s.

Following from the macro-economic policy side, there was a belief that the low saving rate and high current account deficits were not a problem if they reflected decisions by individuals to save, invest and borrow, provided the behaviour wasn't distorted by government regulation. By the end of the decade the debate was unsolved – but had circled back to think perhaps the government should at least play a monitoring role— due to ongoing concerns about external vulnerability. The debates around saving and the current account are summarised in sections 5 and 6 respectively.

Despite the success on the fiscal and monetary side with the macroeconomic reforms – growth did not automatically follow from this. Although the pick up in growth from 1993-95 was heralded as the start of the productivity improvements from the reforms there remains no incontrovertible evidence of a structural improvement in productivity during the 1990s. A re-examination of the role of the government in micro-policy, especially around industry assistance, is taking place as a result. The productivity debates are summarised in section 7.

The paper aims to be descriptive rather than evaluative. We are not attempting an evaluation of the effectiveness of the reforms or the reform process, but a description of what occurred and what was on policy makers and external commentators minds during this period.

We recognise the time period is somewhat arbitrary and is not economically significant in itself. For example comparing the 1980s and 1990s may provide a misleading picture of the New Zealand economy because of differing business cycles over the two decades. However, it is not uncommon in the literature (eg Gruen and Stevens, 2000) and is used as a descriptor for many time-series changes (including fashion). Hence for convenience we use it here.

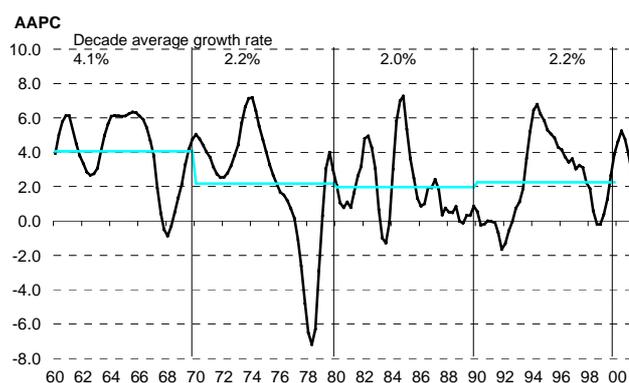
## 2. The 1990s in summary

The 1990s were preceded by relatively low growth and a regulated economy over the 1970s and 1980s.

Progressively during the second half of the 1980s and into the 1990s this regulation was unwound. New Zealand went from being one of the least open economies to being one of the most open market friendly economy (Card and Freeman, 2002).

The reforms were triggered by a constitutional and foreign exchange crisis in July 1984 and designed to provide a stable macroeconomic environment (Evans et al, 1996).<sup>1</sup>

**Figure 1 – Real GDP growth 1960- 2001**  
(annual average % change)



Source: Statistics New Zealand, the Treasury, Reserve Bank

<sup>1</sup> Other references for detail on the purpose and detail of the reforms include Silverstone, Bollard and Lattimore (1996), Bollard and Buckle (1987), and for a more recent assessment Dalziel and Lattimore (2001).

There were high expectations that these changes would bring about a growth dividend for New Zealand and provide the push to catch-up to median OECD income levels (OECD, 1994).

The 1990s were ushered in by negative quarterly growth, high inflation and record unemployment rates even with the very low labour force participation at the time.

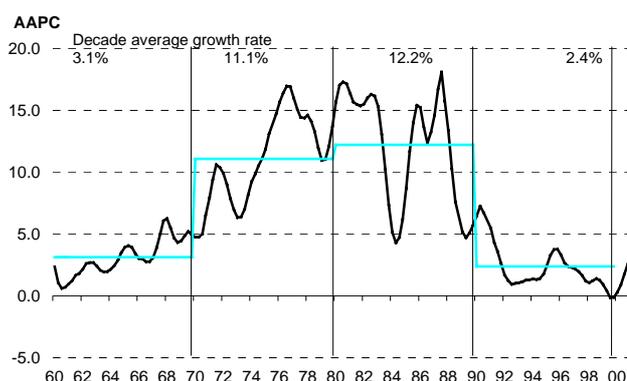
By 1994 it appeared that New Zealand had started to reap the benefits of its vast structural reform (OECD, 1994). Growth averaged nearly 5% over 1993-

95 while inflation remained relatively muted at 2%. Labour productivity growth was somewhat muted reflecting increased labour input. The unemployment rate halved to 6% while the labour force participation rate jumped to early 1980s levels. High levels of business confidence were maintained for 2½ years (figure 5) the most stable period in the survey's history.

The exchange rate (TWI) jumped 15% over 1993-95 reflecting both investor confidence in New Zealand's prospects and the deliberately tight monetary conditions aimed at reducing the inflation pressures from the surge in growth (see section 4). The high exchange rate significantly reduced export earnings with business confidence falling back to around zero.

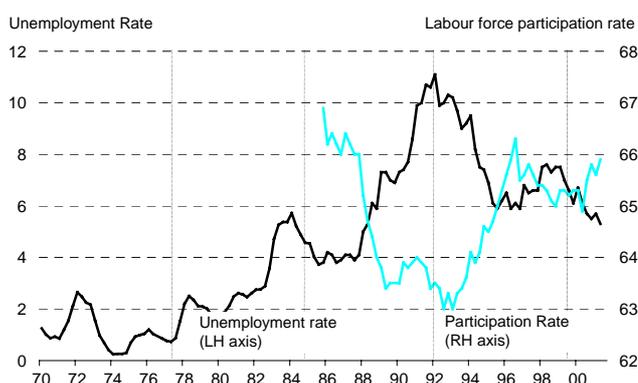
The boom in growth was not sustained. One-off drivers turned around, such as the migration boom. The slowdown was reinforced by the Asian crisis and the effect of consecutive droughts brought the New Zealand economy back to earth with a thump.

**Figure 2 – Consumer price inflation 1960- 2001**  
(annual average % change)



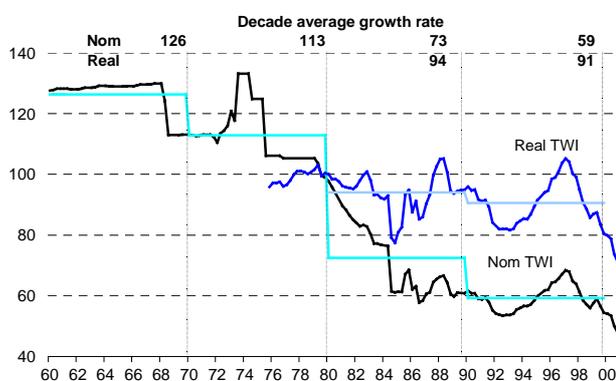
Source: Statistics New Zealand and the Treasury

**Figure 3 –Unemployment and labour force participation rates**



Source: Statistics New Zealand and the Treasury

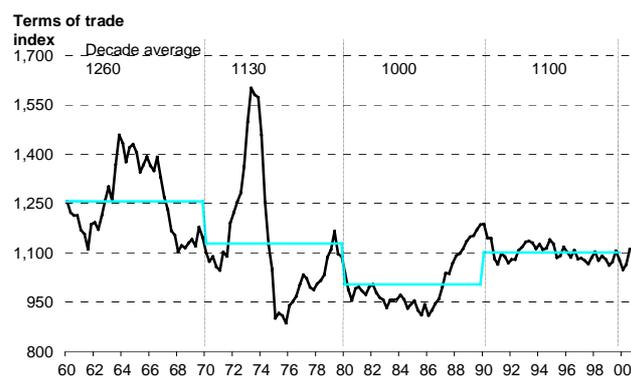
**Figure 4 – Exchange rates – nominal and real**



Source: the Treasury, Reserve Bank

But the slowdown in growth over 1997-98 was different in many respects from the slowdown over 1990/91. Firstly growth did not stagnate – with only 4 negative quarters (97Q1-98Q1) compared with 8 over the previous downturn (88Q1-91Q2). Secondly, while the unemployment rate rose, it remained significantly below the levels at the start of the 1990s, despite the labour force participation rate holding up. Finally the government continued to run operating surpluses making active policy decisions to protect the fiscal position.

