THE GOVERNMENT DEFICIT AND THE ECONOMY

Economic Monitoring Group

New Zealand Planning Council Monitoring Report

THE GOVERNMENT DEFICIT AND THE ECONOMY

Economic Monitoring Group
Report No. 2

16 July 1984

The Chairman,
New Zealand Planning Council,
WELLINGTON.

Dear Mr Douglas,

We have pleasure in forwarding to you the second report of the reconstituted Economic Monitoring Group, which in accordance with the independent right to publish that the Planning Council has given the group, will be released soon.

Yours sincerely,

C.A. Blyth
Convenor
Economic Monitoring Group

MEMBERS OF
THE ECONOMIC MONITORING GROUP

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The Argument

In its first report, the reconstituted Economic Monitoring Group focused on the external deficit as a means of analysing the medium-term prospects of the New Zealand economy. It concluded that we are reaching the point where only reallocation and more efficient use of our resources can provide the imported goods and services required by the standard of living to which we aspire. In this, its second report, the Monitoring Group focuses on the Government's deficit and the balance of the Government's transactions with the rest of the New Zealand economy and with overseas parties.

A review of trends over the last 15 years or so shows that in recent years, the size of the deficit has reached a new plateau. There have been rises before, notably in the early 1970s in the days of the third Labour Government, but recently there have been further increases. The effect of the electoral cycle can be discerned easily (although it has become more complex in the 1980s), but an important reason for the growth of the Government's deficit, as with the overseas borrowing discussed in the Monitoring Group's first report,[1] was the attempt to stabilise the economy in the face of adverse external trends. The Labour Government of 1972-75 attempted to maintain high levels of employment in the face of the first oil shock. However given the climate of expectations built up in the commodities boom of the early 1970s, it probably had no means of reducing government expenditure quickly enough for an immediate adjustment to the new cost of imports anyway. More recently, the Government has attempted to keep exporting profitable while investing in energy projects, providing more transfer payments as unemployment grew, and also maintaining the National Superannuation scheme. It has achieved this partly by in effect reducing some earlier transfer payments, but it has also incurred a large deficit which, through debt servicing requirements, has grown in a cumulative fashion. Despite the budget deficit, the economy has not moved onto a path promising fast growth or using all those who want jobs. One must wonder whether in the current circumstances the deficit stabilises the economy, or whether it now actually runs counter to the changes needed for higher growth and employment.

A large deficit does pose problems for the medium-term adjustment of the economy. In essence, although it would be necessary in a fuller analysis to distinguish between its internal and external receipts and expenditures, an increase in the fiscal deficit leads to an expansion of the money supply. In financing the deficit, this impact on the money supply may either be neutralised or it may remain. In the former case, real interest rates are forced upwards and in an economy where there is not a readily apparent supply of investment opportunities holding out to entrepreneurs prospects of high returns, high real interest rates frustrate efforts to secure higher economic growth and the reduced unemployment that would provide. If the deficit is not financed in a non-inflationary way, increased money supply and liquidity generate price increases and inflation obscures the market signals needed for both the public and private sectors to move resources to their most productive uses. Indeed, even suggestions that it may not all be financed in an orthodox way will feed inflationary expectations and be entirely contrary to whatever effects the freeze on prices and wages has had.

Examining the composition of the deficit shows there is no easy route to achieve a substantial reduction. Increasing taxation is unpopular and may divert efforts from real income growth to devices for securing untaxed capital gains. A large shift to a different tax base cannot be made quickly. Government expenditure is closely tied to inflation and to established policies. Furthermore, the effects of any reduction of real government expenditure on output and employment are likely to be dramatic even if an increased government deficit now does little to increase employment levels. (Because greater unemployment increases government expenditure, an attempt to reduce government expenditure without other contemporaneous changes could well be self-defeating.)

A major reason for the recent renewed growth of the deficit has been the cost of debt servicing arising in part from the use of government expenditure or tax incentives to provide assistance to exporters. Policies to reduce the government deficit should include providing assistance to exporters by some other means. This area of assistance to primary and secondary industry, including the question of the exchange rate (which itself has considerable fiscal significance), will be taken up in the Monitoring Group's third report to be published soon.

1. Economic Monitoring Group, *Foreign Exchange Constraints, Export Growth and Overseas Debt,* New Zealand Planning Council, 1983

Trends in Public Expenditures and Revenues

Each year the Minister of Finance introduces to Parliament his Budget together with the Estimates of Expenditure for the Government. These set out, for debate by Parliament, the Government's intentions for expenditure and revenue in the current fiscal year and review the fiscal outturn for the previous one. In addition to a department-by-department categorisation of expenditure, the Estimates also contain a breakdown of government by function. Table 1 shows the pattern of government spending over the past 15 years and the changes in the share of each category in overall government spending. Figure 1 shows some of this data in pictorial form.

Over the 15-year period there have clearly been shifts (mostly gradual), in the relative importance of the various categories of expenditure in relation to the total.

For most of the period *administration* has run between 8% and 9% of overall expenditure. It was significantly higher (around 11%) between 1973-74 and 1975-76, with the last two years showing a declining proportion to around 6%. These changes reflect shifts in the Government's consumer subsidies programme. Consumer subsidies were expanded substantially between 1972-73 and 1975-76. They were temporarily sharply reduced in 1976-77 but rose again from the following year. In the most recent two-year period the subsidies covering Railways social services have been allocated to the transport and communications category.

Expenditure on *foreign relations* has declined over the period but has now levelled out at between about 6% and 6.5% of net expenditure.

COMPONENTS OF DEVELOPMENT OF INDUSTRY
$m

		1979/80	1980/81	1981/82	1982/83	1983/84
Land Use	(1)	315.7	362.4	531.2	687.7	985.0
Fuel and Power	(2)	146.2	136.4	247.6	282.6	340.7
Other Industrial Services	(3)	252.3	298.3	404.8	459.5	555.3
Total		714.2	797.1	1183.6	1429.8	1881.1

(1) Mainly Ministry of Agriculture and Fisheries, the Forest Service and Department of Lands and Survey
(2) Ministry of Energy
(3) Mainly Departments of Labour, Scientific and Industrial Research and Trade and Industry

Government fiscal support for the *development of industry* has fluctuated over the 15-year period. In the last financial year it reached 13.2%, the highest level over the period.

The fluctuations in this category arise essentially from changes in the level of fiscal support for agriculture. This has been reinforced by variations in outlays for the construction of power stations, together with solid growth, particularly in the late 1970s, in expenditure on schemes to promote employment. (The provision of unemployment benefits comes under the social services category.)

In addition to this overt level of government expenditure on development of industry, assistance is given by means of tax deductions and allowances to exporters, farmers and other business. These tax allowances are called tax expenditures. No official record is kept of the cost of tax expenditures. Furthermore, through such measures as low interest rate lending, the Government provides fiscal support to agriculture and industry not fully reflected in the Estimates of Expenditure considered by Parliament. In the report of the Task Force on Tax Reform (April 1982), it was estimated that taxation incentives and concessions for the business sector (which cover incentives for exporting, farming, forestry, investment and other corporate activities), totalled $470 million in 1980-81. (The question of industrial protection and regulation is not considered here as the principal instrument, import licensing, does not have direct budgetary implications.)

More recent data on the extent of government

FIGURE 1

SHARE OF GOVERNMENT EXPENDITURE TAKEN BY EACH FUNCTION
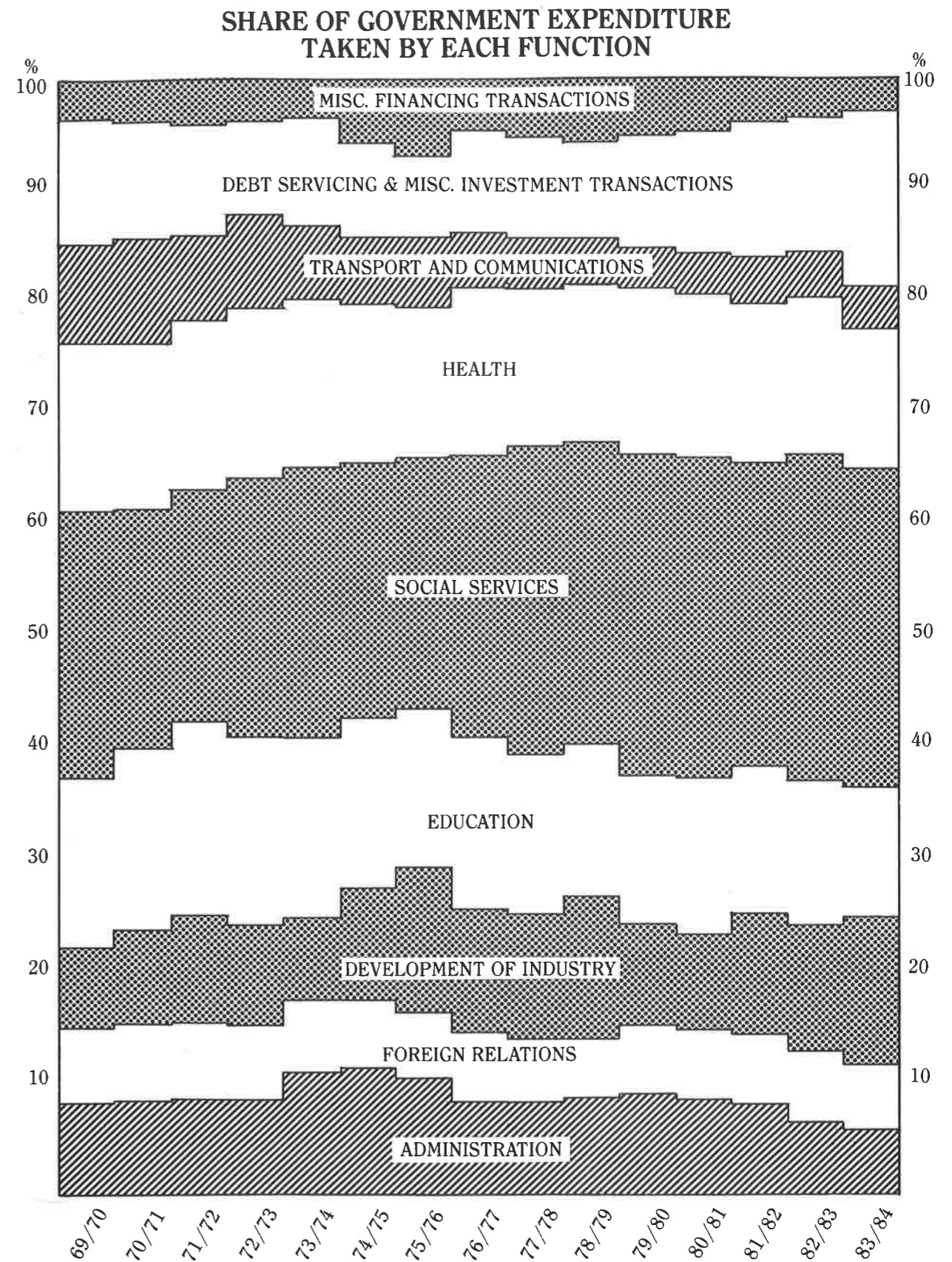
off-budget financial assistance to the business sector is available from the report by Syntec Economic Services, published in February 1984, entitled *The Structure of Industry Assistance in New Zealand: An Exploratory Analysis.* Estimates of industrial assistance amounted to $654 million in 1980-81 and $683 million in 1981-82.

