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**Assessing Structural Adjustment and Economic Reform:**

**The Case of New Zealand**

**Viv B. Hall**

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# **ASSESSING STRUCTURAL ADJUSTMENT AND ECONOMIC REFORM:**

## **THE CASE OF NEW ZEALAND**

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### **Abstract**

Against the background of a set of macroeconomic and microeconomic problems which were diagnosed as more deepset and wide-ranging than for other developed economies, New Zealand has experienced more than a decade of significant economic reform and structural change. During this time, many other countries have been reforming and adapting to varying degrees. New Zealand has made very significant progress over the 1984-1997 time period in most key macroeconomic and many microeconomic areas, but still faces major challenges of sustainability and improvement on almost all fronts. The need for the latter is due variously to the relative ease with which macroeconomic imbalances can re-emerge under lax policy settings, the still relatively inconclusive evidence on the sustainability of improved economic and productivity growth performance, a widespread desire to reduce the NAIRU further, and the likelihood that in recent years other countries' reforms have eroded a number of the comparative advantages New Zealand had achieved in key areas. In the absence of a further major crisis, another 'big bang' sequence of reforms seems unlikely, especially under New Zealand's current MMP electoral system. But the international and domestic economic evidence is certainly consistent with considerable ongoing adjustment being required.

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# The Case of New Zealand

Viv B. Hall

## 1. Introduction

Two basic views underpin this paper: first, by 1984, New Zealand had developed unsustainable macroeconomic imbalances and serious microeconomic problems<sup>1</sup>, and secondly, deep seated macroeconomic and microeconomic problems often take much longer to turn around and require more persistent corrective action than many originally envisage<sup>2</sup>. Set against that background, New Zealand has made very significant progress over the past decade in most key macroeconomic and many microeconomic areas, but still faces major challenges of sustainability and improvement on almost all fronts.

The paper commences with a brief background to New Zealand's reform processes, followed by a selective evaluation of macroeconomic performance to date. The focus is on economic growth, unemployment, inflation, fiscal and external imbalances, and debt sustainability.

Structural adjustment and other microeconomic empirical evidence is evaluated next, initially from a sectoral perspective, and then for goods and services markets and labour markets. The degree of progress on structural adjustment, productivity performance, performance of the public sector, the role of New Zealand's 'light-handed regulation' regime, and the role of the Employment Contracts Act receive particular attention.

Policy implications, including sequencing and so-called 'big bang' versus 'gradualist' issues, are then considered. The questions of sustainability of macroeconomic progress to date, and directions for further significant microeconomic reform affecting goods and services and labour markets are also addressed.

## 2. Brief Perspective on New Zealand's Reform Processes

New Zealand's wide-ranging economic reform processes now span more than a decade<sup>3</sup>. They had their roots in long standing, deep-seated macroeconomic and microeconomic problems, and increasingly inappropriate economic policies<sup>4</sup>, but had their immediate catalyst in the foreign exchange crisis of July 1984. They therefore received their initial momentum from the triple trigger mechanisms of chronic economic problems, a major economic and constitutional crisis, and decisive leadership<sup>5</sup>.

Some authors have characterised the reforms as 'big bang' in nature (e.g. Brash, 1996, p 10; Bollard *et al.*, 1996, p 21). The term seems to receive its justification from both the rapid pace of reform during the first two and a half years, and their especially

comprehensive nature. Of course, many other OECD countries have carried out various types of reforms since the mid-1980s, but after considering the six basic areas of international trade, financial markets, the corporatisation, privatisation and deregulation of industries, tax reform, public expenditure and labour market policies, Henderson (1996, p 10) concluded that "If... we consider all the six headings together, New Zealand clearly stands out ...no other OECD country has such a portfolio of liberalising measures to show." He singles out for particular mention New Zealand's 'least distortive system of taxation', reductions in public expenditure relative to GDP that have proved 'more than temporary', and the Employment Contracts Act 1991 which "...represents a larger step towards greater freedom in labour markets than has so far been taken in any other OECD country". Lloyd (1997, p 117) has singled out the Reserve Bank of New Zealand Act of 1989 and trade policy as areas of reform which were particularly radical and innovative.

A summary chronological listing of the Economic Reforms can be found in **Table 1<sup>6</sup>**. Rather than be categorised as big bang, the reforms can alternatively be thought of as having occurred basically in 'two significant waves'. For example, according to Dalziel and Lattimore (1996, p 92), "In the first wave, the New Zealand dollar was devalued by 20 per cent and then floated on foreign exchange markets; financial markets were deregulated; product markets were opened up to greater domestic and international competition; government subsidies to private producers were phased out; income taxes were reduced and GST was introduced; government trading departments were corporatised into commercial state-owned enterprises; the privatisation programme began; monetary policy was directed towards achieving and maintaining price stability [via the Reserve Bank Act, 1989]; and the task was begun of bringing the public accounts into line with generally accepted accounting practice [the Public Finance Act, 1989]. In the second wave of reform after 1990, key components of New Zealand's welfare state were restructured, and the labour market was deregulated under the Employment Contracts Act [1991]. [the Fiscal Responsibility Act came into force 1 July 1994]." So, against a background of the extent of reform to date and the challenges which still lie ahead, the current New Zealand Government's Coalition Agreement, and the country's MMP voting system, an important issue now is whether a third either revolutionary or consolidatory wave will follow.

It is also important to emphasise at this stage in the paper two other key elements: the 'intellectual underpinnings' of the reforms, and the extent to which they have been market-based. The intellectual underpinnings or underlying economic principles stressed by Evans *et al.* (1996, p 1862) are "...the pursuit of: coherent policies on a broad front; credibility and time consistency; a comparative institutional approach; and efficient contracting arrangements"; while Bollard *et al.* (1996 p 7) have singled out the 'new microeconomic' theories of contestability, principle-agency and public choice. Lloyd (1997, pp 118-119) also emphasised the 'simplicity' of reform methods and their 'least-interventionist' nature.

To this point in time, there seems widespread but not universal recognition that significant progress has been made. It is possible to identify early particular success stories, but more generally it has to be said that the adverse effects of the major macroeconomic stabilisation policies were being felt at least through to the early 1990s, and that these had a somewhat swamping effect on structural adjustment

processes. Cyclically strong economic growth since mid-1991 has meant that successes in macroeconomic areas are now identifiable. But that same economic growth has, at least until recently, also continued to disguise the extent to which structural gains have been made, and the extent to which remaining microeconomic issues still need to be more clearly identified and addressed. Income distribution effects continue to be controversial. We now consider some of these issues in greater detail.

### 3. Macroeconomic Performance

It has been well documented that by the mid-1980s, New Zealand's macroeconomic problems included chronically low economic and productivity growth, significant fiscal and external imbalances, high and variable average inflation rates, significant disguised and rising unemployment, and potential public and external debt sustainability problems. Major progress has been made in correcting these since then, but maintenance of the stable macroeconomic policies so necessary to underpin future economic and productivity growth and improved living standards remains an ongoing challenge.

Like many other countries, New Zealand has successfully reduced unsatisfactorily high and variable **inflation rates** to underlying rates which have been low and stable since December 1991. This quest for ongoing price stability, initially within a 0-2% target range and more recently within a 0-3% band, was tackled from 1987 to 1990 by conventional monetary disinflation policies and thereafter within the framework of the now internationally well-known Reserve Bank of New Zealand Act (1989). Sacrifice ratios associated with this major inflation reduction show that New Zealand's cumulative output losses have been relatively high, somewhat greater than those for Australia over the same period, but below those for Canada<sup>7</sup>. It is also inevitable that there will continue to be a range of challenges to the delivery of ongoing price stability, and important amongst these for New Zealand at present is inflation in the 'underlying non-tradeables goods' sector (see **Figure 1**). Despite significant progress in some sub-sectors, the market based disciplines on public and private sector economic agents operating in many non-tradeables goods and services areas still seem relatively weaker than those that economic agents operating in tradeables goods markets have been forced to wrestle with so successfully in recent years<sup>8</sup>.

Despite only modest economic growth rates recently, in the region of 2 per cent per annum, New Zealand's current **unemployment rate** of 6.7% is relatively low by OECD standards. This area can also be regarded as a relative success story for economic policies of the past decade<sup>9</sup>. New Zealand's previously negligible unemployment rates began to rise from 1976/77 and, affected by both the disinflation and structural policies associated with the reforms, reached a peak of 10.9% in September 1991 (see **Figure 2**). The analytical investigations done for the reform period are limited to date, but there are some useful preliminary insights. For example, Chapple, Harris and Silverstone (1996) have examined the extent to which structural shocks associated with New Zealand's reforms might have been a prime reason for the rise in the aggregate unemployment to its peak of around 11%. Much to their surprise, they found (p 168) that it was primarily shocks from aggregate demand over the

reform period rather than structural shocks initiated by the process of liberalisation which had been the dominant factor<sup>10</sup>. No research study has claimed conclusive evidence that New Zealand's Employment Contracts Act (ECA) has been the major contributing factor in unemployment falling from its peak. Nor is the ECA likely to have been the sole factor, as simultaneous cyclical growth and social welfare system changes will also have contributed. But the fact that Australia's economic growth has been similar to New Zealand's since mid-1991, and its unemployment rate has remained consistently above New Zealand's, help provide *prima facie* evidence that the ECA has probably contributed in a significant way towards improved unemployment outcomes in New Zealand. Similar views are expressed in Evans *et al.* (1996, p 1880) and Kasper (1996b), and are consistent with counterfactual simulation results reported in Hall (1996a, section 5). But despite the encouraging aspects of these aggregate outcomes since 1991, including the fact that unemployment duration has also been declining from its peak, the non-accelerating inflation rate of unemployment (NAIRU) will probably remain around 6-7 per cent<sup>11</sup> unless further institutional changes can be made to assist in reducing it further.