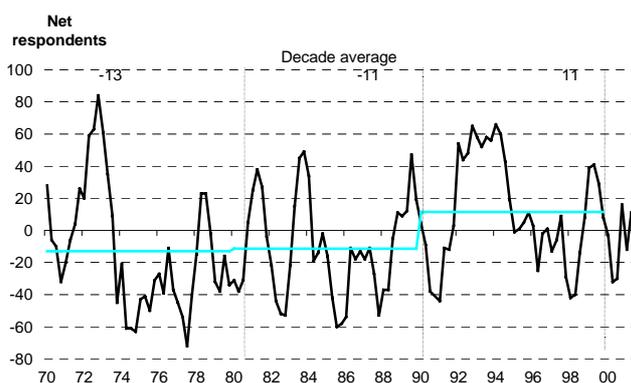
**Figure 5 – Terms of trade**



Source: Statistics New Zealand and the Treasury

By the end of the 1990s an excellent agricultural growing season combined with a low exchange rate saw income growth pick up again in New Zealand. The rollercoaster ride of growth outcomes over the 1990s meant that optimism this time around was more tempered.

**Figure 6 – Expectations of general business situation (3 months ahead)**



Source: NZIER QSBO survey

But there remained a general dissatisfaction at New Zealand's relative performance – although this was tempered by the recognition that performance would probably have been worse in the absence of any reforms. For comparison over the 1990s Australia grew 1.1% per year faster than New Zealand on average. Scobie and Mawson (2002) estimate that New Zealand would need to grow more than 2.5 times New Zealand's average per capita growth rate over 1970-1999 to catch up to the OECD median within 10 years.

But there were a number of successes of the 1990s that should not be forgotten, regardless of the final judgement of economic performance over this time period:

- inflation below 4% for 9 years, for the first time since the early 1960s
- government operating surpluses for 5 years for the first time since the start of the 1970s and uncommon elsewhere in the OECD.
- An operationally independent central bank established
- Significant falls in the unemployment rate even with a rising labour force participation rate.

### 3. Fiscal policy

The 1990s started with a sense of fiscal crisis – 18 years of deficits had led to a large and climbing debt burden. Fiscal consolidation and a change in fiscal policy's governing legislation were introduced in an attempt to ensure the fiscal position remained sustainable into the future.

By the end of the decade there was a sense that the fiscal position was under control, with continued surpluses and falling debt levels. The challenge towards the end of the 1990s and continuing on is to embed the fiscal position while not neglecting other important facets for growth such as social cohesion and inclusion (Bollard and Choy 2000) and adequately planning for long-term pressures and uncertainties.

#### Trends

The 1990s started with net debt close to 50% of GDP – its highest ever level, and with operating deficits totalling 16% of GDP forecast for the upcoming 3 years, with net debt expected to rise by over 20% of GDP by 1993/94. Treasury advice was for a fiscal consolidation as it was thought that continued deficits would harm economic performance through the effect on the current account and interest rates (Treasury, 1990).

In December 1990 the newly elected National government announced a significant cut back in spending over 1993-95 of over 1% of GDP in 1993 and over 3% in 1994. The cutbacks were in social welfare spending and across the board expense control. Despite the controversy generated by these cuts they did not significantly reduce government spending.

The fiscal consolidation was achieved through slowing the rate of spending growth combined with revenue growth in line with GDP (see Figure 8), rather than actual spending reductions in dollar terms.

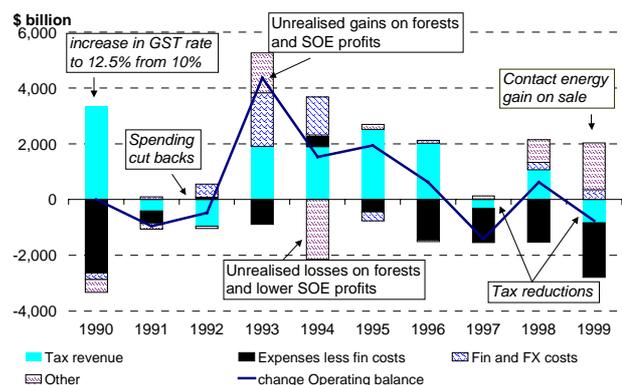
This era of fiscal constraint was formalised into the Fiscal Responsibility Act, introduced in 1994. While in Bill stage it was supported by both major parties. Labour (the main opposition party) viewed

Figure 7 – Fiscal trends



Source: The Treasury

Figure 8 – Drivers of operating balance changes



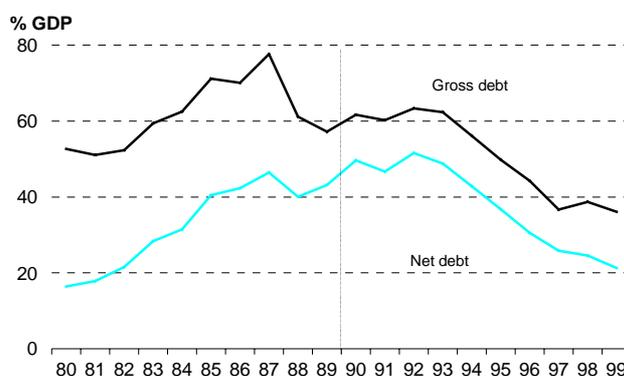
Source: The Treasury

it as legislating current practice. The FRA required the government to set short-term intentions and long term objectives, to regularly publish the economic and fiscal outlook and to disclose the use and effect of discretionary fiscal policy.<sup>2</sup>

By the 1994 Budget Economic and Fiscal Update \$10 billion worth of operating surpluses were forecast over the coming three years and a surplus was expected for the 1994 year. Net public debt was expected to fall from 42% of GDP to 29% of GDP by 1997. This reflected strong tax revenue growth on the back of a growing economy (see figure 8).

With this turnaround in fiscal fortunes tax reductions and social spending priorities were given precedence in the 1996 Budget. It was costed at \$7.0 billion over 1997-99 (p64 Budget Update 1996).

**Figure 9 – Trends in debt**



Source: The Treasury

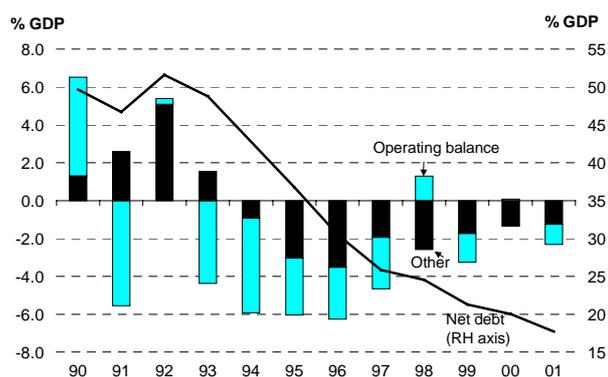
Over the decade net debt fell by 28% of GDP to 21% of GDP (\$21.7 billion) in 1999 reflecting the combined operating surpluses of \$4.5 billion, and asset sale receipts which totalled \$16 billion.<sup>3</sup> These changes were offset by capital investment (less depreciation).

### Key debates of the 1990s

#### Coping with crisis

At the start of the decade the fiscal position was viewed as unsustainable under the current policy settings. This prompted immediate action to reduce spending, but also set in motion legislative changes to help prevent a similar crisis reoccurring.

