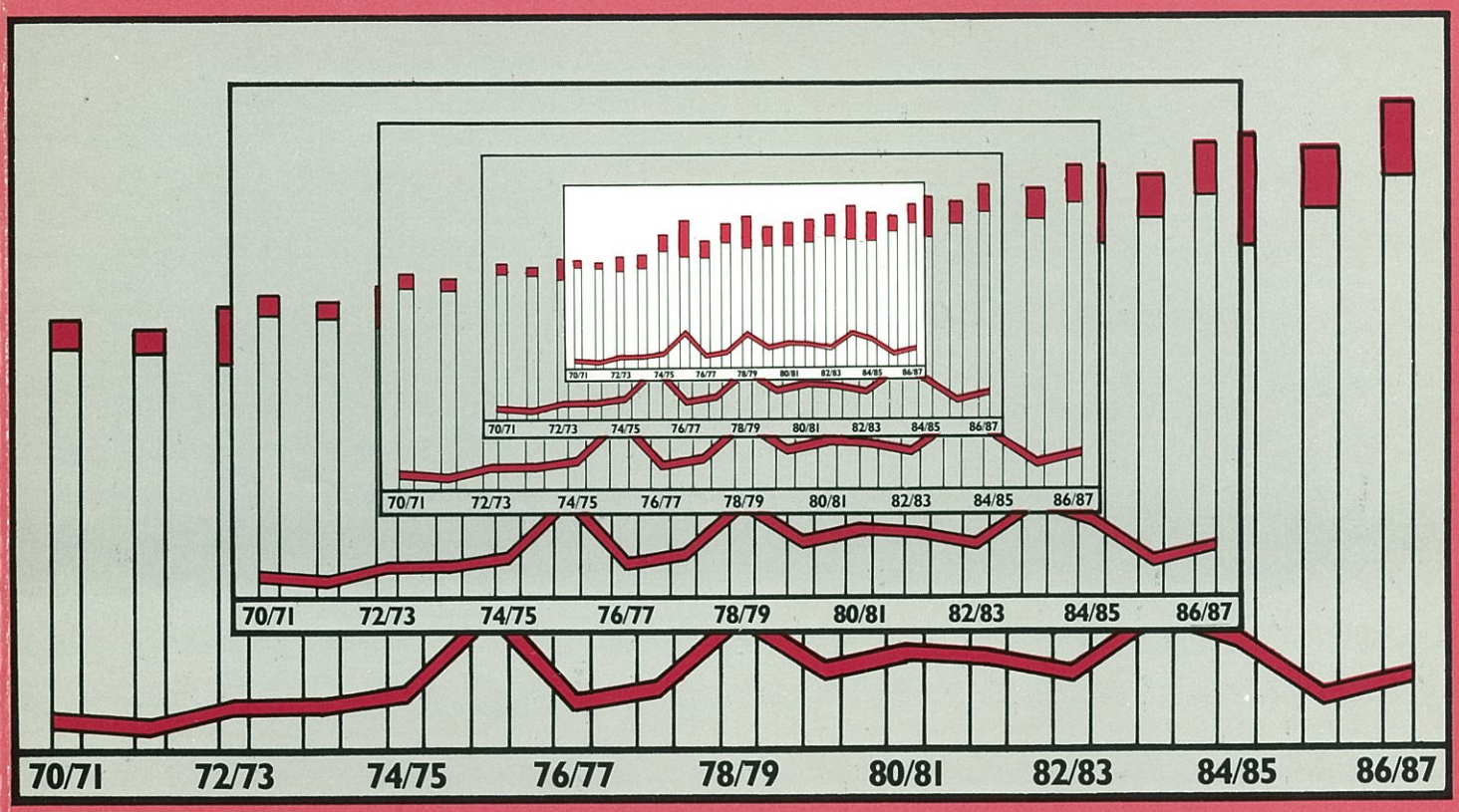
TRACKING DOWN THE DEFICIT



Economic Monitoring Group

New Zealand Planning Council

TRACKING DOWN THE DEFICIT

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FOREWORD

In recent reports the Economic Monitoring Group has examined the role of government in particular aspects of the economy - regulations, the exchange rate and labour markets. An earlier EMG report, *The Government Deficit and the Economy* (July 1984), concentrated mainly on the components of deficits and their impact on macroeconomic management. The group considers it is important now to address some of the wider questions surrounding management of the government's expenditure and revenue, including specific problems raised by continued fiscal imbalance. This focus is also consistent with the Planning Council's commitment this year to explore strategic directions for social policy - directions which need to take account of government's capacity to expand or improve its allocation of public resources.

The present report addresses a number of issues which, although they have been the subject of economic literature for a number of years, have not received any depth of public discussion in New Zealand. These include the longer-term equity considerations associated with the potential for deficits to redistribute income over time, and the trade-off which may exist between social and economic objectives in the context of a less interventionist approach to public policy. The Planning Council intends to follow up this report with a series of more detailed papers on these questions.

In addition, the report identifies a number of areas in the government's fiscal reporting which could be improved. These relate, in the main, to the effects of corporatisation on the structure of the public accounts and the information they convey. Expanding and refining this information is essential, in our view, for more informed public discussion and understanding of the reasons behind and the effects of current policies. The report is an initial contribution to that goal.

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Large and persistent fiscal deficits are a major impediment to the government's economic strategy. In most comparable economies, the expenditure of governments regularly exceeds their revenue and they have found this as difficult to rectify as New Zealand has. Reducing expenditure, in particular, has not been easy. Governments have less control than is often thought. Fiscal deficits raise problems for both short-term economic policy and for longer-term equity between generations. Analysing these effects, and determining the appropriate solutions, cannot be simple.

A fiscal deficit can be divided into cyclical and non-cyclical (or structural) components. "Cyclical" refers to the effect on government revenue and expenditure of changes in the economy's total output while policies remain unchanged. In recent years, the cyclical component of the deficit has been small, and the government's ability to respond to fluctuations in economic activity is limited while it has to contend with a large structural deficit.

The most immediate impact of the deficit is on monetary policy. In an endeavour to limit inflation and ensure that the financial system is efficient, the sale of government stock by the Reserve Bank is part of a complex process of liquidity management which helps to offset the effect of the budget's monetary injections. This policy, sometimes referred to as "fully funding the deficit" may contribute to raising interest rates and the exchange rate and so discourage some desirable kinds of investment and output. In the past, the familiar "Budget Table No. 2" measure of the deficit has generally provided a reasonable indication of the monetary impact of the government. However, with more public sector trading activities now conducted outside the public accounts, a broader measure of the public sector's borrowing requirement is needed.

The longer-term implications of fiscal deficits can be explored through their effects on public indebtedness. New Zealand is now one of the more indebted small industrial countries. Faster economic growth would reduce the relative size of the public debt, but because it is unlikely that real interest rates will be reduced to or below the level of the growth rate, fiscal policy should take account of the need for achieving a surplus in the budget excluding interest payments.

There are added risks to external debt, but the exchange rate effects are related to the total of the public debt rather than to overseas borrowing in particular. Changes in the level of public debt have redistributive as well as growth implications but little is known about them, and they depend on the outcome of government expenditure. Indeed, it is the quality of spending decisions relative to their debt-servicing cost which is central to a proper assessment of fiscal policy.

Some progress towards such an assessment can be made by looking at public sector net worth. Although measurement remains difficult, it is likely that fiscal

policy over the last 15 years or so has supported consumption at the cost of reducing the public assets which can be passed to future generations. Recent government decisions will probably help to counter this trend, but we cannot yet be sure that they will reverse it. For such inter-generational questions, different and more sophisticated estimates of the fiscal deficit are required.

Achieving greater fiscal control through reductions in government expenditure is not a simple process. New Zealand now resembles most OECD countries in relying on welfare expenditure in particular, rather than taxation, to secure redistribution of market incomes; and while redistribution and total expenditure are not directly related, it is important that redistribution programmes be designed to produce the best possible trade-off with income generation. In recent years, the only major items of government expenditure to receive increasing shares of the total have been debt-servicing and superannuation. It is important that other social spending be determined by a proper study of its results, and not just by the pressure of the overall budget.

The current situation is even more uncertain than usual. It is clear that there is no room for relaxation of the government's fiscal stance. It may be that existing policies can reduce the pressures on financial markets to an acceptable degree, and reverse both the growth of the public debt and the trend towards reduced public sector wealth. If existing policies are not sufficient, they should be reinforced by an increase in income tax. The measures discussed in this report provide a framework within which more careful judgements of the progress of fiscal policy can be formed.

CHAPTER 1 : INTRODUCTION

This chapter provides an introduction to the current view of the fiscal deficit as an impediment to effective economic management. It includes comparisons of the deficits of selected OECD countries and preliminary discussion of the relationship between deficits and the growth of government activity. The chapter concludes with an outline of the specific concerns raised by deficits as they relate to the structure of this report.

1.1 Background to the issues

A fiscal deficit - the amount by which government spending exceeds government income - has been recorded in New Zealand in each of the last 30 years. Many other industrialised countries have experienced similar problems of persistent fiscal imbalance.

Fiscal deficits are now widely viewed as a major impediment to effective management of the economy. There is increasing acceptance in New Zealand, as well as overseas, that reducing the deficit is essential for achieving growth and stability in the economy. Why this is more important today than it was earlier is far less clearly understood.

The Economic Monitoring Group (EMG) has consistently supported the priority given to deficit reduction in the government's medium-term strategy for economic reform. Other elements of this strategy include less regulation of commercial sector activity, reduced levels of government subsidy and protection, a floating exchange rate, and more flexible labour market structures. However, as in many other countries, achieving a sustained reduction in the fiscal deficit in a way which complements these other economic policies is proving to be one of the most difficult tasks of all.

The present government has introduced several major policy changes in its efforts to achieve greater fiscal control. Not surprisingly, this process has meant an especially difficult period of adjustment for several sectors of the New Zealand economy. The need for government to re-examine all of its expenditure commitments and revenue opportunities has opened up new areas of public discussion; for example, on the appropriate system of delivery for some social services, the charging of users of government-funded services, and the introduction of a more broadly-based tax system. Recent measures to increase revenue, reduce debt, and find alternative capital funding for state-owned enterprises have raised valid questions about public versus private ownership of those assets and the employment implications of changes to their management and ownership structures. Policies aimed essentially at achieving greater fiscal control, therefore, have in many cases become part of much wider debates concerning the social impact of economic policy and the appropriate role and functions of the state. At the same time, less controllable factors - such as economic cycles and demographic changes - continue to influence the structure and extent of budgetary reforms.

Our purpose in this report is to encourage a detailed and informed assessment of current policies in relation to the deficit problem. This involves, firstly, examining why deficits make management of the New Zealand economy more difficult, as well as assessing their less visible effects on the level and distribution of our economic wealth. In so doing, we are seeking to show that responsible and successful fiscal management involves not only reducing the level of public expenditure and debt, but giving detailed consideration to the longer-term economic and social effects of these policies. Later in the report, we give special consideration to the various options available to the government for achieving a reduction in the fiscal deficit and suggest how further policy decisions could be approached.

1.2 The problem of deficits: an international perspective

Government expenditure - measured either in constant dollar terms or as a proportion of total economic activity - has increased markedly in most industrial countries over the last 15 to 25 years. In the majority of these countries, this growth in expenditure has outpaced increases in government revenues from taxation and other sources. In their attempts to restore fiscal balance, most governments, including the New Zealand government, have placed considerable emphasis on restraining expenditure. In practical terms, this has included policies aimed at restricting public sector recruitment, reducing costs and improving efficiency across a wide range of public sector programmes, departments and trading operations, and withdrawing public funding altogether from certain social and economic activities.

This widespread preference for reducing the deficit by controlling or reducing expenditure rather than by raising taxes has been influenced by a number of economic and political considerations. These include, especially in the case of United States fiscal policy in the early 1980s, increased adherence to "supply side" economics. This contends that economic recovery can best be achieved by encouraging firms and individuals to take the lead in increasing demand and output through *reduced* rates of taxation. As economic growth picks up, revenues from income taxes should also increase - thereby eliminating the deficit. However, despite some tax cuts, US deficits have generally continued to grow, and attention has focussed more recently on achieving efficiency and neutrality in the tax structure.

Most governments have also been conscious of concern (from both an economic and a philosophical standpoint) with the overall size of the public sector in relation to the rest of the economy. Arising from this has been a common political perception of the advantages of advocating lower public spending as opposed to higher personal taxes - though recent polls, in the United Kingdom and California for example, suggest that there is a point at which the public will resist further decline in the quantity and quality of publicly-funded goods and services irrespective of the tax rate implications.

Notwithstanding the clear and generally popular intentions of governments to reduce fiscal deficits through expenditure restraint, a relatively recent study

by the OECD (1983) has shown that not only have public sector expenditures - most commonly expressed as a percentage of Gross Domestic Product (GDP) - continued to rise in the last 10 years, but that much of the progress in OECD countries towards reducing or stabilising fiscal deficits has generally *not* come from expenditure reductions, but from further increases in taxation. This result, which is clearly contrary to the apparent commitment of governments to allow public spending to bear the principal burden of fiscal reform, suggests a number of things:

- Firstly, the *ability* of governments to *resist growth* in public and particularly welfare spending may be much less than is commonly thought.

- Secondly, the relationship between deficits and fiscal policy is more complicated than some governments may have realised. In other words, some attempts at fiscal restraint may *feed back* into the economy in ways which generate other expenditures.

- Thirdly, the need for fiscal management to contribute towards *other policy objectives* (such as growth, employment, external balance as well as social goals) may result at times in a relaxation of expenditure control.

- And finally, allowing *inflation* to raise taxable incomes, and hence income taxes ("fiscal drag"), may provide a less painful means of controlling deficits than the choices involved in reducing government spending.

While each of these explanations may have some validity, the salient facts are that deficits have proved much easier to create than to remove and that a more detailed understanding of the problem is required.

The following pages depict the growth of both revenues and expenditures for the period 1960-1984 in a selection of industrial countries, including New Zealand. Although there are limits to the extent to which comparisons can be made between countries at any one time (owing to different measurement procedures), the graphs provide a clear impression of the relevant trends. New Zealand falls broadly in the middle of this sample for both the overall rates of growth of revenue and expenditure (the slope of the two lines), and in regard to growth of the deficit problem (the gap between the lines). In general terms, our performance bears some resemblance to that of the United Kingdom and the United States, but contrasts with Australia which experienced a continuous fiscal surplus until 1974.

In considering public expenditure and the deficit, we need to be especially wary of generalisations which relate economic performance *directly* to such factors as the growth of the public sector or the size of the fiscal deficit. Economic growth invariably depends on a much more complex interaction of factors, including competitiveness, innovation, resource endowment and the overall

Figure 1 Government Revenue and Expenditure as a Percentage of GDP – Historical Trends

Revenue as % GDP ——— Expenditure as % GDP - - -

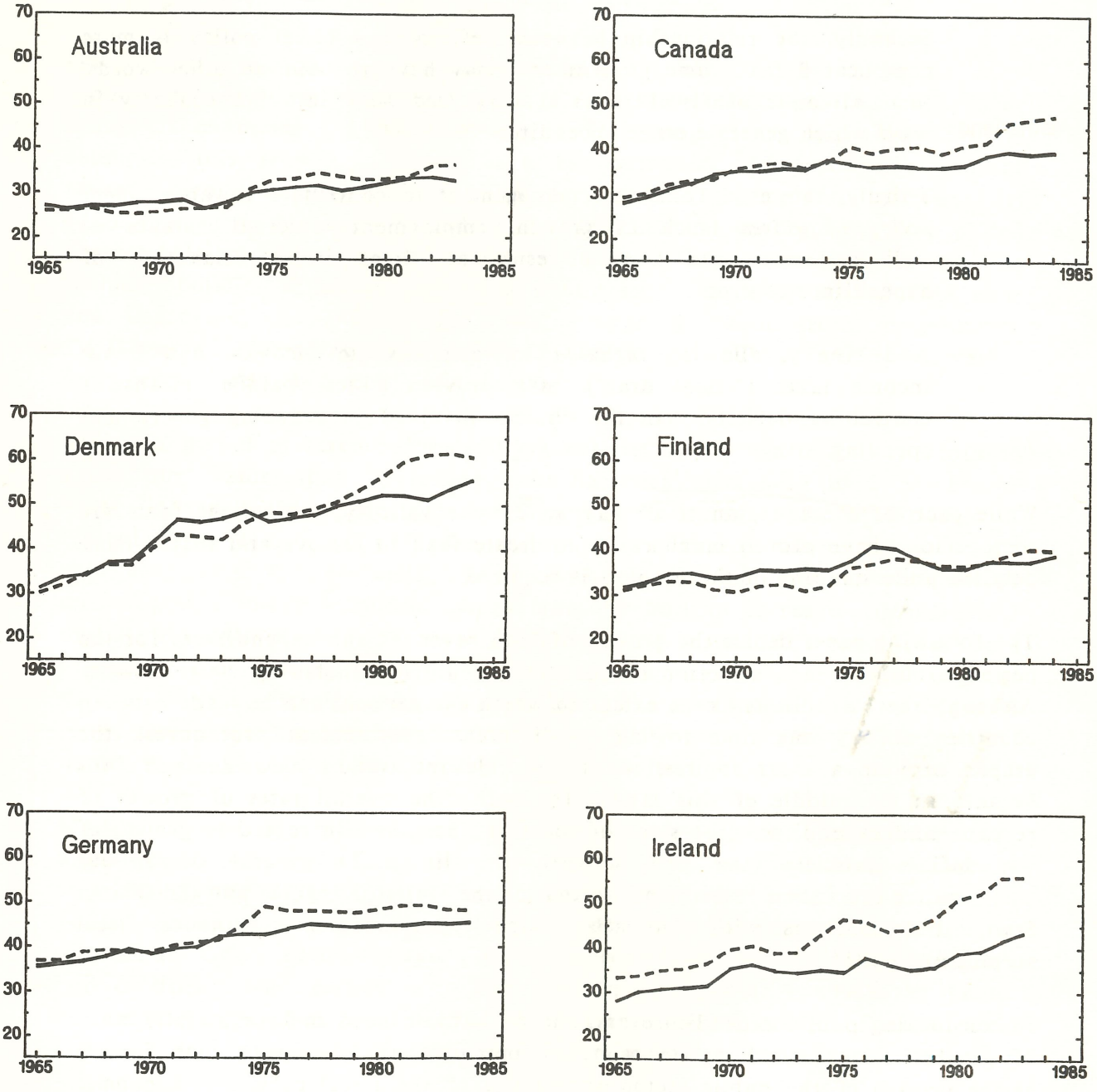
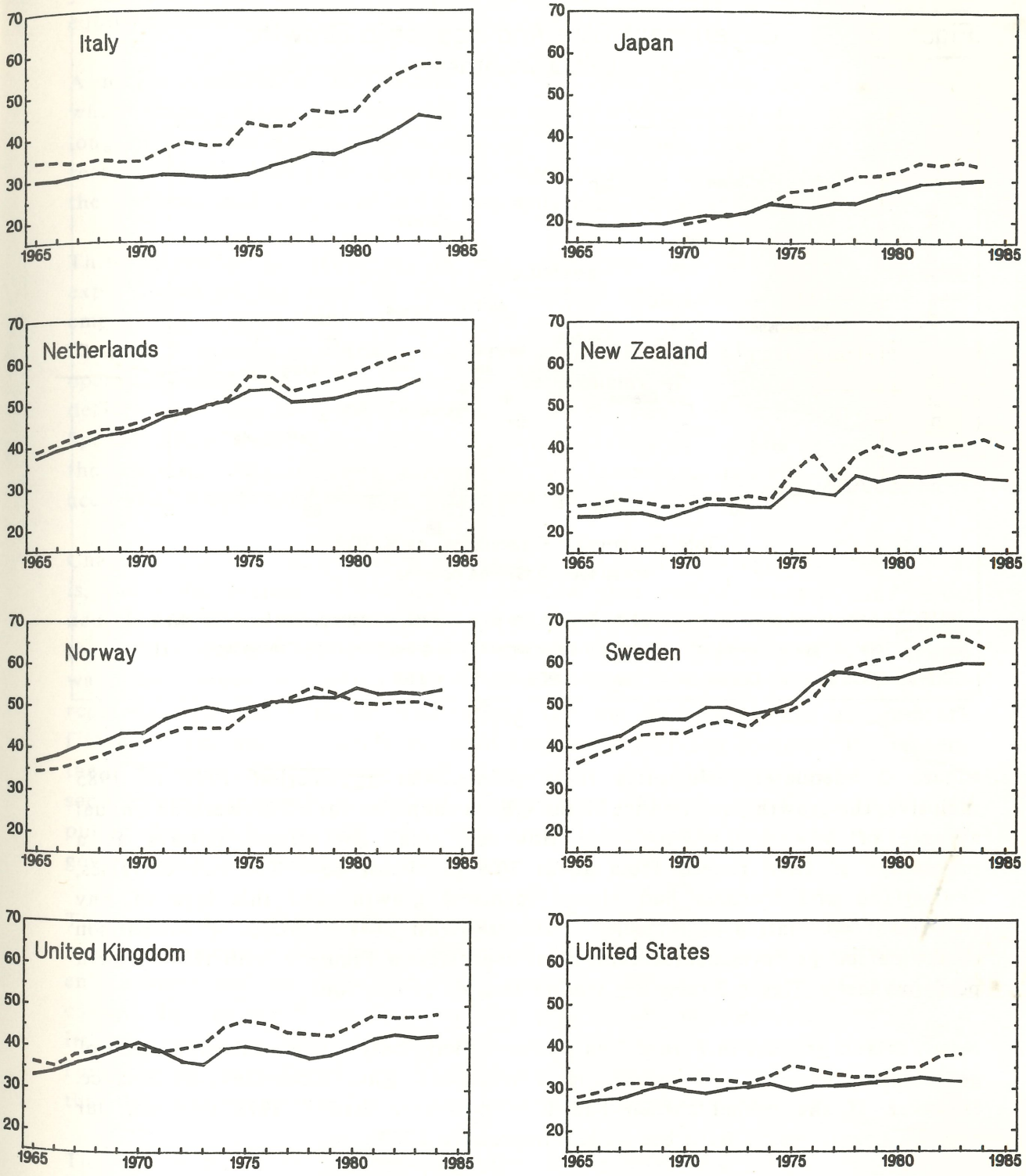


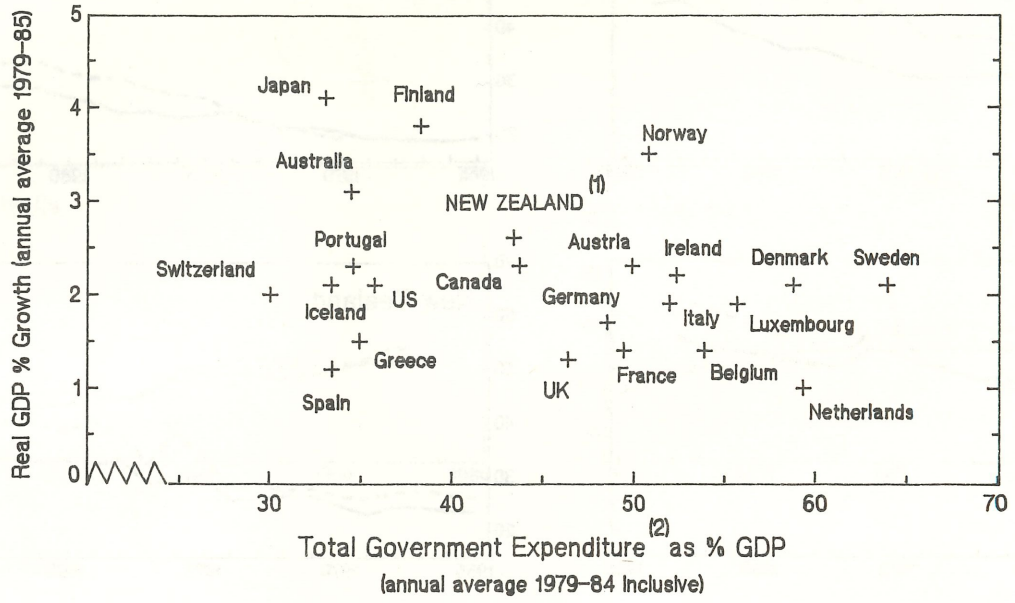
Figure 1 continued



Source: New Zealand - Budget Table No. 2 Data
Other Countries - OECD Economic Outlook N0. 40 December 1986. Tables R8 and R9

domestic policy environment. Also, widely varying results can be obtained from the choice of time periods for analysis, as most economies tend to undergo distinct phases in their economic growth.