It should be noted that these figures include around $120 million of interest rate concessions to the rural sector. These particular concessions were not included in the Task Force's estimates but the Task Force did include about $100 million of taxation concessions not picked up by the Syntec study. Putting these estimates together it is thus likely that government fiscal 'expenditure' on development of industry is more than $700 million higher (or around five percentage points higher as a proportion of total government spending) than shown in the Estimates of Expenditure tabled in Parliament.

Expenditure on *education* peaked at 17.6% of net expenditure in 1971-72, but has declined fairly steadily since. The decline over recent years reflects at least in part the consequences of a declining number of children of school age.
Social services expenditure, which averaged 22.7% of net expenditure in the seven years to 1975-76, rose to average 27.4% over the next five years. The major component of that increase was the rising gross cost of national superannuation. (Part of this cost is recovered through taxation of national superannuation). The payment of unemployment benefits was also a significant factor in the growth in social services expenditure. Excluding these two significant growth areas, social services expenditure has been on a declining trend since 1976-77. This is also true, although less marked, if superannuation expenditure alone is excluded.

A number of significant social policies are also provided through the tax system, for example the family rebate (which in 1982 replaced the low income, young family and spouse rebates). The Task Force on Tax Reform estimated that the cost of personal tax concessions amounted to $582 million in 1980-81. However, some of this amount represents incentives for particular activities rather than tax benefits aimed at meeting social needs. For example, about $200 million of this revenue foregone resulted from the insurance and superannuation exemption. Doubts must be raised about the social welfare value of this tax exemption. In addition to tax relief there is also the substantial implicit cost of Government lending through the Housing Corporation and Maori Affairs Department for housing purposes, and of low rents on state houses. The concession lies in the fact that interest rates and rents charged are significantly below the market rates and in 1980-81 amounted to about $200 million.

Expenditure on *health* fluctuated between 14% and 15% over most of the 15-year period, but its share has been declining since 1979-80 to reach 12.7% in 1983-84.
The share of net government expenditure taken by *transport and communications* is, at 3.8% in 1983-84, less than half the proportion at the beginning of the 15-year period.

Debt servicing and miscellaneous investment transactions share of expenditure declined until 1978-79 reflecting a falling off in investment transactions, but since then it has risen to 15.7% in 1983-84, mainly as a result of the sharply rising cost of servicing the public debt. The movements in the two distinct sub-categories over the last five years are shown in the following table. Miscellaneous investment transactions, which involve government investment by equity or loan capital into government-owned and other commercial enterprises, have fluctuated widely. Debt servicing has, on the other hand, risen solidly over the period to nearly three times its 1979/80 level.

Aggregate expenditure trends

Over the last 15 years aggregate government expenditure has risen more than tenfold in money terms, an average annual increase of 18.5%. The rate of increase in nominal terms has not been even. As is seen in Table 4, expenditure rose by 66% in the two years 1974-75 and 1975-76.

Of more significance than the nominal expenditure data, are the data showing aggregate expenditure as a proportion of gross domestic product (GDP) and expenditure deflated by the Consumers Price Index (CPI). Figure 2 shows expenditure (and revenue) rising as a proportion of GDP. (See also Tables 3 and 4.) A number of interesting observations emerge.

FIGURE 2

NET GOVERNMENT EXPENDITURE AND REVENUE AS PERCENTAGE OF GDP

Year ended 31 March

Debt Servicing and Investment Transactions
$m

	1979/80	1980/81	1981/82	1982/83	1983/84
Debt Servicing	776.4	896.9	1211.0	1492.6	2041.9
Miscellaneous Investment Transactions	4.2	94.0	164.0	50.8	195.3
Total	770.6	990.9	1375.0	1549.4	2237.2

(See Table 6 for information on the public debt.)

Miscellaneous financing transactions covers the financing of the Housing Corporation and the Rural Banking and Finance Corporation.

There was a substantial increase in these transactions in the mid 1970s but now seems to have settled back to 3-4% of total expenditure, as it was in the early 1970s.

(a) Government expenditure as a proportion of GDP has been rising throughout the 15-year period although not at a stable rate. The following table shows the average for each parliamentary term throughout the period. (For the purposes of comparison, expenditure is also shown as a proportion of gross national expenditure (GNE).)

	Government expenditure as a percentage of	
	GDP	GNE
1970-71 — 1972-73	28.1	28.2
1973-74 — 1975-76	33.8	31.8
1976-77 — 1978-79	36.1	35.7
1979-80 — 1981-82	37.2	36.5
1982-83 — 1983-84 (2 years)	40.5	40.0

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7

The most rapid build-up clearly occurred during 1973-74 and 1975-76. The above averages mute the rapid increase over this period when, as a proportion of GDP, government expenditure rose from 28.6% in 1972-73 to 38.1% in 1975-76, an increase of nearly 10 percentage points. As a proportion of gross national expenditure, the rise in aggregate government expenditure in the term of the 1972-75 Labour administration is much less dramatic. This reflects the fact that over this period GNE (including both public and private sectors) was rising much more rapidly than GDP. The consequence of expenditure rising faster than production was a marked rundown in the current account of the balance of payments. This surge in the mid 1970s can be seen partly as a response to the dramatic change in international economic climate. There was pressure internationally that the developed world should not respond to the oil shock (and the substantial transfer of income to the oil producers that implied), by economic deflation to correct balance of payments deficits. This perspective coincided with the way New Zealand had traditionally handled adverse shifts in the balance of payments — seeking to ride them out without severe demand deflation. Over the succeeding two parliamentary terms, the upward movement of government expenditure as a proportion of GDP has been much more modest. However, the last two financial years have seen a significant upward movement in this ratio.

(b) Once the share of government expenditure has expanded it has not been reduced for other than a short period. While there are occasions when the ratio of government expenditure to GDP has fallen, the graph shows that it does not come back to the previous take-off level. There is a clear upward ratchet. After the very rapid expansion during the mid 1970s, government expenditure remained between 35% and 40% as a percentage of GDP. A worrying feature is that in the most recent years there has been another clear upward shift in the ratio of government expenditure to GDP. This carries with it the attendant difficulties of reducing the ratio in future years, without making some major policy changes.

(c) Table 4 shows the impact of the electoral cycle on the fluctuations in government expenditure (see Figure 3). When net government expenditure is deflated by the CPI it can be seen that there has been a decline in 'real' expenditure, particularly in the last three post-election years. Even in 1973-74 there was a reduction in the rate of increase

in 'real' expenditure. (This is matched by a noticeable reduction in 'real' revenue in pre-election years — except in the most recent period. See also Table 4.) Thus government expenditure has had a destabilising effect on the economy, and this has imposed costs on the private sector.

(d) Over the 15-year period there has been substantial 'real' expenditure growth, averaging 5.7%. While 'real' growth has on average been much lower since 1975-76 at 2.5%, it has still been in excess of real GDP growth.

Revenue Trends

Table 2 shows trends in government revenues over the last 15 years (see also Figure 2). Total government revenue has risen at a slower average rate than expenditure (16.9% per annum compared with 18.6% per annum). When expressed as a proportion of GDP, total revenue has been remarkably stable. Throughout the early 1970s it varied between 25% and 27% but in 1974-75 moved up to over 30%. Since then it has varied between 29% and 34% but on a gently rising trend. The following table shows the revenue take as an average proportion of GDP over each parliamentary term.