**Figure 10 – Drivers of net debt reduction**



Source: The Treasury

The decision to reduce spending was and still is contentious. There was considerable debate around both the size and timing of the spending consolidation. The Treasury

<sup>2</sup> The government initially set its long term objectives as gross debt below 30% of GDP, net debt below 20% of GDP, expenses around 30% of GDP, and rising net worth consistent with the operating surpluses and falling debt. Subsequent governments revised these objectives. For further information see Janssen (2001) and the Treasury (1995) (<http://www.treasury.govt.nz/legislation/fra/explanation/intro.asp>)

<sup>3</sup> See <http://www.treasury.govt.nz/assetsales/income.asp> for further details. Between 1987 and 1999 asset sales receipts were \$19.2 billion. The large sales during the 1990s were Telecom (\$4 billion), Bank of New Zealand (\$850 million), Forestry Corporation of New Zealand (\$1.6 billion) and Contact Energy (\$2.3 billion).

argued that it was necessary to cut spending to 'lessen exposure to debt build up and create investor confidence.' It argued that the consolidation should be achieved through spending cuts, rather than tax increases, and should be dealt with as 'quickly as is practicable' (Treasury, 1990). While it was acknowledged that the cuts might exacerbate the cycle in the near term, the benefits of a more sustainable fiscal position were likely to outweigh any transitory cost.

The government cut back the level of social welfare benefits by between 2.9% and 24.7% from 1 April 1991 and reviewed spending across the board. The cuts were expected to reduce social welfare spending by about 1.7% of GDP in 1991/92. But social welfare spending increased in that year, reflecting in part the rising unemployment rate.

Not all commentators agreed with the timing and size of the proposed consolidation. University of Auckland economics academics wrote an open letter criticising the decision to cut spending saying that it would exacerbate the recession. Other areas of criticism were the Government's perceived focus on the complete focus on turning around the deficits at the exclusion of the social imbalances it may be creating. For example Kelsey (1997) states National's 1991 budget 'formalised the stratification of New Zealand's society... in this decade of greed, talk of 'short-term pain for long-term gain' mean pain for the poor to achieve gain for the rich'.

A much improved fiscal position meant that automatic stabilisers were allowed to operate to some extent during the 1998 economic slowdown, leading to some deterioration in the fiscal forecasts.<sup>4</sup> In the 1998 Fiscal Strategy Report the government had lowered its net debt objective from 20% of GDP to 15%, as progress had exceeded earlier expectations.

The Government thought that the Asian crisis might have a serious and lasting impact on the New Zealand economy. While allowing automatic stabilisers to operate, it announced a cut of \$750 million per annum spread over 1997/98 to 1999/2000, largely from unallocated spending. At the end of 1998 the 'Policies for Progress' package was announced with a focus on strengthening the medium term fiscal outlook by lowering the future increases in New Zealand Superannuation. This change was estimated to save \$2.1 billion over 10 years, but with only a very small impact over the first three years (Fowle, 1999). This change was unpopular, and reversed by the next government.

### ***Dealing with surpluses***

With the fiscal position in surplus there was considerable debate about the best use of the projected surpluses. Alternative uses of the surpluses reflect, in part, the different views of the more medium term problems and how best to deal with them. As such they reflect a lengthening of the fiscal planning horizon beyond the next couple of years.

- Over 1994-95 using the surplus to repay debt was supported for both budget and economic reasons. Lower debt would lead to lower debt servicing costs and thus provide more room for spending increases in other areas. From an economic point

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<sup>4</sup> Automatic stabilisers refer to the effect the economic cycle has on the fiscal position through changing tax revenue and unemployment spending. See Tam and Kirkham (2001) for further discussion.

of view repaying debt would lean against inflation and balance of payments pressures (1995 BPS).

- The tax cuts proposed in the 1996 Budget were advanced as a way of locking in the gains of the early consolidation, and supporting future economic growth through increasing the incentive for work, thus raising the labour supply (1996 BPS).
- The spending that accompanied the tax cuts was aimed at building social cohesion, specifically supporting low and middle income New Zealanders (1996 BPS). Similar justification is provided for the \$5.0 billion package of the coalition government elected in 1996, and the \$5.9 billion<sup>5</sup> (revised to \$6.1 billion) package of the 1999 elected government. These packages also aimed at boosting social participation through raising educational and health outcomes.
- More recently, in 1999 the government announced that it would set aside a portion of the surplus in a dedicated fund to partially meet future NZS pressures.

Options for coping with the cost of an aging population has been a subject of much discussion over the 1990s. The 1996 Fiscal Strategy Report highlighted this debate by outlining the different fiscal tracks under the two extremes - a balanced budget and a tax smoothing approach. Under a balanced budget approach the government adjusts tax and spending levels to hold debt to GDP constant over the economic cycle. In contrast under the tax smoothing approach, taxes are set in the current year and held constant to ensure that debt is at a specified level at a chosen point in the future. This approach may require a significant build-up of assets by the government. The current government has chosen a variant of the latter method.

Other alternatives for dealing with the rising costs of an aging population included compulsory private savings in individual accounts. This idea was heavily defeated in a 1997 referendum.

## 4. Monetary policy

A number of the key fiscal policy themes carry through into monetary policy. New Zealand had a poor history of monetary management – New Zealand's inflation over the 1970s and 1980s was among the highest and most variable in the OECD. The multiple objectives for monetary policy were sometimes in conflict and included variables that monetary policy could not influence in the long run. The limited transparency and accountability for monetary policy decisions further undermined the credibility of monetary policy.

The new regulatory framework laid out in the Reserve Bank Act, 1998 sought to overcome these deficiencies. Its key principles of clear objectives, operational independence, accountability, and transparency reflected changes to public sector management throughout government. With this Act, New Zealand was the first country in the world to officially adopt inflation targeting.

The challenges facing monetary policy at the start of the decade cannot be underestimated – inflation targeting was a new concept requiring new tools and

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<sup>5</sup> Roughly half of this was funded by tax increases and the reversal of the tax cuts proposed by the previous government.

methods of operation, the economy was undergoing extensive and rapid structural reform, and low and stable inflation was but a distant memory.

By the end of the decade the Reserve Bank had achieved a remarkable stabilisation of inflation. However, the manner in which this stabilisation has been achieved was, and continues to be, the subject of considerable debate – how quickly should inflation or inflationary pressures be reduced and at what cost to growth and social outcomes, and what is the best way of implementing monetary policy.

In 2000, ten years after the implementation of the Act, the government commissioned a review of the operation of monetary policy. The review concluded that “monetary policy in New Zealand is currently entirely consistent with the best international practice of flexible inflation targeting”. The challenges now are how to best gain from the low inflation environment, with currency union persistently raised as a topic for conferences and discussions.

### Trends

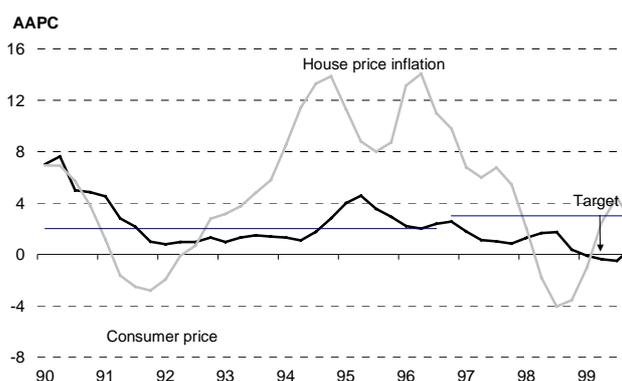
The first goal for the Bank was to achieve price stability, initially defined in the Policy Targets Agreement as consumer price inflation between 0-2% a year. This was to be achieved by December 1992. In the event the target was reached by December 1991.

Global and domestic recession contributed significantly to this “undershooting” of the time frame. Although monetary conditions were easing - the exchange rate and interest rates were falling - this was not sufficient to offset rising unemployment and negative economic growth.

Inflation remained within the target band until June 1995 – when one-off price increases including oil prices and government charges pushed it outside the 0-2% band. Inflation remained outside the band over all of 1996 (although technically the widening of the band in December 1996 meant that the breach was for three quarters).