Figure 2 Government Size And Economic Growth: OECD Countries



NOTE: (1) Figures for all countries, including New Zealand, are on a general government basis (ie. central plus local)
(2) Total Outlays of government – ie. current disbursements plus gross fixed capital formation

SOURCE: OECD Economic Outlook No. 40 December 1986 Tables R1 and R8

Figure 2 adequately illustrates these points. For the period 1979 to 1985 inclusive, the growth performance of the OECD countries varied between an annual average of around 0.5% to 4.0%. However, total government outlays as a percentage of GDP ranged from about 30% to almost 65%. The two extremes, Switzerland and Sweden, had almost identical growth, and this lack of any significant correlation is reflected across the rest of the group. A comparison of the deficit performance of individual countries in Figure 1 with their growth performance in Figure 2 reveals a similar lack of correlation.

New Zealand appears in Figure 2 as a country with only a moderate proportion of government activity and as having a relatively good economic performance. However, if the period chosen had been one year earlier, 1978 to 1984, our average growth would have been a less impressive 1.28%.

1.3 Why deficits matter: the scope of this report

As previously suggested, the proper assessment of fiscal policies involves issues more complex than mere changes in the total levels of spending or deficit. Rather, it must take account of the *quality* of the spending, revenue,

and borrowing decisions made by government, and of the manner in which they affect the economic welfare of both current *and future* generations. Insofar as many fiscal decisions also involve distributional issues - that is, the transfer of income and resources from one group, or even one generation, to another - our judgement of the quality of these decisions must encompass both efficiency and equity considerations.

A major objective of this report is to distinguish between those implications which fiscal deficits can have for current economic activity and those for the longer-term growth and development of the economy. Highlighting these, and recognising the need to develop appropriate measurement procedures for assessing them, should lead to more effective and more comprehensive fiscal management.

This objective is reflected in the structure of the report. Recently, explanations of the need to achieve sustained reductions in the deficit have emphasised the "problems" which deficits create for current economic activity. Chapter 2 consists primarily of a review of these issues, particularly as they operate through the *monetary* side of the economy. This means discussing how deficits are linked with inflation, interest rates and the exchange rate. Special attention is given to the alternative strategies available for funding the deficit, their possible effects on the economy, and the problems of accurately determining the appropriate funding requirement.

Chapters 3 and 4 each present one side of a broader concept of deficits. That is, the redistribution of resources over time that results, on one hand, from debt accumulation (Chapter 3) and, on the other, from changes in the worth of the public sector (Chapter 4). Fiscal policies which redistribute wealth in this way, and which are often not accurately captured by conventional deficit reporting, can have major implications for the success of the government's fiscal strategy and for the longer-term development of the economy. Recognising these effects and assessing their impact on the economy requires a more sophisticated approach to deficit measurement than is usually contained in public discussions, as well as a broader and more careful description of the government's asset and liability decisions.

The remaining chapters of this report are directed primarily at applying this broader framework for the assessment of fiscal policy to the current economic environment and to the options for achieving effective and sustained fiscal control. In Chapter 5, we focus on the issue of public expenditure policy and its relationship to social and economic goals. The health, education and welfare functions of government are given closest scrutiny, since it is in these areas that the greatest pressure for reforms has already begun to occur.

Throughout the report, we draw attention to the difficulty of presenting precise explanations or conclusions. This results largely from the unavailability of appropriate data and from the measurement problems involved. We have endeavoured to keep the text clear of too many discussions of a technical nature by dealing more fully with measurement issues in separate technical papers to follow this report.

Indeed, it is important to keep in mind the need for further work in adjusting and refining the information necessary for the proper assessment *and implementation* of fiscal policy. As indicated in Chapter 6, the Planning Council intends to assist this process through further development of the fiscal measures discussed in this report and their application to future policy.

CHAPTER 2 : DEFICITS AND CURRENT ECONOMIC ACTIVITY

Much of the attention focussed on the size of the fiscal deficit arises from its implications for the government's borrowing requirement and hence for the conduct of monetary policy. The decision government makes on whether to fund all or part of its deficit flows on to interest rates, the exchange rate and inflation. The key role that private sector expectations play in the outcome of policy decisions emphasises the importance of a correct interpretation of the deficit-funding requirement.

2.1 Economic management

Interest in the size of the fiscal deficit reflects the view that deficits have been a key factor in New Zealand's relatively poor economic performance. Determining the precise impact of deficits on the economy, though, is one of the most contentious issues in economics. Even the level of deficit which is tolerable for maintaining reasonable flexibility in macroeconomic management is uncertain. In 1984, Treasury suggested 2% of GDP as a target maximum, while the previous National Government's *National Development Strategy* suggested 3-4%. More recently, another commentator has suggested that a zero deficit would be a more acceptable fiscal objective. The difference between these positions (0-4%) currently amounts to over $2 billion - underlining the significance of this issue for the conduct of public policy.

The main purpose of this chapter is to focus on the difficulties which deficits create, even in the short term, for balanced and effective economic management. Deficits are frequently cited as an explanation for recent high levels of interest rates, the exchange rate, and inflation. Although they are not the only cause of problems in these areas (nor is a higher standard of fiscal management sufficient in itself for improving economic performance), understanding how deficits influence *short-term economic adjustment* is fundamental to the discussion of economic policy.

Describing how deficits interact with economic activity can be approached in a number of ways. We have chosen to outline first how deficits may result from either deliberate or automatic changes in a government's revenue and expenditure activities. These different *components*, or causes, of deficits provide an important introduction to the more complex economic relationships and may determine the appropriate policy response.

In the following sections we consider how the level and structure of demand and the accompanying monetary policies of government contribute to the impact of a fiscal deficit. In particular, we are concerned with the deficit-funding decisions of government, since it is through the effects of these on the "monetary sector" that a large deficit is perceived as being most damaging to output, employment and prices.

In this report, we have taken a general and, we hope, straightforward approach

to the relationships between deficits and other economic variables. There is a danger, therefore, that some of these issues may receive inadequate depth of discussion. Wherever possible, we have referred readers to appropriate sources for a more detailed treatment of the subject.

2.2 The components of a deficit

The size of the fiscal deficit in New Zealand has varied significantly in each of the years since 1971/72 as depicted in Figure 3. However, a deficit is simply the *residual*, or excess, of public expenditure over revenue. Variations in the deficit are therefore the result of different influences operating on each side of the government's accounts. These influences may be either cyclical or structural.

Cyclical influences refer to built-in or automatic links between the government's revenues and expenditure on the one hand, and the current level of economic activity on the other. In periods of economic recession, there is a requirement for the government to spend more on unemployment benefits, for example. At the same time, the decline in incomes accompanying the recession will lead to less revenue from taxation. The combined effect of these adjustments to fiscal flows is to increase the size of the fiscal deficit - even though there has been *no deliberate action* on the part of the government.

Conversely, periods of full employment and/or high economic growth result automatically in reduced expenditures on unemployment as well as increased revenue from taxation. While these periods seldom now result in a budget surplus, they are generally characterised by smaller deficits. Most western economies, including New Zealand's, continue to experience strong cyclical swings in economic performance, though the duration, severity and causes of such swings are rarely consistent nor easily explained. (See Table 2: NZ growth rate history.)

It is possible to estimate the effects of this economic cycle on the size of the government's deficit. This is done, firstly, by determining the extent to which total output for the economy in that year was above or below its longer-term "trend level".* This enables one to arrive at an estimate of the proportions of government revenue and expenditure which are the response to cyclical factors. The remaining (and usually by far the greater) part of expenditure and revenue forms the *structural* (i.e. mainly policy-related) components. The difference between the two structural components then becomes an estimate of the structural deficit.

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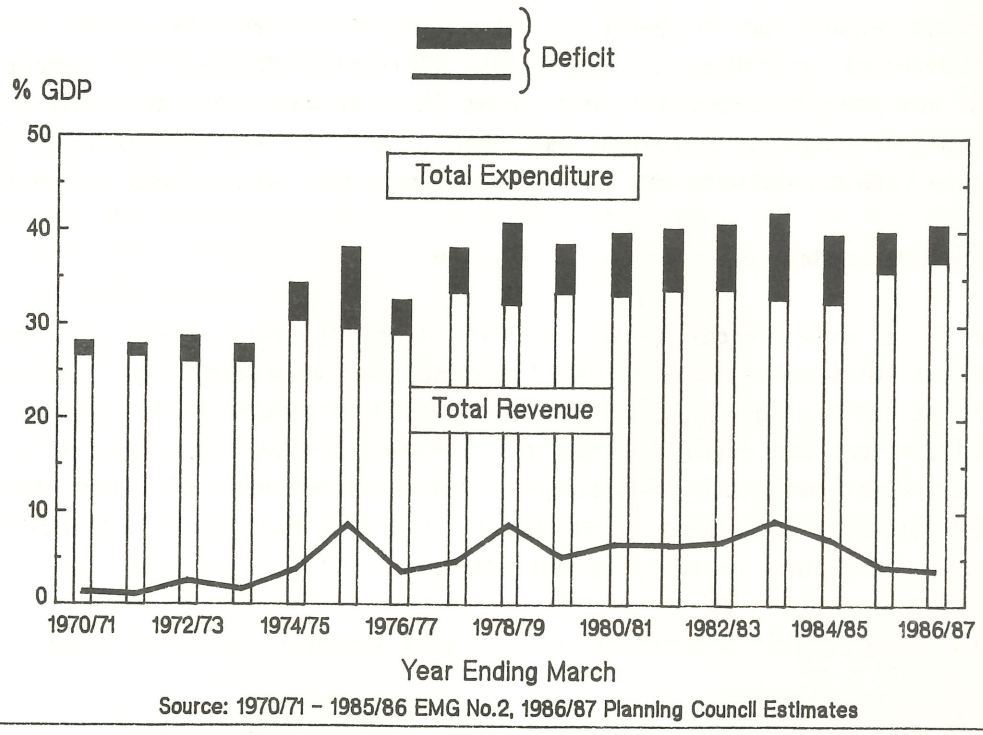
* For a discussion of trend growth and the calculation of the effect of economic cycles on the budget deficit, see *Reserve Bank Bulletin*, Vol. 49, December Quarter, 1986.

Notwithstanding some measurement problems, it is generally agreed that cyclical factors have accounted for only a minor part of the budget deficit in recent years. (Our estimates show the maximum cyclical component in any one year to be about 1.5% of GDP.) Thus the major portions of deficits since 1971/72 have been structural, which means that significant reductions in the size of these deficits could only have come from deliberate changes in the government's revenue and expenditure policies. This distinction between the structural and cyclical components of a reported deficit figure can be useful for disentangling fundamental budgetary changes from temporary ones. For example, correct interpretation of the recently announced deficit of $1.95 billion for 1986/87 involves determining whether the substantially increased tax revenues result from permanent changes in the tax base, or from the temporary rise in consumption spending and related incomes which accompanied the GST/income tax trade-off and sharemarket boom during that year.

Changes in the structural component of the deficit occur for a variety of reasons. Demographic factors, such as changing proportions of school-age children and superannuitants, interact with unchanged policies to affect expenditure levels. New policy decisions, such as the switch between income tax and GST, affect revenue and expenditure levels. Changes in debt-servicing obligations, such as the revision of energy project financing from the private to the public sector, affect what is regarded as government expenditure.

Figure 3 Net Government Expenditure, Revenue and the Deficit
As a Percentage of GDP



Source: 1970/71 – 1985/86 EMG No.2, 1986/87 Planning Council Estimates

Discretionary fiscal policy

Government may introduce new policies which deliberately vary the structural component of the deficit in an attempt to offset undesired fluctuations in the level of private sector economic activity. This discretionary use of fiscal policy for counter-cyclical or "stabilisation" objectives has, at times, characterised the approach of New Zealand governments to economic management. The potential for government to raise output and employment in this way - even though it usually involves an enlarged deficit - is a principal tenet of Keynesian economics.

Confidence in the ability of governments to achieve positive *long-term* outcomes from fiscal expansion has diminished in recent years. Much depends on the ability of the government to correctly interpret economic conditions at the time, to be well informed as to the appropriate action, and to avoid *lags* in the implementation and impact of fiscal adjustments. The failure of the New Zealand economy to achieve sustained growth following successive fiscal expansions in the 1970s was an important factor in the gradual build-up of fiscal deficits. Moreover, the deficit-funding policies which accompanied that period of fiscal "fine-tuning" are now considered to have encouraged excessive growth in the money supply and, therefore, to have reinforced inflationary pressures.

To summarise, changes in the size of fiscal deficits result either from changes in private sector activity which trigger automatic fiscal adjustments; from more fundamental changes in the government's revenue and expenditure policies; or from some combination of both. In New Zealand, the growth of deficit spending has also increased as a result of using discretionary fiscal policies for employment and stabilisation objectives. Current attempts to reduce the structural component of the deficit have so far met with only moderate success. As a result, increasing attention has been drawn to the complexity of the relationship between deficits and other key determinants of economic activity.

2.3 The impact on demand

The use of a deficit-creating (or deficit-enlarging) fiscal boost to economic activity has been a typical policy response in a number of countries - especially to the output and employment recessions generated by the oil price shocks.* However, the initial impact of this measure will often hinge on the existing level and structure of demand in the economy, including the extent to which the stimulus is able to be eroded by counteracting "leaks" in the system (such as extra consumer spending on imports).

Often the most visible constraint on the effectiveness of fiscal expansion is

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* See especially Blondal, G. (1986) for a discussion of this policy response in other small industrial countries.

the extent to which the public sector's increased demand for real resources (such as labour, land, or raw materials) displaces or pre-empts private sector activity. Where this occurs, excess demand and hence inflationary pressures are likely. If resources are used less efficiently in the public sector than in the private sector, this *real crowding out* may also *reduce* the general level of economic welfare. These effects may not only apply to a single instance of fiscal expansion, but also, it has been argued, to the growth of government generally.

An expansion of public sector activity deprives other users of resources only if they are in short supply. During a recession, fiscal expansion may have the very positive effect of creating jobs and incomes for people who would otherwise remain unemployed. However, recent experience in both New Zealand and other countries has shown that it is difficult to direct fiscal expansion in such a that positive effects are achieved without creating other problems. It is difficult, for example, to target government spending so that unemployed people are absorbed into the labour force before potential employers find themselves frustrated by a shortage of particular skills. Furthermore, public employment schemes may frustrate the demand for labour once private sector activity begins to recover. These are the principal reasons why current government policy, in the form of the ACCESS programme, is concentrating on disadvantaged people and on developing the skills they can offer employers.

The impact of fiscal expansion may be diminished in other ways. We have noted above that higher levels of demand may leak out into imports, and also increased private savings. In the former case, the OECD (1983) has estimated that, for most European countries, up to 40% of the demand/output effect of a fiscal expansion will feed directly into an increased level of imports. In other words, a large part of the increase in personal incomes is likely to be used for the purchase of imported consumer goods - with minimal effects on domestic employment. For an open economy like New Zealand with a relatively small manufactured goods sector, the proportion of import leakage may be higher. The stimulus to the domestic economy may also be reduced if, at the same time, agricultural protectionism in other countries prevents us from expanding that part of our export production.

Although there have been few published studies of these issues in New Zealand,* there is reason to doubt whether the impetus which fiscal expansions have given to domestic output and employment in recent years has been either substantial or long lasting. It is undesirable, in our view, that discretionary fiscal policy now be used to stimulate economic activity - at least until the deficit and inflation are under much greater control.

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* See Deane, R.S. and Smith, R.G. (1980) for an assessment of the stablilisation role of fiscal policy in New Zealand, especially during the 1970s.

2.4 Deficit funding and monetary policy

Although these demand conditions may be important, the effects of a deficit usually depend even more on how it is funded and therefore on the stance of accompanying monetary policy. Much of the recent discussion of deficits in New Zealand has centred around the choice and implementation of an appropriate funding policy. The choice which governments make in this respect will generally depend on broader economic objectives, on whether the deficit is the result of a deliberate fiscal expansion or of less controllable cyclical factors, and possibly on the size of the deficit itself. To explain the *two-way* relationship between deficits and monetary policy, we have broadly outlined in the next few paragraphs how this aspect of monetary policy works.

Monetary policy

Responsibility for the implementation of monetary policy rests primarily with the Reserve Bank. The objectives of policy are the achievement of price stability (i.e. the reduction of inflation) and the development of a stable and efficent monetary environment. By meeting these objectives, monetary policy fulfills its broader function of facilitating economic growth.

The implementation of current policy is based on the premise that lower inflation and a more stable and efficient financial sector are most likely to be achieved by ensuring controlled growth of a broad range of monetary assets, commonly referred to as the *money supply*.* The Bank seeks to regulate this growth through a more narrowly defined sub-group of assets known as the "monetary base" or *primary liquidity*. Primary liquidity consists of trading bank balances with the Reserve Bank plus Treasury bills and government securities with less than one month to maturity.

In principle, the Reserve Bank's efforts to exercise moderate control over the total amount of primary liquidity in the financial system (in recent months around $400 million), forces financial institutions to compete for funds on which to base their lending activities. Short-term interest rates adjust up or down to equate supply and demand in this money market. Any shortage of primary liquidity relative to demand places upward pressure on short-term rates. Sustained pressure of this kind may spill over into the rates offered by institutions for longer-term funds, such as bank fixed deposits with lengthy maturities. Because institutions have to maintain their margins, there is a corresponding rise in the rates for personal and commercial loans.

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* There is no single definition of the money supply. In most countries a range of monetary aggregates are compiled - M1, M2, M3, for example - which incorporate the public's holdings of cash, plus deposits with various financial institutions. In New Zealand, the most widely used definition is M3 which, in 1986, the Reserve Bank defined as comprising currency in circulation, plus the deposit liabilities of most of the major financial institutions.

In practice, the interaction between the Reserve Bank and the financial institutions in the money market is rather more sophisticated and less predictable than the above outline suggests. A significant reason for this is the financial institutions' requirement for a certain level of liquidity with which to conduct their daily borrowing and lending operations. The Bank therefore has the dual task of ensuring that the system operates smoothly and efficiently, but within the broad context of relatively firm controls (at present) on the growth of liquidity. This means that the Bank must not only attempt to forecast and facilitate the system's requirement for cash on a daily basis, but to ensure at the same time that the growth of private sector lending and the money supply are in accordance with the government's broader monetary policy objectives. Errors in forecasting and/or the effects of the firm monetary policy guideline can create tensions within a system which, especially during the current process of deregulation, requires both institutions and individuals to be highly competitive.

Deficits and liquidity

The fiscal activities of government are a major influence on the volume of monetary assets in circulation at any one time. Indeed, the fiscal deficit (the excess of government injections over withdrawals) is the principal source of *net* injections of liquidity. To maintain control of the growth in the money supply, the Bank must from time to time withdraw sufficient primary liquidity from the financial sector to offset all or part of these net fiscal injections. The current policy of *fully funding the deficit* simply means withdrawing sufficient liquidity to completely offset these injections. Prior to 1985, monetary policy was much less consistent in its approach to deficit funding. Partial funding - sometimes described as "monetising" or "accommodating" - of the deficit was widely regarded as contributing to the growth in liquidity, the money supply, and eventually prices.

The principal mechanism for funding the deficit is the Government Stock Tender Programme. In effect, this sale of government bonds to the private sector has a dual role of being the major instrument of liquidity management and of providing the government with the private sector savings necessary to meet its funding requirement. Much the larger part of this sale of bonds in New Zealand consists of "wholesale" government stock, which was paying rates of interest of around 16-20% during much of 1986/87. "Retail" issues - such as "Kiwi" or "Kiss" bonds - play a lesser role, but have often been available to the general public at comparable rates.

The implementation of monetary policy has been described by the Reserve Bank in the following way:

> "...The basic criterion the monetary authorities are using for monetary policy at present is to fund almost fully the net public account injections over the course of a year. This means that net injections from the Treasury and the Reserve Bank combined are funded by sales of longer term government stock. These injections comprise mainly the fiscal

deficit and maturing government stock or, to be more precise given the definition of primary liquidity, government securities coming within six months to maturity.*

The critical elements underpinning monetary policy are thus the scheduled reductions in the fiscal deficit, the commitment to market determined interest rates and the exchange rate, and the "fully funding" guideline for Government domestic borrowing."

Reserve Bank Bulletin, Vol. 48 No. 7, 1985, p. 34.

Fully funding the deficit is often referred to as a "firm" or "tight" monetary policy. And while it is true that growth in primary liquidity has been more tightly controlled over the last two years, the consequences of this policy have changed somewhat in a less regulated financial environment. The influence of the Reserve Bank on the lending of financial institutions now tends to be via price (i.e. interest rates) rather than quantity which was the case until 1984. The effect of this change has been to give financial institutions greater flexibility in determining their lending policies, but also the prospect of greater variation in the interest rate costs faced both by the institutions and their clients. It can be argued that this is a more equitable system than one which suppresses interest rates but imposes credit rationing or other quantitative limits.

While the "fully funding" combination of monetary and fiscal policies is probably the least inflationary medium-term strategy, it can easily run into a number of difficult problems. These arise, in particular, from the adjustment responses of interest and exchange rates and their subsequent impact on economic activity, as well as from more purely technical problems of maintaining appropriate monetary control. Technical problems in New Zealand have revolved around maintaining an appropriate volume of liquidity in the financial system on a day-to-day basis. A more fundamental problem has been considerable unpredictability in the relationship between the supply of *and demand for* primary liquidity and the growth of the broader money supply.

Interest rate effects

We have already noted that interest rates are determined in part by the interaction of supply and demand with respect to liquid assets. The sale of government stock is itself an expression of central government's demand for these assets and will therefore have an impact on domestic interest rates.**

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* This definition has subsequently been revised to "one month to maturity".

** For a more detailed, theoretical, discussion of the relationship between fiscal deficits and interest rates see *Reserve Bank Bulletin* Vol 49. No 6, June 1986.

The most direct impact can be expected from the additional demand for savings that results from a substantial deficit-funding requirement. Also, if the private sector's holdings of government debt are already large, due to earlier deficits, then higher rates may be necessary to induce financial institutions in particular to allocate even more of their portfolios to this particular stock. The results of some recent government stock tenders in New Zealand, in which less than the full amount on offer has been bid, suggests that private sector demand for this asset is not insatiable. The demand/output effects of a fiscal stimulus referred to earlier, combined with the possible *wealth effects** which result from the private sector's increased holdings of financial stock, may add further to interest rate pressures.

While all these factors may be important, they should be viewed alongside New Zealand's changing relationship with international capital markets. Foreign savings have always been an important source of deficit funding, though access to these funds has tended to shift from official borrowing to the use of private financial markets - especially in the last two years. Foreign investors, operating through local financial institutions, are now significant buyers of New Zealand government stock. Indeed, financial deregulation has also encouraged the private sector to increase its use of foreign savings in meeting its borrowing requirements.

This closer interaction of capital markets has meant that domestic interest rates, now also free of regulation, tend to respond more to overseas influences. To be attractive to overseas investors, interest rates on government stock must be at least comparable (in terms of both expected returns and investment risk) to those obtainable on foreign markets. This requires a rate which is higher than that currently offered on the debt of most other industrial countries in order to protect the investor against the added risk of exchange rate fluctuation. For New Zealand investors, a return over and above the rate of domestic inflation is paramount. The high nominal rates currently tendered for government stock reflect both these external and internal forces.