	Government Revenue as a percentage of GDP
1970-71 — 1972-73	26.4
1973-74 — 1975-76	28.8
1976-77 — 1978-79	30.7
1979-80 — 1981-82	31.4
1982-83 — 1983/84 (2 years)	33.4

The changing proportions of direct and indirect tax throughout the period are significant. As a proportion of total revenue, direct taxation rose from 63% in 1969-70 to 71% in 1973-74 and varied between 68% and 71% up to 1982/83. In 1983/84, however, direct tax was the lowest proportion of total revenue since 1972/73. The trend of direct tax masks the divergent trends of the two major components. Nominal personal income tax has increased by a factor of 12 while nominal company income tax has risen by a factor of 3.5 over the period. Deflated by the CPI, personal income tax has increased by about 160%, while company tax has decreased by about 25%. As a proportion of total revenue, personal income tax has increased from 42.4% to 60.5%, while company tax has decreased from 18.6% to 7.8% (see Table 5). As mentioned above, changes in revenue have contributed to the fiscal instability surrounding the electoral cycle. This is best seen in the

series deflating direct taxation by the CPI. In 1975 and 1978 'real' direct taxation was reduced. In 1972 the rate of increase was lower than adjacent years and in 1981 the tax reduction came somewhat earlier, applying from February 1981 (i.e. in the 1980/81 financial year). Thus in fiscal terms, the election cycle seems to have been characterised by direct tax reductions in 'real' terms prior to an election, followed by expenditure reductions in 'real' terms in the post-election year. This has been a significant element in fiscal instability, and, given the size of the government sector, in the economy as a whole.

Trends in the Fiscal Deficit

Given the changes in government expenditure and revenue outlined above, the residual (i.e. the fiscal deficit) has fluctuated markedly over the last 15 years (see Figure 4). There has, however, been a clear rising trend as shown in the following table. Both these aspects (i.e. instability and increased size relative to GDP) are matters of concern in terms of economic development.

GOVERNMENT EXPENDITURE — REVENUE DEFLATED BY CPI
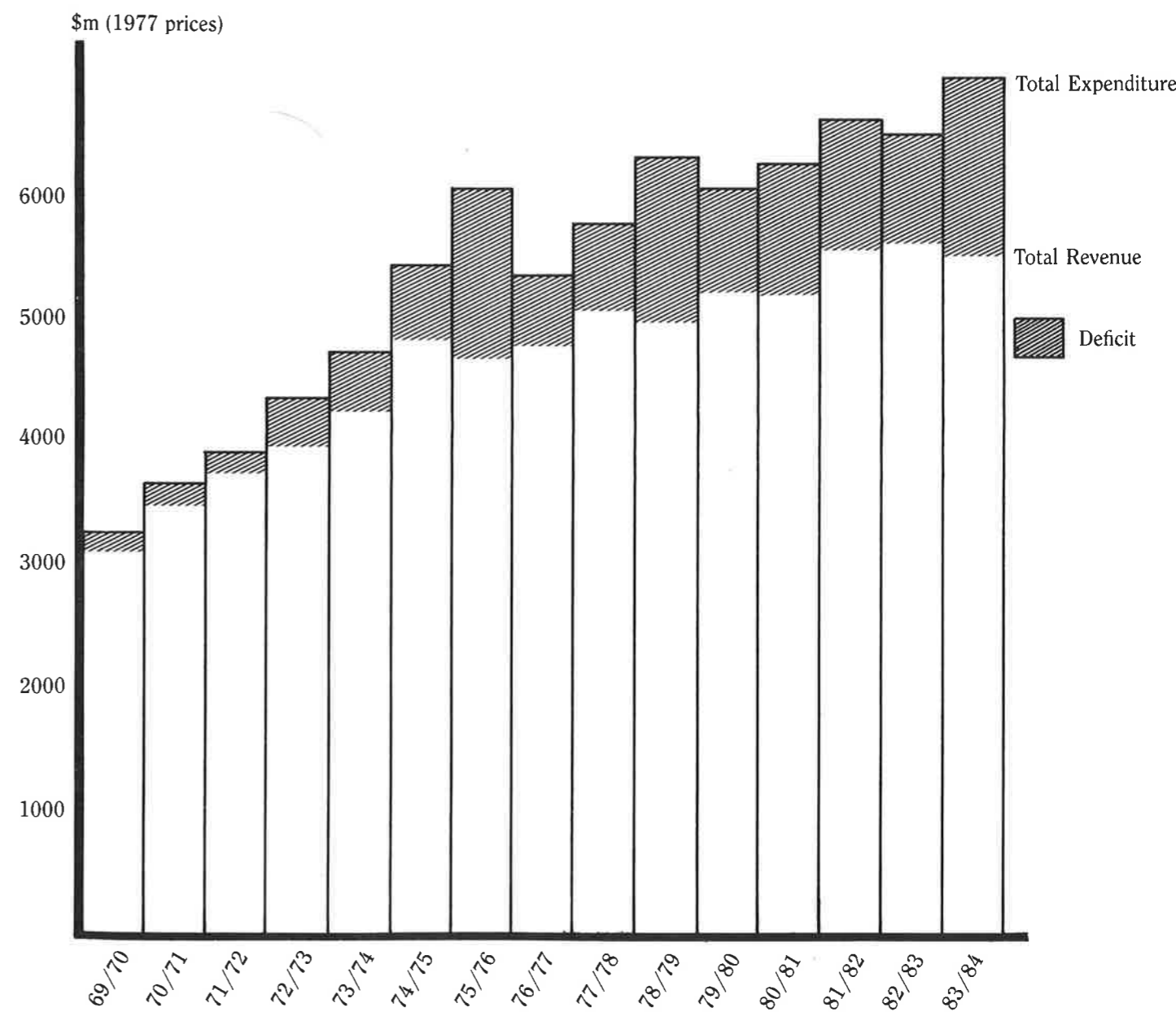
	Fiscal Deficit as a percentage of Government Expenditure	Fiscal Deficit as percentage of GDP
1970-71 — 1972-73	5.9	1.7
1973-74 — 1975-76	14.3	5.0
1976-77 — 1978-79	14.8	5.5
1979-80 — 1981-82	15.5	5.8
1982-83 — 1983-84	18.0	7.1

Figure 5 shows more dramatically the movements in the deficit as a proportion of GDP.

The most recent substantial increase in the deficit (between 1982-83 and 1983-84) amounted to $1,217 million. The two major expenditure components contributing to that were an increase of $451 million for the development of industry and a $549 million increase in debt servicing. The substantial reduction in personal tax contributed heavily on the revenue side.