Policy was tightened substantially in 1994 – with a jump in ninety-day interest rates from 4.5% to 9.5%. They remained over 7% till the start of 1998. The trade-weighted exchange rate rose more steadily from 56 in 1994 to peak

**Figure 11** – Inflation: consumer and house price



**Figure 12** – Monetary conditions: exchange rate and interest rates



at close to 70 in 1997, a rise of over 25%. Monetary conditions were tightened to head of rising inflation pressures – especially from house prices (see Figure 11) and dampen the surge in growth (figure 13).

In 1996 the incoming government broadened the inflation target from 0-2% to 0-3%. In addition the Policy Targets Agreement stated that monetary policy was expected to make its maximum contribution to sustainable economic growth, employment and development opportunities in New Zealand. These changes reflected concerns that monetary policy was unduly focused on short-run fluctuations and paid insufficient attention to the real economy.

GDP growth slowed over 1997 before falling to zero around 1998 and 1999 bringing a quick loosening of monetary conditions with interest rates falling to close to 4%.

The Policy Targets Agreement was revised again in 1999 by the new government. While the 0-3% target band was maintained, the Bank was to 'avoid unnecessary instability in output, interest rates and the exchange rate' as it pursued price stability.

By the end of the decade the economy and monetary policy were back close to equilibrium. Growth rebounded from the Asian crisis and droughts, but not to the levels seen in the mid 1990s, while interest rates rose, this was offset to a large extent by further falls in the exchange rate.

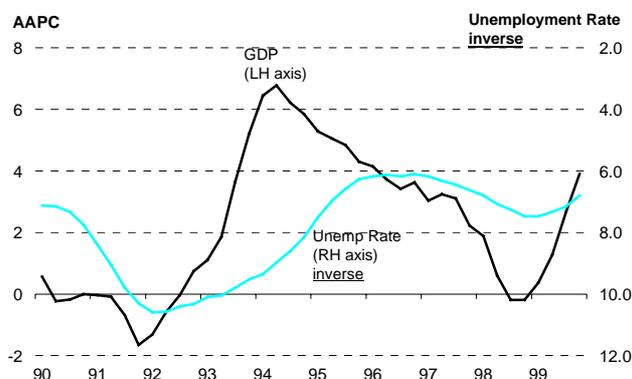
## Policy debates

### *The weight given to objectives other than price stability*

A key feature of the Reserve Bank Act is the sole objective of price stability. Having a sole objective was a sea change from the requirement to take regard of 'the desirability of promoting the highest level of production, and trade and full employment, and of maintaining a stable internal price level' of the previous Reserve Bank Act.

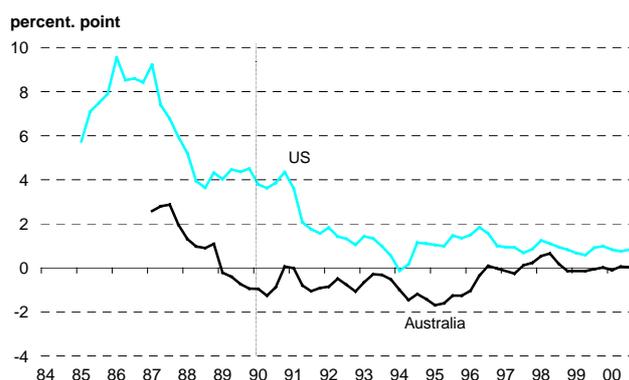
Some viewed the singular focus as excluding consideration of the real effects that monetary policy has on the economy. Dalziel (1993 p 87-88) was concerned about dropping the full employment objective – in particular he thought that anti-inflation policy would lead to a hysteresis effect on employment. The Council of Trade Unions

**Figure 13** – GDP and unemployment rate



Source: The Treasury

**Figure 14** – Premium on NZ 10 year government bonds relative to the US and Australia



(1989) criticised it as 'a misguided and dangerous initiative that is likely to [be to] the detriment of employment and economic growth.'

However the Reserve Bank (1989) argued that price stability 'is the only long run objective monetary policy can successfully pursue. ... [O]ver anything other than the very short-term, monetary policy cannot directly do anything to improve employment or output levels, or the competitiveness of the tradeable goods sector'.

The passing of the Act and the goal of disinflation set for the Bank provided ample fuel for the debate about the costs and benefits of the framework.

### ***Early 90s - how fast to get inflation down***

The government set out the precise inflation target band of 0-2% and the timeframe for achieving it to condition expectations (especially of wage and price setters) towards lower inflation.

The 0-2% range was designed to have shock value to indicate that the government was serious about lowering inflation. Financial markets did not react to these government statements immediately – possibly because they lacked credibility (Reddell, 1999). Similarly, the Treasury had already strongly advised against increasing the band for fear it might reduce the credibility of the government's commitment to price stability – and may signal a monetary loosening (Treasury, 1990).

While the process of bringing inflation down did have an adverse impact on growth and employment (Brash, 2000), the Bank was largely driven by Government pressure to get inflation down and fast (Reddell, 1999). For example, Roger Douglas' commented on 1 April 1988 that policy would be directed to reducing inflation to around 0 or 0 to 1%, and suggested that this should be reached by the time of the next election in 1990. Reddell (1999) states that neither the Bank nor the Treasury were pushing for a specific target date for the achievement of price stability.

### ***Mid-90s***

The debates around the inflation/growth trade-off came to the fore again as monetary policy was tightened over 1995 and 1996.

Over 1996 there was an increasing call for the Bank to take a more flexible approach to inflation targeting. It was seen as taking too much account of Auckland house price inflation to the detriment of the rest of the country – especially exporters who faced both very high interest rates and a high exchange rate. Dalziel and Lattimore (2001) state that this was seen not only as unfair, but also inefficient.

The relatively strict approach to inflation targeting was seen as limiting growth. The Council of Trade Unions (1994) commented that 'we were told that the reward of price stability was growth. But now we are told that economic growth has to be reined in because it threatens price stability'.

In addition, some saw the approach as divisive. Kelsey (1997) states that 'this obsession with one economic indicator ... benefited the rich, at the expense of wage labour, families and the poor.

From 1995 the Reserve Bank increasingly took a more medium-term approach to meeting its inflation target (Mayes, 2000). In 1999 the Reserve Bank stated that 'our conclusion has been to adopt a more medium term approach which attaches more weight to the desirability of stabilising output, interest rates and the exchange rate, while still aiming to keep inflation within the target range' (Reserve Bank, 1999). This approach was subsequently made explicit in the PTA signed with the new Treasurer.

The more flexible approach does not necessarily represent the Bank simply responding to the criticisms of previously strict inflation targeting approach. Drew and Orr (1999) argue that the key reason the Bank adopted a more flexible approach was the shift in expectations that low inflation was the norm and not the exception. This allowed the Bank more room to consider the impact of monetary policy on a wider range of variables. It does not necessarily suggest that the Bank would have taken a different approach over the 1990s if it had the opportunity to do it all again.

The debate about the appropriate weight that monetary policy should give to the short-run stabilisation of real variables continues. However, the debate seems to have drifted away from the appropriateness of price stability as the monetary policy objective to how best to realise this and broader goals within the current framework. Submissions to the review of the operation of monetary policy undertaken by Lars Svensson canvassed options of lengthening the policy horizon or softening the inflation targets bands.

### ***Late 90s - Best instrument to implement monetary policy***

The final key debate in the 1990s was the best way to implement monetary policy. Under the Reserve Bank Act the Bank has operational independence and discretion over the instruments it uses.

At the start of the decade the Reserve Bank was using settlement cash as its key instrument to control inflation, combined with signals as to the bank's comfort with general monetary conditions. The threat to adjust the cash target if necessary became a powerful tool (Reserve Bank 2000).