With respect to **fiscal deficits and surpluses, and net public debt sustainability**, New Zealand has made significant progress in reducing a non-sustainable<sup>12</sup> net public debt-to-GDP ratio, from a peak of around 52 percent in 1991/92 down to around 27 percent for fiscal 1996/97. Also, its government operating balance (excluding net foreign-exchange losses/gains) was turned around from a deficit of 4.6 percent in 1991/92 to an estimated surplus of 5.0 percent for 1995/96. New Zealand's recently upgraded (January 1996 Standard and Poor's) long-term foreign currency credit rating of AA+ reflects this progress. This overall progress on the fiscal front has received favourable international attention<sup>13</sup>. Nevertheless, obvious current issues for New Zealand are its projected reduced operating surpluses<sup>14</sup>, and the extent to which its projected net public debt-to-GDP levels of between 20 and 30 percent are optimal. I am not aware of empirical research which provides a satisfactory answer on the optimality question, and perhaps not surprisingly the Fiscal Responsibility Act of 1994 is framed in terms of 'responsible fiscal management' and 'prudent levels' rather than optimality.

New Zealand has run a deficit on the **current account of its balance of payments** for every year since 1974, and for the June 1997 quarter its deficit excluding the frigate "Te Kaha" is estimated to be around 5.8 per cent. The latter has now become uncomfortably close to the average deficit of around 6.6 per cent for the years 1982-87, despite the significant improvement from around 4 per cent to 1 per cent of GDP recorded between 1990 and 1994. There are a number of key factors that can drive any country's current account, and in New Zealand's case one of the most consistently influential has been movements in its terms of trade. A particularly important factor in recent years, however, has been the rise in the deficit recorded for net foreign direct investment income, and that can clearly be related to the very significant investment in New Zealand over the past decade by overseas firms. Very considerable benefits can be associated with that foreign investment, though the net benefits do not yet seem to have been established conclusively through up-to-date empirical research. It should also be noted that there is insufficient research evidence to pass judgement on the extent to which structural adjustment associated with the reforms has influenced New Zealand's current account movements, relative to effects which may have emanated

through terms of trade and other cyclical factors. The corresponding balance sheet position also gives little cause for comfort, though New Zealand's total **overseas debt-to-GDP ratio** of around 80 per cent has recently been judged to be sustainable<sup>15</sup>. The government's foreign currency debt position is now approximately in balance, but despite this particularly favourable element, New Zealand's essentially private sector overseas debt-to-GDP ratio is clearly very high by prudent international standards. The country will therefore remain vulnerable for some time to any substantial real and financial shocks (of an external nature).

**Real GDP growth rates** for selected OECD economies are presented in **Table 2**. The figures there show that New Zealand's cumulative performance since the mid-1980s of 1.6 per cent per annum is still unfavourable relative to that of other comparable OECD countries. It was preceded by the slightly better, but still comparatively poor record of 1.7 percent per annum for the eight year period 1977 to 1984. Together, those numbers support the view that New Zealand's *average* unsatisfactory growth performance is not a new (or post reform) problem, and should not be claimed as such. However (see **Figures 3 and 4**), New Zealand has recorded cyclically strong economic growth since its most recent business cycle trough in mid-1991. It shared this business cycle trough date with Australia and the United States, and in the six year period since then, the New Zealand and Australian economic growth rates have significantly outperformed those of many other comparable countries.

It is therefore not surprising that there remains considerable controversy in this area. There seems general agreement on matters such as New Zealand's historical growth performance having been relatively poor, there having been very considerable costs through to 1991 in the form of the output losses associated with correcting the major macroeconomic imbalances, and on New Zealand's having lifted its performance very considerably since 1992. It also seems widely accepted: that "...there is still room for debate about the degree to which the recovery is structural rather than cyclical" (Evans *et al.* p 1893); that "...it is still too soon to know whether New Zealand will join that small group of countries who have become 'growth success stories'" (Hall, 1996a, p 66); and that "To firmly establish a case either for or against having a sustainably better growth performance will require data for at least the peak (and subsequent trough) of the current business cycle" (Hall, 1996b, p 12.). But there are also New Zealand economists who would agree with Dalziel (1997, p 12). In the context of a detailed analysis of New Zealand's real *per capita* output data, he has recently argued that "... there is still no clear-cut improvement in the sustainable growth performance of the New Zealand economy ten to twelve years after the beginning of the reform programme...[and] that substantial income sacrifices were incurred during the process (especially between 1987/88 and 1993/94)...". There seems to have been no significant research evidence published on the all-important counterfactual question of what economic growth rates might have been in the absence of the reforms.

Hall (1996b, pp 3-7, 12) has examined the relative merits of the 'growth is now fantastic' versus the 'growth still feeble' ends of the spectrum. He has suggested first, that one can be at least cautiously optimistic on the sustainability of recently improved economic growth<sup>16</sup>, and secondly that "further progress is needed". In the latter context, the challenge for New Zealand from now, therefore, is to be able to maintain



*sustainably* higher potential growth rates somewhere in the 3.0 to 4.5 percent range over the next decade. Views vary considerably on where in the range this can be. In depth research conducted by the Reserve Bank of New Zealand and the New Zealand Treasury has recently supported numbers of around 3 to 3.5 percent per annum<sup>17</sup>. Others, such as Wolfgang Kasper (1996b, p. 12) have suggested figures around 4.5 percent or above as potentially sustainable. To me, while 3 to 3.5 per cent economic growth rates are probably sustainable on the basis of policy progress to date, it also seems crucial New Zealand should be aiming to achieve rates higher than 3 to 3.5 per cent if unemployment rates are to be reduced further and living standards are to be improved on a sustainable basis. Achieving those higher growth rates, though, seems unlikely if there are not further significant micro-economic changes and productivity gains, backed by commensurately improved domestic savings and sustainably high business fixed investment. Clear progress has already been recorded for some sectors, but New Zealand's overall experience to date suggests<sup>18</sup> that it takes more than six years of better growth and productivity performance to move from being an OECD cellar-dweller to maintaining sustainably higher trend rates.

In summary then, on the macroeconomic front, New Zealand has made very significant progress over the past decade in achieving price stability, and in the unemployment and public debt sustainability areas. Maintaining hard-won fiscal surpluses will remain a challenge, and there remains both cautious optimism and controversy over the extent to which New Zealand has offset cumulated output losses and put itself firmly on sustainably high growth paths. Important for influencing the latter, as well as for assisting further progress on current account deficits and net external debt sustainability, will be recent and potential structural change and productivity gains. It is to these areas which the paper now turns.

#### **4. Structural Adjustment and other Microeconomic Empirical Evidence**

##### ***Structural Adjustment***

Structural adjustment and structural change are not easy concepts to operationalise<sup>19</sup>, either in terms of convenient measures or in terms of how such measures can be translated into economic benefits and costs and policy terms. However, for the purposes of this paper, it is convenient to comment on the New Zealand evidence in the context of van Bergeijk and Haffner's (1996, pp12,15) illustrative categorisation of 'two extreme approaches': "...the case of New Zealand, where structural change was radically implemented without *a priori* analysis of the costs and benefits and where, as a consequence, large costs were put on the population. The second case is the Netherlands, ... where it is very difficult to initiate and implement structural adjustment policies because quantitative evaluation techniques are not sufficiently well developed... Obviously, it is a wise policy to avoid the dangers that are inherent in the extreme strategies..."

I have no specialist expertise on the Netherlands experience and so make no comment on that. But from a New Zealand perspective, as stated above in section 2, there seems no dispute with New Zealand's programme of structural adjustment since the mid-1980s having been the most radical of any OECD country. But, it is also important to

emphasise from recent empirical evidence that in New Zealand's case that the 'large adjustment costs' are unlikely to be attributable solely or primarily to the structural adjustment reforms. Rather, and this is consistent with the van Bergeijk and Haffner view (p 201) that "The best foundation for microeconomic reform is a stable macroeconomic environment...", the major adjustment costs in New Zealand's case have been associated with the period of cumulated aggregate output losses and increasing unemployment, and are almost certainly associated primarily with its having taken a significant numbers of years to reduce major macroeconomic imbalances. Moreover, there has only recently begun to appear significant partial evidence on the structural adjustment issues. Some of this has provided encouraging evidence, though overall one has to say that to date the empirical picture remains incomplete and that much further detailed work is required.

At the **aggregate level** (though obviously reflecting sectoral data), two basic messages have emerged from the growth related work of Hall (1996a, 1996b) and the labour market study of Chapple *et al.* (1996). Hall's work presented simple real output based index numbers (Lawrence, 1984, p 51) to assist preliminary judgement on whether any measurably different structural change occurred during the March years 1978 to 1995<sup>20</sup>. The index numbers were calculated in both cyclical and non-cyclical form. They showed that **structural change had been substantially greater in the 1985-95 period than for the years 1978-85**, and that structural change during the contraction phase 1987-92 was more substantial than that during the expansion phase 1979-87. The quite high index value for the more recent expansion period 1992-95 is consistent with the rate of structural change continuing to be quite high in absolute terms and considerably higher than during the previous expansion. Chapple *et al.* (1996, pp 151-156) used several structural indicators (including a Lilien index, a Beveridge curve-based econometric analysis, and some mismatch unemployment indices). Their interim overall conclusion **with respect to the relative importance of demand and structural change as a source of unemployment over the reform decade**, is that **"...the importance of structural change has been exaggerated"**. Their second key interim conclusion is that **"...we have significant doubts regarding the claim that the increase in unemployment was due primarily to a shakeout from government or former government trading enterprises."**

With respect to evidence at the **sectoral level of disaggregation**, there remains much investigative work to be done. Some preliminary evidence on shifts in sectoral output shares is presented in **Table 3**<sup>21</sup>. It is not surprising that there has been considerable variation in performance across sectors, but as yet there is no published analytical evidence identifying the possible reasons for significant differences. Of potential note from Table 3, however, are that:

- The Communications; Financing, Insurance & Realty; Agriculture; and Transport and Storage sectors have all recorded noticeably increased output shares between 1978 and 1995, with well over half the increase coming between 1985 and 1995; and
- For the sectors that have recorded noticeable declines in their output shares between 1985 and 1995, there are a range of possible causal factors. These include their handling the contraction phase of the business cycle worse than the

expansion phase, their failure to adapt successfully to gradually more demanding domestic and international market disciplines, and their being affected directly by the consequences of microeconomic reforms. Potential candidates for being in the latter category are: General Government Services (with 2.5 per cent of its 3.6 per cent decline in output share coming between 1985 and 1995); Machinery, Metal Products & Miscellaneous (with its 1.7 per cent decline over 1985-95 being greater than its 1.0 per cent decline over 1978-95); and Textiles, Apparel & Leather (with its 1.0 per cent decline during the reform period also being greater than its decline between 1978 and 1995).