FIGURE 4

GOVERNMENT REVENUE AND DEFICIT AS A PROPORTION OF GOVERNMENT EXPENDITURE

BUDGET DEFICIT AS PERCENTAGE OF GDP

FIGURE 5

CHAPTER 2

Future Trends in Public Expenditures and Revenues

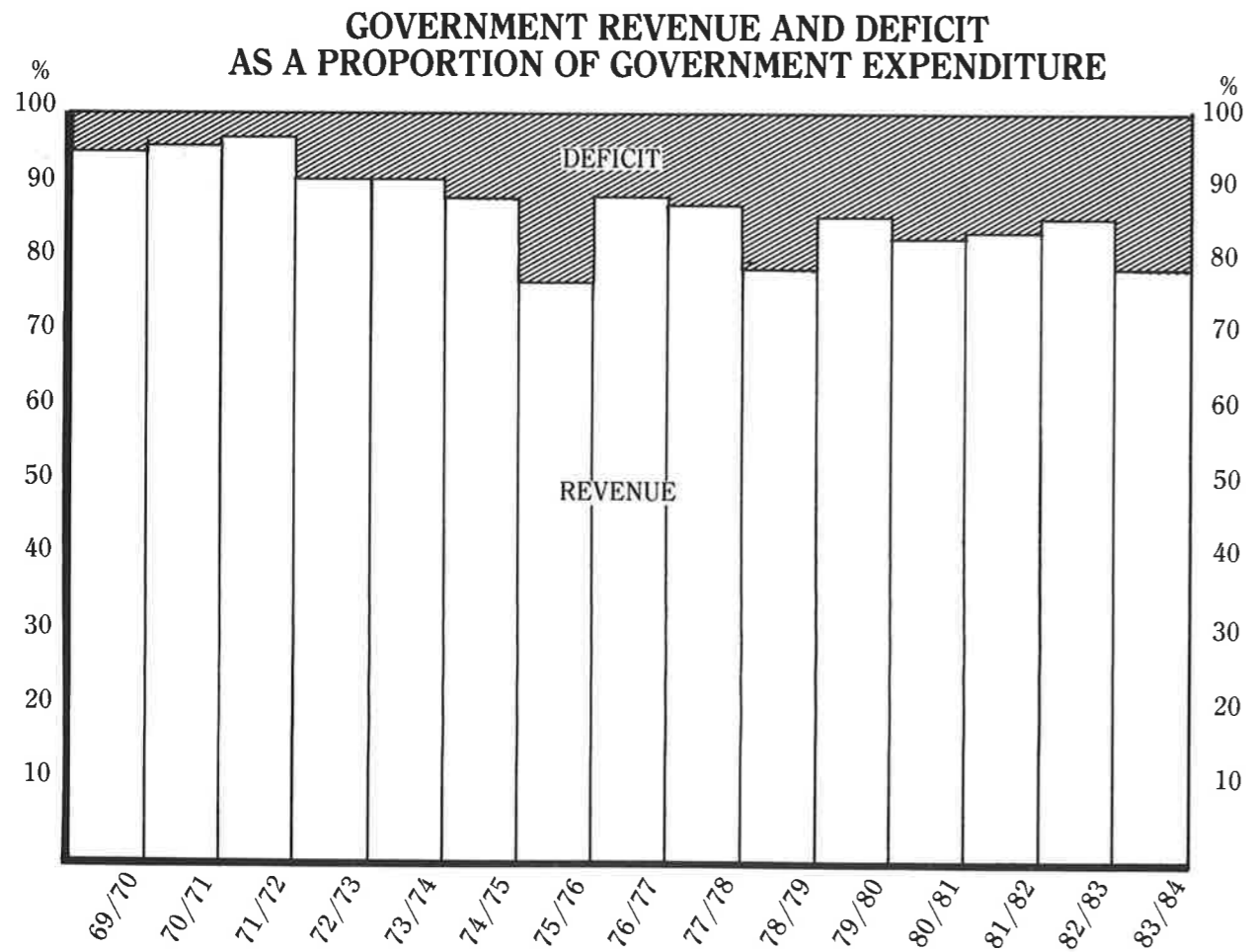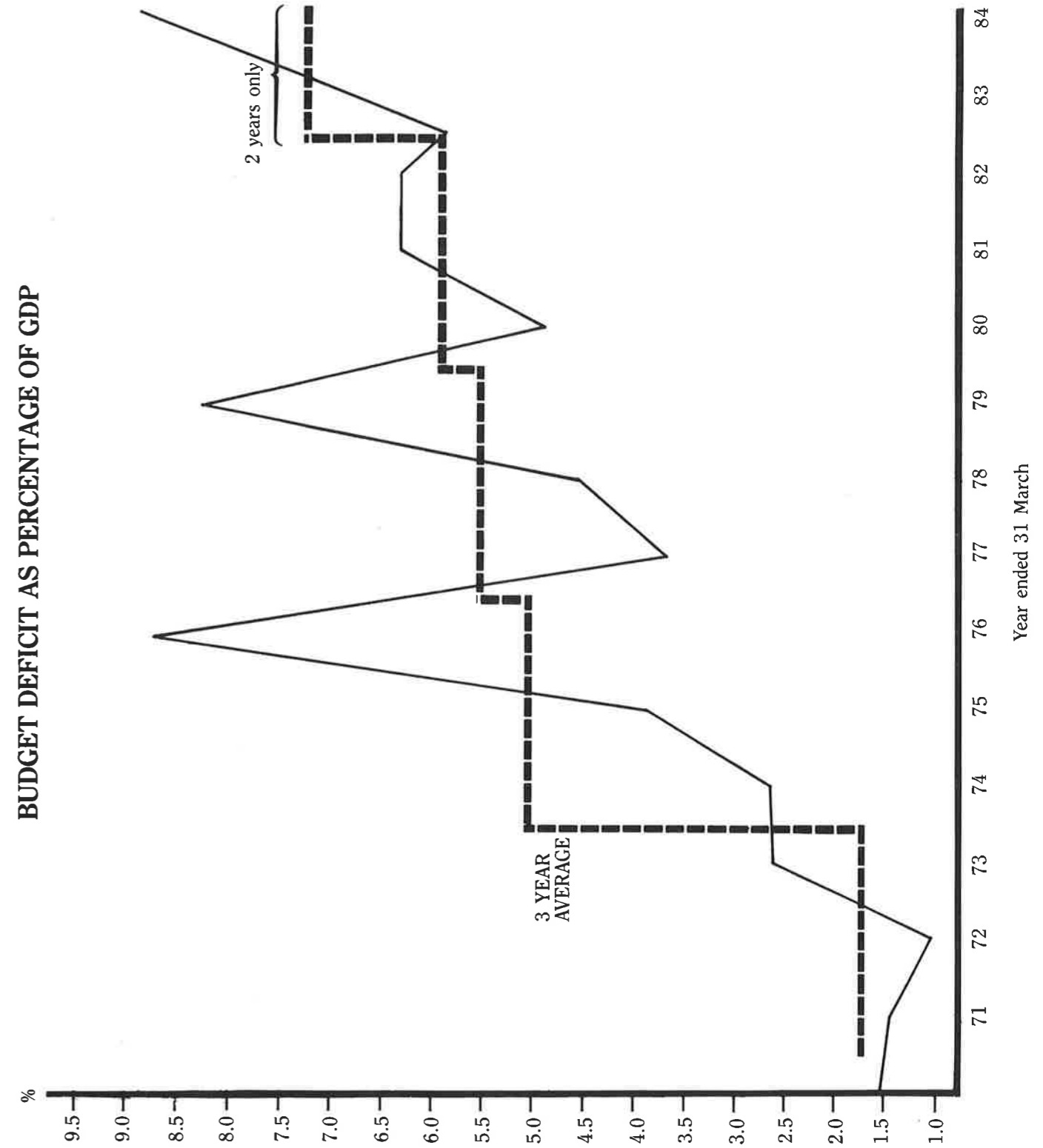Future levels of government expenditure, even on the basis of existing policy, depend heavily on a number of economic factors and others as yet unknown. These include the rate of inflation, the rate of increase in public sector salaries, the rate of economic growth, the level of interest rates, movements in the exchange rate and demographic factors. The following section endeavours to sketch out the likely parameters of government expenditure and revenue for the next three years or so, together with the main areas of variability.

Expenditure Trends

The functional classification of expenditure used in Chapter 1 is also used in this section. However, because we are dealing with broad future trends rather than detailed historical data, it is more useful to look at the major determinants of future expenditure trends rather than seek to provide a forecast of each category of expenditure.

The continuation of existing policies will mean expenditure in *administration, foreign relations* and *transport and communications* will probably continue to rise at about the same rate as inflation.

Under current policies, expenditure on *education* is likely to rise at a slightly slower rate than the rate of inflation, mainly as a result of declining rolls in primary and, to a lesser extent, secondary schools. In addition to the direct salary and other running costs, this will also affect expenditure on school buildings and on teacher training. As a partial offset to the effect of declining rolls, expenditure may increase faster than inflation in respect of kindergarten and tertiary education. A major uncertainty lies with the impact unemployment will have on secondary school rolls and on the numbers of people involved in tertiary education. Also, any policy decision to take advantage of the declining roll situation to effect qualitative improvements in the education system would mean the potential fiscal savings would not be realised.

On the other hand, expenditure on *health* is likely to increase slightly faster than the rate of inflation. Most Department of Health expenditure relates to hospitals. Demographic factors,

such as the growth and ageing of the New Zealand population, will lead to pressure for higher health expenditure.

It is in the other categories of expenditure that the major scope for variations in government expenditure lies (i.e. in respect of development of industry, social services, debt servicing and miscellaneous investment and financing transactions).

Development of Industry

This has been one of the major growth areas of government spending over recent years. There are three main subsections: land use, fuel and power and other industrial services.

(i) *Land Use*

Expenditure under this heading over the next three years will be heavily influenced by decisions to be taken on assistance to agriculture, especially by means of Supplementary Minimum Prices (SMP's). The 1983 Budget stated that the SMP's then in force would remain at least at that level for a further two years. No commitment exists beyond that. If the SMP levels are not revised upward and the scheme not extended beyond 1984-85, expenditure could be expected to decline to zero in 1986-87 (assuming world market prices expressed in NZ dollars increase over this period). Without the end of year financial adjustments, expenditure on SMP's in 1983-84 is estimated to be around $350 million. An alternative assumption would be for this level of assistance to remain in one form or another throughout the period. Clearly the level of expenditure on SMP's depends crucially on the assumptions made. For example, an increase of 5% in the level of SMP's in 1984-85 would increase expenditure in 1985-86 by about $40 million. (The recent announcement of one-year payments to the Producer Boards, instead of SMP's, still leaves open the medium-term question of the level of support for agriculture.)

(ii) *Fuel and Power*

Net expenditure in this category will be influenced by two main factors; firstly, the reduction in expenditure associated with major energy-based projects and secondly, revenue returns

from some of these projects and from the sale of oil and gas. Over the next three years or so, there will be substantial revenue flows from the methanol and synthetic petrol plants but the timing of the receipt of the revenue remains variable.

There are two major variables. Demand for energy is difficult to forecast accurately, depending as it does on a number of imponderables such as the weather. Furthermore, the revenue forecasts are inextricably tied up with the pricing policy the Government adopts with regard to each product.

(iii) *Other Industrial Services*

The main element in this category is expenditure by the Labour Department. Expenditure on employment and training is the largest component, and there are a number of significant variables. For each additional 1,000 jobs created under the public sector job creation programmes, the fiscal cost is about $11 million per annum. The private sector programme will be replaced by the Employment Incentive Scheme from August 1984. This scheme, which is available to a wider group of employers, will result in additional fiscal costs.

Funding for non-earners under the Accident Compensation Commission (ACC) is likely to grow significantly over the three years.

On the other hand, there will be growing revenue arising from import licensing tendering as the volume of such licence tendering increases.

Over these next few years decisions on major tax expenditures such as export incentives will be important, in regard not only to the issues themselves, but also to the impact on the fiscal situation.

Social Services

Over half of social services expenditure is on national superannuation. An increase of about 2% per annum is likely in the numbers of those eligible for national superannuation. Again this is subject to variation — a 1% change in the total number of those eligible leads to a variation in expenditure of about $30 million.

Those eligible for the domestic purposes benefit are likely to increase by about 10% per annum if past trends are any guide. This is subject to much more uncertainty than with national superannuation — a variation of 5% in the total number eligible represents an expenditure shift of about $25 million.

The number likely to receive unemployment benefit is even more difficult to predict. A variation of 10% from present numbers would

involve an expenditure change of about $30 million. Expenditure on family benefit, invalids and sickness benefits will overall probably show little variation in real terms.

Increases of these magnitudes will also lead to higher levels of administrative expenses.

Overall there will continue to be growth in real terms in social services expenditure which reflects largely demographic factors.

Debt Servicing

Two major factors affect the level of debt servicing (i.e. interest payments on public debt). These are the stock of debt and the level of interest rates, and apply to public debt held both in New Zealand and overseas. As far as overseas debt is concerned, variations in the exchange rate between the NZ dollar and the currencies in which the debt is denominated will affect the NZ dollar value of both the stock of debt and the level of interest payments.

At 31 March 1983 the stock of public debt totalled $18.7 billion. During 1983/84 the stock of public debt is likely to have increased by about $3 billion to about $22 billion. In the view of the Monitoring Group it is likely the stock of public debt, both external and internal, will continue to rise by $2 billion-$3 billion per annum over the next three years.