During the 1990s the Bank put increasing weight on the exchange rate combined with interest rates to estimate monetary conditions. In 1997 the Bank formally operationalised this approach through the monetary conditions index (MCI). Under the MCI a 2% change in the TWI was equivalent to a 1% change in the 90 day rate. It reflected the Bank's sense of the medium term impact of monetary policy – although they recognised when it was introduced that trade-off was a rough approximation (Reserve Bank 2000, Dennis 1997).

Operationally, the Bank set its 'comfort level' of the MCI with bands of +/- 50 points. However the tight bands led to greatly increased interest rate volatility as interest rates moved to offset day to day exchange rate movements.

Svensson found that the MCI contributed to the late easing of monetary policy over 1997/98 in response to the onset of the drought and the Asian crisis. He argues that it allowed increases in interest rates to offset the substantial exchange rate depreciation with little burden of proof. He sees the period of using the MCI a significant departure from best international practice.

In March 1999 the Bank introduced the Overnight Cash Rate. This reduced the short-term volatility in the interest rate (Svensson, 2001) and was in line with common

international practice. While commentators may disagree with individual decisions the Bank makes to change the OCR, there is a reasonable consensus that at least the instrument of monetary policy is right (Svensson, 2001).

## 5. Savings

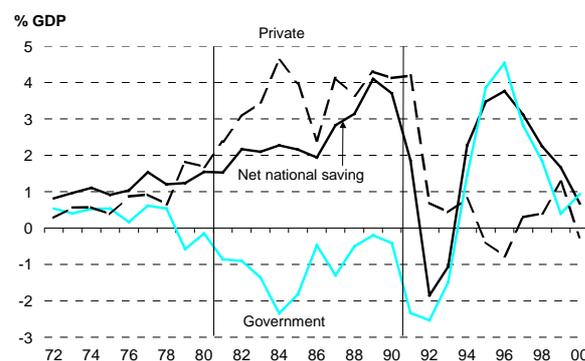
Average net national saving rates fell over the 1990s driven by a fall in private saving, but government saving moved positive for the first time in over a decade. Whether the falling saving rates were a problem and whether the government could do anything to correct them was the subject of much discussion over the 1990s, especially with respect to saving's effect on growth, the current account and future demand for government services.

The broad conclusion was that the falling saving rates were not a problem provided they reflected individual's decisions, not government's. However there remained an on-going uneasiness especially around the difference between saving and investment. While the basic tenet of 'consenting adults' remains a forceful framework, there is an increasing recognition that the government should at least play a monitoring role – especially given the measurement issues.

### 1. Trends in savings

Net national saving in the 1990s was very different to the 1980s and earlier. While measured net national saving was somewhat lower in the 1990s averaging 1.9% of GDP compared with 2.4% of GDP in the 1980s, the surprising change was the falling private saving that was partially offset by rising government saving. This was a turnaround as the government had been dissaving for over a decade. In addition, saving in the 1990s was significantly more cyclical than earlier.

**Figure 15 – Net national saving by component**



Source: Statistics New Zealand

The reason for the decline in private saving was thought to be a short term reaction to the financial market deregulation which increased access to bank credit, lower inflation, lower fiscal deficits and increased transfers as a percentage of household income (Barry, 1991 and OECD 1998). Woolford et al (2001) supports this by showing that offshore borrowing by banks to fund home mortgages is the fastest growing component of the current account deficit.

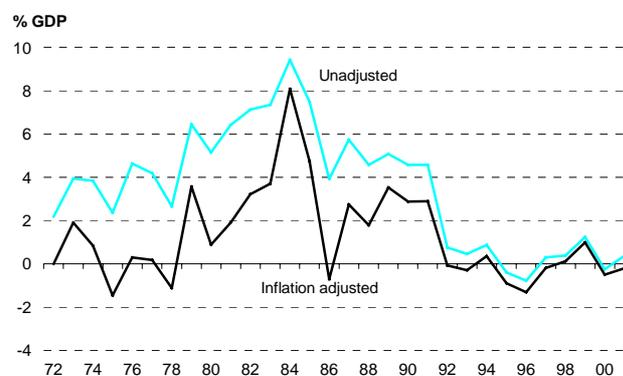
The falling rates of private saving are not unusual from an international perspective. Private saving rates fell throughout the 1990s in Australia, Canada, Germany, Italy, the UK and the US in a similar fashion to the fall in the New Zealand. However falling saving rates in other countries come off a significantly higher base than in New Zealand. New Zealand is the only one of these countries with a measured negative saving rate (Claus and Scobie, 2002).

A number of measurement issues make the saving trends difficult to interpret, and at times frustrated the policy debates discussed below.

The trend in saving changes markedly if reasonable adjustments are made to these measured saving rates. Two such adjustments are for inflation, and spending on items that produce a long run benefit.

Adjusting measured saving for the effects of inflation makes the recent phenomenon of zero and falling private saving rates not unusual historically. In addition, inflation adjusted private saving does not have a downward trend over the 1990s, with a Markov switching model finding no evidence of a structural break in private saving during the decade (Claus and Scobie, 2001).

**Figure 16 – Net private saving: measured and inflation adjusted**

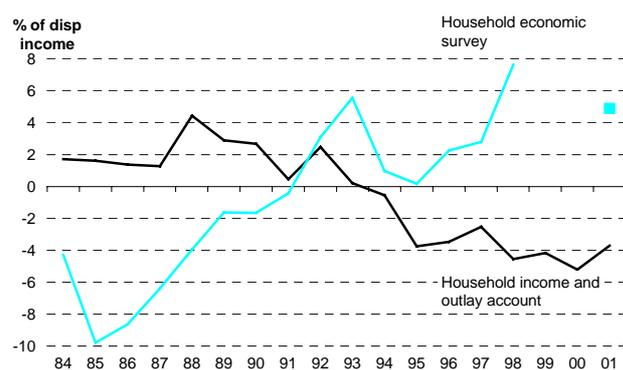


Source: Statistics New Zealand, Claus and Scobie (2001)

Adjusting saving for a proportion of ‘spending’ on items that produce a long run benefit, such as on education, health, (public and private), research and development and durable consumer goods, significantly lifts the level of measured saving.<sup>6</sup> For 2001 it could arguably raise New Zealand’s national saving rate by 21.2% of GDP.

In addition, there are a number of alternative methods to measure a country’s saving to those discussed above. For example saving could be a flow, the difference between income and spending as above, or the change in a stock, which would also account for the change in the country’s assets, over the year. For households the implied saving rate under the stock measure is significantly greater than that under the flow measure.

**Figure 17 – Saving – SNA and HES**



Source: Statistics New Zealand, Claus and Scobie (2001)

Even under the flow method of measuring saving there are alternative measures that tell competing stories. The Statistics New Zealand measure compiled under SNA principles shows the falling private saving rate discussed above. However, saving measured from the Household Economic Survey<sup>7</sup> show private saving rates have been rising over the 1990s (see Figure 17).

<sup>6</sup> Although the measured level of saving increases, so to does the level of investment under this adjustment, thus the gap between saving and investment remains constant.

<sup>7</sup> footnote on what HES is

## 2. Policy debates

It is difficult to state that the saving rate was too low in New Zealand over the 1990s given the measurement issues discussed above. The debate has focused therefore less on the optimal level of saving (as we can't measure whether we've achieved it - if we knew what the optimal level was) but on whether the level of saving was impinging on growth and the current account deficit – and hence raising financial vulnerability problems, or whether it was building up future demands for government services (such as pensions) by today's non-savers. Behind these debates was lurking the question of whether there was a role for government intervention to encourage private saving.

### ***growth***

Whether saving determines growth, or growth determines saving, or whether there is no causal relationship was much discussed.

Barry (1991) states that higher national saving is likely to contribute to higher income growth and greater resilience in the economy. Feldstein and Horioka (1980) agree to the extent that they find that even among industrial countries, capital mobility is sufficiently limited so that investment rates ultimately depend on domestic savings rates.