So, as emphasised in Hall (1996b, p 9; 1996a, p 47), it will take further data observations and much more detailed investigation (including with some form of dynamic integrated sectoral-macroeconomic model), before greater conclusiveness can be established on the role of microeconomic reform as a potential contributor to the substantial sectoral differences.

But what of any findings with respect to productivity gains and of structural change at more micro levels?

### *Productivity*

Whilst there is no doubt that productivity is a fundamental driver of economic growth, international competitiveness and a country's overall living standards, it is also well known that at both the macro and aggregate sectoral levels, this is an area in which it is particularly difficult to produce robust empirical magnitudes and to draw credible conclusions. New Zealand is no exception, due in part to a wide range of legitimate measurement difficulties (e.g. Hall, 1996b, pp 9-12; Janssen, 1996). These include the fact that the outputs for a number of 'service industry' sectors are defined by Government Statisticians as essentially the same as inputs, and therefore by definition cannot record substantial measured productivity gains<sup>22</sup>. Yet in New Zealand over the past decade, according to credible enterprise level measures, some of these service sectors have recorded vast improvements in quality and efficiency of delivery of output.

In a New Zealand context, then, it should not come as a surprise to others that there has been considerable debate about productivity performance over this period, and that there have many claims which are flawed on methodological grounds. These include a number of attempts to tie good or poor productivity performance into specific events, or periods such as the period since May 1991 of New Zealand's ECA, with no appropriate adjustment for preceding and subsequent stages of the business cycle. My own methodological preference when attempting judgement on productivity performance, has therefore been: to make appropriate adjustment for the stage of the business cycle; to evaluate total factor productivity (TFP) as well as a range of labour productivity measures; and to supplement measures derived from official data with suitable industry-specific and enterprise-level statistics.

Preliminary research evidence for New Zealand at the aggregate and sectoral levels (see Hall 1996b, pp 9-11)<sup>23</sup>, which recognises the above important issues wherever possible, reports that:

- New Zealand's TFP performance at the **aggregate level** was "markedly worse" than for other OECD countries for the period 1950-84 (Smith and Grimes, 1990, pp. 141-46). As shown in **Table 4**, TFP has continued to be low *on average* at 0.9 percent per annum for the "reform and beyond period"; but when due adjustment of the average is made for business cycle movements, TFP is shown to be an unsurprising 0.3 percent for the 1987-92 contraction phase, and an exceptionally high 2.3 percent for the 1992-95 expansion phase of the currently incomplete business cycle. The latter rate provides promising, but not yet conclusive evidence, when compared with the 1.3 percent recorded for the previous full expansion phase of 1979-87; and
- Not surprisingly, TFP performance has varied widely **across sectors**, and some sectors have been more affected by aggregate domestic and international business cycle movements than others. A full set of sectoral results appears in **Table 5**. While these sectoral figures can provide potentially useful insights, for the reasons already mentioned and because meaningful numbers for the current expansion phase cannot yet be calculated, they should be formed with more than the normal degree of caution. I confine myself here to pointing out: First, eight sectors show improved TFP performance when the average for 1985-93 is compared with that for 1978-85, whereas the average outcome for 11 sectors is worse. Secondly, by focusing on performance in the 1987-92 contraction phase, one can identify **six star performers** as: Basic Metal Industries; Communications; Mining and Quarrying; Transport and Storage; Forestry and Logging; and Agriculture. Further detailed research would be required to establish or reject causal linkages, but *prima facie* these sectors have all been directly or indirectly affected in significant ways by major micro-economic reforms and restructuring over the past decade.

This evidence is far from conclusive, and there are clearly still big question marks over the extent to which New Zealand's productivity improvements to date can be sustained over time. But to me, it is evidence which is far more encouraging than a number of the gloomy conclusions highlighted in recent years from partial evidence.

Färe, Grosskopf and Margaritis (1996) have also undertaken a comprehensive study of productivity growth at the sectoral level. They utilised the Data Envelope Analysis technique, which allowed them to compute a constant returns to scale Malmquist productivity index to reflect TFP, and its efficiency and technical change components. There has been relatively limited experience in interpreting these measures empirically, especially for individual sectors which are compared to an aggregate best practice frontier for the New Zealand market sector. As a result, their individual sector results are currently seen as controversial and should be interpreted with considerable caution. Färe *et al.* conclude, however, that the economic reforms have had an overall positive impact on productivity growth performance of the New Zealand market sector, and that as one would expect the impact has been quite uneven across sectors. Technical change/innovation (including through openness to foreign knowledge and technology in a freer trade environment) were found to be key drivers of TFP growth, rather than efficiency change. The latter was regarded as being possibly hampered by labour market rigidities for the initial years of the post reform period. Particularly

impressive improvements in productivity were associated with primary sectors selling their output primarily into export markets, and the 'Communications' and 'Transport and Storage' sectors significantly affected by various reforms.

There have been a small number of studies of productivity performance at more micro levels. Careful work has been undertaken for the telecommunications company, Telecom, by Boles de Boer and Evans (1996), and for the Electricity Corporation of New Zealand Limited (ECNZ) and the Coal Corporation of New Zealand Limited (CoalCorp) by Spicer, Emanuel and Powell (1996)<sup>24</sup>. The studies support a conclusion of these State Owned Enterprises (SOEs) achieving major gains in productivity over levels reached under previous government departmental structures.

However, whilst an examination of productivity outcomes is obviously important to any assessment of structural change, it is also important to examine such other evidence as exists in goods and services and labour markets more broadly.

### *Goods and Services/Product Markets*

Not surprisingly, the evidence to date is piecemeal, but some important messages are starting to emanate and are considered selectively here under four headings:

- **Traded versus non traded goods sector adjustments.** An important summary conclusion at the microeconomic level from Bollard *et al.* (1996, p 22) is that the traded sector has had to adjust much more quickly and harshly than the non-traded sector. Whilst this has been due partially to the relative impact of structural reforms such as the removal of import quotas and other non-tariff barriers, and substantial reductions of tariff rates, it has also been due in a very major way to exchange rate appreciation effects associated with correcting fundamental macroeconomic imbalances. Lattimore and Wooding (1996, pp 350-351) have emphasised that resource reallocation following major trade reforms could have been expected to take some years to occur, and that while the post 1984 trade policy changes have provided some discernible positive trends, it is still too early to assess their full impact<sup>25</sup>.
- **Responses at the level of the Firm.** These include the closure and restructuring of existing firms, and can be related to the degree of openness of entry and exit. The importance of evidence at this level has recently been emphasised in an international context in McMillan (1997, ss 3-5). Early detailed case study work reported in Savage and Bollard (1990, pp144-145) showed that while "...the surprisingly rapid rationalization process led by market forces...led to considerable pain amongst firms and workers...the adjustment process itself has been broadly effective." At that point in time, which was of course prior to the ECA coming into operation in 1991 but after the passing of the Labour Relations Act of 1987, the most commonly cited policy constraint was reported as the industrial relations system. The most recent comprehensive study at the micro level has been that of Campbell-Hunt and Corbett (1996). After confirming (pp 125-137) that by the end of the 1980s (the period also covered by Savage and Bollard), very few firms (10-20%) had progressed beyond survival mode, they consider "...the weight of evidence ...suggests an escape from survival conditions

since the nineties” and that “...management in New Zealand is now broadly comparable with that of the country’s trading partners”. They suggest this is “...not inconsistent with what is known about the difficulties organisations face in responding to large-scale strategic dislocations”, and caution that “...there remains a large number of organisations, approaching the majority, which show limited adaptation to the new environment.” Not surprisingly, then, they reach the conclusion (p 133) that “...there is wide scope left for New Zealand firms to develop the foundations of sustainable advantage: in specialisation and networking; in building branded reputations with the consumer; in sustained product and process innovation; and in expanding the number of firms and overseas markets in which all of the assets of sustainable advantage are created.” On the question of the durability of the ‘glorious economic summer’ of the nineties being converted from a single ‘season of excellence’ to ongoing seasons of excellence, and after giving due weight to the fact that by definition ongoing sustainable advantage takes a long time to create, they conclude on balance (p 137) that “...New Zealand managers are minded to press on with the organisational revolution of the nineties, and this must tip the balance in favour...”.

The clear message from micro evidence at the level of the firm is therefore that sustainable successful structural adjustment is a process which can only be evaluated reliably over decades rather than years.

- **Performance of the Public Sector.** Here too, in depth evidence has been relatively slow to emerge, but important empirical evidence is now available from Duncan and Bollard (1992), Duncan (1996), Spicer *et al.* (1996) and Evans *et al.* (1996, pp 1872-77). The evidence is focussed on the outcomes of transformations of government (trading) departments or entities through corporatisation and/or privatisation, a process which has of course been going on in many other countries as well. In New Zealand, the legislative underpinnings for the public sector as a whole were provided by the State Owned Enterprises Act of 1986, the State Sector Act of 1988 and the Public Finance Act of 1989.

As in probably all other countries, changes in the education and health sectors continue to be controversial. Many have suggested that changes made to date remain far from complete, and it is also clear that there seems little available yet in the way of in depth empirical evaluation of degree of success.

In Duncan (1996, p 416) it has been argued that the corporatisation and privatisation process of trading activities in both central and local government areas remains far from complete. Not surprisingly, the evaluative studies report considerable variation in performance, but the general tenor of them is of very significant success over relatively short time horizons. For example, Spicer *et al.* (1996, pp 171, 203) have concluded that “Overall, the New Zealand government’s objective of gaining an improvement in the economic and financial performance of government owned enterprises by transforming them into SOEs does seem to have been achieved, at least for the organisations that we studied...the successful transformations of these five government owned enterprises were not isolated cases.” Duncan (1996, pp 416-419), from a more economics based perspective,

points to the major gains in productive efficiency, and net gains to allocative efficiency and welfare to the economy as a whole, but is unable to offer any significant evidence on the perhaps potentially greater but difficult to measure dynamic efficiency effects.