The cost of servicing the existing stock of debt is largely already determined by the arrangements presently entered into. The *growth* in debt servicing, from the $2,042 million in 1983-84 will largely be determined by additions to the debt at the interest rates then current. At an interest rate of about 10% the cost of debt servicing will increase by between $200 and $300 million per annum over the next few years.

The growth in public debt and in debt servicing is a crucial matter in controlling the fiscal deficit. Large fiscal deficits increase debt which adds to interest payments required to service the debt, which in turn, further enlarges the size of the deficit. The recent tendency towards debt instruments having large real interest rates (about 5%), which are tied to the rate of inflation, is of concern in this regard as it implies heavy debt servicing commitments into the future. Any attempt to restrain the growth of interest payments through increasing the money supply (monetising the deficit), would be counter-productive as the increase in the money supply would spill over into imports and increase the current account deficit on the balance of payments. This would then need to be covered by overseas borrowing. Furthermore,

expectations of higher inflation would also lead to higher domestic interest rates.

This escalating cycle of large deficits leading to higher debt and, through higher servicing costs, to larger deficits, is operating strongly in New Zealand at present. Control of it is an important ingredient in overall fiscal control.

Miscellaneous Investment Transactions and Miscellaneous Financing Transactions

The former category covers appropriation of funds for advances to, or for an acquisition of, an interest in commercial ventures. It also includes the cost of government participation in international organisations such as the International Monetary Fund (IMF). As can be expected, expenditure under this category varies from year to year in relation to government decisions on the capital requirements of government-owned corporations (mainly). Additional capital to Petrocorp, NZ Steel Development Ltd and the Tourist Hotel Corporation is likely and further capital injections to organisations such as Air New Zealand, the Bank of New Zealand and the Shipping Corporation cannot be ruled out.

The latter category (miscellaneous financing transactions) provides for the net loan financing of the Housing Corporation and Rural Bank. In recent years this has totalled around $400 million per annum. However, both these corporations will probably be seeking to raise some of their own capital directly from the market and this could reduce the amount required. Furthermore, the Government has intimated it may sell part of its shareholding in some government-owned corporations. However, neither of these moves would be likely to alter pressure on capital markets as they would not change overall demand for loanable funds. Sales of state-owned enterprises would produce only a one-off cash flow in exchange for foregoing future profits.

Revenue Trends

On the revenue side there are a number of key issues.

(a) If present tax policies are continued, growth in revenue will come through growth in incomes (both personal and corporate) and through increase in the consumption of taxed goods. With a progressive personal income tax structure, tax revenue will rise faster than income growth. The extent of revenue growth over the next few years will therefore depend heavily on the rate of inflation and the rate of real growth.

(b) A major policy issue is what will be done about fiscal drag. Although the extent of fiscal drag has been reduced through the introduction of the new tax scales in 1982, there is still a substantial amount of revenue at stake. For example, with an inflation rate of 7% and a rate of real economic growth of 2%, the process of fiscal drag will generate about an additional $1,000 million in revenue by the end of 1986-87. Over recent years governments have chosen to 'give back' in the form of tax cuts at least part of fiscal drag revenues. This has been done either through alterations to the tax scale or by upgrading the tax allowances and rebates.

(c) Various export tax incentives are scheduled to terminate on 31 March 1985. If they are extended beyond that date, or if they are replaced by schemes with a similar fiscal impact, revenue will be reduced by about $400 million in 1986-87.

(d) If the temporary surtax on the higher tax brackets was removed, tax revenue would be reduced by around $90 million.

Thus, apart from the particular 'lumps' of revenue mentioned in points (b)-(d) above, the rate of growth of revenue depends on what happens in the economy, particularly with the rate of inflation and the rate of real growth. It is unlikely, however, that over the next few years there will be sufficient revenue growth on the basis of existing tax structures to close substantially the deficit.

Consequences for the Deficit

The factors highlighted in the previous two sections are the keys to the size of the fiscal deficit over the next few years. Important policy decisions would be required to alter significantly the trend in government expenditure particularly in view of the growth in eligibility for most social welfare benefits, combined with indexation of most benefits and given the continued growth (and in some cases indexation) of debt servicing.

Clearly the question of the level of fiscal assistance to industry, both primary and secondary, involves major decisions over the next few years with many hundreds of millions of dollars at stake. Further, adjustments to the income tax scale, or to tax rebates, to return fiscal drag to taxpayers or to remove the temporary surtax on the higher tax brackets, will also have a substantial impact on the deficit, unless they are accompanied by an extended indirect tax base such as envisaged by the Task Force on Tax Reform.

While the fiscal deficit may show some improvements in the immediate future as a result of additional taxation revenues arising from the present period of economic growth, it is the Monitoring Group's view that the deficit will remain a problem of economic management over the medium term. Without a consistently firm approach to fiscal matters, (not characteristic of governments in the past), the deficit will remain well above the stated medium-term objective of 3-4% of GDP, expressed in the National Government's *National Development Strategy.*[2]

2. Minister of National Development, *The National Development Strategy*, 1983

CHAPTER 3

The Fiscal Deficit and the Economy

The previous two chapters have described and analysed the trends in government expenditure and revenue and the fiscal deficit. These indicate the fiscal deficit is on a rising trend (with fluctuations) and that previous attempts to reduce expenditure have not significantly affected the deficit other than in the short term. Furthermore, the outlook for the future seems to signify the deficit is unlikely to be reduced substantially without major policy changes.

Clearly the primary purpose of government expenditure is to provide goods and services to the public. In doing this the Government diverts resources from other uses and thereby alters resource allocation in the economy. A key requirement is that these goods and services be provided in such a way that maximises the net benefit to society. This means that capital expenditures should be assessed on the basis of their rate of return, that current expenditures should be targeted well so that benefits exceed costs, and that revenue should be raised in such a way that minimises efficiency costs on the economy (in terms of resource allocation).

In addition to these efficiency questions it needs to be asked whether a high deficit has adverse macroeconomic consequences. The next sections of the report move from what is essentially a description of trends to a discussion of the economic impact of fiscal deficits especially with respect to the level of activity in the economy (and therefore employment) and the rate of inflation.

(a) Does higher government spending increase economic activity?

Macroeconomic policy-making in most western countries since the Second World War has been based on the concept that by expanding or contracting the fiscal deficit, a government can regulate the level of activity in the economy. The theoretical underpinning for this was in the work of Lord Keynes who promoted the idea that the way out of the depression of the 1930s was through the expansion of government economic activity. Expansion of government spending would increase the level of aggregate demand for goods and services within the economy and thereby promote increased production and employment (provided there was surplus capacity in the economy, as there was in the 1930s).

Keynes also postulated that a reduction in government spending at a time when excess aggregate demand was putting pressure on inflation or the balance of payments, or both, would be an appropriate macroeconomic response.

In more recent years, New Zealand governments have used fiscal policy (among other things) as a regulator of economic activity — expanding government spending (or reducing taxation) when economic activity eased (e.g. 1972), and reducing expenditure (or increasing taxation) when signs of excess demand appeared in the economy (e.g. 1967).

The success of this sort of stabilisation action depends crucially on timing and it has clearly been difficult to ensure that the impact of fiscal policy coincides with the appropriate stage in the economic cycle. There are a number of lags which make it difficult to achieve the desired impact at the right time. There are delays in recognising the problem, analysing it, devising an appropriate response and finally in waiting for the response to take effect. Thus there is no guarantee that by the time a policy response impacts on the economy it is the appropriate policy for the situation then pertaining. In New Zealand history, movements in real government expenditure have tended to be pro-cyclical rather than anti-cyclical, indicating that the timing of government's fiscal response to economic activity has not always been appropriate. For example, in 1972 the economy was already beginning to expand when it was stimulated further by the budget of that year. This exacerbated the economic stress caused by the international boom in 1973-74.

However, while there are delays in formulating fiscal responses to economic developments, most developed economies have in-built responses which tend to operate automatically. For example, as the economy contracts, incomes, both business and private, will tend to fall and this will reduce the Government's tax take, and, other things being equal, will increase the deficit and the fiscal stimulus. Furthermore, the more or less automatic availability of unemployment benefits will mean expenditure will increase without further policy decision as unemployment rises with the economic downturn. Conversely, when the economy is expanding, incomes will generally be rising and, given the progressive nature of the personal income tax

scale, tax revenues will be rising even faster, thus tending to reduce the fiscal deficit. Expenditure on such things as unemployment benefits will also tend to decline.

A part of the fiscal deficit thus relates to the stage of the cycle through which the economy is passing. During recessionary times the deficit will tend to be higher, as revenues are reduced and expenditure on social support increased. The converse is true in expansionary times.

Even the automatic stabilisers, as they are called, sometimes involve delays. For example, corporate taxation, which is not on a PAYE basis, does not immediately reflect changes in company incomes. In fact, sometimes the higher tax bill falls due once incomes have started to decline again.

Another powerful stabilising force is the current account of the balance of payments. An expansion of the fiscal deficit, particularly if the monetary impact is not neutralised, will add to demand for imports and lead to a worsening of the current account of the balance of payments. This in turn will contract the money supply and help to rectify the problems associated with the initial expansion of the money supply.

Over recent years the automatic stabilisers have assumed considerable importance in developed countries. A recent review of fiscal policy showed that over the period 1971-1982, the impact of unemployment on fiscal deficits in the seven major OECD (Organisation for Economic Cooperation and Development) economies accounted for over three percentage points of the deficit as a percentage of GDP.

Given that the New Zealand economy has largely been in recession over recent years, it is to be expected that some part of the deficit reflects this fact; this is the cyclical component of the deficit. The balance of the deficit is structural — that is, it would be present even if the economy was in a state of full employment. In the Monitoring Group's view the fiscal deficit is not just a transitory problem that will correct itself when the economy comes right. It is largely a structural problem and will require structural policy changes on either the revenue or expenditure sides, or both, to correct it.