There is some evidence that saving may follow from growth, rather than the other way around. Masson, Bayoumi and Samiei (IMF 1995) find a positive association between GDP growth and private saving, but the causal effect in either direction is unclear. On the other hand, evidence from Carroll and Weil (1994) suggests that GDP growth leads to higher aggregate saving both public and private.

Claus, Haugh, Scobie and Törnquist (2001) similarly find no evidence that investment and hence economic growth has been constrained by low domestic saving rates.<sup>8</sup> In addition they add that a floating exchange rate, a strong financial sector, and sound macroeconomic policies help reduce the risk that New Zealand will not be able to attract foreign capital in the future.

### ***current account deficit***

By definition the current account deficit will increase as domestic saving falls for a given level of investment. As explained in section 6, this may affect the sustainability of the current account deficit, and may increase New Zealand's vulnerability to rapid changes in foreign investor confidence.

In terms of sustainability, it was argued that as the saving shortfall was from the private sector, rather than directly government induced, it was a matter for the private sector to sort out. In this case, private sector agents are best placed to assess the profitability and sustainability of their saving and investment decisions.

In terms of vulnerability falling domestic saving makes New Zealand increasingly reliant on the continuing willingness of foreigners to lend, as investment requires someone to save, either overseas or domestically. In addition, New Zealand becomes increasingly dependant on ensuring that projects earn a sufficient return to repay the interest and

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<sup>8</sup> Although they ignore the effect of domestic saving on the risk premium.

principal of the borrowed funds. Over the past 27 years the accumulated deficits have amounted to \$78 billion. This combined stock of borrowing does mean New Zealand may be vulnerable to sharp shifts in the exchange rate or interest rate if investor sentiment changes suddenly. But sudden and large changes in the exchange rate are likely to reflect bigger structural problems than a shortfall of saving (Kaminsky et al 1997).

### ***future demand for government services***

If household saving is low, then there may be a larger demand for government provision of social services in the future. Households may under-save by mis-estimating future income or spending streams either through the future not being as expected (Coleman, 1998) or through households not adequately taking account of the future.

This concern was behind much of the superannuation funding debate in the 1990s; including the Retirement Income Act in 1993 that set up the Office of the Retirement Commissioner. Periodic reports on retirement income policies are also required under the Act to ensure the issue of retirement saving remains under active consideration<sup>9</sup>. Other examples include a proposed compulsory private saving scheme, the Super 2000 Taskforce, and the current (government) New Zealand Superannuation Fund.

However, the low household saving experienced in the 1990s may reflect the cohort born between 1920-1935, which had significantly lower saving rates, entering their peak saving years (Choy, 2000, Gibson and Scobie, 2001). Future cohorts may save more than this current cohort – suggesting that future demand for government services may not be building up.

Consistent with this finding, Kim, Buckle and Hall (2000) find that the falling household saving rate is consistent with consumption smoothing. If this is the case, then demand for government services in future may not be building up.

### ***Does the fall in private savings suggest a role for the government***

Both the Treasury and The Reserve Bank have closely monitored the fall in private saving over the 1990s, with many policy papers and Reserve Bank Bulletin articles prepared.

While the national saving ratio is not directly controllable by the government, its influence includes the ability to:

- increase government saving. This is likely to increase national saving, although it is likely to be partially offset by a reduction in private saving. Seater (1993) finds that the pass-through from the change in government to private saving is around x% [50%?].
- reduce tax distortions. Janssen (1996) highlights potential reforms as including ensuring that interest income from superannuation was charged at the taxpayers marginal rate, rather than at the (then) top tax rate of 33%, and taxing capital gains on owner-occupied housing .

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<sup>9</sup> See [www.sorted.org.nz/lib\\_other\\_period.php](http://www.sorted.org.nz/lib_other_period.php) for further details.

- improve quality of saving through encouraging entrepreneurial behaviour.
- encourage voluntary private saving through the Retirement Commission.
- Legislate for compulsory private saving – such as through the scheme put to referendum in 1997. The overwhelmingly rejection of the compulsory private superannuation scheme demonstrates the difficulty gaining consensus in this area. In addition, the effect of compulsory saving may be limited. Engen, (1995) concluded that saving incentive plans may not raise national saving, the contributions may be financed by transferring existing taxable assets, by reallocating current saving that would have been done anyway, or by increasing debt.

## 6. Current account

Over the 1990s the current account deficit continued the downward trend of the 1980s, reaching over 7% in 1997 – well over the 5% of GDP level used as a trigger for some analysts. This caused concern around the sustainability of the deficit – and the degree to which it made New Zealand vulnerable to external shifts in investor confidence.

The policy advice was that provided the deficit represented private sector contracts willingly entered into, then policy change designed solely to improving the current account was not necessary. But maintaining fiscal credibility was important.

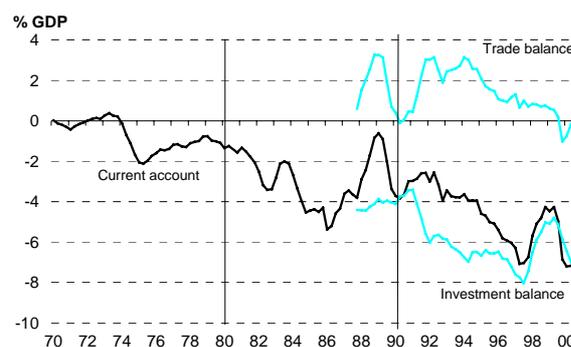
By the end of the decade much of the heat had gone out of the debate as the deficit reduced. But there remains an outstanding question how long New Zealand can continue to run sizeable current account deficits.

### Trends

The current account deficit became an increasing concern over the second half of the 1990s. It started the decade at 3.7% of GDP, but had nearly doubled to 7.1% of GDP by mid 1997.

Concern reflected that the deficit level was above the traditional concern level of 5% of GDP, even after excluding the government-imported frigates in 1997 and 1999 (both around 1% of GDP). The deficit was as large as the deficits in Thailand before its economic crisis in 1997, and in Mexico just before the peso crashed in December 1994 (see Economist, 1998).

**Figure 18 – Current account balance**



Source: Statistics New Zealand

Moody's downgraded New Zealand's sovereign credit rating in January 1998 from AA1 (stable) to AA1 (negative) and again in September 1998 to AA2 citing concern about the size of the current account deficit and external indebtedness.

The deficits were largely private sector related, as reflected that the rising overseas debt was driven by large increases in private sector debt, particularly bank borrowing.

By the end of the decade New Zealand was more dependent on net external capital than any other developed country (Woolford et al 2001).

**Policy debates**

A current account deficit signals a shortfall of domestic saving to fund investment. To cover the shortfall of domestic savings requires foreign savings – or capital inflow into New Zealand.

From a policy perspective the debate focused on the sustainability of persistent and large current account deficits and the effects on external vulnerability. There was also political concern around the effect of the rising foreign ownership that the current account deficits implied.

**Sustainability**

The rising deficit becomes unsustainable when the country is unable to repay the interest and principal on their debt. This limits the ability to continue to borrow to finance investment. A drastic policy shift (for example, a sudden policy tightening causing a large recession) may be required to ensure the deficit becomes sustainable or lead to a 'crisis', such as a collapse in the exchange rate (Milesi-Ferretti and Razin, 1996). Such thinking led to widespread concerns about current account deficits in Australia in the 1990s.

On the other hand, it was argued that the current account deficit was not a serious problem as it reflected private sector borrowing backed up by an open economy, with a floating exchange rate and transparent policy settings (Carran, 1999, Collins et al, 1998). This reflects that if the current account deficit is a result of decisions between 'consenting adults', or rational private agents who borrow and save based on expected

**Figure 19 – Overseas debt (% GDP)**



Source: Statistics New Zealand,

**Figure 20 – Current account identity, 2001**

Total saving 7,678	Current account deficit 5,338	Foreign saving 5,338	Investment 7,341
	Net national saving 2,340	Government saving 1,922	
		Household saving -2363	Statistical discrepancy 337

Source: Statistics New Zealand, Claus and Scobie (2001)

future returns. Therefore, the deficit will sort itself out – under the proviso that there are no distortions to saving and investment decisions and the fiscal position is sustainability (Corden 1994, Pitchford 1989).