- **Competition Policy/'Light-handed Regulation'.** New Zealand's competition policy, as enacted in the Commerce Act of 1986, features what has become known as 'light-handed regulation' in an economy wide setting (see, for example, Evans *et al.*, 1996, p 1885, and Evans, 1996, pp7-8). There is therefore a presumption against industry-specific or price regulations, so as to minimise government and regulatory intervention, and place reliance on actual and potential competition for the regulation of prices and monopoly behaviour. Evans (1996, p 7) argues that actual and potential open entry to an industry are critical for the success of light-handed regulation, and that this form of regulation is more open than industry-specific regulation to achieving efficiency gains under conditions of rapid technical change. The limited analytical empirical evidence presented to date is summarised in Evans *et al.*(1996, pp 1887-90). There it is argued that light-handed regulation has had its most stringent test to date in telecommunications, and that based on evidence from Boles de Boer and Evans (1996), Ergas (1996) and Evans (1996) there is some initial presumption of the superiority of light-handed regulation in telecommunications. It is also suggested that the number of industries to which light-handed regulation is potentially applicable is quite wide-ranging. But as evidenced for example in the relatively slow movement to even the current state of competition in the electricity sector in New Zealand, in depth evaluation of light-handed regulation in a wider context will remain in its infancy for some time to come.

### *Labour Markets*

Significant liberalisation of New Zealand's labour markets did not take place till the ECA became effective from May 1991, and so in this area too, evaluative empirical evidence remains in its infancy.<sup>26</sup> This is partly because of the limited time period which has elapsed since then, but also because the introduction of the ECA coincided with the most recent business cycle trough of mid-1991. It is well-known that prior to the reforms, New Zealand's labour market system was highly centralised and heavily regulated, with a national awards system of wages, a legislated adult minimum wage and compulsory unionism. In almost complete contrast, it was replaced by the ECA, an Act defined "to promote an efficient labour market", and designed to achieve a decentralised, more competitive wage setting system based on bargaining at the individual enterprise level. National awards and compulsory unionism were thereby removed. But as somewhat of a counterbalance, it also established a separate Employment Court and Employment Tribunal to assist in resolving contract disputes, and left in place certain statutory provisions for minimum terms and conditions of employment. The latter have since been the subject of considerable controversy, as have particular aspects of the ECA itself<sup>27</sup>.

As regards the evaluative empirical evidence published to date, some key messages in the areas of unemployment, the ECA, and income distribution are:

- As emphasised above in section 3, Chapple *et al.*(1996) have established that unemployment rate changes over the reform period have been dominated by aggregate demand rather than structural change
- Maloney and Savage (1996, pp 210-211) have concluded that the economic reforms have had substantial effects on New Zealand's labour markets. But perhaps more importantly, they also consider that "...achieving better labour market outcomes requires a **broader focus than just a reform of the labour relations system**. It is the combination of welfare, product and labour market reforms (together with external pressures like changes in the terms of trade) that will alter labour market outcomes." More specific amongst their labour market conclusions are that: almost all of the **decline in unionisation** in New Zealand since 1991 can be attributed to the ECA, with unionism also having become increasingly decentralised via single-employer agreements; and that within the context of real wage increases having been modest overall, "...employment growth [and real wage declines] occurred in industries experiencing the largest relative declines in unionisation in the post ECA period."
- From a significant sized Survey conducted by the NZIER for its December 1995 Quarterly Survey of Business Opinion (QSBO), written up in Savage and Cooling (1996), it was concluded (p 33) that: the **most notable labour market outcomes** as a result of the ECA were said to be for larger firms and to have involved increased productivity and operational flexibility, greater training, and increased employment (especially part time and casual jobs), but also relatively small impacts on the firm's total wage bill, hiring and redundancy costs, and negotiation costs; the **most common changes to employment contracts** have been higher ordinary-time wages, lower overtime and penal payments, an increase in flexible work practices, reduced demarcations, increased multi-skilling, and increases in performance based pay. It was also recorded that three quarters of the firms regarded the net effect of the Act as positive for their overall performance, and that whereas firms were initially (in the 1993 Survey) focussed mainly on cost-cutting and productivity gains, they have more recently put strong emphasis on increased training and higher wages for their employees<sup>28</sup>.
- The effects of the reforms on **income distribution** have been the subject of much partial, speculative comment. However, Easton (1996) has recently analysed this issue in the context of some degree of real wage stagnation and increased wage dispersion having started to occur prior to 1984 in both New Zealand and other OECD countries. Consistent with the labour market evidence cited above, he emphasises that macroeconomic stabilisation measures increased unemployment and hence income inequality, as did flattening of the income tax scale in 1988, and measures in 1991 which reduced benefit levels and entitlements. He therefore suggests (p 136) that "If it is only market liberalisation, there is little evidence it impacted substantially on the aggregate economic distributions, although we noted some minor changes." This can be seen also in the context of Stephens' (1996) economic analysis of social services, in which he concludes (p 490) that "The welfare state in New Zealand.... has been more enduring and resilient than many observers thought in 1991."



In summary, the above still very much partial evidence on structural adjustment is consistent with the view that the greatest part of the adjustment costs can be associated with reduction of macroeconomic imbalances rather than structural adjustment, that after more than a decade since major reforms were commenced there is significant evidence of positive effects, that key adjustments in the product markets have been and will continue to take very lengthy periods before sustainability can be assured, and that in both the product and labour markets the reforms have not been complete in their coverage.

## 5. Some Policy Implications

There is little dispute that the initial phases of New Zealand's economic reforms were closer to the 'big bang' than to the 'gradualist' end of the spectrum. There will, however, be debate for some time on whether the big bang approach has been justified in New Zealand's case, and on whether the sequencing of its reforms has been optimal.

My own interpretation of the evidence is that the **big bang approach** has been justified by the deep-seated and widespread nature of New Zealand's economic problems, by the resultant foreign exchange crisis of July 1984, and by the near certainty that continued adoption of previous piecemeal or gradualist approaches would have been insufficient. It is also clear to me from the New Zealand evidence that while some adjustments have taken place rapidly, one should not equate the adoption of a big bang approach with unreasonably rapid solution of fundamentally serious real sector and fiscal problems. Bollard *et al.* (1996, p19) and others have emphasised that, even after more than a decade of the reform process, the net outcomes for some areas of economic activity from New Zealand's big bang shock have been surprisingly difficult to measure. What this seems to suggest for other countries is that the degree of success of reforms must be linked with the magnitude of the problems faced and the estimated counterfactual outcomes, as well as the size and speed of the reforms themselves. Or put another way, even when a big bang approach is taken, it will take time for such well-recognised economic mechanisms as the non-instantaneous adjustment of inflationary expectations and other product and labour market rigidities to be worked through or changed through policy action.

On **sequencing issues**, a number of implications have emerged<sup>29</sup>. Firstly, and perhaps least controversially, Maloney and Savage (1996, p 211) found from their analysis of New Zealand's labour markets and policy that it is the combined pressure of welfare, product and labour market reforms, and external shocks that will affect labour market outcomes. Hence, it may be preferable to create pressure for reform through this combination of influences, rather than solely and initially through factor markets. Secondly, Lloyd (1997, pp124-25) has observed that New Zealand's reforms were different from conventionally regarded economic views on sequencing, i.e. they were back to front in the sense of fiscal stabilisation not preceding microeconomic reforms, and product and labour market reforms being preceded by reform of financial markets. However, one of the Evans *et al.* (1996, p1894) 'four important lessons' for other developed economies trying to improve their competitiveness is that, when a country is confronted by particularly major problems and has given due regard to the

cumulated dynamics of the full reform processes required, the traditional sequencing literature “..need not dominate the practicable option of proceeding as rapidly as possible on all fronts”. Thirdly, perhaps the dominant particular suggestion in the small New Zealand literature on a possibly different sequencing has been that the radical labour market deregulation via the ECA may have come too late in the process (e.g. Spencer, 1990, pp 255-57; Hansen and Margaritis, 1993, pp 29,34,35). Evans *et al.* (1996, pp 1871-72) have suggested that an earlier more flexible labour market combined with a faster reduction in the fiscal deficit could well have produced additionally beneficial effects through reduced adjustment costs. One clear advantage of the ECA having taken effect as late as mid-1991 was that it coincided with the most recently documented trough of New Zealand’s aggregate business cycle. But would the benefits recorded to date have been as great at an earlier stage of the cycle? Whilst counterfactual evidence from a credible dynamic macroeconometric model is obviously not able to be totally conclusive, it can provide useful assisting evidence. Little such work of a counterfactual nature has been done for New Zealand, but results from the illustrative ‘combined wages-productivity’ shock reported in Hall (1996, pp 57-61) are not inconsistent with the arguments of those who have suggested there could have been significant real sector benefits from having introduced the ECA around five years earlier.

There seems considerable agreement amongst New Zealand’s professional economists that, despite the cautious optimism expressed on progress to date, there is **considerable need and scope for New Zealand’s economic performance to be improved much further**. Indeed, as well as there not yet being totally clear cut evidence on sustainably improved economic growth and productivity performance, recent events have shown that under current structural settings, New Zealand has not yet been able to sustain 4-5 per cent economic growth rates without generating unsatisfactory inflationary pressures. Not surprisingly, there are a wide range of views<sup>30</sup> about how fast policy and other changes in a ‘third wave’ of reform might take place, and in which specific areas they should occur.

The OECD (1996, p 39) has recently concluded that “Over the past two years or so, [New Zealand’s] policy efforts on the structural side have aimed at implementing, refining and complementing the initiatives launched in the late 1980s and early 1990s.” They refer specifically to consolidation of health and education reforms, restructuring of the electricity sector, and improvement of the financial management and accountability of local government, all of which have direct or indirect impacts on the growth and inflation performance of non-tradeables goods and services sectors.

With respect to the category of still unfinished structural policy business, it is not difficult to find either actual or potential candidates and proponents. For example, whilst the OECD (1996, p 2) has singled out in a broad sense “...skill development, trade protection, privatisation and health reform”, it is perhaps more useful in the context of the current paper to list briefly some key possible candidates under the product market and labour market headings.

Further enhancement of **product market** competition could come from: the outcomes from the 1998 Tariff Review which will set a timetable to remove all remaining tariffs well within the 2010 deadline set by APEC<sup>31</sup>; further transformation of the processing

and marketing functions of existing agricultural and horticultural Producer Boards<sup>32</sup>; the rolling back of increased costs of complying with central and local government legislation and regulations; and the corporatisation or privatisation of further central and local government 'commercial' entities.