Expectations play an additional, but crucial, role in this process. What the private sector believes about future rates of inflation and the size of the government's borrowing requirement are especially important in determining interest rate movements. Expected inflation provides the key to the return which suppliers of funds will be seeking, while the borrowing requirement provides an indication of the level of demand in the market. It is possible that interest rates will only decline when the private sector expects a *sustained* reduction in one or both of these variables. Expectations of the exchange rate are of similar importance for overseas investors. Much of the success of current

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* Much debate surrounds the view that an increase in the stock of outstanding government debt which results from deficit funding can raise the private sector's perception of its own net wealth, and hence its level of spending. See especially Barro (1974).

monetary policy in New Zealand therefore hinges on the perceptions of financial markets.*

The high nominal interest rates currently applying in New Zealand are a direct consequence of a combination of present and previous monetary, fiscal and exchange rate policies. The potential which such high rates may have for encouraging a shift of resources away from investment in the real goods sector into consumption or financial and speculative investment is a major cause for concern. Clearly, some investments (whether real or financial) which, after tax, have an expected rate of return lower than the return on government stock will be declined. This effect - sometimes referred to as *financial crowding out* - can result in lower output and employment. And any such reduction in economic activity is likely to generate additional cyclical pressures on the deficit.

Exchange rate effects

Capital flows into New Zealand have been a major factor in supporting the exchange rate. The EMG considers the present rate of around US58c (April 28, 1987) to be about 10-20% above the level which would otherwise be determined by our international balance of trade. As indicated in an earlier report**, the effect of these currency values has been to lower the profitability of some export industries by reducing the NZ dollar value of export sales without simultaneously reducing domestic input costs. A higher valued NZ dollar also lowers import prices relative to domestically produced goods, thereby encouraging a switch of demand away from domestic production. The process by which an appreciation of the exchange rate reduces domestic investment through these two channels is sometimes called *exchange rate crowding out.* There is little doubt that this has occurred in New Zealand over the last two years, though the extent of the impact cannot be accurately gauged.

The principal task of policy is finding the most appropriate adjustment path from a position of high inflation and increasing debt to a more efficient and equitable economy. Within this, the most important factor is the mix of monetary and fiscal policy adopted. The interest and exchange rate effects of present policies bear heavily on those sectors of the economy which produce tradable goods, particularly on exporters to countries against whose currencies the New Zealand dollar has appreciated. Thus the "losers" include pastoral farmers whose ability to switch to different products or new markets is limited. Some regions are more dependent than others on such producers, and the regional impact is therefore uneven.

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* In one sense, the wage and price controls introduced in 1982 were an attempt to "squeeze out" inflationary expectations. The interest rate controls which followed were, in affect, an attempt to deny the financial market's freedom to act on its expectations of inflation and determine interest rates accordingly.

**EMG Report No. 6 (1986)

An alternative approach would have been to rely more on fiscal policy and less on monetary policy. If the fiscal policy had taken the form of increased taxation, the decline in demand would have been distributed differently; there may well have been more unemployment, for example. Determining the public interest is difficult and it cannot be said with confidence that the community as a whole, as distinct from particular groups within it, would be better served by a different mix of monetary and fiscal policy than the one adopted.

The relationship between deficits, monetary policy and the exchange rate has not only proved complex in most countries, but also decidedly variable. Hence the need to adopt a sound and consistent medium-term approach to monetary and fiscal policies and to avoid attaching too much importance to short-term balance of payments indicators. One argument for resisting the move to a managed exchange rate is that such a policy - whether or not it consisted of direct intervention in the foreign exchange market - would greatly alter the overall monetary, fiscal and exchange rate relationship. There is no evidence that the problems which this could create for the control of inflation, business confidence and resource allocation would be less than the present potential for exchange rate crowding out.

2.5 Assessing the monetary sector impact

In previous sections, we have sketched the broad theoretical relationships which exist between fiscal deficits and other economic variables. A key element in these relationships was seen to be the deficit-funding policy. It is through this interdependence of monetary and fiscal policies that deficits exert their major influence on the level of economic activity. For these reasons, government announcements on the size of the fiscal deficit and the supporting monetary policy are widely regarded as important indicators of forthcoming economic conditions. In this section, we consider the quality of the information provided by the government's budget deficit figure as an indicator of its expected borrowing requirement.

An important point in the earlier Reserve Bank statement on monetary policy is that net injections may arise from a *combination* of Treasury (i.e. fiscal) and Reserve Bank activities. The official, Budget Table No. 2, deficit figure provides only an estimate of the impact of Treasury's revenue and expenditure transactions. For this reason, account needs also to be taken of Reserve Bank transactions with Treasury and with the private sector through the use of a consolidated measure. The principal adjustments to the Budget Table No. 2 deficit figure involve:

(i) Eliminating transactions which have taken place between Treasury and the Reserve Bank (i.e. within Government) and which have no impact on private sector liquidity;

(ii) Including the liquidity impact of other Reserve Bank transactions with the private sector; and

(iii) Including the impact of the Reserve Bank's shorter-term liquidity management programme. (In practice, this impact tends to net out to zero over the longer term. For this reason, we have not included it in our essentially backward-looking estimates of the consolidated deficit.)

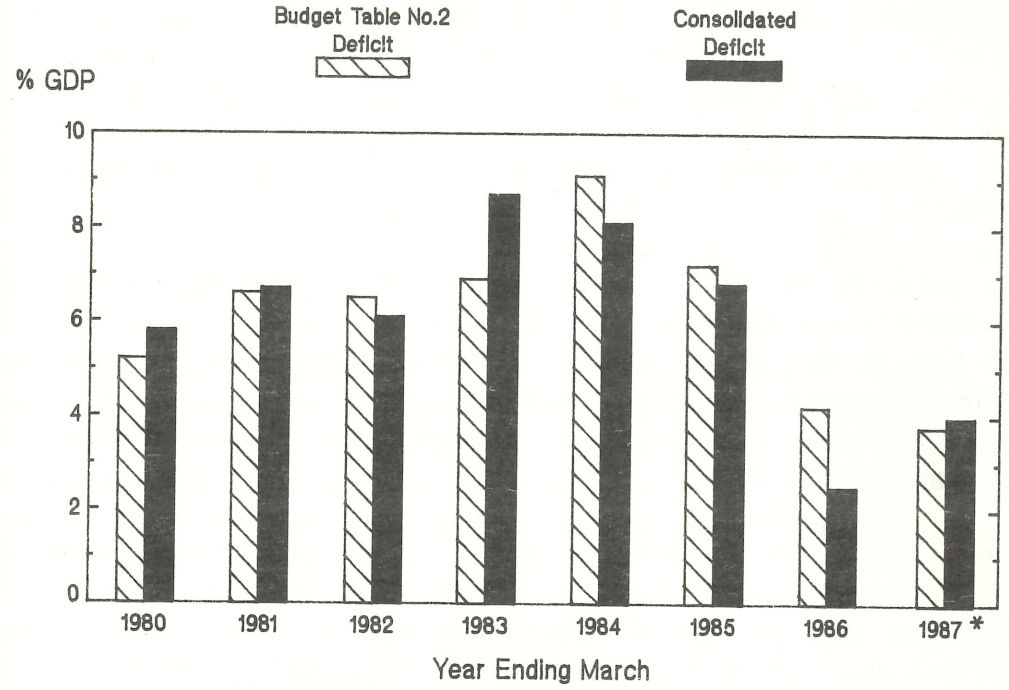
The bar charts in Figure 4 show the effect of these consolidating adjustments compared to the published Budget Table No. 2 deficit figure. We have provided the same information expressed both as a percentage of GDP and in current dollars since both series are helpful for gauging the trend of recent policy. Although our figures are only approximate for the consolidated deficit, the two charts indicate that there have been only two or three occasions in the last seven years when the Budget Table No. 2 deficit has not provided a reasonably good indication of the liquidity impact of the government's (consolidated) monetary sector activities. The Budget Table No. 2 figure has clearly been least reliable as an indicator of the public sector's liquidity impact in the year ending March 1986. In the second graph, net issues of government debt (i.e. new issues less maturing debt) are shown alongside the consolidated funding requirement. The data for 1985/1986 reflect the "fully funding" monetary principle instigated at that time. More significantly, perhaps, the graph shows the approximate extent of "over-funding" which occurred in 1986/87 as result of the problems experienced by the government in accurately predicting the final budget deficit figure.

It is interesting to note, however, that the similarity of the two deficit measures arises mainly as a result of *offsetting* adjustments within the public accounts. As Table 4 shows, Reserve Bank activities and transactions within the public sector have at times been quite significant and this points to the potential importance of the consolidated measure in assessing the net public sector injections and hence the government's borrowing requirement.

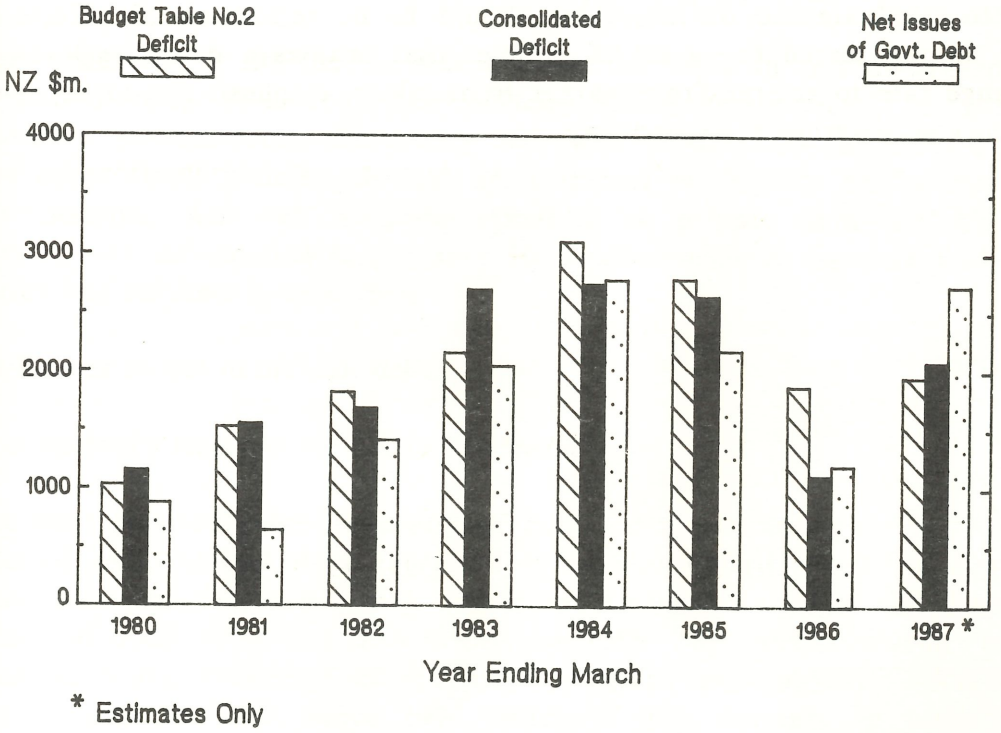
The shift of some government trading operations into corporations - and therefore ouside the public accounts - means that the Budget Table No. 2 figure (and therefore the consolidated measure as well) will become a much less accurate indicator of the public sector's *total* borrowing requirement. This is not a major problem in itself, but it does mean that financial markets will need to have access to a much broader list of borrowing plans for the government and corporations in order to judge the full impact of the public sector on the demand for funds. This has already occurred in 1986/87 with the "off-budget" shift of some Housing Corporation and Rural Bank borrowing. The effect in 1987/88 will be considerably greater with nine new corporations and will generate the need for a new measure which, in the United Kingdom at least, is called the Public Sector Borrowing Requirement (PSBR). It is expected that future government budgets will provide such a figure - or at least indicate the borrowing requirement of public corporations from which an overall PSBR can be compiled.

Figure 4

Consolidated Monetary Sector Deficit
Percent of GDP



Consolidated Monetary Sector Deficit
Current Dollars



* Estimates Only

2.6 Conclusions

Large and persistent fiscal deficits make it very difficult to achieve a balanced and effective programme of macroeconomic management. In New Zealand's case, the adoption of a firm anti-inflationary strategy alongside a large borrowing requirement by government has placed pressures on the operation of the monetary sector. This has contributed directly to undesirable exchange rate and interest rate levels. There are indications that the investment and output effects of these adjustments are themselves creating longer-term difficulties for the economy.

A further point to emerge is the importance of interpreting correctly the monetary sector implications of deficits. What the private sector *perceives* about the size of the deficit and its monetary implications may be more important than the reality. Developing measures for more accurate assessment may therefore be necessary to encourage more informed and more constructive reaction to future budget announcements.

The problem remains that the exchange rate is a strong influence on output and investment in important sectors of the economy. International competitiveness depends both on our inflation rate relative to those of our trading partners, and on the exchange rate. A firm monetary stance is needed to control inflation, but as long as we have to attract substantial resources to the public sector, interest rates will be high and the overseas funds attracted by those interest rates will push the exchange rate to a level which is no longer profitable to the tradables sector - that is, producers of exports and import-competing goods. It is obviously undesirable to give up the control of inflation; although it is difficult to eliminate the deficit, there should be no relaxation of efforts to reduce it. In the search for a set of policies that enables a desirable level of the exchange rate to emerge from market transactions, emphasis has to be given to the *quality* of government expenditure.

CHAPTER 3 : FISCAL DEFICITS AND THE GROWTH OF DEBT

In this chapter, we examine the extent of indebtedness in New Zealand. In particular, we point to the implications of current indebtedness for economic management - including the conditions under which a serious and uncontrolled expansion of the interest costs of accumulated debt could occur. We discuss the need to develop a better understanding of the debt liabilities inherent in some fiscal policies and their relationship to future economic growth.

3.1 Official debt

The consequences of persistent fiscal imbalance extend beyond the short-term adjustment issues outlined in Chapter 2. Over a longer period, the funding of fiscal deficits from internal or external borrowing may add substantially to the accumulation of official debt and to the costs of debt servicing. This interaction between the deficit and the growth of debt increases the difficulty, and the importance, of achieving fiscal control.

We have confined our discussion of New Zealand's indebtedness to "official" debt, i.e. debt incurred by the government and the Reserve Bank. Although providing a broader and more accurate description of the government's debt position than the more commonly cited "Public Debt", the official measure does not include an increasing number of public corporations. The establishment of new corporations means that valid comparisons of trends in public sector assets and liabilities will, in future, require more sophisticated measurement.

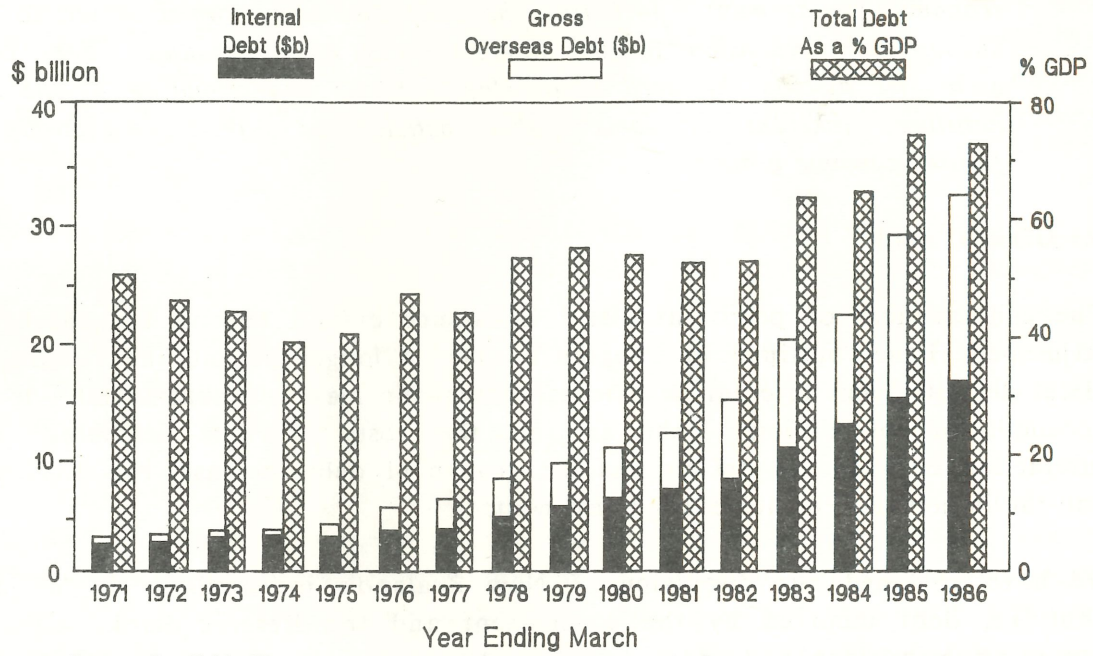
Debt incurred by the private sector is not included in this discussion since it is not directly related to the deficit-funding requirements of government. However, private sector borrowing may well be affected *indirectly* by deficits and other fiscal policies, through their impact on interest and exchange rates, for example. Although accurate statistics of private debt are difficult to obtain, such information is necessary for a comprehensive assessment of economic policy and national indebtedness.

3.2 Recent trends in official debt

New Zealand's total and per capita indebtedness

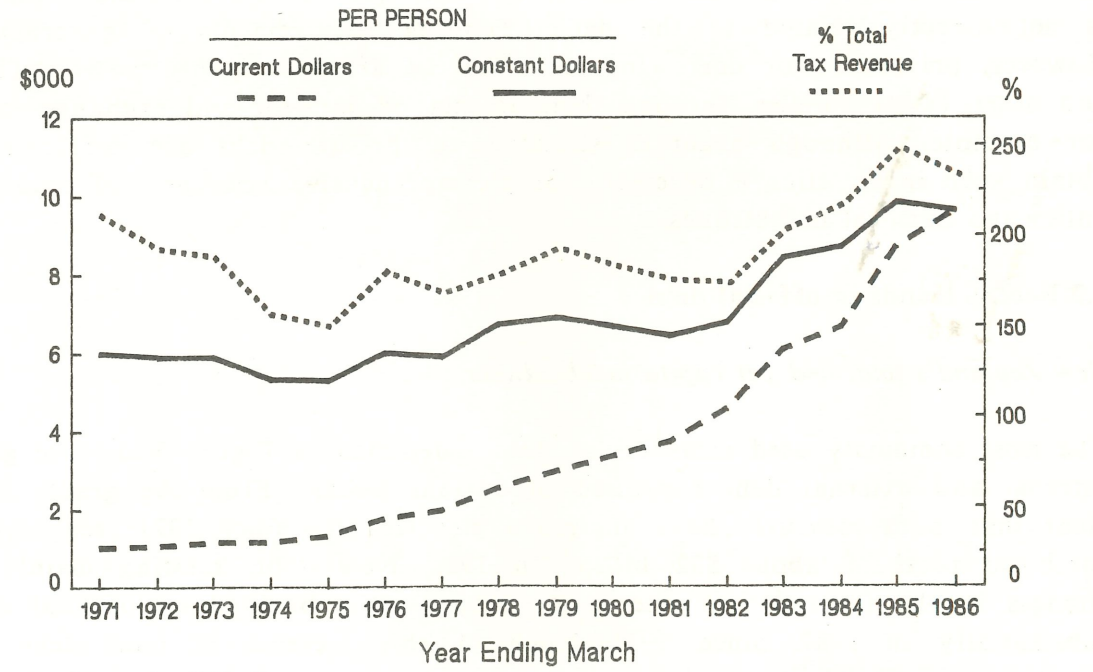
The most commonly used measures of debt - depicted in Figure 5(a) - are gross internal and external debt expressed in current dollars. From the graph, it is clear that both measures have increased significantly since 1971, reaching a combined total of about $32 billion in 1986. New debt, relating mainly to changes in the financing of the major projects, has bumped up official debt substantially in 1987. Since 1976, much of this increase in total debt has resulted from overseas borrowing, which now makes up approximately half of total indebtedness. The significance of this shift in the structure of official debt is considered in Section 3.3 below.

Figure 5(a) Official Internal and Overseas Debt
1970/71 – 1985/86



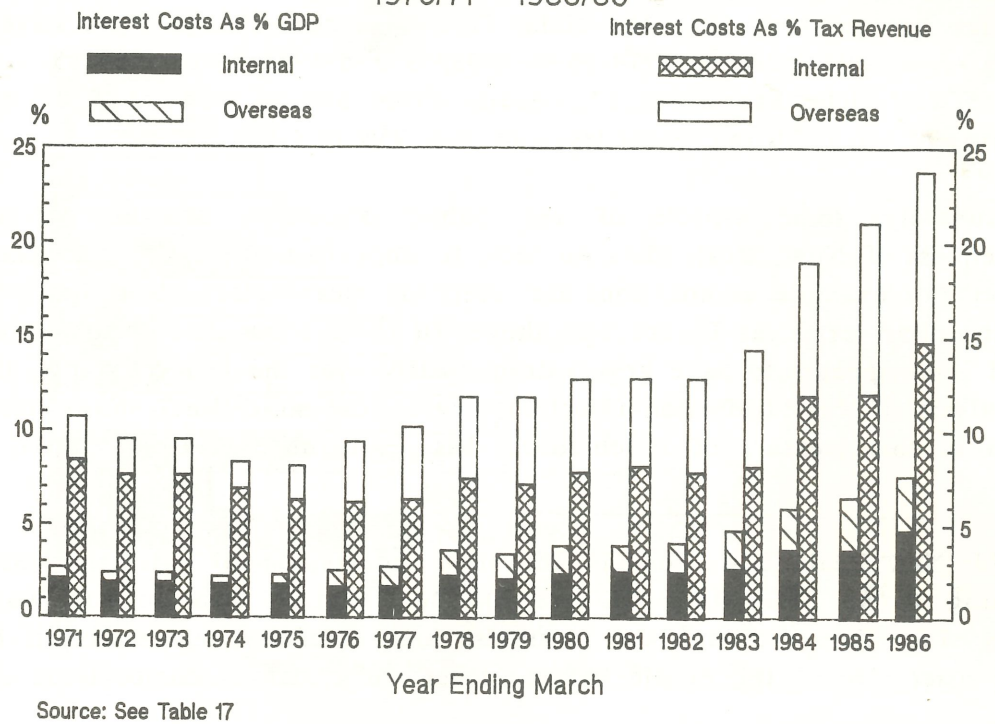
Source: See Table 15

Figure 5(b) Trends In Total Official Debt
1970/71 – 1985/86



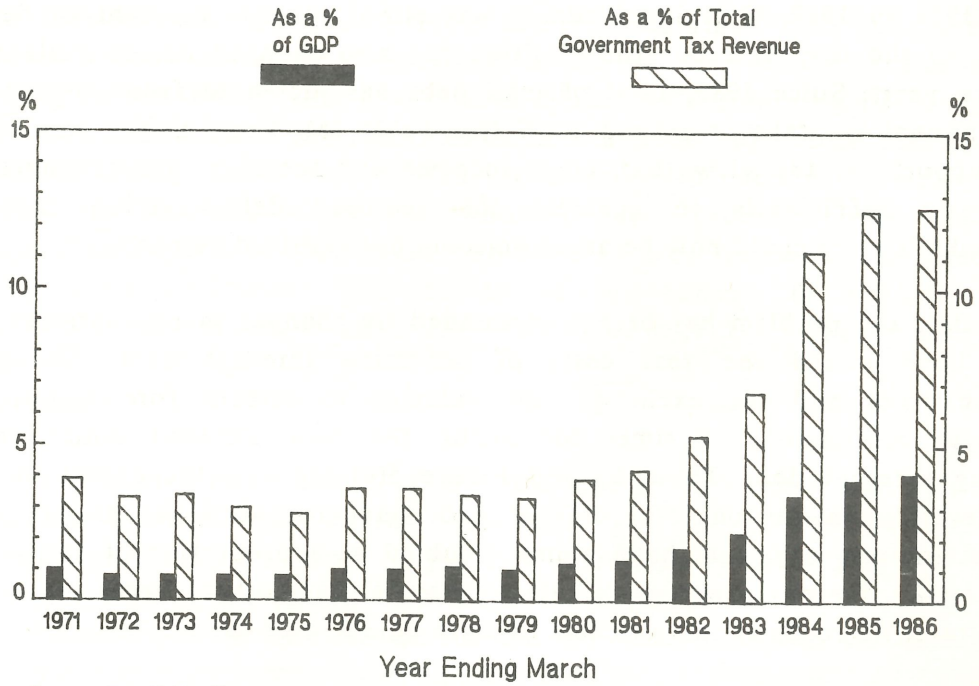
Source: See Table 15

Figure 5(c) Trends in Total Interest Costs of Official Debt 1970/71 - 1985/86



Source: See Table 17

Figure 5(d) Trends in Net Interest Costs of Official Debt 1970/71 - 1985/86



Source: See Table 18

Looking at debt only in terms of current dollars can be misleading due to the impact of inflation. Figures 5(a) and 5(b) express total debt in terms of percentages of GDP and per capita respectively. Figure 5(a) shows that total official debt as a proportion of total annual production (GDP) has increased much less spectacularly than the dollar figures suggest, though there have been periods of notable increase: 1974/75 to 1978/79 and 1982/83 to 1984/85. Overall, total official debt has increased steadily from around 50% of GDP at the beginning of the 1970s to current levels of over 75% of GDP.