There was however, some uncertainty around whether the current account deficits were temporary (ie reflected adjustment to reforms) or a structural problem (Janssen 1998). There is a stronger case for government involvement if the deficit is seen as structural.

### ***Vulnerability***

While the current account may be sustainable and should not theoretically pose a risk, the perceptions of foreign lenders may be different, especially if they use rules of thumb such as a set percentage 'worry' level, or the check-list approach of Milesi-Ferreti and Razin (1996). In those circumstances, although the current account may be consistent with model-based predictions of GDP and consumption growth, there may nevertheless be a risk of capital flight if New Zealand is hit with a shock that reduces foreign investor confidence.

However, it was argued that New Zealand's current account deficit likely represents a vote of confidence by foreigners in our economy (Collins et al, 1998 and Brash, 1998). Moreover, foreign denominated liabilities (65% of total) were largely hedged, reducing New Zealand's vulnerability to exchange rate movements (Woolford et al, 2001). Finally, the current account is not a good predictor of crises – and therefore of vulnerability (Kaminsky et al, 1997). While current account deficits were on average 2 percentage points higher in crisis countries than non-crisis countries no difference was apparent in the Asian countries affected by the crisis (IMF, 1999).

### ***Proposed policy prescriptions***

The policy advice in the mid 1990s was that any policy changes needed to be directed towards the medium term, rather than 'fixing' the CAD directly. The government could make some changes that would improve domestic savings, however, these should be done because they were good policy, not as a measure to fix the current account. (Janssen 1995, Janssen 1998, Carran 1998)

In addition, the government needed to maintain a sound macro-economic framework; including a floating exchange rate, a sound fiscal position (low debt and operating surpluses) and strong banking supervision. Currency crises in countries with strong fundamentals are rare (Kaminsky and Reinhard, 1999).

Maintaining fiscal credibility was highlighted as very important. For example, Treasury reports in 1997 saw the continued inflow of foreign capital as dependant on confidence in the Government maintaining prudent fiscal policy and macroeconomic stability. The OECD (1998b) said that 'given high external deficits and debt levels, preserving a sound fiscal position is crucial to maintaining confidence in the currency'.

By the late 1990s the continuation of deficits led to a fresh look at vulnerability issues, although some of the heat has gone out of the debate with the deficit expected to fall below 3% of GDP in 2002 (2002 Budget Policy Statement). But it remains an important and closely watched economic indicator, by analysts, the Treasury and the Reserve Bank (Woolford et al, 2001). Even if theory tells us that there isn't a problem,

expectations matter. If the market thinks we have a problem, then we have a problem (see Milesi-Ferreti and Razin (1996) and Ostry (1996)).

Attention is increasingly moving toward analysis of the trends underlying the current account deficit, such as the composition of liabilities and the maturity structure (Woolford et al, 2001). For example, a current account deficit financed by foreign direct investment is likely to be less worrying than portfolio investment.

## 7. Productivity

### Key themes

Over the 1990s productivity improved, but slower than expected and relative to our major trading partners (OECD, 1998). The policy debates have centred around whether there was any significant payoff from the reform process. Today, we remain unsure why productivity growth was relatively subdued over the 1990s, but there is an increasing discussion of a role for government in supporting productivity and therefore economic growth.

### Trends

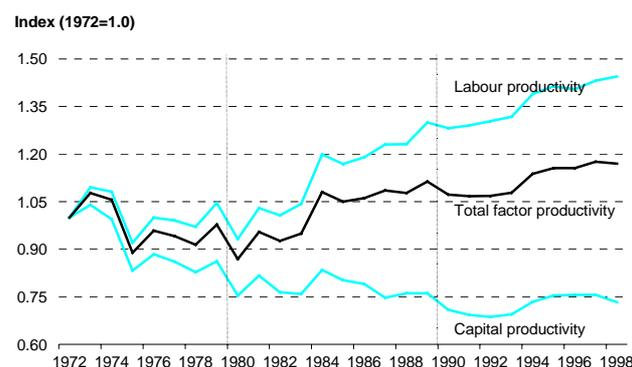
Productivity performance in the 1990s was below expectations at the start of the decade. While total factor productivity did rise it was by 0.6% a year, this was below the average OECD level of x%, and the long run average for developed countries of 1.5%.

The low productivity growth reflected rising labour productivity of 1.2%, about half the level of the 1980s, and falling capital productivity of 0.6% (Diewert and Lawrence, 1999).<sup>10</sup>

Until the early 1990s, labour productivity growth dominated aggregate productivity gains, but slowed thereafter while the pace of capital productivity increases picked up.

The economic cycle in the start of the 1990s (Dec-90-Jun-97) was characterised by strong growth in the labour input, with hours worked rising x%. In contrast, strong

**Figure 21 – Productivity**



Source: Diewert and Lawrence

<sup>10</sup> Productivity measures output produced per unit of input. Thus rises in productivity reflect that more output is being produced for no change in inputs. Total factor productivity (also called multi-factor productivity) measures output per unit of a bundle of inputs (such as capital and labour, but can include measures of the quality of labour such as average years of education). Capital productivity is output per unit of capital input, while labour productivity is output per unit of labour input (usually hours worked or full time equivalent employees).

growth in capital stock (x%) was a feature of the latest economic cycle (Jun-97 – Dec-01). Both cycles had similar per capita growth (McLellan, 2001).<sup>11</sup>

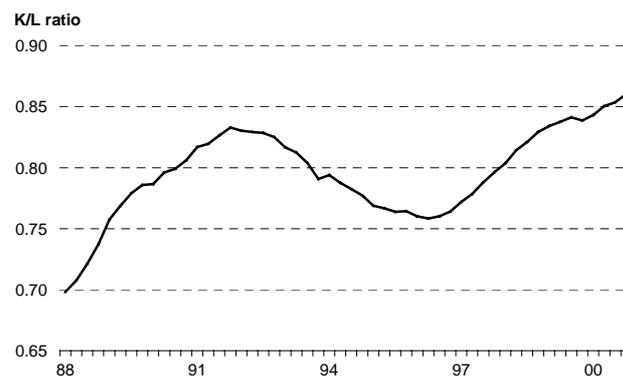
The trends suggest that technology is labour augmenting as labour productivity continued to grow during a period of strong growth in the labour input (relative to growth in the capital stock) while capital productivity declined during a period of capital deepening.

Sectoral breakdowns suggest that communications and forestry have had very high productivity. Productivity has barely changed since 1978 in machinery, community services and construction. But finance sector productivity has dropped significantly, especially over 1988 to 1998. Developments in manufacturing industries have been mixed – five of the 9 sub sectors within it have boosted their TFP growth since 1993 (Diewert and Lawrence, 1999).

However, the productivity numbers at the sectoral level look implausible, especially for the finance industry – encouraging few policy implications to be drawn. In the finance sector measures of productivity fell 27% in the ten years to 1998.<sup>12</sup> This is despite:

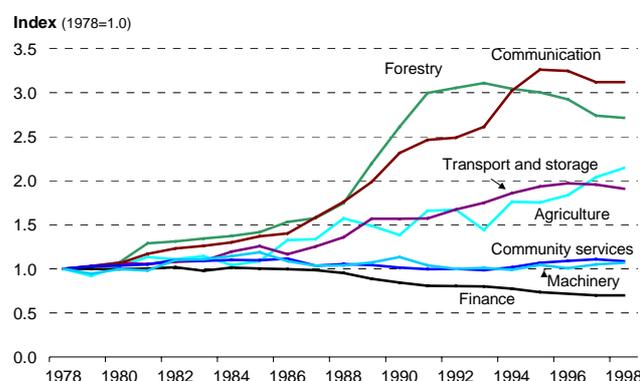
- the rapid deregulation and automation in the sector
- many financial firms are owned by Australian parents and presumably have similar operating styles. Productivity for the finance and insurance sector in Australia grew 3.7% over 1993/94 to 1999/2000 (p 82 OECD, 2001).