In terms of further improving **labour market** efficiency and assisting in the further reduction of New Zealand's NAIRU, potential change has to be regarded in the context of New Zealand's now having one of the more deregulated systems of wage bargaining in the OECD. Some proponents of further change have been evaluating whether altering the existing forms of minimum wage and other provisions, and the current monopoly provision of accident compensation insurance through the Accident Rehabilitation and Compensation Insurance Corporation (ACC), could assist further on both the efficiency and NAIRU fronts. Current Coalition government policy is for their review of existing industrial relations legislation<sup>33</sup> to be completed for the 1998 legislative programme. There is little surprise in the OECD's (1996, pp 61-63, 87-88) synopsis of OECD Jobs Strategy recommendations for New Zealand. Its judgement is that in the area of workforce skills and competencies, New Zealand has fallen behind other OECD countries and that this is "...to a large degree probably responsible for its poor historical record of productivity growth." New Zealand should therefore be giving highest priority to improvement of such skills and competences. Productivity, the NAIRU, and overall living standards could all be enhanced further if significant improvement were to be recorded in these areas.

So, there obviously remain considerable challenges for New Zealand policy makers and other economic agents in the structural adjustment area.

## 6. Conclusion

Against the background of a set of macroeconomic and microeconomic problems which were diagnosed as more deepset and wide-ranging than for other developed economies, New Zealand has experienced more than a decade of significant economic reform and structural change. During this time, many other countries have been reforming and adapting to varying degrees. New Zealand has made very significant progress over the 1984-1997 time period in most key macroeconomic and many microeconomic areas, but still faces major challenges of sustainability and improvement on almost all fronts. The need for the latter is due variously to the relative ease with which macroeconomic imbalances can re-emerge under lax policy settings, the still relatively inconclusive evidence on the sustainability of improved economic and productivity growth performance, a widespread desire to reduce the NAIRU further, and the likelihood that in recent years other countries' reforms have eroded a number of the comparative advantages New Zealand had achieved in key areas. In the absence of a further major crisis, another 'big bang' sequence of reforms seems unlikely, especially under New Zealand's current MMP electoral system. But the international and domestic economic evidence is certainly consistent with considerable ongoing adjustment being required.

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<sup>1</sup> These were clearly documented at the time (e.g. New Zealand Treasury, 1984), even if not universally accepted.

<sup>2</sup> For discussion of this in the context of the economic growth performance of New Zealand, Chile and some other countries, see Hall (1996a, section 6). See also McMillan (1997), from a more microeconomic perspective and in a wider international setting.

<sup>3</sup> This passage of time means that, following on from the relatively early consideration of the reforms in Bollard and Buckle (1987), a now fairly comprehensive set of economic studies are

beginning to appear. Some of these contain major analytical work. The studies include Dalziel and Lattimore (1996), Evans, Grimes, Wilkinson and Teece (1996) and Silverstone, Bollard and Lattimore (1996). Evaluative commentaries have also been written by Easton (1994), Henderson (1995, 1996), Brash (1996), Grafton, Hazledine and Buchardt (1997), Lloyd (1997) and MacMillan (1997).

<sup>4</sup> For example, Henderson (1996, p 6) has recently expressed the view that "...by 1984 the direction and tenor of New Zealand economic policy, and the character of the system, had become out of line with the rest of the OECD... While New Zealand was not alone in being still a highly regulated economy, its economic policies in general, and the attitudes underlying them, bore an increasingly old-fashioned, antediluvian look."

<sup>5</sup> Henderson (1996, p 8) has emphasised the reinforcing nature of 'chronically poor performance' and the 'crisis in foreign exchange markets'. Deane (1995, p 13) has suggested 'six lessons' which might be drawn from New Zealand's period of economic change. These include the needs: "...to start with a crisis or some other genuine stimulus to persuade people of the need for change"; and "...to get quality people to lead the process..."

<sup>6</sup> This Table has been taken from Bollard *et al.* (1996, pp 24-28), though different listings and accompanying descriptive commentary can be found in Brash (1996, pp 10-32), Bollard *et al.* (1996, section 3), Evans *et al.* (1996, pp 1859, 1863-1870, 1895-1900), and Grafton *et al.* (1997, pp 4-9, Table 1).

<sup>7</sup> See Hall (1996a, sections 4 and 6) for details. It is also emphasised there that all disinflations have real output and employment costs, and that the ultimate benefits to output can take a long time to achieve. How great the associated benefits are, has yet to be computed for New Zealand.

<sup>8</sup> See, for example, Janssen (1996, p 13).

<sup>9</sup> However, as emphasised in both Brash (1996, p 4) and the OECD (1996, pp 52-53), while both Maori and Pacific Islander unemployment rates have also fallen since 1991/92, the rates for both groups currently remain around 15 per cent.

<sup>10</sup> It is a technically difficult research exercise, to separate the effects on aggregate unemployment into those which can be associated with aggregate demand and those with structural change. The associated empirical results are also often controversial. Chapple *et al.* (1996) have chosen and explained their methodology carefully, and have been appropriately cautious in drawing their preliminary conclusions.

<sup>11</sup> This is clearly well below what it would have been immediately prior to the introduction of the ECA. I am not aware of any formal estimates but it is not impossible the rate could have been as high as around 10-11 per cent then. The OECD (1996, pp 48,59) has recently argued New Zealand's NAIRU is at or below 6 per cent.

<sup>12</sup> See, for example, the discussion and analysis in National Bank of New Zealand (1992).

<sup>13</sup> See, for example, Shultz (1995, p 7) and IMF (1996, p 10).

<sup>14</sup> Official (New Zealand Treasury, 1997, Table 2.1) Operating Balance-to-GDP ratios are estimated to be a 2.6 per cent surplus for 1996/97, and projected to be 1.5, 1.8 and 2.3 per cent for subsequent years. The corresponding Net Crown Debt-to-GDP ratios are 27.1, 25.5, 23.2 and 20.5 per cent. The NZIER's September 1997 *Quarterly Predictions* for the operating balance ratios from 1997/98 onwards are somewhat lower at 0.9, 1.1 and 1.7 per cent.

<sup>15</sup> See Colgate and Stroombergen (1993).

<sup>16</sup> A similar view is expressed in Bollard *et al.* (1996, p 20).

<sup>17</sup> See Reserve Bank of New Zealand (1996, p 38) and New Zealand Treasury (1996, p 22).

<sup>18</sup> See Hall (1996b, p. 12).

<sup>19</sup> Amongst the reasons for this is that structural change is usually a process which is spread over a considerable period, with any benefits (often unlike its costs) emerging over decades rather than years.

<sup>20</sup> The attempted identification of potential causal factors from a sectoral and/or dynamic integrated macro-sectoral model was therefore left to future work.

<sup>21</sup> This evidence can be read in the context of the evidence and commentary on sectoral economic growth rates presented in Hall (1996b, pp 9-10), and the preliminary work on sectoral employment shifts which can be found in Hall (1996a, pp 49-51).

<sup>22</sup> This can be seen in the context of the recently expressed view of Wagner and van Ark (1996, p 20), that "The extension of comparative productivity studies to services, which represent an increasing share in output and employment of economies of advanced nations, should now be a top priority on the productivity research agenda."



<sup>23</sup> Janssen (1996) has also recently reported on New Zealand's labour productivity performance in the context of TFP growth.

<sup>24</sup> Specifically, Spicer *et al.* (1996, pp 170-171) conclude that for the five SOEs they studied, "In general, ...asset productivity increased substantially and so did labour productivity....operating efficiency (as measured by SALES/ASSETS and other input-output ratios) is higher than previously."

<sup>25</sup> They consider that "discernible trends" are appearing "...especially in agriculture and manufacturing with its shorter production lags" and that "...trade data available through 1993 and 1994 is only of limited usefulness in assessing the full impacts of the changes..."

<sup>26</sup> Major pieces of published work are those of Chapple *et al.* (1996), Maloney and Savage (1996), and Kasper (1996). These can be usefully read in conjunction with the OECD's view (1996, section III) and the detailed information presented in Harbridge *et al.* (1997).

<sup>27</sup> For example, there continues to be residual differences of opinion between the ILO and The New Zealand Government which are likely to remain unaddressed (see Harbridge *et al.*, 1997, pp 6-7); there have been a number of studies which have argued that labour market efficiency would be improved further by the abolition of the Employment Court and of minimum wage provisions; in March 1997, the Coalition Government increased adult and youth minimum wage rates significantly; and there have been suggestions for an industrial relations framework under a revised Act (see Bowden (1997)).

<sup>28</sup> Whilst this evidence based on 562 respondents is encouraging, it should also be seen against the summary view expressed in Campbell-Hunt and Corbett (1996, p 128) that "Half of all employers have shown no interest in using the new freedoms in the ECA to improve, or even to change, the nature of the workplace relationship."

<sup>29</sup> Succinct representations of New Zealand's sequence of reforms are available in Bollard *et al.* (1996, p 10, Figure 1) and Evans *et al.* (1996, p 1859, Figure 2).

<sup>30</sup> See, for example, Savage and Bollard (1990, pp 50-54), Dalziel and Lattimore (1996, chapter 10), OECD (1996), and Campbell-Hunt and Corbett (1996, 130-137).

<sup>31</sup> See Peters (1997, p 9).

<sup>32</sup> See, for example, Evans *et al.* (1996, pp 1890-93).

<sup>33</sup> The key initiatives outlined in the Coalition Agreement are summarised in Harbridge *et al.* (1997, pp 7,61-62).