It would be expected that an expansion of government expenditure would, at least in the short run, have an impact on the economy greater than the initial impulse from the Government. The size of the expansion of the economy in relation to the expansion of government expenditure is called the fiscal multiplier. An expansion in government expenditure, or a reduction in taxation, would lead to an

increase in incomes in the community, either generally (as in the case of a tax reduction), or in the sectors providing the additional goods and services sought by the Government. These higher incomes themselves generate additional demand for goods and services and so on. Parts of these higher incomes will not have an impact on domestic consumption of home-produced goods as they will be saved rather than spent, or will be spent, directly or indirectly, on imports. Thus as the process goes on, there will be a 'dilution' of the income generating effect of the initial expansion of government expenditure. The eventual size of the expansion in aggregate demand reflects the extent of these leakages from the system in terms of higher savings or imports. The larger the multiplier, the greater the eventual increase/decrease in aggregate demand for any increase/decrease in government outlays.

The effectiveness of fiscal policy in relation to economic activity is the extent to which the multiplier is above unity. If the fiscal multiplier is greater than unity, then an expansion of government expenditure will lead to an expansion of overall demand greater than the size of the original stimulus. If the fiscal multiplier is less than unity then an initial expansion will lead to a smaller expansion of overall demand than the size of the original stimulus.

The size of the multiplier depends partly on the method by which an expansion of government spending is financed, and on the time which has elapsed since the initial fiscal stimulus. Thus a fiscal stimulus may lead to an initial expansion of demand but as time elapses and as the method of financing takes effect, the size of the multiplier may fall or even become negative. We shall look at this further when dealing with the financing of the deficit.

Recent experience, not only in New Zealand but also in other developed countries, has cast doubts on the efficacy of fiscal action as a means of promoting economic activity. Persistently high deficits have not been able to prevent rising unemployment. Studies by the OECD indicate that the fiscal multipliers in developed countries may not be the same in the case of fiscal expansion as in the case of fiscal retrenchment.

Attempts to stimulate economic activity in the 1970s both here and in major developed economies overseas, led to rapidly rising fiscal deficits but very little sustainable real economic activity. This would seem to indicate a low fiscal multiplier.

Conversely, in the late 1970s and early 1980s, as governments sought to rectify their ex-

tended budgetary positions, it was found that an attempted reduction in the fiscal deficit led to a significant contraction in economic activity but with little actual impact on the deficit.

This seems to indicate that a more substantial multiplier was in operation during fiscal retrenchment. One reason for this was that as the economy contracted, the action of the automatic stabilisers (viz. lower tax receipts and higher unemployment-related expenditures) combined with persistently rising debt servicing offset, at least in part, the fiscal effect of the original expenditure cuts or tax increases. Furthermore, the monetary impact of reducing government expenditure was more immediate than in the case of increasing government expenditure. (An expanding monetary base is not fully effective until demands for credit expand to take up the additional lending capacity available.) Thus a cut in government expenditure is likely to have a much greater impact on economic activity, especially initially, than an equivalent increase in government expenditure. In other words, in situations of fiscal expansion, the multiplier seems to be small, but in cases of fiscal contraction, the multiplier appears to be somewhat larger.

This apparent lack of symmetry in the size of the multiplier between an increase and a decrease in government expenditure was also shown by research done on the New Zealand economy by the Reserve Bank in 1978.[3]

This work also gave an insight into the size of the various multipliers. Two financing assumptions were used: firstly, when an expansion of government expenditure is financed by monetary expansion; and secondly, when it is financed by an equivalent increase in taxation revenue. In the former case, the impact on GNP of a change in government expenditure was about twice the size of the initial change after about three years and then reduced slowly as time went on. In the latter case (when taxation revenue was raised to finance an expansion in government spending), the multiplier with regard to GNP was initially small and positive but soon declined to around zero, or even negative, after a little over one year.

More recent work in the Reserve Bank[4] using a revised model of the New Zealand economy indicates that the fiscal multiplier in relation to output may be considerably smaller than thought earlier and very much smaller than unity, even when the increase in expenditure is financed by monetary expansion.

3. Spencer, G.H., (ed), *The Reserve Bank Econometric Model: A Revised Structure and some Policy Simulations*, Reserve Bank of New Zealand, 1978
4. Grimes, A., (ed), *A Revised Reserve Bank Core Model with SNA Data*, Reserve Bank of New Zealand, 1983 and Carey, D.A., *Experiments with a Revised Core Model*, Reserve Bank of New Zealand, 1984

The 1981/82 economic upturn illustrates the way in which growth in savings and imports neutralised what was essentially a fiscally stimulated expansion, so that there was little growth in consumption and employment.

In that year real GDP grew by 4.4%, while the budget deficit was 6.2% of GDP. Real private sector savings grew by 15.5% and import volumes expanded by 11.6%. Real disposable household income growth and real private consumption increased by 1.0% and 2.1% respectively. Growth in employment was small at 1.7%.

Present economic thinking attributes the changed effectiveness of fiscal policy from what appeared to be the case 20 or more years ago, to shifting attitudes and expectations in the community. There is now a growing belief that changes to fiscal deficits do not have the predictable impact on aggregate demand previously thought to exist. The change in spending that flows from any given fiscal action depends not only on the impact on consumers' incomes but also on expectations about how it will affect future incomes and tax liabilities. For example, continuing large fiscal deficits can raise concern about future financing of deficits and the servicing of the growing stock of debt. A sharply rising stock of public debt involves the possibility that either taxes will need to be raised to service the debt or else the pressure to monetise it will prove to be irresistible for a future government, with the likely inflationary consequences. With these factors in mind, businessmen and consumers are likely to adopt a cautious approach to what they perceive as a temporary government-induced increase in their incomes.

(b) *Financing the deficit*[5]
The impact on the economy of the fiscal deficit depends on the method by which the deficit is financed. In *The Stabilisation Role of Fiscal Policy*,[6] Deane and Smith list four options available for financing the Government's deficit as:

(a) borrowing from the Reserve Bank or running down cash balances at the Reserve Bank
(b) overseas borrowing
(c) borrowing from the trading banks
(d) borrowing from the non bank private sector.

5. The discussion in this section assumes that taxes are not raised to cover the deficit. While tax increases may be part of any policy package aimed at achieving the required structural changes in the New Zealand economy, a substantial increase in net taxation may not be appropriate in the light of the likely multiplier effect inherent in such an action which would deflate the economy. (The third report of the Monitoring Group, due to be published soon, discusses possible measures to achieve the desired structural change.)
6. Deane, R.S. and Smith, R.G., *The Stabilisation Role of Fiscal Policy*, New Zealand Planning Council, 1980

The fact that the Government spends more than it receives in revenue leads to an expansion of the money supply. The various methods of financing differ in the extent to which they neutralise that increase in the money supply for any given stance of monetary policy.

A key question in examining the various methods of financing the deficit is the extent to which they facilitate the monetisation of the deficit (i.e. the extent to which they lead to an expansion of the money supply). Generally speaking, there is a declining risk of monetisation associated with financing the deficit as one moves down the list. Borrowing from the Reserve Bank carries a high risk of monetisation, while borrowing from the non bank private sector carries a lower risk of monetisation.

The process is broadly as follows. By spending more than it receives, the Government either borrows from the Reserve Bank, where the Public Accounts are held, or it runs down positive balances held at the Reserve Bank. This expands the money supply which ends up, in large part, as deposits with the trading banks, thereby increasing trading bank reserves. Initially these reserves will be held in short-term government securities (e.g. Treasury Bills) pending an increase in the demand for other higher returning loans. If any trading bank experiences a higher demand for loans, it may discount its government securities with the Reserve Bank to obtain cash to meet this demand for lending.

The Government may seek to limit the growth in some of these cash, or near cash, reserves by offering government securities to the general public or by selling less liquid longer maturity stock to financial institutions. If the general public takes up and continues to hold government securities, the monetary impact of the deficit is neutralised to that extent. In order to purchase these securities the public will, in general, draw down balances at trading banks (or at other financial institutions which in turn will draw down their balances at trading banks). This will reduce the reserves of the trading banks. However, many of the government securities held by households are in practice relatively easy to redeem for cash. The extent to which they continue to hold these securities therefore depends largely on the rate of return relative to other rates of return available.

The corporate sector, especially financial institutions, has discounting facilities available and the government securities it holds may well find their way back into the hands of the Reserve Bank via the trading bank discounting facility with the Reserve Bank. The crucial thing is for the Reserve Bank to keep up the

required rate of sales of government securities to cover not only the current deficit but also redeeming and discounting of previously held securities.

Overseas borrowing, while it may provide the accounting means of covering the Government's deficit, does not lead to a neutralising of the monetary effects of the deficit. Its prime purpose is to cover the deficit on overseas exchange transactions, not the fiscal deficit. An expansion of the fiscal deficit, whose monetary effects are not neutralised, may well lead to the need to borrow overseas to cover the rise in imports that will occur.

Thus, while in one sense it is useful to look at the various sources from which the Government may seek to finance its deficit from an accounting point of view, these cases are not wholly distinct from a monetary policy point of view. More important than the source from which it seeks to cover its deficit, is the liquidity of the government securities sold. The main aspects of this are the type of government security issued, the rate of return from the stock, the discount policy operated by the Reserve Bank and public sector security ratios imposed on financial institutions. The objective in monetary policy terms is to seek to 'lock-in' the debt so that it cannot lead to an increase in the money supply. We look at each of these aspects in turn.