Unfortunately, some aspects of the public discussion of the per capita indebtedness of New Zealanders do little to improve understanding of the debt position. For example, comparisons are relatively meaningless when conducted in current dollar terms, as Figure 5(b) shows. In these terms, per capita debt (the dashed line) appears to have grown dramatically over the last ten years, though an analysis of real (inflation-adjusted) trends (the solid line) shows that the growth in this measure of indebtedness has really only been substantial since 1982.

In 1984, New Zealand was one of the more indebted small industrial countries according to an IMF study (Figure 6). Our relative position has worsened slightly since then - though one must also look carefully, as we discuss below, at the *asset side* of the public balance sheet when making comparisons of this kind.

Official debt and tax revenue

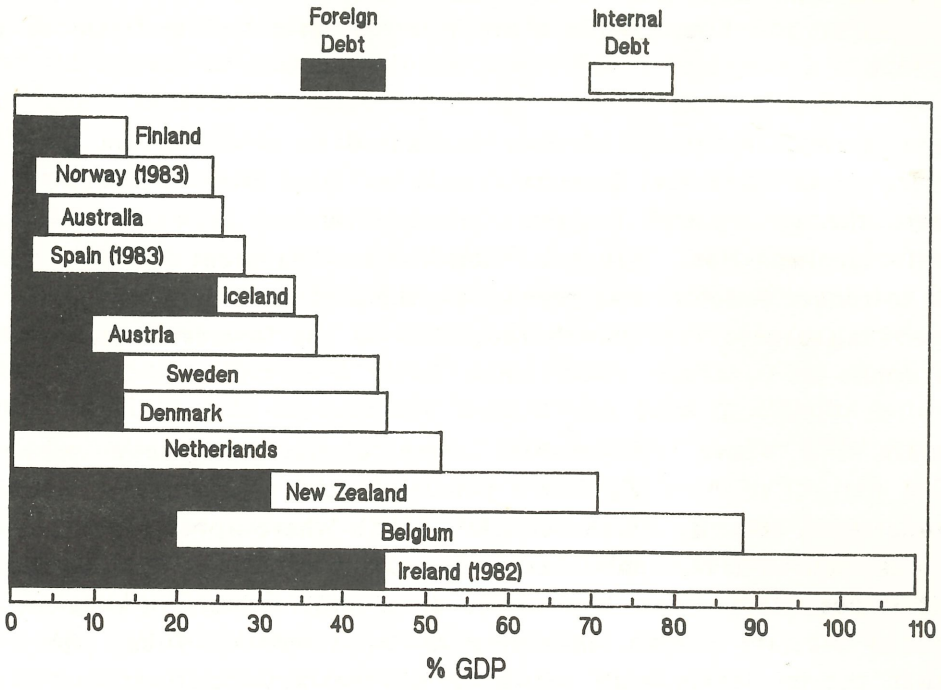
The dotted line in Figure 5(b) indicates the extent to which total official debt has risen or fallen relative to total tax revenue since 1971. For much of the period 1971 to 1982, total indebtedness was either roughly constant or declined relative to the tax take, but this position has also changed dramatically in the last five years. Since 1982, total official debt has increased from around 167% of the annual tax take to around 226% (see Table 15). These trends may provide some support for the view that, since incomes and therefore tax revenues have not grown sufficiently to generate the required debt-servicing capability, increased tax rates could now be an unwelcome but justified response.

In practice, the problem has been compounded by changes in real interest rates which have raised the real costs of servicing internal debt. Changes in inflation rates and the exchange rate relative to certain foreign currencies have also contributed at times to raising the New Zealand dollar cost of servicing external debt. Table 17 and Figure 5(c) indicate the extent to which the interest payments on total official debt have outpaced the growth in tax revenue. Interest payments have almost doubled as a proportion of tax revenue since 1982, thereby increasing the pressure on other areas of public expenditure. We consider this problem in more detail in Chapter 5.

3.3 The impact of debt on fiscal management

Notwithstanding the need for caution when interpreting statistics on debt,

Figure 6 Gross Official Debt: Small Industrial Countries (1984)



Source: Government Finance Statistics Yearbook, 1986

escalating indebtedness can present serious obstacles to economic management. Firstly, interest costs on official debt may, under certain conditions, cause total indebtedness to expand to levels beyond the repayment capability of the economy as has happened recently in Mexico and Brazil. Secondly, increasing official indebtedness may raise private sector expectations that the government will adopt a more inflationary approach to the funding of future deficits. (By monetising future deficits the government might avoid enlarging its debt as well as allow the inflationary consequences of such a policy to reduce the real value of existing debt.) Such expectations, whether well-founded or not, present problems for the achievement of interest rate, exchange rate and price stability. Finally, and of particular relevance to New Zealand, increased debt-servicing costs may limit the ability of government to achieve income distribution objectives and to undertake other, more useful, fiscal programmes.

Debt servicing

Possibly the most serious aspect of the relationship between fiscal deficits and debt is the potential for interest expenditures to reach uncontrolled levels. While governments may at times be justified in relying on growth in the economy (and therefore in tax revenues) to provide the extra income with which to meet these obligations, it is apparent from the previous section that this strategy has not succeeded in recent years in New Zealand. Consequently, interest costs and the demands of debt servicing in general can become a significant cause of continuing failure to achieve fiscal control.

It is possible to illustrate with a simple model how the potential for escalation in official debt and debt-servicing costs is linked to the government's fiscal stance. The key factors in determining this relationship between the growth of debt and fiscal deficits are interest rates and the rate of economic growth.

In general terms, the stock of debt (measured as a proportion of GDP) will continue to grow when real interest rates are higher than the real growth rate, and where the government budget, *excluding interest payments*, fails to be in sufficient surplus. How large a "non-interest payment budget surplus" is required to reduce indebtedness depends on the amount by which interest rates on new borrowing exceed the growth rate, and on the interest costs of the initial stock of debt.

To explain the above relationships more clearly, we have constructed a simplified picture of New Zealand's potential debt growth that is similar to a study undertaken recently by the OECD* (1986). Where appropriate, the data and assumptions used have been modified to approximate New Zealand's position. As a result, it is possible to show how the level of indebtedness in this country may or may not escalate further *according to the stance of fiscal policy*. But we stress that the model is only *indicative* of the key relationships and should not be seen as providing actual forecasts of debt, nor a detailed prescription for the balance of revenue and expenditure policies.*

Our key assumptions are:

(i) Real interest rates exceed the real growth rate by 2%. (For this model we have used nominal interest rates of 14% on all new government borrowing and a nominal growth rate of 12%. For the sake of realism, we have assumed an interest rate of 12% on the existing stock of debt, though this is not essential to the broad result.)

(ii) The starting point in this example is a *Net* Debt/GDP ratio of approximately 40%. Net debt includes both internal and overseas official debt. The ratio equates roughly with estimated net debt and GDP levels for New Zealand of $20 billion and $50 billion respectively (from Tables 7 and 13).

(iii) Three possible debt/GDP growth paths have been calculated according to the following *non-interest payment budget balance* assumptions:

Case 1 - a "deficit" of 1% of GDP
Case 2 - a "balanced budget"
Case 3 - a "surplus" of 1% of GDP

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* A more detailed treatment of the debt growth issue will be the subject of a subsequent Planning Council paper.

The *actual* net debt growth path for New Zealand is shown on the left-hand side of Figure 7. The outcome of each of the three non-interest payment budget balance scenarios is depicted for 1987 onwards. Clearly, debt expansion is possible where the non-interest payment budget balance is in deficit; and debt growth would appear to continue slowly even with a "balanced budget". Hence, the government's non-interest payment budget must be in surplus in order for the debt/GDP ratio to decline. The point at which this debt/GDP ratio starts to fall is sometimes referred to as the "threshold value" (this is actually a surplus of 0.6% of GDP, or $300m in our example). This corresponds with other OECD countries in which the threshold value (i.e. the required non-interest payment budget balance) was found to range between zero and a surplus of 2% of GDP. However, we consider the assumptions used in the above calculations to be *conservative*, so that a threshold value significantly higher than +0.6% of GDP is probably required just to maintain stability in New Zealand's current debt position.

Figure 8 indicates the extent to which *net* interest payments have contributed to fiscal deficits in New Zealand since 1971. Until 1986/87 the non-interest payment budget has been in considerable deficit as shown by the shaded area. In the fiscal year just completed an estimated budget surplus of 0.2% was recorded which comes close to the "required" threshold value. However, it is apparent that, *if actual growth and real interest rates remain similar to our assumptions*, the debt/GDP ratio will continue to grow despite substantial recent improvements in the government's fiscal stance.

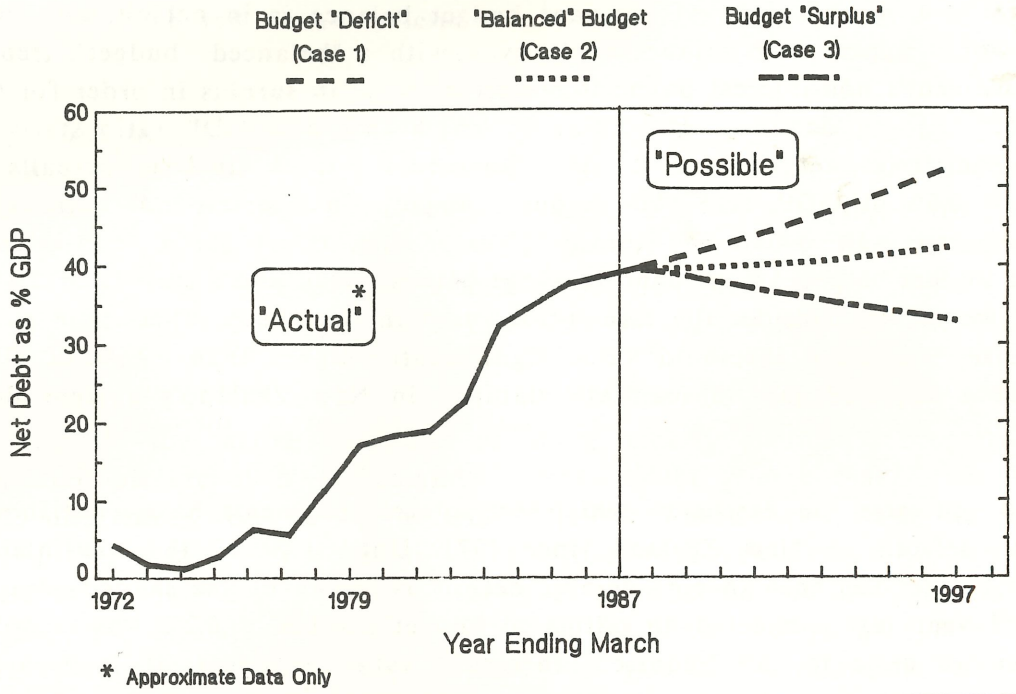
This result reveals the interrelations between various aspects of economic management. Given the objective of reducing public indebtedness, it demonstrates the importance of raising the economy's present low rates of growth. Some recent economic reforms are intended to have that effect, but they cannot be expected to work quickly. While internal investors remain unconvinced that inflation has been eliminated and while external investors continue to require a significant premium for exchange rate risk, real interest rates are likely to exceed the growth rate by at least the two percent figure we have assumed. Consequently, in the short term, a surplus in the non-interest payment budget must be a major consideration in the formulation of fiscal policies.

Domestic confidence and expectations

The growth of public sector debt figures prominently in the private sector's perceptions and expectations of economic policy and performance. The larger the stock of official debt (and therefore the higher the servicing cost), the less likely it is the private sector will believe that the government's anti-inflationary policies can be sustained. Expectations of inflation are an important determinant of the actual performance of the economy and can be felt strongly in the short to medium term through the interest rates the private sector charges for its lending to government.

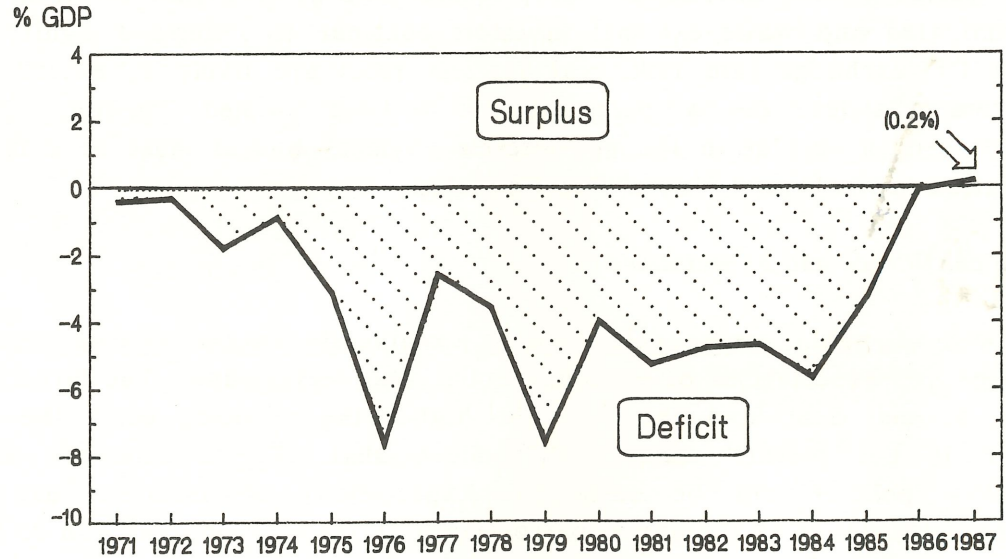
In the longer term, concern about the amount of public debt may well cause the

Figure 7 Growth In Net Debt/GDP Ratios Under Differing "Non-interest Payment Budget Balance" Assumptions



* Approximate Data Only

Figure 8 Trends in the Non-Interest Payment Budget Balance 1970/71 - 1986/87



Source: See Table 8

private sector to charge an additional interest rate premium when lending to government as compensation for the increased risk of default. These additional costs raise the debt-servicing obligations of the government and hence increase the chances of it using inflation to reduce the real burden of debt. There is no prospect of this at present in New Zealand, but it has occurred in other countries.

The added risks of external debt

In the case of small countries in particular, a distinction between internal and external debt may also be relevant to an assessment of the indebtedness problem. Foreign borrowing has traditionally been important to deficit-funding in New Zealand (see Table 11). Access to the savings of foreigners has provided additional resources without generating some of the interest rate pressures which might have resulted from an equivalent amount of internal borrowing. However, there may be cause to view substantial foreign indebtedness as more of a problem than internal debt.

The major concern arises from the fact that the *interest* paid on external debt represents a loss of national income. (Whether the borrowing results in a net loss overall will depend on the returns which the borrowed funds have generated - a principle which applies equally to the private sector's external borrowing.) As the servicing costs of external debt rise, the pressure that places on the external balance of payments, and the exchange rate, may reduce policy flexibility in other areas.

Large external borrowing can also lead to an appreciation of the exchange rate, with implications for the international competitiveness of tradables production - as outlined in Chapter 2. This applies irrespective of whether the borrowing is by the public or private sector: during the 1986/87 financial year substantial overseas borrowing by both sectors in New Zealand (including the sale of government stock to foreigners by domestic brokers) contributed directly to appreciation of the exchange rate. Conversely, depreciation of the exchange rate can raise the value, and hence the repayment costs (in New Zealand dollars), of outstanding foreign debt. While some of these costs may be offset in the longer term by interest and exchange rate differentials, they illustrate the added vulnerability which is usually associated with external borrowing - especially for small economies.

International "credit worthiness"

New Zealand's international credibility as a borrower is of no small importance, given the dependence of both public and private sector investment on foreign savings. Although the government has seldom, if ever, encountered major difficulty in borrowing overseas, it is clear that external confidence in the economy (as reflected by international credit ratings) has declined in recent years. The level of external indebtedness has been a factor in these down-gradings, and we should recognise that the "risk premium" reaction referred to above is much more common and justifiable amongst lenders on international

markets. Thus, growing debt can raise the cost (and possibly constrain the supply) of external funds over a comparatively short period, with implications for future investment plans and debt-servicing levels.

Redistributive effects

Public indebtedness - to the extent that this involves *real* interest payments out of taxes - contributes to a redistribution of resources from taxpayers to the holders of government debt.* As the real costs of debt servicing change, so too does this implicit redistributive effect. There is no guarantee that the proportion of government revenue so affected has, at any time, been redistributed in accordance with any desirable social policy objective in New Zealand.

In order to assess properly the redistributive impact of internal debt, we would need to look both at the incidence of taxation and the composition of government debt-holders in the economy. In practice, this is extremely difficult. Official data provided by the Reserve Bank on the distribution of outstanding government debt is contained in Table 19. However, this summary of debt ownership by type of institution in 1976, 1981, and 1986 gives only a very partial and generalised picture of recent trends. The only significant changes during this period have been the growth of private finance and trustee company holdings of government debt, combined with a marked reduction in Reserve Bank holdings and, to a lesser extent, those of the private and Post Office savings banks.** No firm conclusions can be drawn on the economic implications of the redistributive effects of these changes.

3.4 A wider perspective

Although we should be concerned about New Zealand's growing levels of indebtedness, we should resist making too strong a connection at this stage between the growth in official debt and the quality of fiscal management in recent years. Historically, high and low debt ratios have each accompanied periods of economic prosperity and recession. What matters most with respect to official indebtedness (however measured) is not so much the amount of debt, but the extent to which it has been used to generate sustained economic growth, either through investment in income-earning assets or through other wealth-enhancing expenditures. This latter category is especially important where government expenditure is being increasingly allocated to "social" expenditures.

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* Only the real interest payable on government debt is a transfer of resources since nominal interest rates usually include an inflationary component. This portion of the government's interest bill, which really only compensates lenders for the erosion of their loan due to inflation, is not redistributive.

** The decline in the holdings of government enterprises is largely explained by the earlier change in the Post Office's designation.

Employment training schemes, for example, may increase the potential for economic growth in a way which unemployment benefits cannot. It is the *quality* of these individual investment or spending decisions *relative to their debt-servicing cost* which is important for a proper assessment.

Furthermore, our discussion of New Zealand's indebtedness has so far only included rather narrow financial concepts based on the financial liabilities of government (together with financial assets in the calculation of "Net Debt"). We also need to know what has happened to the stock of non-financial assets and liabilities, and what the combined effect of these changes has meant for the growth and distribution of economic wealth. These broader considerations involve the use of the concept of "public sector net worth" which we explore in the following chapter. They also carry implications for the nature and extent of future fiscal reform.

3.5 Conclusions

Levels of debt in New Zealand are high by developed country standards, and it is frequently argued that they impose a major repayment burden on the economy. The interest costs involved in servicing this debt are a significant component of current government expenditures, and hence of the structural deficit problem. Further growth in debt servicing will not only reduce the flexibility the government can exercise in the overall composition of its fiscal policies, but it may reduce internal and external confidence in the ability of the government to adhere to its economic strategy. Any deterioration of investor confidence is likely to result in higher borrowing costs for the government, as well as in raised expectations of inflation.

Given that New Zealand is likely to face for some time real interest rates on its debt which are at least 2% higher than its average real growth rate, the government will need to maintain a surplus on the non-interest payment components of its budget if it is to avoid increasing indebtedness. Even on relatively optimistic assumptions, this surplus will need to be in the region of +0.6% of GDP; significantly higher than the average for the period 1971-1986 of -3.5%.

We should be careful to note, though, that the accumulation of official debt resulting from government borrowing does not *inevitably* impose a "burden" on future generations. Much depends on the quality of the fiscal policy involved - in particular, the nature of the expenditures undertaken and their potential for generating positive (net) returns to the economy. Although the substantial nature of New Zealand's recent borrowing is reasonably clear, changes in total wealth (i.e. including both financial and non-financial assets and liabilities), are generally much more difficult to determine. Assessing the impact of fiscal policy on *both sides* of the public sector's balance sheet - i.e. on the *net worth of the public sector* - is essential to identifying the extent of these inter-generational effects.

CHAPTER 4 : DEFICITS AND WEALTH

Where government expenditure is a substantial proportion of a country's total expenditure, fiscal policy can be an important determinant of economic growth. Deficits can add a further dimension to the impact of fiscal policy by transferring some of the costs of current consumption onto future generations of taxpayers. In this chapter, we examine the ways in which deficits redistribute wealth.

4.1. The transfer of wealth

In Chapter 1 attention was drawn to the endemic nature of fiscal deficits in New Zealand's recent economic history. Suggestions that these deficits originate from a series of valid, Keynesian-type responses to short-term depressed demand in the economy, or that they have been employed as a necessary or useful device for smoothing taxes across periods of variable public expenditure, are at best only partial explanations. Continuous deficits can only be incurred by a general and continuing unwillingness to meet (via taxation) the current costs of public expenditure policy.

Prior to 1985, there was also reluctance amongst policy-makers to continually impose on the economy the full consequences, especially for domestic interest rates, of heavy government borrowing. Instead, monetary accommodation of deficits enabled successive governments to transfer at least some of the costs of deficit spending into price inflation. After more than ten years of double-digit inflation, however, there appears to have been recent political acceptance that the effects of this inflation are themselves too high a price to pay.

It would be grossly misleading to lay every problem in the New Zealand economy at the feet of recent monetary and fiscal management. Other sources of poor economic performance beyond the immediate control of government - such as international economic recessions and declining terms of trade - have contributed to fiscal imbalance during these years. At the same time, it is clear that deficits - whether or not they have involved monetary accommodation and inflation - have constituted an attempt to *avoid* some of the costs of current government spending. Where debt sold to the private sector (in New Zealand or overseas) is eventually repaid at *positive* real rates of interest (i.e. above the rate of inflation), the costs of that spending are effectively transferred forward in time. On the other hand, deficit funding which has contributed to inflation and *negative* real interest rates has effectively transferred these costs onto existing holders of government debt. It is in this sense that deficits can be seen as a powerful device for redistributing income and wealth within and between generations.

The mechanism by which this redistribution can occur may vary from one country to another. In an open economy like New Zealand, where the government has access to the savings of foreigners, internal and external borrowing can have separate

results. Changes in government internal borrowing affect domestic interest rates and investment. More borrowing usually means higher real interest rates to attract private savings and hence lower private sector consumption and investment. Less private sector investment means a lower capital stock and, *depending on the nature and quality of the public sector spending*, lower future income.

External borrowing, on the other hand, enables the government to have a less direct impact on the allocation and use of domestic savings. However, to the extent that external borrowing generates greater overseas debt, future income and consumption (especially net imports) are affected by the need, in the long-term, to maintain external balance, or at least to maintain a manageable debt roll-over strategy.* In practice, the adjustment process often occurs through the depreciation of the (real) exchange rate.

The related question of whether deficits thereby impose "burdens" on future generations is a difficult and controversial one. Much depends, initially, on whether one views current generations as "altruistic", in the sense that they are genuinely concerned about standards of living beyond their own life-times. If not, deficits could be an attempt to raise *current* living standards irrespective of the (debt-servicing) burden imposed on future generations.

We doubt that New Zealanders are as unconcerned as that. Even so, it could be argued on the basis of past experience that future generations are likely to be wealthier than the current ones and that it is not unreasonable to require them to pay for some present activities (especially those investment, research and development projects which could directly improve their standards of living) However, for reasons explained in the next section, we consider the current debt level to be too high for such an argument to be justified. Moreover, as we have suggested in Chapter 2, recent deficits have created serious problems for current economic management which are quite separate from those connected with future repayment of an enlarged stock of debt.

The more relevant question to ask, therefore, is whether recent deficits have *inadvertently* lowered future national income as a consequence of the range and type of expenditures and commitments undertaken. In other words, to what extent have recent levels of deficit spending raised or lowered the growth potential of the economy relative to the additional debt liabilities?**

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* See Pope (1986) for a discussion of the sustainability of New Zealand's foreign borrowing.