Table 1

**Chronology of Economic Reform in New Zealand  
1984-1996**

**Capital Markets**

Removal of controls on outward investment and borrowing	1984
Deregulation of foreign exchange trading	1984
Devaluation by 20 percent against basket of currencies	1984
Free float of currency on foreign exchange markets without direct control	1985
Free entry of foreign direct investment (rubber stamped by Overseas Investment Commission, except for farmland, offshore islands and fishing)	1985, 1989
Very liberal regime for portfolio investment and repatriation of profits	1985

**Financial Sector**

Abolition of credit growth guidelines	1984
Removal of interest rate controls	1984
Abolition of export credit guarantees	1984
End of formal financial controls (reserve ratio requirements, sector lending priorities)	1985
Removal of ownership restrictions on financial institutions	1985
Removal of separate requirements for trustee banks, building societies, finance houses, stockbrokers	1985-87
Removal of quantity restrictions and other entry barriers to banking	1985-86
Liberalisation of stock exchange	1986

**Energy Sector**

Corporatisation of state coal mines	1987
Financial restructuring of oil refinery	1988-91
Legalisation of oil company ownership of service stations	1988
End of price controls	1984-93
Sale of Crown gas exploitation and distribution interests	1988-90
Sale of other Crown energy holdings	1990-92
Corporatisation and restructuring of electricity generation and transmission	1986-91
Corporatisation, privatisation and deregulation of gas and electricity distribution	1993-95
Competition in electricity generation, Electricity Corporation split	1993-95

**Transport Sector**

Corporatisation of state rail, air, and bus services	1982-84
Removal of restrictions on road and rail carriage	1983-86
End of quantity licensing of trucking	1984
Corporatisation and sale of airports and Airways Corporation	1986-91
Tendering of local authority bus services and liberalisation of licensing requirements	1987-91
Opening up of domestic aviation industry	1987
Granting of a number of landing and on-flying rights to foreign airlines	1989
Corporatisation of ports	1989
Deregulation of taxi industry	1990
Deregulation of stevedoring industry	1990
Removal of cabotage and deregulation of coastal shipping	1991-94
Privatisation of New Zealand Rail	1993

### **Agricultural Sector**

Termination of supplementary minimum prices on agricultural products	1984
Termination of domestic boards for eggs, milk and wheat	1984-88
Agricultural tax concessions removed	1985
Termination of concessional financing of primary producer stocks held by producer boards	1986-88
Review of compulsory producer marketing board arrangements	1987

### **Science Sector**

Removal of concessions for research and development to put on equal footing with all investment	1984
Cost-recovery of public research and development work	1985
Establishment of a contestable pool of public funds (Foundation for Research, Science and Technology)	1990
Corporatisation of government research bodies (Crown Research Institutes)	1992

### **Other Industry Reforms**

End of wage-price freeze	1984
Termination of price controls and replacement by price surveillance powers under the Commerce Act 1986	1984-88
End of all state regulated monopoly rights (except postal service and air traffic control)	1984-89
Removal of some occupational licensing	1985-90
Removal of quantity licensing on almost all industries and end of quality regulation on most industries	1986-88
Removal of producer co-operative tax advantages	1989
Termination of restrictions on shop trading hours	1989

### **Business Law Reform**

Establishment of Commerce Act 1986 to govern mergers and trade practices	1986-91
Fair Trading Act 1986 to govern consumer rights	1986
Securities Amendment Act 1988	1988
Review of securities legislation and take-over law	1988-94
Review of intellectual property regime (patents, copyright, trademarks and designs)	1990-91
Companies Act 1994	1994

### **International Trade**

Termination of export market development incentive schemes	1984
Phaseout of import licensing requirements	1983-89
Phaseout of export performance tax incentives	1984-87
Removal of special protection features for 18 specific sectors and incorporation into general tariff reform	1984-92
Reduction of import tariffs on Swiss formula from an average of 28 percent to 5 percent	1986-96
Slower reduction tariffs on two remaining 'special industries' (motor vehicles, components, textiles, clothing and footwear)	1987-96
Further reduction in import tariffs planned	1996-2000

### **Monetary Policy**

Independence of Reserve Bank formalised through Reserve Bank Act 1989 (Monetary policy instruments devoted to disinflation, with target of 'price stability' by 1992-93)	1989
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### **Tax Reforms**

Standardisation and simplification of corporate taxation to minimise evasion and to cut administrative costs	1985
Broadened tax base through a goods and services tax (GST) on virtually all final domestic consumption (initially 10 percent, later 12.5 percent)	1986, 1989
Removal of most other indirect taxes	1986-91
Removal of tax concessions for savings, etc to put on neutral footing	1987
Flattening and lowering of personal income tax rate, with top rate standardised to corporate tax levels and aimed to minimise poverty traps	1988
Review of international tax regime	1995
Further income tax reductions	1996

### **Corporatisation and Privatisation**

Removal of almost all state regulated monopoly rights	1984-89
State-Owned Enterprise Act 1986	1986
Corporatisation of 24 state owned enterprises (in transport, finance, tourism, forestry, broadcasting, utilities, and service industries)	1987-88
Full or partial privatisation of Air New Zealand, Bank of New Zealand, Petroleum Corporation, Shipping Corporation, Tourist Hotel Corporation, Rural Bank, Government Life, Forestry Corporation, Post Office Savings Bank, Radio New Zealand, Telecom Corporation and others	1987-91
Restructuring to isolate natural monopoly elements of state enterprises	1989-91
Requirement for local authorities to corporatise local-authority trading, enterprises and tender out services	1990-91
Further privatisation planned via asset sales, sale of rights, sale of shares, etc.	1991
Encouragement to local authorities to sell holdings in airports, port companies and local utilities	1991

### **Expenditure Control**

Reduction in government expenditure, especially administration and industry development	1985-87
User pays principles for remaining state trading activity	1986-90
Abolition of 50 quangos and quasi governmental organisations	1987
Assignment of proceeds of sale of state enterprise assets to repay public debt	1987-89
Reform of core government departments on corporate lines through the State Sector Act 1988, with separation of policy, provision, and funding	1988-93
Public-sector management reform through the Public Finance Act 1989	1989
Redesign of government accounts on more commercial basis, accrual accounting, output based monitoring systems through the Public Finance Act	1989
Reduction in social spending (education, health, social welfare and superannuation)	1991-93
Fiscal Responsibility Act 1994 (fiscal management regime)	1994
Local Government Law Reform Bill 1995 (fiscal regime for local authorities)	1995

### **Labour Market**

Introduction of voluntary unionism	1983
More market-based bargaining under Industrial Relations Act Amendment 1984 (compulsory unionism reinstated)	1984
Some contestability in union coverage under Labour Relations Act 1987	1987
Radical reform <i>via</i> Employment Contracts Act 1991 (voluntary unionism, contestable unions, deregulation of employer-employee bargaining)	1991

### Resource Use

Sale of assets (for example, irrigation schemes, fishing rights, airwaves, forestry cutting rights)	1983-85
Auctioning of radio spectrum and fishing rights	1987-89
Review of Town and Country Planning Act 1986	1987-90
Resource Management Act 1991 to govern more liberal planning and environmental legislation	1991
Crown Minerals Act 1991 to clarify property rights to mineral resources	1991
Carbon emission regime	1995

### Social Services

Reform of compulsory education system, based on elected boards of trustees	1988-90
Tightening of requirements, postponement of age of eligibility and reduction of benefits for government funded pensions	1989-92
Tightening and reduction of unemployment benefits and other government social transfers	1990
Integration of state housing assistance into private sector rental and mortgage provision	1991
Possible development of private funding arrangements for health provision	1992
Quasi corporatisation and fee paying for tertiary education institutions	1992-95
Separation of funding from provision of state health services, establishment of Crown Health Enterprises and private sector deregulation	1992-93

Source: Bollard, Lattimore and Silverstone (1996, pp 24-28)

**Table 2. GDP Growth Rates of Selected OECD Economies, 1977-1996**

Averages of Percentage Changes of Calendar Year Growth Rates

Period	New Zealand	Australia	United States	Major 7	Denmark	Ireland	Netherlands
1967-1976	3.3	4.6	2.6	3.9	3.2	4.6	4.4
1977-1984	1.7	2.9	2.9	2.8	1.9	3.9	1.4
1985-1996	1.6	3.2	2.5	2.6	2.0	5.0	2.7
1993-1996	3.9	4.2	2.6	2.0	2.7	6.8	2.3

Sources: Annex Table 1, *OECD Economic Outlook*, (55) June 1994, (57) June 1995, (59) June 1996, (61) June 1997.

**Table 4. Some 'Proximate Sources' of Aggregate New Zealand Growth Rates**

March Years, 1978-95

	Actual			In Business Cycle Context			
	1978-95	1978-85 'Pre-Reform'	1985-95 'Reform and Beyond'	1979-92 Full Cycle	1979-87 Expansion Phase	1987-92 Contraction Phase	1992-95 Expansion Phase*
Compound Percentage Growth Rates							
GDP	2.0	2.4	1.8	1.5	2.5	0.0	4.8
Labour Quantity	0.1	0.6	-0.2	-0.5	0.4	-1.8	2.7
Capital Quantity	2.4	2.5	2.3	2.4	2.5	2.3	2.1
Total Factor Productivity	1.1	1.2	0.9	1.0	1.3	0.3	2.3
Labour Productivity	1.9	1.8	1.9	2.0	2.0	1.9	2.0
Capital Productivity	-0.4	-0.1	-0.6	-0.9	-0.0	-2.2	2.7
Percentage Points Contributions to Growth Rates							
Labour Quantity	0.0	0.4	0.0	-0.3	0.3	-1.1	1.6
Capital Quantity	0.8	0.8	0.9	0.8	0.9	0.9	0.8
Total Factor Productivity	1.1	1.2	0.9	1.0	1.3	0.3	2.3
GDP	2.0	2.4	1.8	1.5	2.5	0.0	4.8

\* Reflects years to March 1995 only, in current expansion phase. Peak and subsequent Trough are not yet determinable.

Sources: Hall (1996b, Table 3), based on calculations from data in Philpott (1994, 1995) and from Statistics New Zealand.