(i) *The type of security issued*
Short-term securities which require constant refinancing, or securities which can be readily redeemed or discounted, are relatively liquid. On the other hand, securities that have longer terms or that cannot be redeemed or discounted without significant financial cost, do tend to neutralise successfully the monetary consequences of the Government's deficit. Important elements associated with relatively illiquid government securities are clearly the rate of return and the ease with which securities can be discounted.

(ii) *The rate of return*
Clearly it is possible for the Government to neutralise the monetary consequences of the fiscal deficit by offering rates of return on government securities which are very attractive to investors. The converse follows inevitably that artificially low interest rates on government securities increase the risk of the deficit being monetised.

(iii) *Discount policy*
The terms under which the Reserve Bank will buy back government securities from the trading banks is important in determining the ease with which financial institutions will be able to

meet demands for loan finance. Discount policy therefore affects the profitability associated with an expansion of lending. Thus discounting terms which are financially unattractive to the trading banks are likely to be reflected in unattractive discounting terms offered by trading banks to their clients. This will slow monetary growth.

(iv) Public sector security ratios

The Government generally has imposed on financial institutions requirements regarding their holdings of government securities. Sometimes this has been used as a means of financing fiscal deficits without paying the rates of interest that would have been necessary on the open market. By increasing or decreasing this requirement, the Government may alter the availability of funds financial institutions have for lending. Thus even short-dated stock at low interest rates can be locked in by government regulation which forces financial institutions to hold a higher level of government securities than they would choose to. However, this would reduce the competitiveness of these institutions over time and cause them to lose market share to other non-ratio institutions. In the longer run this could undermine the ability of the Government to control monetary growth.

Thus, whether or not the deficit ends up being monetised is a complex question. It depends not only on the source from which the Government borrows, but also on a range of monetary policy questions. What can be said, though, is that for any particular stance of monetary policy, the deficit is less likely to be monetised if financed in New Zealand from the non-financial institution sectors (i.e. from households and from the non-financial corporate sector). The monetary consequences of the deficit can, however, be neutralised if it is financed from financial institutions and is accompanied by appropriate monetary policies to 'lock' it in.

The following table shows the extent to which the Government has financed its deficit from 'non-M3' sources (see footnote to the table for definition). While this category does contain some financial institutions, it suffices as a rough and ready proxy for borrowing which is more likely to neutralise the monetary consequences of the Government's deficit. Over recent years between a third and a half of the deficit has been financed in this way, although the last two years show a significant upward shift.

GOVERNMENT FINANCING TRANSACTIONS

Financed by: Borrowing from

$ million year ended March	(1) Deficit Before Borrowing	(2) Non-M3 ** Institutions	% of Deficit	(3) Other * Institutions
1976	1,002	106	(11)	896
1977	506	108	(21)	398
1978	694	219	(32)	475
1979	1,446	496	(34)	950
1980	1,027	393	(38)	634
1981	1,525	483	(32)	1,042
1982	1,818	711	(39)	1,107
1983	1,767	905	(51)	862
1984	2,984	1,949 ***	(65)	1,035 ***

* Includes borrowing from M3 institutions. These are the Reserve Bank, trading banks, savings banks, finance companies, life offices, stock and station agents, and official money market dealers.
** Non-M3 borrowing involves borrowing from private households and institutions not included under *.
*** Provisional

Up to this point the data has been based on the Budget Table 2 format. That format does not distinguish the various purposes of government expenditure between current and capital expenditure. The IMF publishes data for each member country which distinguishes between the various categories of expenditure, and excludes those types of public expenditure that are genuinely commercial in nature.

FINANCING THE DEFICIT

		71/72	72/73	73/74	74/75	75/76	76/77	77/78	78/79	79/80	80/81	81/82 (1)	82/83 (2)	83/84 (3)
A Total Savings	$m	1210	1491	1852	1552	1677	2549	2213	2407	3592	3605	4808	4657	4520
B Public Account (+) deficit (−) on current transactions	$m	281	149	280	388	−11	372	322	−320	−91	−438	−750	−1037	−1682
C Non-Public Account Savings (A-B)	$m	929	1342	1572	1164	1688	2177	1891	2727	3683	4043	5558	5694	6202
D Net Public Capital Expenditure	$m	194	234	263	170	359	365	401	434	421	487	573	636	703
E Net Borrowing (+), Net Lending (−), (D-B)	$m	−87	85	−17	−18	370	−7	79	753	512	925	1322	1673	2385
F Government Lending minus repayments	$m	180	213	243	433	824	621	710	749	616	616	789	716	825
G. Overall deficit (E + F) (+)	$m	93	298	225	415	1194	614	789	1502	1127	1541	2111	2389	3210
Net Borrowing/lending as % of Non public account savings (i.e. E % C)		−9.4	6.3	−1.1	−1.5	21.9	−0.3	4.2	27.6	13.9	22.9	23.8	29.4	38.5

Sources: IMF Government Finance Statistics Yearbook 1983
Department of Statistics

(1) Revised — unpublished
(2) Unpublished data
(3) Estimate — Economic Monitoring Group

The table, "Financing the Deficit" on page 21, which shows the share of private savings being taken by the Government, uses the IMF based data. Row B shows that whereas previously there was generally a surplus between government current expenditures and revenues, the Government has over recent years increasingly been financing current expenditures out of borrowed money. Borrowing for public capital expenditure (Row D) has been growing slowly, and net borrowing for on-lending (Row F) has been fluctuating over recent years between $600 and $800 million. It is the growth in borrowing to finance current expenditures that has led to the rapid expansion of the Government's borrowing. As Row F reflects the Government's role as a financial intermediary, the key row reflecting the extent to which the Government is absorbing private sector savings is Row E. With the exception of 1975-76, government capital expenditure was more or less financed by the surplus the Government achieved on current transactions until 1978-79.

Since then, not only has the Government been in the loan market to finance its capital expenditure, but it has not been contributing to aggregate savings via a surplus on current transactions. In the last financial year, the Government took nearly 40% of non-public account savings. Previously, the Government's demand on capital was more or less equal to its contribution to national savings. This change will almost certainly have had an impact on the private sector's cost of borrowing from capital markets.

'Crowding out' is a general term covering a range of responses to fiscal deficits that lead to offsetting action in the private sector. It occurs when the private sector responds to an expansion in the fiscal deficit in such a way as to offset, at least in part, the expansionary impact of the enlarged deficit. This can take a number of avenues.

(i) An expansion of the Government's borrowing requirement increases the demand on available loanable funds. This could be expected to cause an increase in rates of interest. The higher interest rates generated by the greater demand for loan funds can lead to a reduction in interest-sensitive private expenditure, most probably some form of investment expenditure. Where there are controls on interest rates which prevent them from rising to reflect higher demand for funds, any crowding out will take the form of direct credit rationing by financial institutions.[7]

(ii) The sale of a higher amount of government stock may displace holdings of private sector debentures or shares. This would make it more difficult for the private sector to raise funds for investment. In this case government debt crowds out private sector debt in investors' portfolios.

(iii) When the exchange rate has a degree of flexibility, overseas borrowing causes an upward movement in the exchange rate which in turn affects the incomes of those sectors which depend heavily on overseas markets, either to buy from or to sell to. Thus, the incomes of exporters expressed in NZ dollar terms will decline if the NZ dollar appreciates and this could lead to a reduction in output from exporters. A similar argument applies for those competing directly with imports. In this situation, the direct impact on output of an expansion of government expenditure may be offset by a decline in output of exporting and import competing industries.

The extent to which crowding out occurs and over what period is a matter of debate. It is likely however, that when it occurs, it happens gradually over a period of time. The extent of crowding out will depend on the nature of the money markets, exchange rate flexibility, rate of inflation and monetary and credit conditions.

Thus unless financing action is taken simultaneously, the initial impact of an increase in government expenditure is likely to be an expansion of aggregate demand in the economy. This may then trigger off second and subsequent round effects via the multiplier process leading to a larger increase in demand. As incomes expand there will be a higher demand for imports and probably a higher level of private savings. Furthermore, the process of funding the expansion in government expenditure from, say, the domestic household market will lead to higher interest rates and this will alter private sector expenditure patterns. What precisely eventuates as these two processes (i.e. the fiscal expansion and the private sector response) interact is difficult to foretell. It is, however, likely that the expansionary forces will dominate to begin with but that contractionary private sector responses will increasingly make their presence felt. The length of time over which this occurs depends on such factors as the state of the economy and financial markets, but the contractionary aspects could nevertheless happen quite quickly.

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7. If a larger fiscal deficit does lead to higher interest rates, there may also be an offsetting (at least in part) increase in the volume of savings. This in turn may reduce or eliminate the crowding out problem. The extent of any increase in savings depends on the extent to which savings are interest sensitive.

It is not possible to say from the table the extent to which crowding out has occurred, particularly given the depressed economic conditions over most of the recent period. However, the sharp expansion of the Government's share of private savings over recent years to reach nearly 40% in 1983/84 has clearly increased the likelihood of crowding out having occurred and continuing to occur. This must be viewed with concern, particularly as there are expectations that substantial fiscal deficits will continue to require to be financed over the medium term.

(c) *Fiscal deficits and inflation*
Over the medium term the growth in the money supply is a major determinant of the rate of inflation. If the money supply is growing at a faster rate than the underlying growth in the economy, it will be reflected in a rising rate of price increases.

Monetisation of a deficit involves an increase in the money supply. This in turn increases demand for assets (such as houses or shares) which results in higher prices for these assets. Higher asset prices imply lower rates of return and thereby lower interest rates and these could encourage expansion of investment activity. In the longer term, expectations of continued monetisation of the deficit play a larger role in determining economic behaviour. Thus, if deficits are monetised over a period of time, operators in financial markets will expect a rising rate of inflation and act accordingly. They will seek higher nominal interest rates in order to protect their real rate of return in the future in the face of perceived future inflation. OECD studies covering the seven major industrial countries seem to confirm this[8] — that there is a link between long-term government bond interest rates and expected budget deficits. This is the case even if present deficits are being financed in a non-monetised way and the present inflation rate is low. Prospects for continuing large deficits will lead to concern that the financing burden will become so high that future governments will choose to finance the deficit by monetised routes in order to reduce the servicing costs. Thus operators in financial markets will seek to cover themselves from possible future negative real interest rates.