** It may also matter whether individuals adopt a savings behaviour which effectively offsets the inter-temporal consumption effect of government borrowing. This possibility, sometimes referred to as the "Ricardian equivalence theorem", is not one we regard as likely, but it has received considerable attention from some economists - see especially Barro (1974).

Fiscal policies which bring about an inter-temporal consumption of resources raise ethical considerations. We are not prepared to make judgements on these issues here, though it would seem to us both ethically and economically sound for society to acknowledge the extent to which deficits have been used to benefit current generations in this way. The first step in such a process may be to ensure that fiscal deficits as reported by government provide accurate information on the extent of the transfers taking place. Because our present public accounts fail conclusively in this respect, all we can do at this point is provide an introduction to the conceptual and measurement issues involved.

4.2 The concept of public sector net worth

The net worth of the public sector refers to the *difference* between the total stock of publicly-owned assets and the total stock of public liabilities. The same net worth can therefore apply to different total amounts of assets and liabilities and hence to different levels of government activity in the economy. Fiscal policies which alter the balance between public sector assets and liabilities (i.e. raise or lower net worth) influence the level of future incomes. Policies which reduce net worth effect a transfer of consumption from future to current generations, and vice versa. The idea that some optimal balance exists for a society between current and future consumption leads to the notion that public sector borrowing, and hence trends in net worth, should contribute to achieving this optimal result.*

Applying the concept of changes in net worth to the assessment of fiscal policy requires some care. For instance, the desired trend in net worth will depend on the present relationship between public assets and liabilities. If total assets are judged to be too high (i.e. the government is taking too active a role in the economy), then a declining net worth may be desirable. Similarly, if the government's debt-to-assets ratio (i.e. "leverage") is too high, an increase in net worth would add flexibility to the management of public finances, and possibly raise private sector confidence. Our view is that economic policy should be geared to at least *maintaining* current net worth, though no single fiscal policy should be dictated by this consideration.

Deciding what should be included in the public sector's balance sheet of assets and liabilities is a difficulty when determining net worth. In the following discussion, we have assumed a fairly narrow definition based on the financial liabilities covered in Chapter 3 and the stock of fixed public capital (schools, hospitals, roads, etc). Measurement problems preclude a wider treatment which

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* We recognise that policies which result in changes to public sector net worth can have other, possibly offsetting, effects on private sector net worth. A comprehensive discussion of the impact of fiscal policies should address both areas, though we consider that paying particular attention to changes in public sector net worth is justified because they provide a useful qualitative measure of the management of public wealth.

could include the nation's stock of non-renewable natural resources, financial assets such as government ownership in public corporations, and non-financial liabilities such as pension benefits. Some important considerations for New Zealand arising from these last two categories are mentioned in Section 4.5 below. An even broader approach would include the present value of future taxes which the government is empowered to levy, though this takes the concept of net worth beyond measurable limits.*

Changes in public sector net worth generally arise, as noted above, from policies which alter the *total stocks* of assets and liabilities in relation to one another. However, net worth may also change in response to other factors:

- A *relative price* shift which alters the present values of existing assets and liabilities (including, especially, exchange rate changes which alter the value of outstanding overseas debt).

- A change in the *efficiency* with which public sector resources are currently managed thus raising (or lowering) their future income potential (e.g. improved management of electricity generation raises the return on those assets and hence their value to the economy).

- A change in *contingent* liabilities arising out of current policy decisions (such as the government's liability for possible losses arising out of some major energy projects).

To assess the full impact of current policy on public sector net worth, it is necessary to take each of these factors into account. Recent fiscal policies in New Zealand have paid special attention to efficiency issues, though much the larger influence on net worth remains the overall effect of fiscal policy on total assets and liabilities.

4.3 Current and capital expenditures: the "Net Financial Balance"

The fiscal deficit, properly measured, indicates the extent of new financial liabilities arising from the government's fiscal policies. However, we need also to examine the effect of these policies on the stock of capital as measured in the Government Finance Statistics (GFS). Using this series, the expenditures of government can be divided between current and capital uses:

CURRENT EXPENDITURES

(i) *expenditure on goods and services* - purchased at market prices and required for a wide range of public sector activities. Wages and salaries of public sector employees are generally the largest single item.

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* For a discussion of a "comprehensive balance sheet approach" to fiscal reporting, see Buiter, W. (1983).

(ii) *current transfers and subsidies* - includes all grants to the private sector arising from welfare and industry assistance programmes.

(iii) *interest payments* - payable on government debt (i.e. foreign and domestic loans).

CAPITAL EXPENDITURES

(i) *fixed assets* - purchase by central government of land, buildings, plant and machinery, roads, transport, etc (often referred to as "capital formation").

(ii) *stocks* - net additions to the government's stockpiles of consumable goods.

(iii) *capital transfers* - financial grants to the private sector or local government (usually for capital formation).

A third category, of somewhat less importance, is *NET LENDING (MINUS REPAYMENTS).* This measures government's role, in effect, as a financial intermediary providing loans to the private sector, public corporations and, in some case, foreign governments. The significance of this category for New Zealand, especially in relation to corporatisation, is considered in more detail below.

As with society as a whole, there is no hard and fast rule as to the proportions of its income which governments should allocate to current consumption and capital expenditures. The balance will depend on a complex mix of factors including:

- the historical function of government as a provider of economic and social infrastructure;

- the need to encourage steady growth in the economy through public investment programmes which, at times, also serve to offset cyclical fluctuations in the level of private sector capital formation;

- the perceived need for the public rather than the private sector to undertake major new investments owing to cost, risk or both;

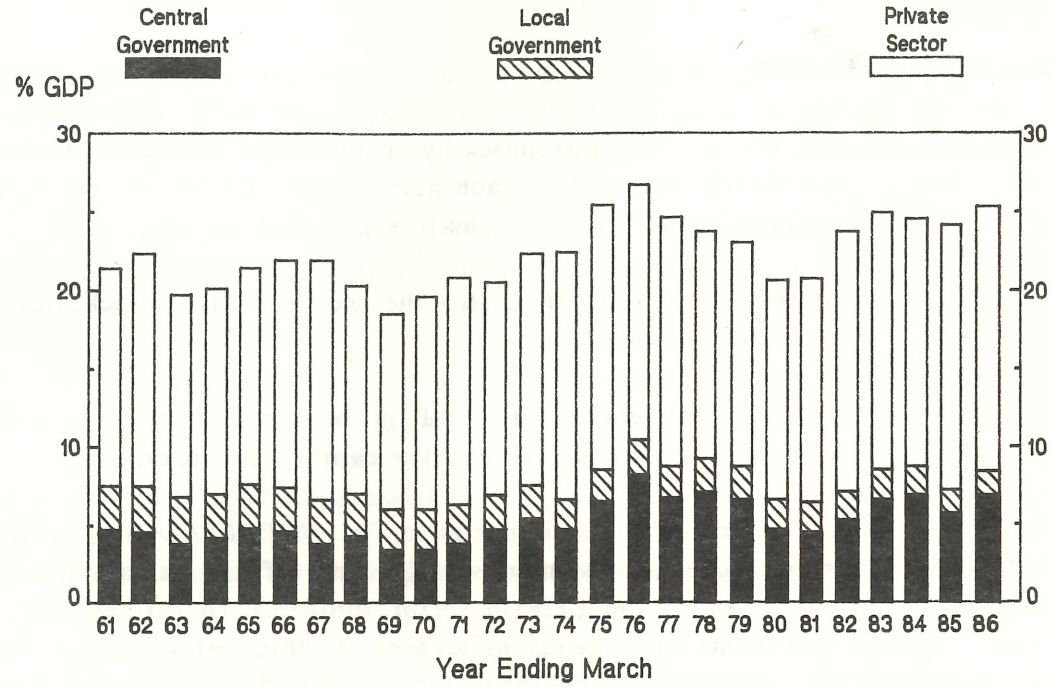
- the rate of depreciation on public fixed assets; and

- the influence of cyclical or structural factors on the level and type of current expenditures.

Public sector capital formation can, and frequently does, fluctuate in response to these changing pressures. Figure 9 gives a broad indication of the changes in

public and private sector shares of capital formation which have occurred since 1961.

Figure 9 Shares of Gross Fixed Capital Formation
As a Percentage of GDP



Source: 1961–77 RBNZ Paper No.32; 1978–86 Dept. Statistics Monthly Abstract February 87

In order to maintain public sector net worth, current government expenditures, including capital replacement (i.e. depreciation of the existing stock of fixed assets), should not exceed current income from taxes and other revenue sources. That is, increased liabilities (i.e. deficits) should only be incurred to a degree which equals *additions* to the stock of fixed and financial assets. This is a *minimal* requirement for maintaining public sector net worth. Obviously, debt raised above this level - i.e. for consumption (such as welfare payments or public service salaries) or capital replacement - lowers public sector net worth.

Associated with the above requirement is the difficult matter of assessing whether capital expenditure is of sufficient quality to generate the growth in incomes sufficient to meet the borrowing costs. Capital expenditure on, say, major energy projects maintains (or improves) public sector net worth only if the income from those projects is equal to (or greater than) the debt-servicing cost. Government policies which raise the quality of investment decision-making, therefore, may be more effective in improving net worth than continuing to engage in capital investment under existing management structures or criteria.

There are certain obstacles to drawing clear distinctions between current and

capital expenditure. In particular, some current expenditures on education and health could be seen not so much as consumption expenditure from which only current generations benefit, but as investment in *human capital.* In this sense, public monies spent on raising the productive potential of the future workforce may be no less an "investment" than expenditure on, say, buildings used to produce goods and services. In this case, such expenditure may be legitimately financed from government borrowing.

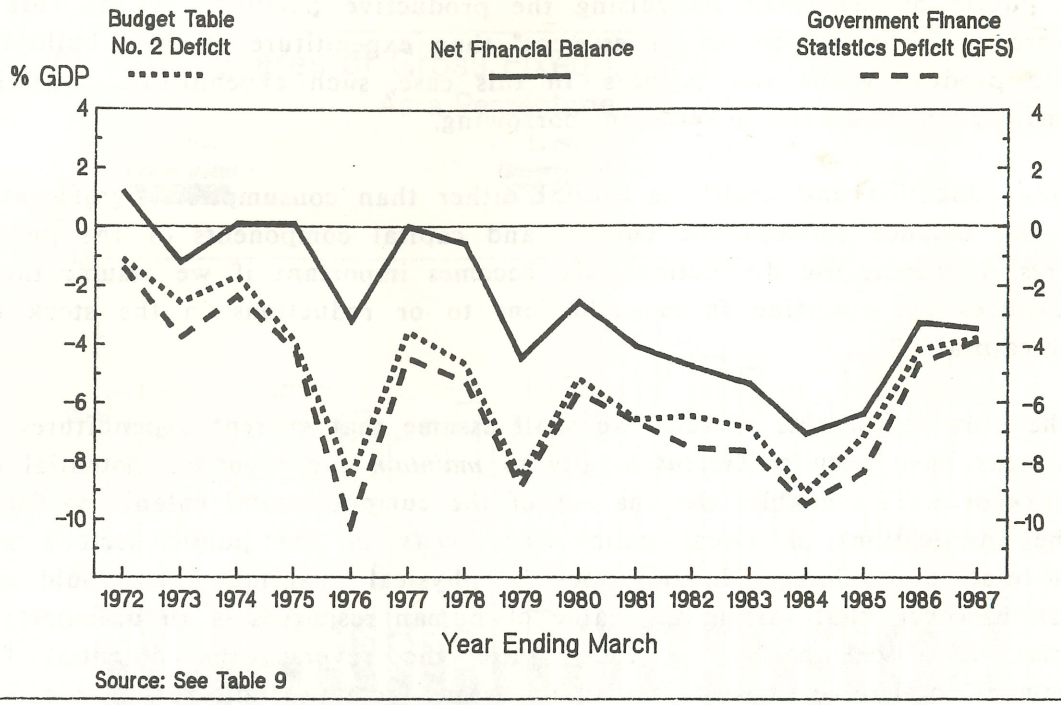
Treating education and health as capital rather than consumption significantly alters the balance between the current and capital components of the public accounts. However, the distinction only becomes important if we assume these expenditures are resulting in *net* additions to or reductions in the stock of human capital.

For the purposes of this exercise we shall assume that current expenditures in these areas have been sufficient simply to *maintain* the economic potential of the workforce. This enables the analysis of the current/capital balance to focus on the implications of fiscal policy for *trends* in the public sector's net worth relative to changes in the stock of physical capital. This should not suggest, however, that raising the value of human resources is an unimportant objective of fiscal policy. In fact, quite the reverse: the potential for government to achieve significant economic gains from expenditure on education is arguably greater than in many other areas.

Lines 1-3 of Table 9 provide a detailed record of current revenues and expenditures since 1971. The difference between these items, the *Current Account*, indicates the extent to which borrowing has been undertaken to finance current consumption. Surpluses in the Current Account from 1971/72 to 1977/78 indicate net public savings. All figures have been expressed as a percentage of GDP, since this gives the best indication of orders of magnitude in relation to the prevailing size of the economy. From line 4, it is evident that government has been *dissaving*, i.e. spending more on consumption than it received in revenues, in each year since 1978/79. The Current Account was most in deficit in the years 1983/84 and 1984/85.

By adding capital expenditure (line 5) to the Current Account, we obtain a measure of the *Net Financial Balance.* This reveals the extent to which the government's expenditure and revenue programmes have required it to draw on foreign and private sector savings. It does not include off-budget shifts, such as revenue from capital assets (e.g. land sales), which tend to affect liabilities and assets equally, nor the net impact of government financial intermediation. The Net Financial Balance in this form (Figure 10) therefore provides a useful, if somewhat rough, indication of the trends in public sector net worth. A negative Net Financial Balance means that government borrowing (i.e. new liabilities) has exceeded any increase in total (non-human) public assets. However, not much can be inferred from this data about public sector net worth until a number of important adjustments are undertaken (see Section 4.4 below).

Figure 10 Trends in the Net Financial Balance and Overall GFS Deficit - as a percentage of GDP 1971/72 - 1986/87



Source: See Table 9

Figure 10 also compares the Net Financial Balance with the conventional Government Budget deficit measure and with the overall GFS deficit. There is little difference between the two latter measures, though the GFS deficit includes a more accurate accounting for some items, such as debt-servicing costs and capital equipment credits. The difference between the Net Financial Balance and these two deficit measures is made up of Capital Revenues and Net Lending. As mentioned in the previous paragraph, neither are relevant to net worth since they both involve equal adjustments to the liabilities and assets sides of the balance sheet. However, both can be expected to change in importance as a result of recent fiscal policies. Capital Revenues (which includes asset sales) can be expected to increase in future years as government divests its ownership of some public assets (such as Petrocorp to the private sector and forest and electricity assets to state corporations). And Net Lending (which currently makes up most of the gap between the NFB and GFS measures in Figure 10) can be expected to continue diminishing as the state requires the corporations to take much more responsibility for their loan-raising activities.

4.4 The adjusted Net Financial Balance

As we have said, examining the Current/Capital Account balance alone may not give a very accurate picture of whether the fiscal policies of government are increasing or reducing public sector net worth. Considerable measurement problems arise in three particular areas:

Measuring depreciation

Unfortunately, no explicit provision is made in the public accounts for depreciation on public capital. This stems from the difficulty of establishing a market value for many public assets, as well as from the sheer task of monitoring changes in those valuations. To some extent, the establishment of the new corporations will reduce the importance of this omission since their assets will be shifted outside the public accounts.

For the rest of the public capital stock, not knowing whether capital expenditures are sufficient (or more than sufficient) to cover depreciation is a major measurement problem. Our approach here (as in other studies of this kind) is to *assume* that the capital expenditure in each year is equivalent to the rate of depreciation. In other words, government is investing just enough to maintain the total worth of its capital assets. The reasonably constant level of real public account capital expenditure over the last 15 years would tend to support the idea that, at best, net additions to the public capital stock can only have been minimal. However, we acknowledge the importance of this assumption to the overall analysis, and therefore the caution which should be attached to the interpretation of any result. Using this assumption, changes in the net financial balance can be argued - subject to some modifications below - as providing a reasonable basis for assessing the impact of fiscal policy on the public sector's net worth.

Excluding cyclical influences

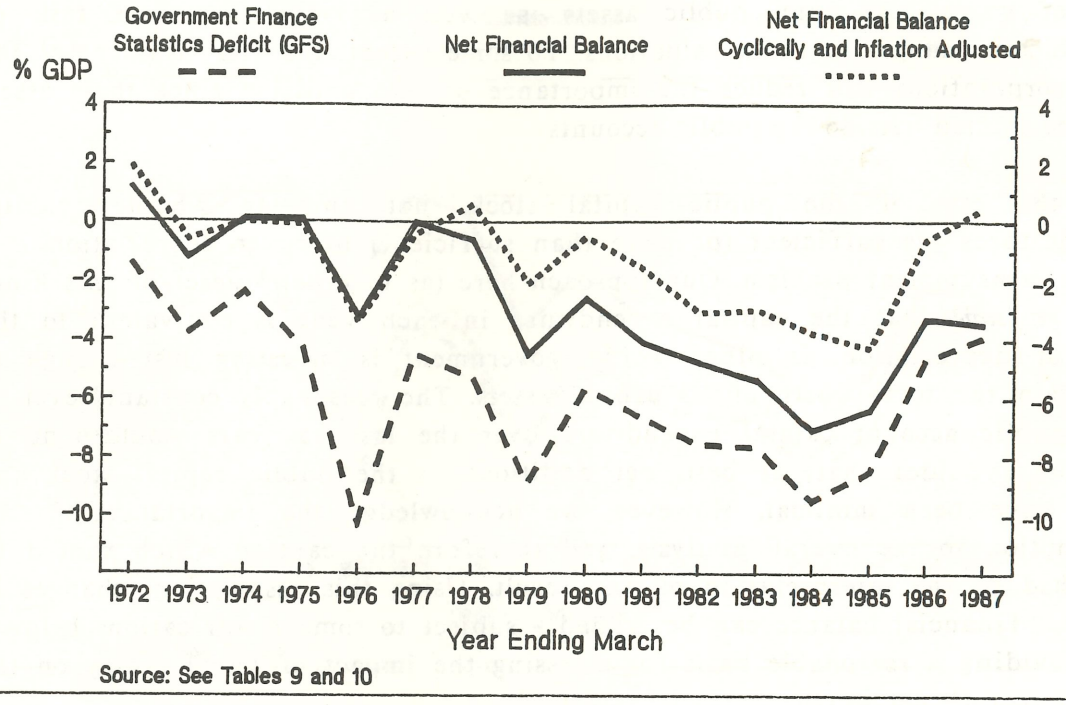
In Chapter 2, the vulnerability of the economy to cyclical fluctuations was shown to affect the size of the deficit. In order to assess the impact of fiscal policy, it is therefore desirable to remove from the data the effects of these cyclical variations. A *cyclically-adjusted* Net Financial Balance more accurately reflects the structural, i.e. policy-induced, consequences of deficits on the public sector's net worth.

Allowing for inflation

Identifying changes in public sector net worth involves measuring the *real resource* implications of fiscal policies. Inflation complicates this task by altering the nominal value of assets and liabilities in different ways. The most obvious example of this is government debt which is denominated in current dollar terms. Over time, inflation erodes the real value of that debt, whereas the nominal value of public assets adjusts with the level of other prices.

In order to adjust the public accounts accordingly, we need to remove that proportion of interest payments which effectively compensates the lender for inflation. Our approach here is to eliminate the inflationary component of government interest payments and receipts by adjusting them for a constant real rate of interest of 3%. This rate corresponds with the long-term growth rate of the New Zealand economy and is probably also close to the *expected* real return.

Figure 11 Net Financial Balance (Cyclically and Inflation Adjusted) – as a percentage of GDP 1971/72 – 1986/87



Source: See Tables 9 and 10

The effects of these adjustments are depicted in Table 10 and Figure 11. Although the *Cyclically and Inflation Adjusted Net Financial Balance* (the dotted line) is less negative than the unadjusted deficits in Figure 10 (due primarily to the high inflationary component of recent interest payments), it would still seem likely that fiscal policies have reduced public sector net worth in most of the last 15 years. Recent improvements in fiscal performance are creditable, and may have begun to achieve stability in the narrow definition of net worth used in this discussion.

A recent overseas study by the OECD (1986) suggests that several other industrial countries have experienced declining public sector net worth *as a proportion of GDP* since 1970. By comparing these results with real growth rates, it appears that, like New Zealand, some have also experienced a decline in the *level* of public sector net worth. Perhaps the major exception is Japan, where increases in capital formation relative to the growth in public debt have enabled net worth to improve even in relation to GDP.

4.5 Other considerations

The above discussion provides only an introduction to assessing the inter-generational effects of recent policies. Measurement and conceptual problems prevent a more comprehensive analysis at this time. Similarly, the methods used tell us little about the kind of adjustments to policy which would most effectively reverse these fiscal trends. The following issues in particular are relevant to this broader objective.

"Economic" deficits

So far, our concept of public debt has been limited entirely to *financial* liabilities - i.e. liabilities denominated in specific money terms. In New Zealand, the government faces a variety of *non-financial* and *contingent* liabilities which would need to be included in a full "public sector balance sheet" approach to the assessment of fiscal policy.

In practice, most non-financial liabilities of the government are either too small to affect the overall picture or, as in the case of obligations to compensate victims of disasters or wars, cannot be adequately measured. There is, however, one important exception: the implied obligation of the government to continue paying pension or superannuation allowances to subsequent generations on their retirement. Demographic trends indicate that the proportion of older people will increase in the future, and though changes in the "dependency ratio" in this country will be postponed for some time by an offsetting decline in the proportion of school-age children, the dependency ratio will increase in the longer term. It follows that the "indebtedness" of the government - broadly defined to include superannuation obligations - is considerably greater than the *apparent* stance of current fiscal policy would suggest. In other words, the "threshold budget balance" required for an improvement in official indebtedness, determined in Chapter 3 as 0.6% of GDP, may be inadequate over a longer period as the implicit liabilities associated with some current policies increase.

We return to this question of the expenditure on superannuation in Chapter 5. However, to the extent that officially reported deficits may understate the degree of adjustment required to avoid an escalation of the debt problem, it reinforces our view that the debt/GDP ratio assumptions used in Chapter 3 are conservative. The wider concept of an "economic deficit" may therefore be more appropriate, since it includes not only the official fiscal accounting deficits, but also the inter-generational consequences of other current policies.

The quality of current government spending

We have drawn repeated attention to the need for public capital spending to meet certain economic criteria in order to justify the borrowing involved. Consideration of the qualitative aspects of government activities should also be applied to current expenditures. Clearly, the economic impact of goods and services provided, say, by our health services will depend on the efficiency with which Vote: Health funds are dispensed. Thus the economic impact of each dollar of public sector expenditure can be enhanced by measures which are successful in raising the output of either the market or non-market activities of government. For example, more accurately targeted advisory services can raise the economic value of this "non-market" activity.

The government's 1986 *Statement on Government Expenditure Reform* recognises the importance of achieving greater efficiency in the use of current expenditures, both as a means of raising total output of the public sector and

of reducing costs. Providing departments with greater managerial autonomy, ensuring that certain government services are needed by requiring users to meet their cost, removing some restrictions on government purchasing, and rationalising ownership and use of some departmental assets, are examples of fiscal policies which may help to raise the future income potential of current expenditures.

Corporatisation

At the same time, moves have also been taken to place the market operations of government, via the establishment of the State Owned Enterprises (SOEs), on a more purely commercial footing. Whether these measures succeed in raising the efficiency with which public sector assets are managed remains to be seen, though that is clearly the intention.

There is some concern that this shift of public sector activities "off-budget" will distort future deficit reporting. Allowing these entities to raise their own debt for such activities will of course reduce *central government* borrowing by further diminishing "Net Lending" expenditure, but it will not reduce "public sector" borrowing overall. Similarly, revenues from the sale of assets to the corporations will provide an additional source of income for the government, but this should be "below the line" of the Net Financial Balance. Measurement of *changes* in public sector net worth, although relating to a smaller area of public policy, should therefore be unaffected by these decisions.