Table 3. New Zealand Real GDP. Sectoral Shares  
March years, percentage form

	Actual					In Business Cycle Context			
	1978	1985	1995	1978-95 Difference	1985-95 Difference	1979-92 Full Cycle Average	1979-87 Expansion Phase Ave.	1987-92 Contraction Phase Ave.	1992-95 Expansion Phase* Ave.
<b>Agriculture</b>	5.6	5.8	7.5	1.9	1.7	6.8	6.2	7.7	7.7
Fishing & Hunting	0.2	0.3	0.5	0.3	0.2	0.4	0.3	0.5	0.5
Forestry & Logging	0.9	1.1	1.2	0.3	0.2	1.1	1.1	1.1	1.2
Mining & Quarrying	1.4	1.1	1.8	0.4	0.7	1.3	1.1	1.8	2.0
Food, Beverages & Tobacco	5.9	6.2	5.8	-0.1	-0.4	6.0	6.1	6.0	5.9
Wood & Wood Products	1.4	1.5	1.4	0.0	-0.1	1.3	1.4	1.2	1.3
Paper, Printing & Publishing	2.6	2.8	2.5	-0.1	-0.4	2.7	2.6	2.8	2.5
Basic Metal Industries	0.9	1.1	1.4	0.4	0.3	1.0	0.9	1.2	1.4
<b>Total Exportables</b>	<b>18.7</b>	<b>19.8</b>	<b>22.0</b>	<b>3.3</b>	<b>2.2</b>	<b>20.7</b>	<b>19.8</b>	<b>22.2</b>	<b>22.6</b>
<b>Textiles, Apparel &amp; Leather</b>	<b>2.3</b>	<b>2.4</b>	<b>1.4</b>	<b>-0.9</b>	<b>-1.0</b>	<b>2.1</b>	<b>2.3</b>	<b>1.7</b>	<b>1.4</b>
Chemicals, Petroleum, Plastic	2.1	2.3	2.4	0.3	0.1	2.3	2.3	2.3	2.4
Non-Metal Mineral Products	1.1	1.2	0.9	-0.1	-0.2	1.0	1.1	0.9	0.8
Machinery, Metal Products & Misc	5.7	6.4	4.7	-1.0	-1.7	5.3	5.7	4.7	4.3
<b>Total Importables</b>	<b>11.2</b>	<b>12.2</b>	<b>9.4</b>	<b>-1.8</b>	<b>-2.8</b>	<b>10.6</b>	<b>11.4</b>	<b>9.6</b>	<b>9.0</b>
<b>Total Tradeables</b>	<b>29.9</b>	<b>32.0</b>	<b>31.4</b>	<b>1.5</b>	<b>-0.7</b>	<b>31.3</b>	<b>31.1</b>	<b>31.8</b>	<b>31.6</b>
Electricity, Gas & Water	2.6	3.1	3.1	0.5	0.0	3.1	3.1	3.3	3.2
Building & Construction	6.9	6.0	4.3	-2.6	-1.6	5.5	5.8	4.9	3.8
Trade, Restaurants & Hotels	20.8	18.6	17.3	-3.5	-1.3	18.3	19.2	16.9	16.7
Transport & Storage	5.4	5.4	6.5	1.1	1.1	5.5	5.3	5.7	6.4
Communications	2.4	2.9	5.8	3.4	2.9	3.4	2.8	4.2	5.5
Financing, Insurance & Realty	10.4	11.6	13.6	3.3	2.0	12.3	11.4	13.8	13.9
Community Social & Personal Services	4.5	4.5	4.6	0.1	0.1	4.6	4.6	4.4	4.6
<b>Total Non-Tradeables</b>	<b>53.0</b>	<b>52.1</b>	<b>55.3</b>	<b>2.3</b>	<b>3.2</b>	<b>52.7</b>	<b>52.3</b>	<b>53.2</b>	<b>54.1</b>
(excl Dwellings and Govt)									
Owner-Occupied Dwellings	4.1	4.0	3.9	-0.2	-0.1	4.2	4.1	4.2	4.2
General Government Services	12.9	11.8	9.3	-3.6	-2.5	11.9	12.5	10.9	10.1
<b>Total Non-Tradeables</b>	<b>70.1</b>	<b>68.0</b>	<b>68.6</b>	<b>-1.5</b>	<b>0.7</b>	<b>68.7</b>	<b>68.9</b>	<b>68.2</b>	<b>68.4</b>

\* Reflects years to March 1995 only, in current expansion period.

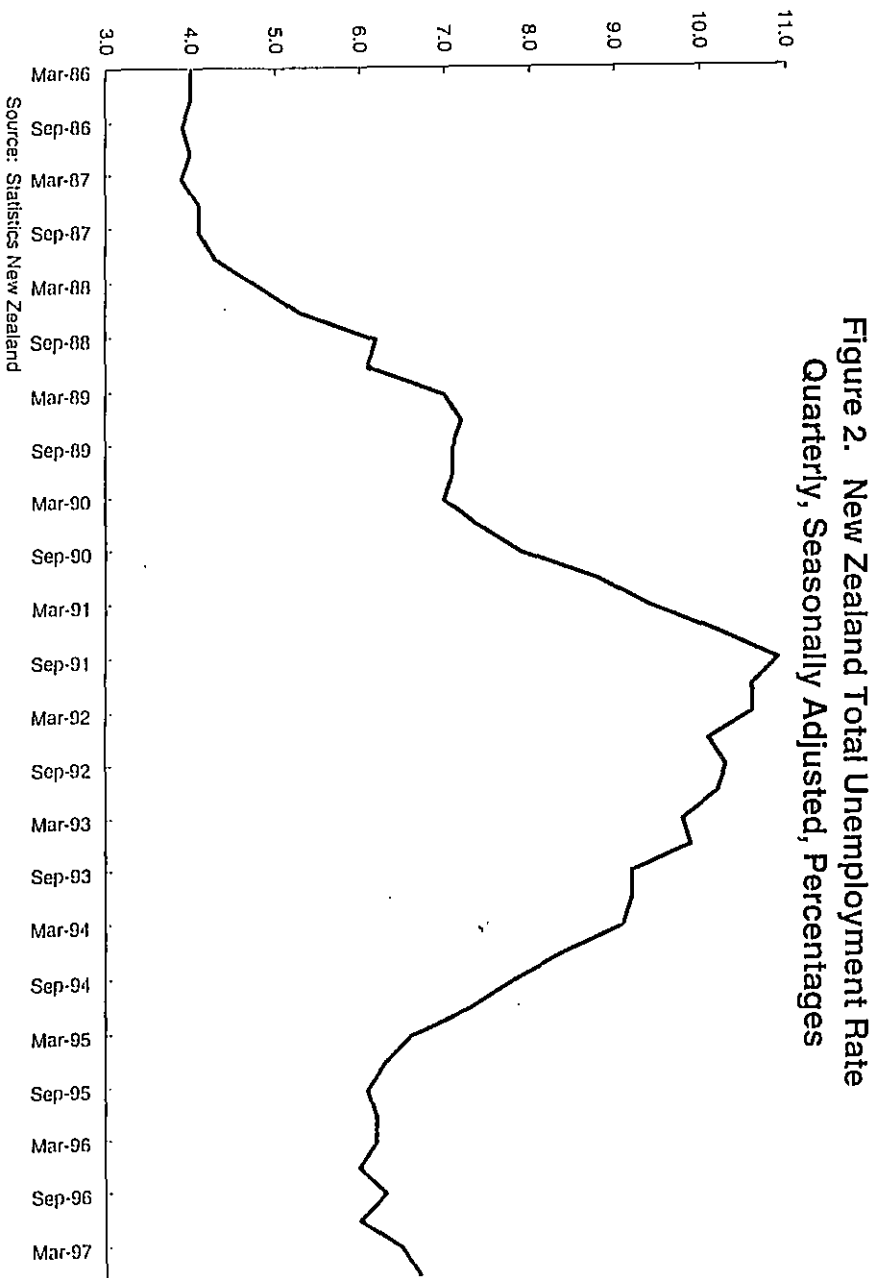
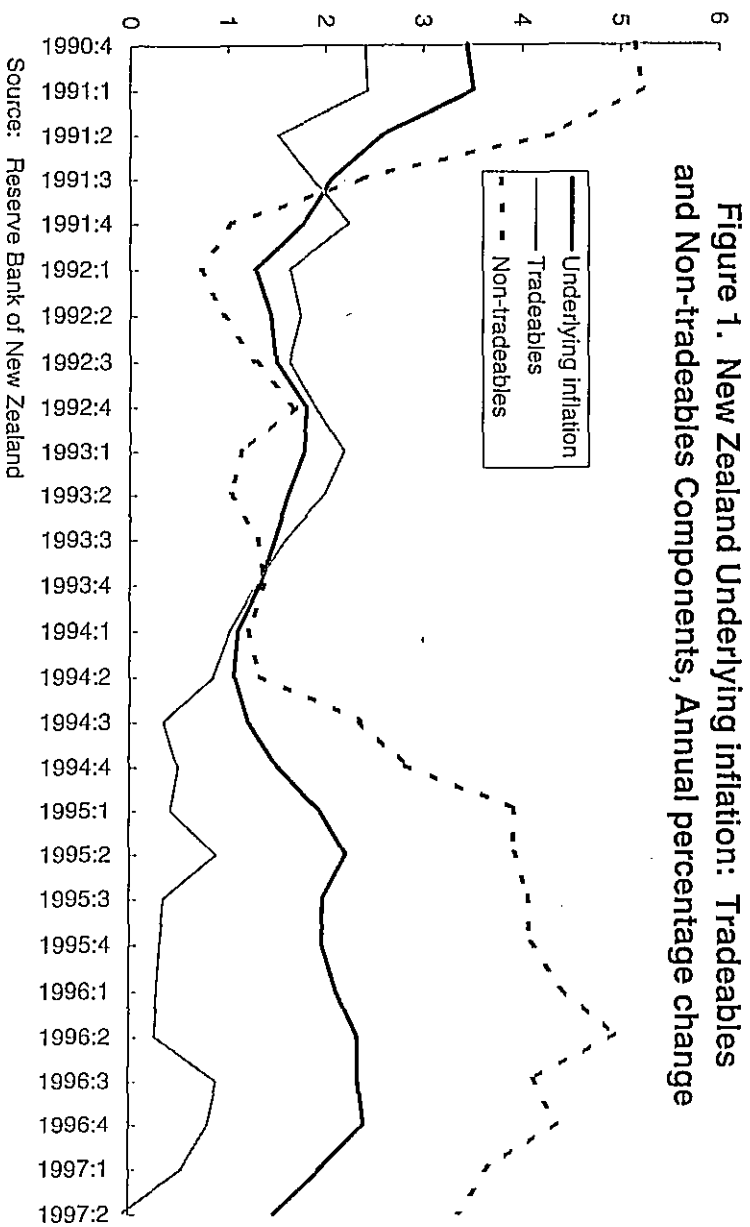
Sources: Computed from Philpott (1994, 1995) and from Statistics New Zealand