**Figure 22 – Capital / Labour ratio**



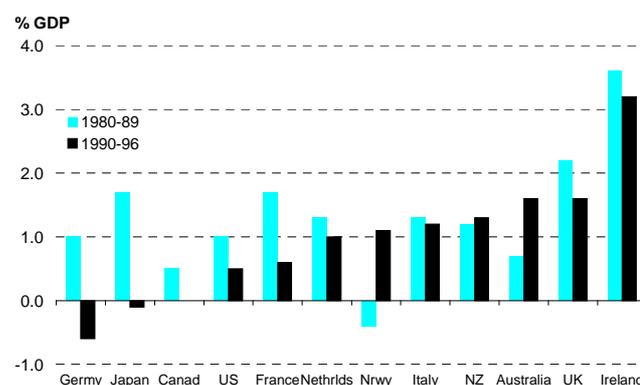
Source: Diewert and Lawrence

**Figure 23 – Sectoral productivity rates**



Source: Diewert and Lawrence

**Figure 24 – International comparison**



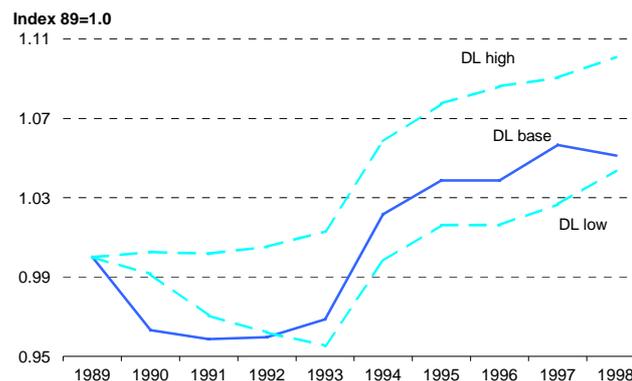
Source: OECD (1998a)

<sup>11</sup> Based on peak-to-peak analysis. McLellan (2001) also uses trough-to-trough analysis that produces quantitatively similar results.

<sup>12</sup> This is a commonly found result from NZ statistics. It does not reflect Diewert and Lawrence's methodology. See for example x.

**Figure 25 – Alternative measures of productivity**

These measurement issues make TFP numbers unreliable and policy implications difficult. In a definitive study of New Zealand trends, Diewert and Lawrence produced over 30 different measures of productivity in 340 pages. As a result, their estimates of TFP for NZ vary from 10.1% to 4.4% over 1989-1998, with 5.1% under their preferred measure.<sup>13</sup>



Source: Diewert and Lawrence (1999)

### Policy debates

At the start of the 1990s Smith and Grimes (1990) outlined four possible reasons why New Zealand's productivity growth had been very low historically. These were; an inward oriented economy with highly protected domestic markets, lack of internal competition, high and variable inflation and unfavourable terms of trade.

By the end of the 1990s many of these impediments were removed but productivity performance remained below that in the 1980s and economic growth had continued to lag the OECD average. Although positive, productivity growth over the 1990s generally disappointed given the structural reforms that had occurred (OECD 2000).

As a consequence the policy debates during the 1990s were around whether the reforms had paid a dividend.

### ***Did the reforms pay a dividend?***

Studies looking for a structural break in the productivity series after the reforms often produced conflicting results.

#### **Yes**

Some studies found evidence that the reforms did have a productivity payoff – at least in some sectors.

The 1993-95 growth spurt was interpreted by some as the start of the productivity payoff from the reforms (1996 PEB, Evans et al 1996), but the growth soon unravelled.

Fare et al (1996) found evidence that TFP growth did improve in the majority of sectors post reforms (94-96) compared with before the reforms (pre –1984). Further they state that improvements in TFP come from improved technological progress (shifting out of the best practice frontier). But, the individual sector results are controversial and should be treated with considerable caution as they rely on estimates of the 'best practice frontier' for each industry (Hall 1998), and the data for the post reform period ends in 1996 at the top of the economic cycle.

<sup>13</sup> Variants include the data source (eg Statistics New Zealand, OECD), measures of output (eg economy wide, production only), capital (eg net or gross) and labour (hours worked or employment).

Further sectoral implications were drawn by Hall (1998) who states that further research would be required to establish or reject any casual link, but prima facie all the sectors with improved TFP were affected directly or indirectly in significant ways by major microeconomic reforms and restructuring that over the previous decade.

### ***Maybe***

Other studies were more equivocal about whether there really was a productivity pickup over the 1990s.

While it was acknowledged that productivity lifted over 1993-1995 it was argued that there was no evidence of a structural break in the productivity trend (Sarel, 1996) and that it might reflect a cyclical upswing (Hall, 1996). Although Diewert and Lawrence (1999) found evidence of a structural break in 1993, this was highly sensitive to the specification of the productivity function.

From a different perspective Skilling (2001) argues that the reforms did pay a dividend – but the substantial gains were realised in the years immediately after the reforms with little further change in the 1990s.

In contrast, other commentators still believed that a future productivity burst was possible. For example the OECD (2000) stated that : *‘while productivity performance has been disappointing given the scope of reforms undertaken, there are promising signs that this may be turning around.’* In addition the 1999 PEB showed continuing optimism *‘Although recent economic performance suggests NZ may not close the gap with the OECD average in the near future, there are a number of causes for greater optimism in the longer term [that] should improve performance relative to other countries.* But the possible limits to catch-up were flagged early on – reflecting New Zealand’s location, size and preferences for leisure and security (1993 PEB).

The lack of clear evidence of stronger productivity growth in the 1990s is puzzling. New Zealand’s performance was compared to other countries that underwent similar reforms, yet appeared to reap significantly larger benefits over the 1990s than New Zealand.

For Australia the OECD (2001) found that the reforms were instrumental in driving the higher productivity growth over the 1990s. Although it was acknowledged that direct links between particular microeconomic reforms and productivity outcomes are difficult to find. While for the UK, Card and Freeman (2002) found that the economic reforms contributed to halting the nearly century long trend in relative economic decline of the UK relative to its historic competitors, Germany and France.

This raises the question about why New Zealand failed to reap similar benefits. It could be that New Zealand was unlucky, and the shocks that hit it during the 1990s dwarfed the reform dividend. This is supported by Easterly et al (1993) who find that random shocks (eg changes in terms of trade) explain as much of the variation in growth over 10 year periods as do country policies. Alternatively Card and Freeman (2000) suggest that the reforms were not the right medicine for New Zealand.

A number of questions remain outstanding, in part reflecting the lack of progress during the 1990s in understanding the productivity trends, and even the concept of productivity remains elusive.

Nonetheless, there is a feeling that the reforms failed to deliver the expected gains. While it is agreed the macroeconomic reforms, monetary and fiscal, both delivered the desired macroeconomic stability, there is increasingly a public debate around the role of government in microeconomic policy. This is very different to the types of strategies being raised at the start of the 1990s to 'fix' NZ's low productivity growth.

This debate is still relatively new and likely to flow on through the next century.

## **8. Conclusion**

Over the 1980s the policy debates centred on the reform process and how best to 'fix' the New Zealand economy. The 1990s brought a growing awareness that there was no quick fix for the economy in general. While some indicators improved dramatically, others showed little change or headed backwards. The debates moved on from the reforms and focused on improving specific areas at the margin. By the end of the role of government was being seriously reconsidered in areas such as raising private saving rates and lifting New Zealand's productivity growth. This is quite stark contrast to the start of the decade, when removing government interference or distortions was the primary aim.

Looking forward, only one thing is certain – by the end of the current decade the nature of the debates will have changed fundamentally to those in vogue now.

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