In the longer term, whether the net worth of the combined (government plus SOE) public sector is improved by these changes will depend, as we noted above, on the quality of SOE management. In economic terms, establishment of the SOEs does not alter at all the importance of those public investment decisions as a use of the economy's savings.

4.6 Conclusions

Fiscal policies which result in deficits have important effects on the distribution of consumption over time. By increasing their borrowing, recent governments in New Zealand have been able to increase expenditure substantially in relation to current income. Debt repayment, however, will lower future expenditures. At the same time, expenditures brought forward by deficits have also affected future welfare: additional investment may have increased future income and consumption possibilities, but additional consumption clearly will have not.

Conventional deficits tell us little about these longer-term issues. Although the measurement problems are considerable and weaken the conclusiveness of any analysis, the public accounts can be adjusted to provide a partial indication of recent inter-generational transfers. There is evidence that fiscal policies over at least the last 15 years have attempted to maintain consumption levels, but at

the expense of future welfare. Recent changes in the government's fiscal stance have brought some improvement, though it remains uncertain whether they will be sufficient to reverse this trend. It seems likely that social policy initiatives could generate demands for more expenditure on income redistribution. If increased health and education services are also to be funded from public expenditure, they will have to be balanced by increases in revenue, or at least contribute to improvements in human capital, in order to maintain public net worth.

Restoring a better balance between consumption and capital spending in relation to current revenues is not of itself sufficient for improved fiscal management. Raising the efficiency of non-market government expenditures through managerial reforms, or by making them more sensitive to the requirements of users, are additional strategies which should help to improve the quality of current spending. Much has been made already of the poor quality of capital spending decisions of government in relation to the major energy projects. Whether these will continue to be seen as poor investments depends on factors that are mostly beyond this country's direct control. Transferring responsibility for public sector assets to public corporations should improve future decision-making, though it should not be seen as a complete solution. A more effective overall approach to investment and development in the public sector is essential if improved fiscal management is to be achieved. Such an approach can only be implemented properly on the basis of far more informative public accounts.

CHAPTER 5 : PUBLIC EXPENDITURE DECISIONS

The problems of fiscal deficits as identified in earlier chapters relate to their effects on current economic management, debt accumulation, and inter-temporal consumption. Given that deficits have tended to arise from growth in government spending, reducing expenditure is generally seen as the most popular corrective measure. The purpose of this chapter is to set out some background to the objectives of government spending and the effects which it may have on the economy. In the final section, the composition of recent government spending is analysed, leading to discussion of the choices available.

5.1 The Focus on Expenditure

Large and persistent deficits have resulted from growth in public expenditures consistently outpacing growth in tax revenues for much of the last 30 years. At times, this gap has been widened by cyclical fluctuations in the economy which have raised unemployment expenditures and reduced taxable incomes. The consequences of these deficits for economic management, indebtedness and future economic growth explain why deficit reduction is at the top of the government's current list of priorities.

Not surprisingly, cutbacks in public expenditure, rather than increased taxes, tend to be the most commonly proposed solution to the deficit problem. In general, New Zealand governments do not have a good record when it comes to reducing their total spending. New or increased public expenditure programmes - whether these result from public pressure, political or bureaucratic initiatives, or from the effects of inflation - have invariably overridden the need for fiscal restraint. At best, governments have achieved only marginal reductions in most allocations, while usually increasing others.*

One of the factors which makes expenditure reduction more difficult is the frequency with which the various activities or programmes of government (which are almost all worthwhile in their own right) are seen as competing for a share of fixed total expenditure. For example, few would doubt the desirability of a well-financed education system or health care, but few would also attempt to identify one as inherently more useful or "necessary" than the other. Similarly, how can the security afforded to, say, sickness beneficiaries be compared with the security afforded to others by defence expenditures? Quite often, expenditure programmes regarded as essential by some may be considered of

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* *Shares* of government spending (Figure 12) have remained remarkably constant from one year to another. Only on three occasions since 1970, for example, has the government reduced the proportion of its expenditure on any one vote by more than 2%. These were Administration in 1976/77 (the removal of bread and milk subsidies), and Development of Industry in 1979/80 (the removal of some export incentives) and again in 1985/86 (the removal of Supplementary Minimum Prices).

minimal importance by others. The tighter the budgetary and financial constraints, the more public expenditure policy becomes a matter of difficult *political* choices.

These choices are especially acute at the present time. This is due not only to the size of the deficit, but to the extent to which certain components of government spending, particularly social services and debt servicing, have been increasing as a result of factors not easily within the government's control. This means that a decreasing share of total government expenditure is available for other activities and that the search for significant financial savings tends to focus on the next major spending areas of health and education. But further cost-cutting in these latter areas may only compound the shift in favour of social services and debt servicing in the composition of government expenditures.

Some recent proposals for reform of public expenditure policies arise as much out of concern with the size of government, or from differing perspectives on the most desirable way to provide certain "public goods", as they do from the desire to achieve greater fiscal balance. While, from a purely economic standpoint, periodic reviews of the objectives and implementation of public expenditures are useful for achieving greater efficiency and equity of delivery (thereby helping to reduce pressures on the government budget), such reviews ought not to be confused with the more philosophical issues of individual freedom or choice. There is a need, therefore, to ensure that efforts to achieve fiscal control do not alter the balance of government spending, and hence the nature of its role in the economy, in ways unrelated to any visible and/or broadly accepted social or economic objectives.

5.2 The balance of objectives

In Chapter 4, it was argued that the longer-term *economic* consequences of government spending depend heavily, though not completely, on the balance between capital and consumption expenditure, and on the quality of individual spending decisions. Raising the effectiveness of public expenditure policy was shown to be vital to improving economic performance. Current policies to improve the quality of expenditure decisions - such as corporatisation, greater departmental autonomy, and a more commercial approach to the provision of government services - are, in our opinion, necessary and desirable attempts to achieve this.

The motivation for public expenditures, however, reaches beyond economic objectives to include *social* development goals. The concept of "growth with equity" receives almost unanimous political support in New Zealand. This requirement for an effective integration of both the social and economic objectives of government policy is implicit in the terms of reference of the Royal Commission on Social Policy (due to present its conclusions in late 1988).

As the EMG argued in its report, *The Regulated Economy* (September 1985), economic activity always takes place within a set of rules. This means that the

distribution of income is always influenced by community judgements about what is and what is not desirable economic activity as well as by the supply of and demand for specific skills. Furthermore, it is usual for communities to want to influence the distribution of income to fit contemporary understanding of what constitutes fairness and equity.* A primary feature of the "mixed economy", of which New Zealand is an example, is the role which governments play to protect the welfare of groups and individuals in accordance with these broader social considerations.

The problem, which has been amply covered in recent debate, is in determining the appropriate *kind* and *degree* of government intervention. This applies both to narrowly economic issues (such as interest and exchange rates), and to the modification of market outcomes in the pursuit of social objectives. The current government's policies centre on increasing the "transparency" of government intervention, i.e. of setting out more clearly the objectives of government action, and facilitating debate on how well those policies are suited to their objectives. Furthermore, there is clearly a belief that, in current circumstances, it is desirable to minimise direct modification of commercial decisions - although that has been overridden in some cases, such as determining the appropriate transport for West Coast coal. This need not mean that social objectives have become unimportant: on the contrary, current policy would appear to be based on the premise that social well-being will be enhanced by reducing the degree of government involvement "upstream" in the economic process.

Implicit in this approach is the belief that welfare and equity can be better served from the standpoint of *end results* or *outcomes*. A more efficient and competitive economy enables the government to define social needs more clearly and to sustain the programmes needed to redistribute income. However, when the transfer programmes have been reviewed and made as administratively and conceptually sound as possible, it is still necessary to ensure that the revenue and expenditure sides of the government's activities are brought into a reasonable balance.

5.3 Interaction of public expenditure policies

Although only a broad discussion of these issues is warranted here, we would not wish to over-simplify the relationships between social and economic objectives and public expenditure policies. For example, it would be incorrect to suggest that the social objectives of government involve only the redistribution of market-generated wealth, or that redistribution can only be effected

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* Achieving what society regards as a fair and equitable distribution of income may be based on a number of different considerations. For example, it will usually include providing a level of income to individuals or families who cannot otherwise obtain it through active participation in the market economy, as well as compensating some of those who have employment but are disadvantaged by market-wage relativities, monopolies, or other market distortions.

through transfers (such as welfare payments) or other social expenditure programmes. In addition, social expenditures, including health and education, invariably have major economic implications of their own as discussed in Chapter 4. Recognition of these factors is necessary for achieving the appropriate balance in fiscal policy.

Deliberate efforts on the part of governments to influence the distribution of income are most commonly related to tax revenue, expenditure and transfer programmes. However, other non-expenditure policies, such as the equal opportunity intended by free, compulsory education, and by the regulation of some market activity, can also affect income distribution in the longer term. To measure the *total* impact of government on the distribution of income in a society (sometimes called the "net fiscal incidence"), it is necessary to take into account all of these effects. This also includes, for example, the extent to which taxes and subsidies may offset each other and the extent to which there is a link between the provision of benefits and the raising of taxes to finance them.

Evaluating the overall redistributive impact of governments is hampered by the lack of detailed or reliable data. This is also true of New Zealand, though the Planning Council's Income Distribution Monitoring Group is aiming to compile appropriate data and measurement criteria. Although New Zealand's reliance on personal taxes has for a long time been greater than most other countries, some lessons can be taken from a recent comprehensive analysis by the OECD (1985). That study found that the redistributive effects of progressive income tax systems tended to be largely offset by the regressivity of indirect taxes and company payroll taxes in most of the countries studied. In other words, taxation overall was found to have little redistributive effect. The same was true of government expenditure on goods and services - the benefits of which were broadly proportional to each income group. Transfers were clearly the most effective means for redistributing income:

> "When tax, transfer and expenditure programmes are viewed together, it is apparent that public expenditure programmes, particularly the provision of cash transfers, have been almost totally responsible for the changes in income distribution which governments have brought about in OECD countries." (p. 228)

The introduction in 1986 of the Goods and Services Tax and the related adjustment of personal income tax scales brought New Zealand more into line with the OECD experience by further diminishing the progressivity of taxes and increasing the importance of transfers as a means of redistributing income.

Two further points from the OECD study concerning the redistributive impact of governments would seem to be especially relevant to this report. It is *not* the case that a greater level of government activity in the economy necessarily results in a more equitable distribution of income, nor does it follow that *total* income remains unchanged irrespective of the redistributive policies of the government.

To illustrate the first point, the study found that in the four member countries for which the most detailed income distribution data was available (UK, USA, Canada and Sweden), the redistributive impact of governments bore no significant relation to the size of the public sector in each economy. In other words, it is quite possible for governments to achieve the same *net* redistributive impact with lower levels of revenue and expenditure.

The second point concerns the possible trade-off between equality of incomes and economic efficiency. Measures which seek to redistribute income from the owners of more highly-priced skills or capital to lower-income groups may reduce incentives, and therefore the total income available. The idea that governments, in seeking to divide economic wealth more equally, may inadvertently reduce its size is an argument frequently used by proponents of "supply-side" economics. A problem for social policy, therefore, is to find fiscal measures for redistributing income which have minimal effects of this kind. In addition, redistributive social policies need to avoid the well-recognised problem that, in a democratic society like New Zealand, the larger middle-income groups tend to capture a major share of the benefits at the expense of the poorer sections of the community.

Changes in the proportion of income transferred from one group in society to another may also have important economic effects. For example, if the propensity to save rises with income, redistribution via taxes and benefits towards those with lower incomes will alter the balance of consumption and savings. Probably more important, the existence of schemes like national superannuation is likely to influence the savings and consumption behaviour of many people, especially those who receive incomes which are high in relation to their lifetime average as they approach the age of eligibility for the transfer scheme. That is, it is likely that national superannuation has a negative effect on the savings rate. Considerable debate has also focussed at times on the points at which unemployment and domestic purposes benefits become sufficiently generous that they discourage potentially productive sections of the workforce from seeking employment.

To summarise, it is likely that it is the quality of government expenditure, more than the quantity, which is important for the achievement of social or redistributive objectives. Although tax systems are not particularly effective in redistributing income, the implementation of transfer payment programmes can lead to constraints on total income potential. It would seem that the formulation of social policy, and hence the quality of fiscal management in New Zealand, would benefit from taking this interdependence of social and economic objectives into account.

5.4 The record of government spending

A useful starting point for reviewing government's recent expenditure decisions is the size of each category's share of total expenditure.*

In Figure 12, these shares of expenditure are presented for the years 1970/71 and 1986/87. (The figures for this latter year are estimates as at March 1987.) The major changes are the well-publicised growth of Social Services from 21.7% to 31%, and Debt Servicing from 10.7% to 19%. Much of the growth in these areas has been at the expense of Education (down from 16.2% to 12.0%), Health (down slightly from 14.9% to 14.0%), Transport and Communications (down from 9.1% to 5.0%) and the Development of Industry (down from 8.4% to 7.9%).

Figure 13 provides a similar picture of this shift in expenditure priorities but expressed in real (1986) dollar terms. The differing growth rates of each expenditure category are more apparent. Over this period, real government expenditure has gone up by about 120%, while real GDP has increased by around 50%. (This corresponds with the much larger share of government in the economy discussed in Chapter 1.) Again, the above-average growth in real spending on Social Services and Debt Servicing are the most striking, with much smaller real growth apparent in Administration, Education, and Health. The smallest increase in real terms has occurred in Transport and Communications, though this is partly explained by the removal of Railways expenditure from the public accounts following its establishment as a separate corporation in 1982.**

Figure 14 provides a more detailed breakdown of expenditures for the areas of Education, Health and Social Services. For this report, we have restricted the focus to these three (plus Debt Servicing in Chapter 3) since they hold the major implications for the expenditure requirements of government over the next few years, and because they tend to receive most attention in terms of the changing (and generally growing) role of government in the economy. Our intention here is not to make judgements on the "appropriate" level of spending or to identify potential savings - such a task can only be undertaken in the course of a comprehensive vote-by-vote expenditure review - but simply to provide a general indication of the amounts actually spent under these allocations and the factors which influence them.

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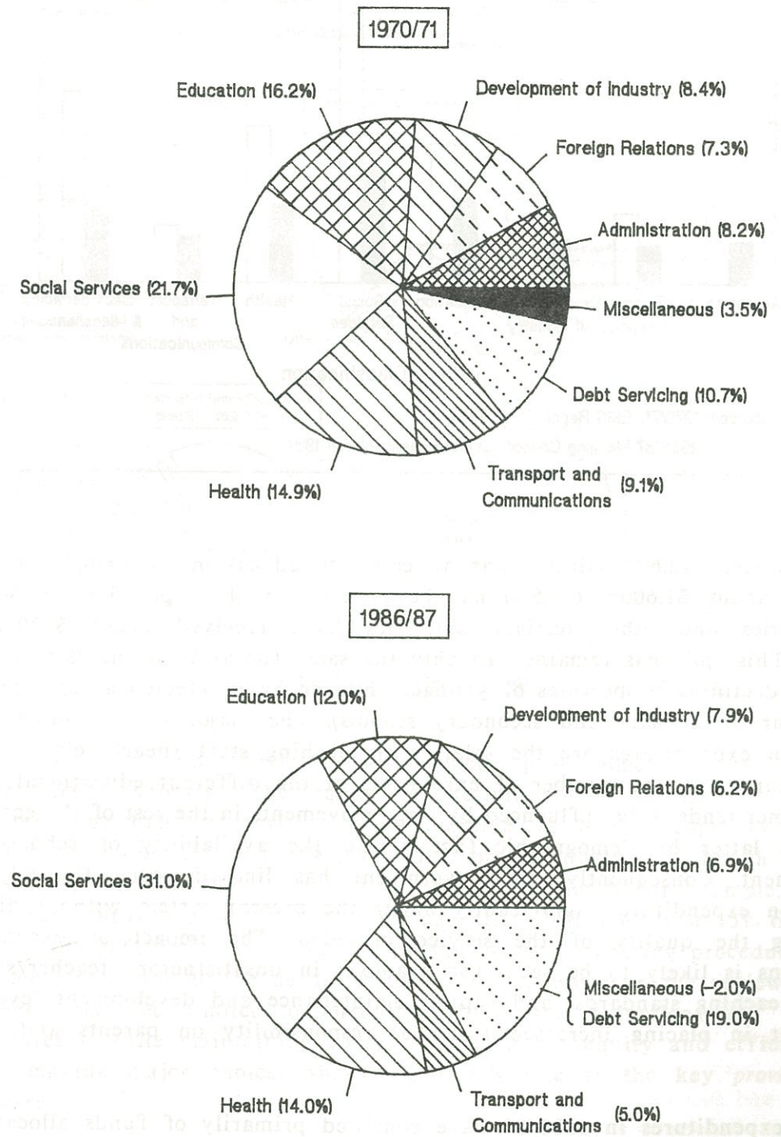
* There are limits to the accuracy of this form of presentation. Not all policy objectives are pursued through public expenditure activities. For example, "tax expenditures" (e.g. assistance to families and export development totalling approximately $200m and $50m respectively in 1983/84) are one means by which special benefits or assistance may be directed without a clearly identifiable financial "expenditure". However, the number and importance of these exceptions are diminishing as the present government moves to identify more clearly in its annual budget the financial cost of current policies.

** Comparing trends in government expenditure according to functional classifications will be considerably more difficult after 1986/87, unless more comparable series are developed to accommodate the nine new corporations whose activities will be shifted outside these public accounts.

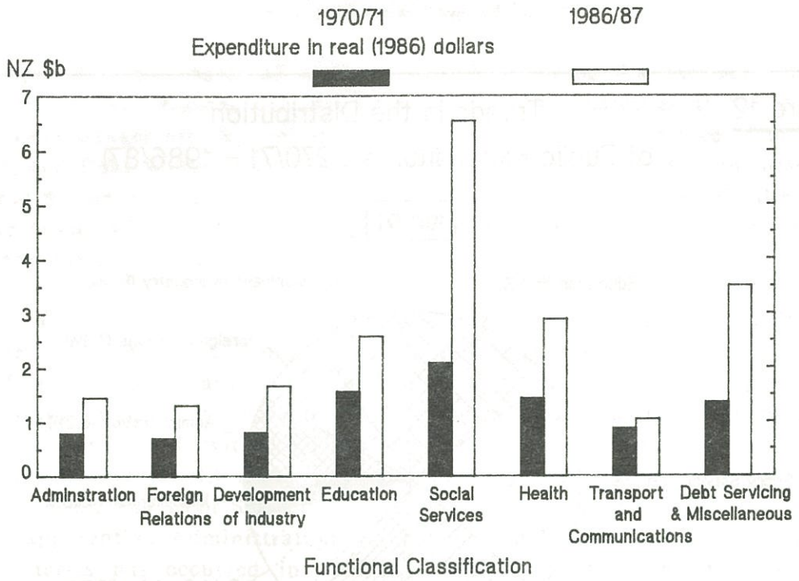
Figure 12

Trends in the Distribution of Public Expenditures (1970/71 – 1986/87)



Source : 1970/71 – EMG Report No.2
1986/87 – Planning Council estimates as at March 1987

Figure 13 Trends in Real Government Expenditure by Classification 1970/71, 1986/87

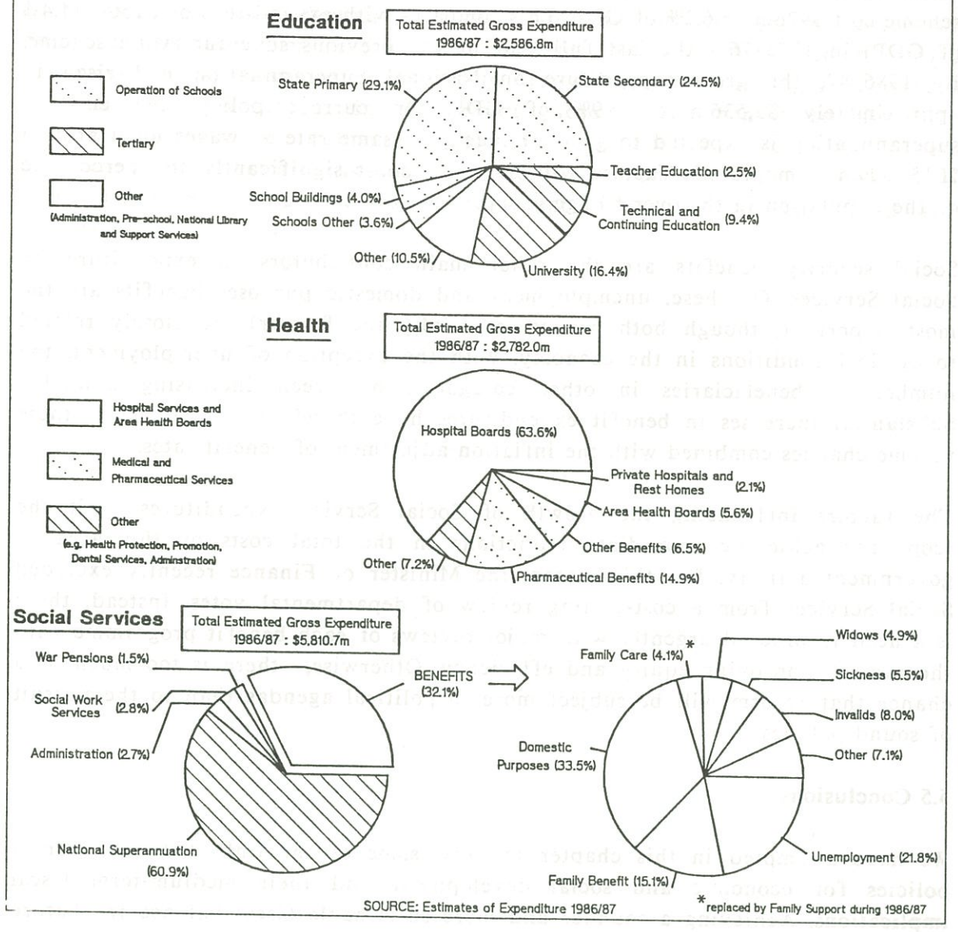


Sources: 1970/71 EMG Report No.2, Table 2
1986/87 Planning Council estimates as at March 1987

Approximately $2,600 million was allocated to education in 1986/87. Of this amount, about $1,600m (61.5%) has been spent on the Operation of Schools. Universities and other tertiary activities have received about $730m (i.e. 28.1%). This split has remained roughly the same for at least the last 10 years (though declining proportions of younger children have effected a resource shift in favour of primary and secondary schools). The major factors which drive education expenditures are the salaries of teaching staff (nearly 60% of total expenditure) and the number of enrolments at the different educational levels. The former tends to be influenced by wage movements in the rest of the economy, and the latter by demographic factors and the availability of school-leaver employment. Consequently, the government has limited scope for adjusting education expenditures significantly under the present system without directly affecting the quality of the service provided. The impact of expenditure reductions is likely to be seen, for example, in unsatisfactory teacher/student ratios, teaching standards, and capital maintenance and development levels, or to result in placing increased financial responsibility on parents and school boards.

Health expenditures in 1986/87 have consisted primarily of funds allocated to hospitals and area health board services (71.5%), and medical and pharmaceutical services (21.3%). Total expenditure for the year is estimated at about $2,800m, of which over 95% is paid out either as grants, loans and transfers to the

Figure 14 Education, Health and Social Services Expenditure 1986/87



various boards, or under several health benefit programmes, e.g. the general practice (GMS) subsidy. The range of activities and health institutions administered by these authorities is considerable, as is the scope, in certain areas, for achieving efficiency gains and improved quality of health service delivery. The recently completed Health Benefits Review*, for example, found that the rapid growth in the nation's pharmaceutical bill ($346m or 15% of Vote: Health in 1985/86) could be restrained by improving purchasing procedures and paying more attention to the needs of users. Overall, however, the review found that there may be limited opportunities for large reductions in health expenditures - while maintaining current standards of equity and efficiency - without making major choices about the state's role as the key *provider* of health care.

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* *Choices for Health Care*, Report of the Health Benefits Review, Wellington 1986.