**Table 5. New Zealand Total Factor Productivity by Sector, 1978 - 1993**  
Average Annual Percentage Growth Rates, March Years

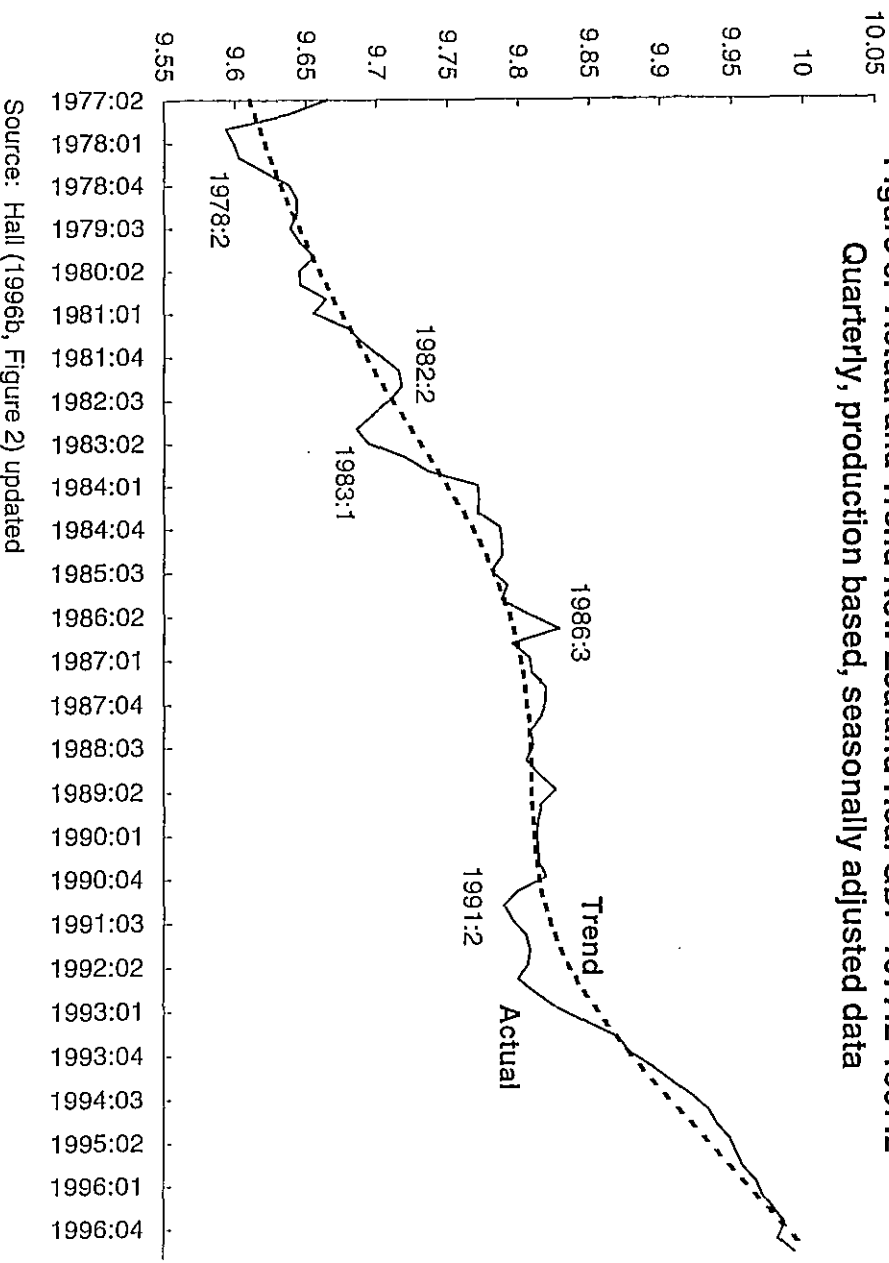
	Actual Rates			In Business Cycle Context		
	1978-93	1978-85 'Pre Reform'	1985-93 'Reform and Beyond'	1979-92 Full Cycle	1979-87 Expansion Phase	1987-92 Contraction Phase
<b>Agriculture</b>	4.68	3.10	5.99	5.49	6.47	<b>3.88</b>
Fishing & Hunting	7.42	3.70	10.21	7.64	13.59	-0.77
<b>Forestry &amp; Logging</b>	4.31	2.51	4.79	4.43	3.59	<b>5.01</b>
<b>Mining &amp; Quarrying</b>	2.04	-5.02	8.17	5.10	3.76	<b>6.86</b>
Food, Beverages & Tobacco	1.91	1.80	1.83	1.75	2.84	0.03
Wood & Wood Products	0.04	1.96	-1.64	-1.28	0.31	-3.69
Paper, Printing & Publishing	1.46	3.48	-0.38	2.03	3.29	-0.07
<b>Basic Metal Industries</b>	3.69	0.36	6.50	3.42	-2.22	<b>11.65</b>
Textiles, Apparel & Leather	0.94	3.01	-0.80	1.16	2.71	-1.22
Chemicals, Petroleum, Plastic	-0.77	-2.43	0.85	-1.62	-2.78	0.19
Non-Metal Mineral Products	2.30	3.88	1.16	1.31	3.07	-0.90
Machinery, Metal Products & Miscellaneous	0.99	3.17	-1.02	0.66	1.91	-1.40
Electricity, Gas & Water	2.22	3.20	1.34	2.74	2.75	2.69
Building & Construction	-0.68	1.19	-2.29	-0.62	1.29	-3.61
Trade, Restaurants & Hotels	-1.86	-1.56	-2.13	-2.12	-2.20	-1.98
<b>Transport &amp; Storage</b>	3.97	3.06	4.82	3.84	2.32	<b>6.30</b>
<b>Communications</b>	6.26	4.05	7.36	6.18	4.93	<b>7.22</b>
Financing, Insurance & Realty	-1.38	-0.00	-2.61	-1.25	0.79	-4.49
Community Social & Personal Services	0.20	0.85	-0.53	0.37	0.30	0.14
General Government Services	-0.37	0.92	-1.48	-0.37	0.81	-2.27

Sources: Hall (1996b, Table 6), based on calculations from data in Philpott (1994, 1995a, 1995b)



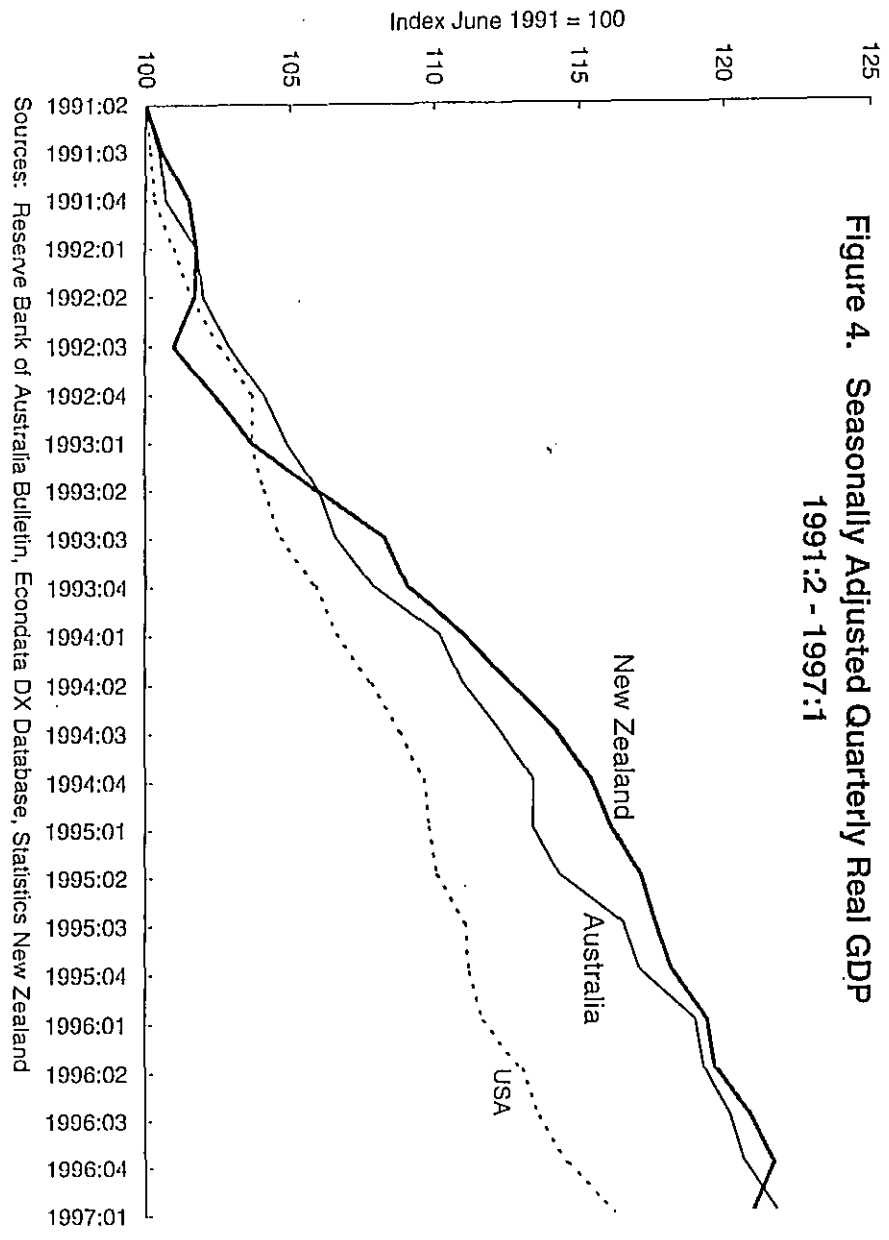


**Figure 3. Actual and Trend New Zealand Real GDP 1977:2-1997:2**  
 Quarterly, production based, seasonally adjusted data



Source: Hall (1996b, Figure 2) updated

**Figure 4. Seasonally Adjusted Quarterly Real GDP**  
 1991:2 - 1997:1



Sources: Reserve Bank of Australia Bulletin, Econdata DX Database, Statistics New Zealand

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