In the area of Social Services, much of the growth in real expenditure has been attributable to National Superannuation. In its first full year (1977/78) the scheme cost $926m or 6.2% of GDP. This compares with expenditure of $166m (1.4% of GDP) in 1975/76 - the last full year of the previous superannuation scheme. By 1986/87, the gross expenditure on National Superannuation had risen to approximately $3,536m or 6.9% of GDP. On current policy, the cost of superannuation is expected to grow at much the same rate as wages until around 2015 when demographic factors will begin to boost significantly the percentage of the population in the over-60 age group.

Social security benefits are the other main contributors to expenditure on Social Services. Of these, unemployment and domestic purposes benefits are the most important, though both groups (especially the former) are closely related to cyclical conditions in the economy. With the exception of unemployment, the number of beneficiaries in other categories has been increasing annually. Substantial increases in benefit expenditures have therefore resulted from these volume changes combined with the inflation adjustment of benefit rates.

The factors influencing the growth of Social Service expenditures limit the scope for achieving immediate reductions in the total costs of this area of government activity. For this reason, the Minister of Finance recently excluded Social Services from a cost-cutting review of departmental votes. Instead, there is a need to proceed urgently with major reviews of each benefit programme with the aim of improving equity and efficiency. Otherwise, there is too much of a chance that reform will be subject more to political agendas than to the pursuit of sound policies.

5.5 Conclusions

We have attempted in this chapter to draw some of the links between current policies for economic and social development and their medium-term fiscal implications. Achieving a sounder and more sustainable fiscal balance in future will depend on the successful integration of these policies and therefore on the extent of the redistributive role to be played by government. At the same time, future budgets are likely to be placed under increasing pressure from the growth of superannuation and debt-service payments. These will constrain the expenditure options available to government and may incline the balance of spending even further away from traditional government activities.

There is no reason, based either on our own or on overseas experience, to be confident that public expenditure will naturally decline. The present adjustment process, while intended to provide higher standards of living in the future, places immediate demands on social welfare systems. The economic trends which generate higher standards of living might well involve greater disparity of incomes and so encourage community demands for compensatory transfer schemes, especially for groups such as households with young children. When higher average standards of living are achieved, community notions of acceptable minima will also rise. Demographic factors must be expected to bring demands for greater public expenditure on older people, while there is no sign of medical

technology ceasing to provide opportunities for greater expenditure.

In the light of these factors it is most unlikely that the present excess of public expenditure over revenue will be easily corrected. However, no broad consensus yet exists for major changes to present forms of funding and delivery of these services which, in any event, need to be considered alongside alternative ways of achieving better fiscal control. Identifying these alternatives more clearly is therefore necessary for the proper conduct of public policy as well as for instigating a more sustainable approach to deficit reduction.

CHAPTER 6 : POLICY IMPLICATIONS

6.1 The scale of the problem

Several points relevant to effective fiscal management in New Zealand emerge from this report:

- While economic growth should remain a primary objective of policy, it is unlikely to be sufficient to eliminate the problem of deficits even in the medium term. Structural deficits must be tackled through policies which directly alter the existing balance between government revenue and expenditure.

- Deficits are the major component of net public sector injections into the money supply. Prior to 1985, part-funding of the deficit contributed significantly to high rates of inflation. Monetary policies based on the "fully funding" principle are less inflationary, but are more likely, at least in the short term, to crowd out real investment and growth, especially in the tradables sector.

- There is a strong two-way relationship between fiscal deficits and the growth of internal and external public debt. The real interest rates currently applying to this debt mean that a substantial portion of real national income must be allocated annually to servicing the costs of previous deficits. Achieving a surplus in the non-interest payment government budget is one means by which fiscal policy can help to overcome this problem.

- Deficits incurred as a result of increased public consumption and/or low quality capital investment can contribute to a transfer of wealth between generations. From the preliminary analysis contained in this report, it would appear that fiscal policy for much of the period 1970 to 1985 maintained living standards at the expense of future incomes.

- The expenditure pressures which have contributed to New Zealand's persistent fiscal imbalance have changed over the last 15 years. Social welfare (especially superannuation) and debt servicing are now substantial items in the government budget. However, there are major practical and political difficulties associated with reducing these expenditures.

- Spending in all other areas combined has remained roughly proportional to GDP during the last 10 to 15 years. However, the problems caused by continuous deficits have given urgency to the case for expenditure reform. Non-pension benefits, health and education have become the major focus of attention, though there remains considerable debate on whether we are spending too much, or too little, in these areas.

- There is a need to ensure that pressure to improve the fiscal balance

does not overrule proper debate about the social and economic objectives of public expenditure policy and the nature of the choices involved. Discussion of the appropriate levels of state funding, and of more equitable and efficient ways of delivering these services, is also complicated by philosophical arguments such as the merits of private sector participation.

- Corporatisation, asset sales, and the floating of shares in state-owned enterprises will result in major changes to the structure of, and the information conveyed by, the public accounts. The quality of public analysis and discussion of fiscal management may deteriorate unless public sector accounting and reporting is considerably strengthened.

The importance for an effective economic strategy of achieving a smaller deficit has been clear for a number of years. Failure to act effectively in the past has increased the scale of the adjustment problem. What is much less certain is the actual size and the speed of the fiscal adjustment now required, and to what extent the adjustment process should impose unequal burdens on the community.

6.2 The appropriate fiscal stance

While the primary focus of this report has been the problems associated with fiscal deficits, we have been concerned throughout to emphasise that, from a policy perspective, deficits are merely a measure of the *residual balance* between the government's revenue and expenditure activities. Discussion of the appropriate response to the problem of persistent deficits therefore entails identification and assessment of specific policies or programmes which, individually or collectively, may contribute to an improvement in the fiscal balance. Furthermore, attention must be paid not only to the total cost of an expenditure programme, or to the amount of funds generated by a revenue policy, but also to the *qualitative* impact of that programme. The questions to be asked include: to what extent does the programme contribute to the achievement of its intended social and/or economic objectives, and in what ways can that revenue or expenditure be varied to reach a more equitable and efficient result?

As we noted in Chapter 5, the pressure on government to achieve a reduction in the deficit ought not to dominate this process. Instead, policy changes in the areas of health, education and welfare benefits in particular should result from agreement on the need for more cost-effective services, and from careful evaluation and public discussion of the relative merits and the real costs of alternative systems. In addition, public choices can only be soundly made if the taxation consequences of maintaining present services are accurately presented. The achievement of sustainable fiscal reductions is not aided either by arbitrary cost-cutting of social expenditures (if eliminating wasteful government spending were a straightforward task it would have been achieved before now), nor by a reform of social services that lacks a genuine consensus, in the sense that the bulk of those who have an interest in the issue are satisfied that their views have at least been taken into account before

decisions are made. The Health Benefits Review, Defence Review, proposed Superannuation Review and the Royal Commission on Social Policy all exemplify the initial stages of a process which should lead to properly formulated changes in public policy.

At another level, the choice of an appropriate fiscal stance will involve policies, such as the regulation of market activity and the government's conditioning of private sector expectations, which are much less obviously "fiscal". While these policies may not themselves be part of a particular revenue or expenditure programme, they may well have substantial fiscal implications as a result of their impact on private sector activity. In this light, the correct approach to overcoming a prolonged fiscal imbalance involves consideration of a very broad range of potential government policies.

It can be argued that attending to the equity and efficiency of individual revenue and expenditure programmes is the essence of successful fiscal management. However, as we have pointed out on several occasions, there is no *guarantee* that this approach will lead to the optimal fiscal balance. At the end of the day, attention must still be paid to the overall balance between revenue and expenditure and the implications which this holds, both for an effective macroeconomic strategy and for equity in the inter-temporal distribution of wealth. Moreover, the degree of pressure exerted on the revenue and expenditure decision-making of government suggests that this need for a balance sheet review must be part of a continuous process. It should also be accompanied by a constant concern for the consequences of the adjustment process itself.

6.3 The adjustment required

Like many other industrial countries, New Zealand has a poor record of reaching and maintaining an appropriate fiscal balance, and we cannot be confident that the present set of policies will be sufficient to achieve this goal. Some countries have recently begun to conduct the reform of fiscal policy within the context of specific annual targets for deficit reduction. Such an approach may be unnecessarily restrictive in New Zealand, though we consider it desirable that more specific criteria be developed for monitoring the government's performance. This requires a more comprehensive framework than is provided by the Budget Table No. 2 deficit figure.

In quantitative terms, the government's declining role as a funder of capital development, together with other changes to the public accounts, means it should be aiming to achieve a *sustainable* deficit (on a Budget Table No. 2 basis) of well below 2% of GDP. Over the longer term, a balanced budget should remain the goal, though the scale of adjustment required to meet and sustain even a deficit of 2% should not be underestimated in New Zealand's current economic circumstances. Any lesser achievement is likely, in our view, to threaten both the practical and the political sustainability of the government's overall economic strategy. Moreover, we stress that this figure applies to the structural component of the deficit, and therefore involves an improvement of

well over $1 billion on the deficit reported for 1986/87. Budgetary changes of this magnitude are likely, in our view, to require a medium-term (three-year) framework for implementation, especially if the negative effects that adjustment can have on output and employment are to be minimised.

At the same time, the composition of structural expenditures should be adjusted, both to obtain a better balance between current revenues and expenditures, and to meet the requirements referred to in Chapter 3 for a reduction of public indebtedness. Proper monitoring of the compositional aspects of the proposed adjustment must include an allowance for cyclical factors, as well as for changes in the public accounts resulting from current policies. As argued throughout this report, fiscal reform must also go beyond improving the fiscal balance to consider the quality of investment and consumption decisions and their relationship to the asset/liability structure of the economy. A major objective of the report is to establish the basis for more detailed public commentary and clearer identification of the objectives of individual policies. Our intention is therefore to follow up the report in ways which apply this framework to major issues of public expenditure - especially as they relate to social policy.

6.4 Are current policies sufficient?

The approach to fiscal management outlined here is reflected in a number of fiscal adjustments already introduced by the present government. These include a broadening of the tax base arising from both the introduction of GST and greater tax neutrality across different economic activities and sources of income, more efficient management of public sector assets and trading operations, and a less regulated and protected private sector. These should all, in the longer term, generate the kind of structural shift in public finances which we have argued is necessary for sustained fiscal improvement. Implicit in this strategy is the encouragement of business confidence and those expectations essential to the growth of investment and output, and hence to more positive cyclical pressures within the fiscal accounts.

Although there are some problems, these measures offer good prospects of success. In terms of the criteria established in Chapters 3 and 4 in particular, the deficit results for 1986/87 show a marked and so far sustained reversal of earlier trends. Although we would emphasise that our calculations are only provisional at this stage, it appears that a surplus (albeit a small one) in the non-interest payment budget balance has been recorded for the first time in the last 15 years, and a similar improvement appears likely in the inflation-adjusted structural deficit. Both of these results are significant in pointing to real progress in the recovery of fiscal control.

On the debit side, the threat to the current strategy comes from a number of sources covered in this report: the crowding-out effects of anti-inflationary funding policies; the largely uncontrolled growth of current expenditures on social services and debt servicing; the possibility of further loss of internal and/or external confidence due to escalating levels of public (and private)

debt; and the medium-term nature of most of the government's fiscal measures. The combination of these factors means that further large reductions in the deficit are unlikely to be achieved within a short time unless more drastic changes, such as sweeping reductions in other expenditures, are also instituted. (A fourth problem, the difficulties of interpreting changes in the reported deficit, and hence the real impact of the present strategy, is addressed in the final section.)

Waiting for current measures to take full effect might be possible were it not for the damage to investment and production which we consider will continue to occur in the present high interest and exchange rate environment. In addition, the results of the expenditure review referred to above - if they are to have major fiscal implications - will not be in place soon enough to achieve the degree of sustained fiscal improvement which we have recommended. Obviously, to the extent that these reviews might result in increased expenditures, as in the case of defence, improvements in the fiscal balance would be reversed. Achieving more immediate fiscal adjustment therefore consists of a choice between an increase in tax revenues and an urgent and radical overhaul of social spending. We have made it clear that we do not support the latter course.

With the benefit of hindsight, we suggest that the extent of tax reductions in October 1986, although part of a wider policy for improving family incomes and achieving equality of marginal income and company tax rates, was probably greater than the economy could afford at that time. The fact that much of the increase in disposable income appears to have been channelled directly into consumer spending, rather than savings and investment, provides reasonable support for this view.

Reluctantly, we accept that some increase in tax revenues may offer the least damaging way of achieving the required adjustment until the medium-term policies take proper effect. While such a policy could be implemented through an increase in the rate of GST, problems could again arise in the relationship between the setting of a new tax rate and the price-fixing behaviour of the private sector. Further disruption to business so soon after the introduction of the tax cannot be justified; and although it can be argued at any time that increasing indirect taxes is inflationary, the objection has particular force at present because of the high degree of uncertainty about future price trends. Instead, an increase in income tax revenue would provide a less inflationary, more practical and probably more acceptable option at this time. The EMG has consistently advocated indexing income tax scales so that governments have to make clear the means by which income tax revenues are raised. In the current situation, however, it suggests that the government announce its best calculations on what concessions need to be made in order to keep the income tax schedule neutral with respect to inflation, but refrain from implementing those concessions because of the need to tighten its fiscal stance. This approach would make the real costs of current government spending more apparent and therefore place a sharper focus on the social expenditure decisions which must soon be made.

The decision to *raise* income tax rates would only need to be taken once it

became clear that the increase in revenue from the effects of inflation and previous fiscal changes was not adequate to achieve the desired adjustment. It is also important that no firm policy changes are made until the borrowing programmes of the new corporations are better known. But in the case of insufficient improvement in the fiscal balance over the next nine months, and faced perhaps with a large public sector borrowing requirement, some small increases in income tax rates effective from April 1988 may be the only responsible course of action.

The case for implementing this interim fiscal adjustment through an increase in income tax revenues rests on a stronger argument than just the reluctance to juggle the rate of GST. Recent high interest rates cannot only, in our view, be attributed to uncertainty in inflationary expectations, exchange rate risk, or the size of the government's borrowing requirement which, as a percentage of GDP, is considerably less than it was in 1985 (see Figure 4). Although we have not provided in this report the supporting evidence, it is possible that increased competition in the financial sector, combined with the disposable income effects of the October 1986 tax cuts, have significantly, but perhaps temporarily, raised the demand for money. This would help to explain why interest rates have moved away from the level to be expected under the prevailing monetary conditions. Reducing disposable incomes through an increase in income tax revenues may therefore *complement* other policies aimed at achieving lower interest rates and improved macroeconomic performance.

The case for raising investment and output through tax increases (or conversely, suggesting that tax cuts may be contractionary) has limited support in economic literature. However, we would note the results of two studies* - one commissioned by the UK Treasury - which show that decreases in the tax rate have not had the effect of raising output and incentives as widely believed. The other analysis, from the United States, even suggests that tax cuts may be contractionary under conditions not too dissimilar from those prevailing here.

6.5 Measuring progress

One of the factors which has made proper analysis of deficit issues more difficult is the absence of detailed information concerning the adjustment path to a better medium-term fiscal balance. The outcome has been to create uncertainty about the extent of the short-term problem, to encourage speculation about the taxation or expenditure adjustments needed, and to attach too much importance to cyclical influences on the fiscal accounts, such as the spending/revenue peak arising from the introduction of GST. Although, as we have said, we would hesitate to suggest that *formal* targets for achieving an improved fiscal balance are appropriate for New Zealand, clearer identification of the required annual adjustment would make the government's medium-term approach more understandable to the public as well as give it a greater chance

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* Mankiw, N.G. and Summers, L.H. (1984), and C.V. Brown et al (1986).

of success. Updating and publication of the government's "three-year fiscal projections" is possible and desirable now that many of the government's major fiscal changes have been implemented. These projections have a valuable role to play in enhancing public understanding and moderating expectations of fiscal policy changes and their economic effects.

Perhaps the greatest danger in the present fiscal environment arises from the possibility that changes in the fiscal deficit as reported in the Budget will encourage an inaccurate public assessment of the government's fiscal management. The Budget Table No. 2 deficit figure, although a big improvement on earlier reporting, has strictly limited value as an indicator of the results of fiscal policy. It will become an even less informative statistic after the 1986/87 financial year. Future budgets will need to provide a rather more detailed picture of the changes that have occurred - taking into account all of the issues which we have endeavoured to capture in this report. In more specific terms, this will require the government to:

(i) identify all spending and borrowing activities which have been transferred "off-budget" as a result of corporatisation, or through greater autonomy being given to existing corporations and government departments;

(ii) estimate the combined public sector (i.e. central government plus corporations) borrowing requirement for the year, with the corporations' borrowing for the repayment of assets purchased from government separated from their operational borrowing requirements;

(iii) record the asset sale price determined between Treasury and the corporations, together with the planned programme for asset purchase repayment;

(iv) record the payment of corporation profits and dividends to government as a separate item in the public accounts;

(v) present more clearly the sources for the recovery of interest from government enterprises and investments (Budget Table No. 9);

(vi) provide a more detailed presentation of total official indebtedness, including separate figures for central government, the Reserve Bank, and the state-owned enterprises;

(vii) provide more detailed presentation of the contingent liablities of government, including the expected costs of committed social expenditure programmes such as superannuation;

(viii) give more prominence to official commentary on the information contained in alternative measures of the deficit such as the estimated Net Financial Balance, structural deficit, and the public sector's borrowing requirement.

The Economic Monitoring Group will attempt to clarify the nature of these changes and their impact on the economy. We propose to focus on the major macroeconomic issues associated with trends in public sector indebtedness (broadly defined to include the new corporations), and on the related issues of changes in the worth of the public sector and their policy implications. We hope that, within the next year, the government itself will assume much greater responsibility for providing information and comment on the various issues introduced by this report, given their importance to the quality of fiscal management.

THE TABLES

Table 1

Government Revenue, Expenditure and Deficit as a Proportion of GDP 1960/61 - 1986/87

Year Ended March	Govt. Revenue	Govt. Expenditure	Deficit
60/61	24.8	27.6	2.8
61/62	26.3	29.1	2.8
62/63	23.1	27.2	4.1
63/64	23.0	26.4	3.4
64/65	23.8	26.2	2.4
65/66	23.9	26.8	2.9
66/67	24.6	27.8	3.2
67/68	24.5	27.0	2.5
68/69	23.2	26.1	2.9
69/70	24.9	26.4	1.5
70/71	26.6	28.0	1.4
71/72	26.6	27.7	1.1
72/73	26.0	28.6	2.6
73/74	26.0	27.7	1.7
74/75	30.4	34.2	3.9
75/76	29.5	38.1	8.6
76/77	28.9	32.5	3.6
77/78	33.4	38.1	4.7
78/79	32.1	40.6	8.6
78/80	33.3	38.5	5.2
80/81	33.1	39.7	6.6
81/82	33.7	40.2	6.5
82/83	33.8	40.7	6.9
83/84	32.8	42.0	9.1
84/85	32.4	39.6	7.2
85/86	35.7	39.9	4.2
86/87	36.8	40.6	3.8

Totals may not add due to rounding.

Sources: 1960/61 - 1969/70 (Revenue & Expenditure Data) R.S. Deane and R.G. Smith, *The Stabilisation Role of Fiscal Policy* N.Z. Planning Council, April 1980.

1960/61 - 1969/70 (GDP data) D. Grindell (ed), *Consolidated National Accounts for New Zealand on an SNA Basis*, Reserve Bank Research Paper No. 32, May 1981.

1970/71 - 1982/83 N.Z. Planning Council, *The Government Deficit and the Economy*, EMG Report No. 2, 1984.

1983/84 - 1986/87 1984, 1985, 1986 Budgets; GDP data from Department of Statistics, Monthly Abstract.

Table 2

Gross Domestic Product Measures Used in this Report

Year Ended March	Nominal GDP $m	Nominal GDP Growth % p.a.	GDP Index (1977/78 = 1000)	Real GDP Growth % p.a.
1971	5,843	13.6	846	3.7
1972	6,874	17.9	867	2.5
1973	7,901	14.9	905	4.4
1974	9,199	16.4	970	7.2
1975	10,117	10.0	1,010	4.1
1976	11,669	15.3	1,027	1.7
1977	14,105	20.9	1,028	0.1
1978	14,889	5.6	1,000	-2.7
1979	16,852	13.2	1,002	0.2
1980	19,715	17.0	1,028	2.6
1981	23,002	16.7	1,038	1.0
1982	27,841	21.0	1,087	4.7
1983	31,149	11.9	1,093	0.6
1984	33,967	9.0	1,121	2.6
1985	38,729	12.3	1,195	6.6
1986	44,255P	14.3	1,214	1.6
1987	51,540	16.5	1,226	1.0

Average % Change in Real GDP:

1960/61 - 1985/86 = 3.1 1970/71 - 1985/86 = 2.6 1980/81 - 1985/86 = 2.9

1960/61 - 1969/70 = 4.8 1970/71 - 1979/80 = 2.4

Source: 1971-1986: Department of Statistics (Infos), as at 30 November 1986.
1987 : Planning Council estimates, November 1986.

Table 3

Fiscal Deficit Measures Used in this Report

Year Ended March	(1) Budget Table No. 2 As reported		(2) Budget Table No. 2 Less Reserve Bk Indemnity		(3) Consolidated Monetary Sector Deficit	
	$m	% GDP	$m	% GDP	$m	% GDP
1970/71	80.6	1.4	80.6	1.4	N/A	N/A
1971/72	72.3	1.1	72.3	1.1	N/A	N/A
1972/73	206.0	2.6	206.0*	2.6	N/A	N/A
1973/74	155.1	1.7	61.9	0.7	N/A	N/A
1974/75	390.4	3.9	384.5	3.8	N/A	N/A
1975/76	1001.7	8.6	1001.7	8.6	N/A	N/A
1976/77	506.1	3.6	464.6	3.3	N/A	N/A
1977/78	694.4	4.7	682.5	4.6	N/A	N/A
1978/79	1445.9	8.6	1422.8	8.4	N/A	N/A
1979/80	1026.9	5.2	994.2	5.0	1152.2	5.8
1980/81	1524.9	6.6	1511.7	6.6	1548.0	6.7
1981/82	1818.3	6.5	1818.3**	6.5	1684.1	6.1
1982/83	2158.0	6.9	1766.9	5.7	2696.9	8.7
1983/84	3100.7	9.1	2984.0	8.8	2744.7	8.1
1984/85	2783.5	7.2	2037.3	5.3	2636.5	6.8
1985/86	1871.0	4.2	1766.7	4.0	1115.0	2.5
1986/87	1950.0	3.8	N/A	N/A	N/A	N/A

* In 1972/73 Reserve Bank was compensated for $87.5m from borrowing.
** In 1981/82 Reserve Bank was compensated for $107.61m with non-interest bearing Government Stock.

Sources: Column 1 - Budget Table No. 2 (1986/87 approximate only).
Column 2 - Calculated from Budget Tables Nos. 2 and 4.
Column 3 - See Table 4.

Table 4

Consolidated Monetary Sector Deficit ($m)

Year Ended March	1980	1981	1982	1983	1984	1985	1986
Budget Table No. 2	1026.9	1524.9	1818.3	2158.0	3100.7	2783.5	1871.0
Less:							
R.B. Indemnity	53	20	274	446	127	746	104
F/E Losses/Payments on:							
(i) Balances	-	-	-	-	25	-	-
(ii) Transactions	16	-	74	30	-	70	122
Reserve Account *	-	-	-	-	7	-	59
SUB TOTAL	957.0	1504.9	1470.3	1682.0	2941.7	1967.5	1586.0
Plus:							
R.B. Discount (LR A/c)	-	-	-	-	13	75	-
Reserve Account*	3	6	18	27	-	127	-
R.B. Profits	8	11	8	31	49	45	200
IMF Transfers	2	-	2	-	-	1	-
F/E Gains/Receipts:							
(i) Balances	19	4	9	90	-	188	134
(ii) Transactions	-	11	-	-	23	-	-
Total	989.0	1536.9	1507.3	1830.0	3026.7	2403.5	1920.0
Reserve Bank Activities	163.2	11.1	176.8	866.9	-282.0	233.0	-805.2
Consolidated Deficit	**1152.2**	**1548.0**	**1684.1**	**2696.9**	2744.7	**2636.5**	1115.0
% GDP	5.8	6.7	6.1	8.7	8.1	6.8	2.5

* Exchange Rate Losses/Gains on Investments

Sources: Budget Table Nos. 2 and 4
Public Accounts 1979/80 - 1985/86
Reserve Bank Annual Reports 1980-1986.

Table 5

Net Issues of Government Stock 1978/79 - 1986/87

Year Ended March	Gross Issues	Net Issues
1979	2232.4	854.3
1980	3534.2	876.3
1981	3463.9	640.8
1982	4416.5	1414.8
1983	5922.9	2046.4
1984	7978.7	2781.8
1985	9506.8	2176.5
1986	12732.4	1198.4
1987	N/A	2990.0*

* Estimate in press statement: "Estimates of Public Sector Liquidity Influences", Reserve Bank, 8 January 1987.

Source: Reserve Bank Bulletin, Table E.7

Table 6

Gross Official Debt of Small Industrial Countries 1984

Country	Domestic Debt % GDP	Foreign Debt % GDP	Total Debt % GDP
Australia	20.4	3.8	24.2
Austria	27.3	9.3	36.6
Belgium	68.6	19.7	88.3
Denmark	32.0	13.2	45.2
Finland	6.2	8.1	14.3
Iceland	9.2	23.9	33.1
Ireland (1982)	63.9	44.8	108.7
Luxembourg (1983)	6.7	-	6.7
Netherlands	51.7	-	51.7
New Zealand	39.3	30.7	70.0
Norway (1983)	21.6	2.3	23.9
Spain (1983)	25.8	2.0	27.8
Sweden	30.9	13.1	44.0

Source: International Monetary Fund, *Government Finance Statistics Yearbook*, Vol. X, 1986.

Table 7

Official Net Internal Debt ($m)

Year Ended March	(1) Official Gross Internal Debt	(2) Internal Financial Assets	(3) Net Internal Debt
1972	2523	2396	127
1973	2939	2637	302
1974	3133	2838	295
1975	3030	3345	-315
1976	3542	4222	-680
1977	3654	4843	-1189
1978	4699	5485	-786
1979	5613	5883	-270
1980	6327	6484	-157
1981	7078	7086	-8
1982	7939	7853	86
1983	10596	8044	2552
1984	12593	8897	3696
1985	14817	9839	4978
1986	16304	10246	6058
1987	19264	11762	7502

Sources: Column 1 - see Table 14
Column 2 - Reserve Bank Bulletin, Vol. 49, December Qtr, 1986, p.501 Table 4.

Table 8

Non-Interest Payment Budget Balance 1970/71 - 1986/87

Year Ended March	(1) Budget Deficit $m	(2) Net Interest Payments $m	(3) Non-Interest Budget Balance $m	%GDP
1971	80.6	55.8	-24.8	-0.4
1972	72.3	56.9	-15.4	-0.3
1973	206.0	64.8	-141.2	-1.8
1974	155.1	72.8	-82.3	-0.9
1975	390.4	79.5	-311.8	-3.1
1976	1001.7	113.1	-888.6	-7.6
1977	506.1	137.7	-368.4	-2.6
1978	694.4	158.7	-535.7	-3.6
1979	1445.9	164.9	-128.1	-7.6
1980	1026.9	231.9	-802.6	-4.0
1981	1524.9	293.7	-1235.3	-5.3
1982	1818.3	469.6	-1348.7	-4.8
1983	2158.0	675.5	-1482.5	-4.7
1984	3100.7	1170.6	-1930.1	-5.7
1985	2783.5	1494.2	-1289.3	-3.3
1986	1871.0	1799.8	-71.2	-0.2
1987*	1950.0	2069.4	-119.4	+0.2

*Planning Council estimates as at April 1987

Sources: Column (1) - Table 7
Column (2) - Table 18

Table 9

Net Financial Balance and Overall GFS Deficit 1974/75-1986/87 ($m)

	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
Current Revenue	1,901	2,141	2,626	3,121	3,496	4,277	5,150	5,648	6,823	7,871	9,747	11,204	11,711	13,685	16,981	20,300
Current Expenditure	1,620	1,992	2,346	2,712	3,474	3,870	4,777	5,914	6,858	8,246	10,432	12,171	13,313	15,238	17,389	20,900
Current Account Surplus (+) Deficit (-) (i.e. Govt savings)	281	149	280	409	22	407	373	-266	-35	-375	-685	-967	-1,602	-1,553	-498	-600
Current Account Surplus/Deficit as % GDP	4.1	1.9	3.0	4.1	0.2	3.0	2.5	-1.6	-0.2	-1.6	-2.5	-3.1	-4.7	-4.0	-1.1	-1.2
Capital Expenditure	201	240	268	395	399	406	455	490	480	556	643	709	795	916	941	1,200
Net Financial Balance	80	-91	12	14	-377	1	-82	-756	-515	-931	-1,328	-1,676	-2,397	-2,469	-1,439	-1,800
As % GDP	**1.2**	**-1.2**	**0.1**	**0.1**	**-3.2**	**0.0**	**-0.6**	**-4.5**	**-2.6**	**-4.1**	**-4.8**	**-5.4**	**-7.1**	**-6.4**	**-3.3**	**-3.5**
Plus: Capital Revenue	7	6	6	3	7	6	3	3	4	6	6	3	13	20		
Less: Lending Minus Repayments	180	213	243	433	824	621	710	749	616	616	789	716	825	784	685	230
Overall GFS Surplus/Deficit	-93	-298	-225	-416	-1,194	-614	-789	-1,502	-1,127	-1,541	-2,111	-2,389	-3,209	-3,235	-2,082	-2,010
As % GDP	**-1.4**	**-3.8**	**-2.4**	**-4.2**	**-10.2**	**-4.5**	**-5.3**	**-8.9**	**-5.7**	**-6.7**	**-7.6**	**-7.7**	**-9.5**	**-8.4**	**-4.7**	**-3.9**

Totals may not add due to rounding

Sources: Revenue and Expenditure Data: 1971/72 - 1983/84 Government Finance Statistics Yearbook, IMF, 1982, 1985
1984/85 - 1985/86 1986 Budget
1986/87 Planning Council estimates as at March, 1987.

Table 10

Net Financial Balance with Cyclical and Inflation Adjustments ($m)

	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87*
Net Financial Balance	80	-91	12	14	-377	1	-82	-756	-515	-931	-1,328	-1,676	-2,397	-2,469	-1,439	-1,800
Cyclical Adjustment	16	4	-61	-89	-116	-112	+93	+219	+179	+274	-88	+27	+14	-672	-606	-300
Structural Deficit(-) Surplus(+)	+96	-87	-49	-75	-493	-111	+11	-537	-336	-657	-1,416	-1,649	-2,383	-3,141	-2,045	-2,100
As % GDP	**+1.4**	**-1.1**	**-0.5**	**-0.7**	**-4.2**	**-0.8**	**0.1**	**-3.2**	**-1.7**	**-2.9**	**-5.1**	**-5.3**	**-7.0**	**-8.2**	**-4.6**	**-4.07**
Inflation Adjustment	35	41	45	68	99	57	71	184	241	300	546	719	1,082	1,461	1,767	2,344
Inflation and Cyclically Adjusted NFB	+131	-46	-4	-7	-394	-54	+82	-353	-95	-357	-870	-930	-1,301	-1,680	-278	+244
As % GDP	**1.9**	**-0.6**	**0.0**	**-0.1**	**-3.4**	**-0.4**	**0.6**	**-2.1**	**-0.5**	**-1.6**	**-3.1**	**-3.0**	**-3.8**	**-4.3**	**-0.6**	**+0.5**

*Based on Planning Council estimates as at March, 1987.

Sources: NFB and GDP data as for Table 9
Income Tax data Dept of Statistics, Monthly Abstract.
Unemployment data - Department of Labour Statistical Tables 1957-1979
- Employment Promotion Conference Employment and Unemployment in New Zealand Table 13, p. 59.
- Estimates of Expenditure (1971-1986) Budget Papers B.7 Pt.I

Table 11

Financing the Deficit

Year ended March	Net Borrowing in New Zealand $m	Net Borrowing in New Zealand % of Total Borrowing Requirement	Net Borrowing Overseas $m	Net Borrowing Overseas % of Total Borrowing Requirement	Cash Surplus(+) Deficit(-) $m	Total (ie Budget Table No.2 Deficit) $m
1971*	98.5	122.2	-2.9	-3.6	+3.4	80.6
72	85.6	118.4	-16.3	-22.5	-3.0	72.3
73	338.9	164.5	-119.5	-58.0	+13.4	206.0
74	176.3	113.7	-14.2	-9.2	+7.0	155.1
75	139.9	35.8	246.1	63.0	-4.4	390.4
76	702.2	70.1	287.1	28.7	-12.4	1,001.7
77	378.0	74.7	129.8	25.6	+1.7	506.1
78	434.4	62.6	265.8	38.3	+5.8	694.4
79	997.6	69.0	444.0	30.7	-4.3	1,445.9
80	703.9	68.5	327.7	31.9	+4.7	1,026.9
81	774.8	50.8	753.8	49.4	+3.7	1,524.9
82	1,212.1	66.7	609.2	33.5	+3.0	1,818.3
83	1,519.7	70.4	641.8	29.7	+3.5	2,158.0
84	2,382.0	76.8	720.8	23.2	+2.2	3,100.7
85	1,502.2	54.0	1,302.3	46.8	+21.0	2,783.5
86	1,017.8	54.4	859.7	45.9	+6.5	1,871.0

* Includes other external financing (e.g. net sales of gold) of $11.6m.

Note: Percentages of total borrowing requirement do not add to 100 due to rounding and to the present of a cash surplus or deficit in each year.

Source: Budget Tables No. 2 and No. 5.

Table 12

New Zealand's Total Overseas Debt ($m)

Year ended March	(1) Government[a]	(2) Reserve Bank	(3) Total Official (1 + 2)	(4) Other Central Government	(5) Private Sector	(6) TOTAL ALL SECTORS	(7) TOTAL OVERSEAS DEBT AS PERCENTAGE OF GDP	(7) TOTAL OVERSEAS DEBT AS PERCENTAGE OF Current Receipts
1971	576.4	5.4	581.8	-	-	-	-	-
72	653.5	-	653.5	-	-	-	-	-
73	564.0	-	564.0	-	-	-	-	-
74	465.2	-	465.2	-	-	-	-	-
75	862.8	218.4	1,081.2	-	-	-	-	-
76	1,463.2	520.3	1,983.5	-	-	-	-	-
77	1,826.6	736.7	2,563.3	-	-	-	-	-
78	2,446.7	809.1	3,255.8	2,469.0	3,079.0	14,799.6	47.5	152.0
79	2,920.1	756.3	3,676.4	3,138.0	3,885.0	16,410.9	48.3	142.7
80	3,567.5	729.3	4,296.8	5,249.0	5,449.0	24,657.5	63.7	172.7
81	4,236.1	572.9	4,809.0	5,839.0	5,212.0	26,945.1	60.1	181.6
82	5,549.4	1,227.5	6,776.9					
83	7,764.7	1,486.9	9,251.6					
84	8,226.3	1,161.6	9,387.9					
85	12,409.4	1,550.1	13,959.5					
86	14,726.2	1,167.9	15,894.1					

Notes:

(a) Government = Public Account

Sources: Column (1) - EMG Report No. 2, Budget Table No. 7.
" (2) - Reserve Bank Annual Reports
" (4),(5),(6) - Dept of Statistics, Quarterly Survey of Overseas Debt, December 1986.

Table 13

Official Net Overseas Debt ($m)

Year ended March	(1) Gross Debt	(2) Public Account Investments Overseas	(3) Reserve Bank Overseas Assets	(4) Net Debt*
1971	581.8	117.3	85	379.5
72	653.5	186.3	269	198.2
73	564.0	234.6	465	-135.6
74	465.2	183.8	428	-146.6
75	1,081.2	219.5	222	639.7
76	1,983.5	258.9	277	1,447.6
77	2,563.3	271.5	274	2,017.8
78	3,255.8	413.7	331	2,511.1
79	3,676.4	256.5	217	3,202.9
80	4,296.8	266.0	214	3,816.8
81	4,809.0	261.5	115	4,432.5
82	6,776.9	410.6	88	6,278.3
83	9,251.6	991.5	666	7,594.1
84	9,387.9	954.1	128	8,305.8
85	13,959.5	1,091.5	895	11,973.0
86	15,894.1	1,119.3	1,532	13,242.8

*Net Overseas Debt may also be calculated by subtracting from Gross Overseas Debt the total of Official Reserves (Reserve Bank Bulletin Table G.1). The result is very similar for the period covered here.

Sources: Column (1) - from Table 12
" (2) - Public Accounts
" (3) - Reserve Bank Annual Report Balance Sheets.

Table 14

Official Gross Internal Debt ($m)

Year Ended March	(1) Public Gross Internal Debt	(2) Reserve Bank Holdings of Govt. Debt*	(3) Official Gross Internal Debt
1971	2,430.5	52.9	2,377.6
72	2,533.0	9.8	2,523.2
73	2,939.1	0.2	2,938.9
74	3,269.3	136.5	3,132.8
75	3,336.9	306.5	3,030.4
76	4,094.7	552.4	3,542.3
77	4,462.6	807.9	3,654.7
78	5,037.1	337.2	4,699.9
79	5,899.4	285.6	5,613.8
80	6,778.9	451.7	6,327.2
81	7,381.0	302.5	7,078.5
82	8,832.0	892.3	7,939.7
83	10,968.1	371.8	10,596.3
84	13,652.4	1,059.1	12,593.3
85	15,836.8	1,019.8	14,817.0
86	17,276.0	971.3	16,304.7

* Balance Sheet Basis

Sources: Column (1) - Budget Table No. 7
" (2) - Reserve Bank Annual Reports.

Table 15

Total Official Debt

Year Ended March	(1) Official Overseas Debt $m	(2) Official Internal Debt $m	(3) Total Official Debt $m	(4) %GDP	(5) Per Person $Current	(6) Per Person $Constant(a)	(7) % Govt(b) Tax Revenue
1971	581.8	2,377.6	2,959.4	50.6	1,021	5,986	204.8
72	653.5	2,523.2	3,176.7	46.2	1,073	5,885	186.1
73	564.0	2,938.9	3,502.9	44.3	1,162	5,889	181.8
74	465.2	3,132.8	3,598.0	39.1	1,169	5,321	150.2
75	1,081.2	3,030.4	4,111.6	40.6	1,331	5,290	143.5
76	1,983.5	3,542.3	5,525.8	47.4	1,766	6,001	173.5
77	2,563.3	3,654.7	6,218.0	44.1	1,980	5,884	161.7
78	3,255.8	4,699.9	7,955.7	53.4	2,529	6,714	172.0
79	3,676.4	5,613.8	9,290.2	55.1	2,954	6,893	186.2
80	4,296.8	6,327.2	10,624.0	53.9	3,345	6,666	176.5
81	4,809.0	7,078.5	11,887.5	51.7	3,720	6,426	168.6
82	6,776.9	7,939.7	14,716.6	52.9	4,557	6,773	167.3
83	9,251.6	10,596.3	19,847.9	63.7	6,071	8,407	196.6
84	9,387.9	12,593.3	21,981.2	64.7	6,662	8,691	210.7
85	13,959.5	14,817.0	28,776.5	74.3	8,690	9,821	241.5
86	15,894.1	16,304.7	32,198.8	72.8	9,612	9,612	226.2

Notes: (a) Constant 1986 dollars deflated using Consumer Price Index.
(b) Total taxation revenue as recorded in Budget Table No. 3.

Sources: Column (1) - from Table 12
" (2) - from Table 14

Population and CPI data from NZ Official Yearbooks 1971-1986/87.

Table 16

Interest on Official Internal Debt

Year Ended March	(1) Interest on Internal Public Debt	(2) Less Interest Paid To Reserve Bank	(3) Official Interest Costs
1971	120.9	N/A	120.9
72	130.5	N/A	130.5
73	146.5	N/A	146.5
74	166.3	N/A	166.3
75	179.7	N/A	179.7
76	201.2	N/A	201.2
77	256.7	N/A	256.7
78	331.3	N/A	331.3
79	415.9	41.9	374.0
80	537.6	66.0	471.6
81	635.1	67.0	568.1
82	786.7	89.0	697.7
83	960.8	160.0	800.8
84	1,394.7	153.0	1,241.7
85	1,633.2	204.8	1,428.4
86	2,275.9	241.7	2,034.2
87*	2,777.3	300.0	2,477.3

*Planning Council estimates

Sources: Column (1) Budget Table No. 9
" (2) As advised by Reserve Bank.

Table 17

Payments on Total Official Debt ($m)

Year ended March	On Official Internal Debt $m (1)	%GDP (2)	%Tax Revenue (3)	On Official Overseas Debt $m (5)	%GDP (6)	%Tax Revenue (7)	On Total Official Debt $m (8)	%GDP (9)	%Tax Revenue (10)
1971	120.9	2.1	8.4	32.6	0.6	2.3	153.5	2.7	10.7
72	130.5	1.9	7.6	32.8	0.5	1.9	163.3	2.4	9.5
73	146.5	1.9	7.6	37.3	0.5	1.9	183.8	2.4	9.5
74	166.3	1.8	6.9	34.0	0.4	1.4	200.3	2.2	8.3
75	179.7	1.8	6.3	50.5	0.5	1.8	230.2	2.3	8.1
76	201.2	1.7	6.3	103.6	0.9	3.3	304.8	2.6	9.6
77	256.7	1.8	6.7	159.0	1.1	4.1	415.7	2.9	10.8
78	331.3	2.2	7.2	194.6	1.3	4.2	525.9	3.5	11.4
79	374.0	2.2	7.5	243.6	1.4	4.9	617.6	3.6	12.4
80	471.6	2.4	7.8	303.7	1.5	5.0	775.3	3.9	12.8
81	568.1	2.5	8.1	331.4	1.4	4.7	899.5	3.9	12.8
82	697.7	2.5	7.9	449.7	1.6	5.1	1,147.4	4.1	13.0
83	800.8	2.6	7.9	614.9	2.0	6.1	1,415.7	4.6	14.0
84	1,241.7	3.7	11.9	744.1	2.2	7.1	1,985.8	5.9	19.0
85	1,428.4	3.7	12.0	1,084.0	2.8	9.1	2,512.4	6.5	21.1
86	2,034.2	4.6	14.3	1,251.4	2.8	8.8	3,285.6	7.4	23.1

Source: Column (1) - from Table 16
Column (5) - Reserve Bank Annual Reports

Table 18

Net Interest Cost of Total Official Debt ($m)

Year ended March	(1) Interest on Total Official Debt	(2) Interest Recovered[a]	(3) Net Interest Cost	(4) % GDP	(5) % Total Tax Revenue
1971	153.5	97.7	55.8	1.0	3.9
72	163.3	106.4	56.9	0.8	3.3
73	183.8	119.0	64.8	0.8	3.4
74	200.3	127.5	72.8	0.8	3.0
75	230.2	150.7	79.5	0.8	2.8
76	304.8	191.7	113.1	1.0	3.6
77	415.7	278.0	137.7	1.0	3.6
78	525.9	367.2	158.7	1.1	3.4
79	617.6	452.7	164.9	1.0	3.3
80	775.3	543.4	231.9	1.2	3.9
81	899.5	605.8	293.7	1.3	4.2
82	1,147.4	677.8	469.6	1.7	5.3
83	1,415.7	740.2	675.5	2.2	6.7
84	1,985.8	815.2	1,170.6	3.4	11.2
85	2,512.4	1,018.2	1,494.2	3.9	12.5
86	3,285.6	1,485.8	1,799.8	4.1	12.6

Notes: (a) Comprises interest recovered from government enterprises and investments but excludes income received from Reserve Bank overseas assets ($128m in 1985/86).

Sources: Column (1) - from Table 17
" (2) - Budget Table No. 9.

Table 19

Ownership of New Zealand's Internal Public Debt

As at -	27.6.86		31.12.81		31.12.76	
	$m	%Total	$m	%Total	$m	%Total
GOVERNMENT ACCOUNTS AND PUBLIC ORGANISATIONS:						
Public Account and Dependent Administrative Bodies	170.4	1.0	7.8	0.1	6.6	0.2
Govt. Enterprises (outside Public Account)						
Accident and Superannuation Accounts	1,619.0	9.6	766.3	8.9	442.2	9.8
Financial and Trading Enterprises	188.5	1.1	153.2	1.8	957.9	21.3
Trading Enterprises	1,235.4	7.3	446.0	5.2	225.3	5.0
Public Corporations[1]	8.1	0.0	0.1	0.0	0.1	0.0
LOCAL AUTHORITIES AND PUBLIC ADMINISTRATIVE ORGANISATIONS:[2]	66.1	0.4	4.2	0.0	3.4	0.1
STATUTORY MARKETING AND PRIMARY PRODUCER ORGANISATIONS:	28.7	0.2	7.1	0.1	59.8	1.3
FINANCIAL INSTITUTIONS:						
Reserve Bank of New Zealand	815.3	4.8	1,107.8	12.9	698.5	15.5
Trading Banks	2,730.9	16.1	1,349.4	15.8	624.7	13.9
Trustee and Savings Banks	1,228.5	7.3	822.9	9.6	423.9	9.4
Private Savings Banks	284.5	1.7	505.6	5.9	398.4	8.8
Post Office Savings Banks	1,419.8	8.4	1,337.9	15.6	-	-
Official Money Market	-	-	35.0	0.4	22.3	0.5
Life Insurance Companies[2]	1,473.5	8.7	652.6	7.6	385.7	8.6
Other Insurance Companies[3]	104.5	0.6	32.2	0.4	10.3	0.2
Building Societies	243.2	1.4	82.8	1.0	19.3	0.4
Trustee and Nominee Companies	1,214.6	7.2	78.1	0.9	18.5	0.4
Finance and Investment Companies	863.1	5.1	166.9	1.9	78.3	1.7
Pension and Benefit Funds	552.4	3.3	160.0	1.9	50.8	1.1
Other Financial Institutions n.e.i.	1,113.1	6.6	159.6	1.9	10.6	0.2
International Financial Organisations	20.5	0.1	7.0	0.1	-	-
NON-FINANCIAL BUSINESS:						
Stock and Station Agents	-	-	0.7	0.0	1.3	0.0
Other Non-Financial Business	254.4	1.5	32.4	0.4	13.4	0.3
SOCIAL AND CHARITABLE INSTITUTIONS AND NON-PROFIT ORGANISATION, N.E.I.	29.9	0.2	14.8	0.2	6.7	0.2
ALL OTHER HOLDERS	637.5	3.8	240.2	2.8	44.7	1.0
INFLATION ADJUSTED BONDS	623.8	3.7	392.6	4.6	-	-
Total Registered Debt	**16,924.0**	**100.0**	**8,563.3**	**100.0**	**4,502.7**	**100.0**
Total Public Debt	**16,924.0**	**100.0**	**8,563.3**	**100.0**	**4,502.7**	**100.0**

1 Excludes Reserve Bank of New Zealand and Bank of New Zealand; these institutions are included in this table under "Financial Institutions".

2 Includes holdings of overseas Governments.

Source: Reserve Bank Bulletins, July 1978, November 1982, May 1986.

Table 20

Composition of Central Government Gross Fixed Capital Formation by Type 1972-1985

March Year	Residential Buildings	Non-residential Buildings	Other Construction	Land Improvements	Transport	Plant Machinery & Other Equipment
1972	4.0	33.1	28.5	6.5	4.9	23.2
1973	4.7	31.3	27.3	0.9	11.3	24.5
1974	4.4	33.5	23.4	0.9	13.1	23.9
1975	6.6	32.6	22.7	0.6	15.4	21.6
1976	9.3	29.7	22.5	0.7	12.1	25.7
1977	6.7	31.5	21.7	0.9	9.3	29.8
1978	4.8	27.3	26.9	0.9	9.6	30.5
1979	4.4	31.4	21.8	1.1	14.8	26.5
1980	4.4	30.3	23.4	1.4	10.8	29.7
1981	4.0	28.8	22.0	2.1	9.9	33.3
1982	1.8	22.5	28.0	2.0	19.6	26.0
1983	2.4	16.8	40.9	2.0	10.6	27.4
1984	2.2	14.8	53.0	1.3	4.4	24.2
1985	1.0	16.4	37.6	1.5	7.4	36.1

Source: Department of Statistics, *Monthly Abstract*, February 1987.

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