Two further aspects, of a more institutional nature, relating to the inflationary impact of large deficits are worth noting. Firstly, any expansion of economic activity stimulated by an increase in the fiscal deficit may have an inflationary impact. This higher level of demand could put pressure on both goods and labour markets or spill over into imports. This could in turn worsen the current account of the balance of payments (particularly if these deficits continue over a long period) and lead to a depreciation of the exchange rate, thus adding to inflationary pressures in the domestic economy. Secondly, irrespective of the method of financing, an increase in the deficit will impact on the housing component of the Consumers Price Index. If monetised there will be an increase in house prices; if not monetised, there will be an increase in interest rates. Although both of these will be reflected in the CPI and may then flow on into wages, the impact on the CPI of higher house prices is larger than that of higher interest rates.

From an inflation point of view it is preferable for the deficit to be financed in a way which does not lead to an increase in the money supply beyond what is desired by real growth in the economy. However, even financing the deficit by a non-monetised route may have inflationary implications because of institutional factors. Clearly some reduction of the fiscal deficit is necessary over the medium term to hold inflation, lessen inflationary expectations, and with it, reduce present interest rates.

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8. *OECD Economic Outlook: Occasional Studies-Public Sector Deficits: Problems and Policy Implications*, OECD, 1983

Conclusion

The Government's expenditure and revenue raising activities are powerful influences on various aspects of the New Zealand economy. A number of aspects stand out as of crucial importance.

(a) Both government expenditure and revenue have been rising as a proportion of GDP, but with expenditure rising significantly quicker than revenue. Consequently, there has been a secular trend towards ever increasing fiscal deficits.

(b) There have been wide fluctuations in the size of the deficit, usually associated with the electoral cycle. This has had a destabilising effect on the economy and imposed higher costs on the private sector.

(c) It appears likely that the fiscal deficit will over the medium term continue to be substantially above the policy goal of 3-4 percent of GDP as stated by the National Government in the *National Development Strategy*.

(d) Attempting to increase the level of real activity in the economy by means of raising government expenditures does not appear to work other than in the very short term. Rather it enlarges the fiscal deficit for very little real benefit in terms of increased production and employment.

(e) Conversely, attempting to reduce sharply the fiscal deficit is likely to have little effect on the size of the deficit but would probably lead to a significant contraction of economic activity.

(f) Financing the government deficit is now absorbing a large proportion of private sector savings and, given that large deficits are likely to continue over the medium term, this is highly likely to crowd out desirable private sector investment. In the New Zealand economy at present, lower real interest rates (that are market determined) are more conducive to growth than higher ones.

(g) A continuing large deficit is not consistent with the control of inflation.

In the light of this what is the appropriate policy response from the Government? For reasons of both inflation control and of economic growth, the Government should seek to reduce the size of the deficit in proportion to GDP. Without having a significant deflationary impact on the economy, this cannot be done quickly. It does, however, require a determined medium-term approach by the Government to fiscal policy which includes a clear recognition that fluctuations of the fiscal deficit in relationship to the electoral cycle carry with them wider economic costs.

Over the next few years there are major policy decisions to be taken, which will be the main determinants of the size of the fiscal deficit. These include the nature and size of assistance to primary and secondary industry (SMP's and export incentives), whether the Government should retain fiscal drag, whether to broaden the indirect tax base and whether to attempt to contain in some way social service spending which under present policy will continue to grow in real terms.

Decisions will not be easy in any of these areas. Nonetheless a fiscal deficit that continues to trend upwards (even though there may be temporary improvements), will add fuel to inflationary fires, and will inhibit the growth performance of the economy and the expansion of employment opportunities.

Appendix

TABLE 1

15-YEAR SUMMARY OF GOVERNMENT EXPENDITURE BY FUNCTIONAL CLASSIFICATION

Net Expenditure		69/70	70/71	71/72	72/73	73/74	74/75	75/76	76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84
Administration	$m	105.9	134.9	159.3	189.3	296.7	400.3	475.4	388.3	479.2	603.4	692.6	785.8	914.2	832.5	841.1
	% of total expenditure	7.8	8.2	8.4	8.4	11.1	11.6	10.7	8.5	8.5	8.8	9.1	8.6	8.2	6.6	5.9
Foreign Relations	$m	100.7	118.9	134.2	155.4	176.4	214.2	271.0	288.7	329.0	384.7	451.5	577.9	719.9	808.2	834.1
	%	7.4	7.3	7.1	6.9	6.6	6.2	6.1	6.3	5.8	5.6	6.0	6.3	6.4	6.4	5.9
Development of Industry	$m	96.0	137.2	184.5	210.0	196.6	346.1	573.1	504.9	629.8	858.0	714.2	797.1	1183.6	1429.8	1881.1
	%	7.1	8.4	9.7	9.3	7.3	10.0	12.9	11.0	11.1	12.5	9.4	8.7	10.6	11.3	13.2
Education	$m	207.3	265.5	335.0	376.8	440.2	526.6	627.0	699.4	807.5	929.3	1009.3	1292.0	1493.2	1638.8	1674.3
	%	15.3	16.2	17.6	16.7	16.4	15.2	14.1	15.3	14.2	13.6	13.3	14.1	13.3	12.9	11.7
Social Services	$m	324.4	355.7	391.9	527.3	646.8	789.5	997.0	1158.9	1569.3	1853.5	2175.0	2589.7	3042.3	3744.2	4049.6
	%	24.0	21.7	20.6	23.3	24.1	22.8	22.4	25.3	27.7	27.1	28.7	28.4	27.2	29.5	28.4
Health	$m	204.6	244.2	291.8	343.1	401.1	492.3	605.7	689.1	808.5	980.1	1136.2	1356.3	1601.2	1766.1	1804.9
	%	15.1	14.9	15.3	15.2	15.0	14.2	13.6	15.1	14.3	14.3	15.0	14.8	14.3	13.9	12.7
Transport & Communications	$m	113.4	148.8	141.1	186.6	173.1	207.3	275.3	230.6	247.6	279.1	265.0	332.6	460.6	495.6	537.0
	%	8.4	9.1	7.4	8.3	6.5	6.0	6.2	5.0	4.4	4.1	3.5	3.6	4.1	3.9	3.8
Debt Servicing and Misc. Investment Transactions	$m	156.7	174.6	192.5	194.2	261.8	289.4	311.2	409.5	516.8	592.3	770.6	990.9	1375.0	1549.4	2237.2
	%	11.6	10.7	10.1	8.6	9.8	8.4	7.0	8.9	9.1	8.6	10.2	10.8	12.3	12.2	15.7
Sub Total	$m	1309.0	1579.6	1830.3	2182.7	2592.7	3265.7	4136.2	4369.4	5387.7	6480.4	7214.4	8722.3	10790.0	12264.6	13859.3
	%	96.7	96.5	96.2	96.5	96.8	94.3	93.1	95.4	95.0	94.6	95.1	95.5	96.4	96.8	97.3
Misc. Financing Transactions	$m	44.5	56.5	72.4	79.1	86.6	196.5	308.1	208.8	281.0	368.0	372.2	411.1	406.5	407.9	390.7
	%	3.3	3.5	3.8	3.5	3.2	5.7	6.9	4.6	5.0	5.4	4.9	4.5	3.6	3.2	2.7
Total	$m	1353.5	1636.1	1902.7	2261.8	2679.3	3462.2	4444.3	4578.2	5668.7	6848.4	7586.7	9133.4	11196.5	12672.5	14250.0
	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Budget Table 2

TABLE 2

15-YEAR SUMMARY OF GOVERNMENT REVENUE

	69/70	70/71	71/72	72/73	73/74	74/75	75/76	76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84
A Total Taxation	1181.0	1445.0	1706.9	1926.6	2394.8	2865.3	3185.3	3844.9	4626.3	4989.5	6020.0	7050.8	8798.0	10097.5	10431.2
% of total revenue	92.4	92.9	93.3	93.7	98.2	92.6	92.6	94.4	93.0	92.4	91.8	92.7	93.8	92.6	92.6
— Direct Tax	808.4	989.6	1189.9	1346.5	1735.2	2180.8	2353.6	2890.1	3540.1	3717.8	4526.1	5349.6	6580.9	7521.8	7522.6
% of total revenue	63.3	63.6	65.0	65.5	71.2	71.0	68.4	71.0	71.2	68.8	69.0	70.3	70.2	69.0	66.8
— Indirect Tax (incl. highways)	372.6	455.4	517.0	580.2	659.6	684.5	831.7	954.8	1086.2	1271.7	1493.9	1701.2	2217.2	2574.7	2908.6
% of total revenue	29.2	29.3	28.2	28.2	27.1	22.3	24.2	23.4	21.8	23.5	22.8	22.4	23.6	23.6	25.8
B Interest, Profits, etc.	96.7	110.5	123.5	129.2	42.8	206.5	257.3	227.2	348.0	413.0	539.8	557.7	580.2	808.1	834.8
% of total revenue	7.6	7.1	6.7	6.3	1.8	6.7	7.5	5.6	7.0	7.6	8.2	7.3	6.2	7.4	7.4
C Total Revenue	1277.7	1555.5	1830.4	2055.8	2437.6	3071.8	3442.6	4072.1	4974.3	5402.5	6559.8	7608.5	9378.2	10905.6	11266.0
% of total revenue	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Budget Tables 2 and 3
Department of Statistics

TABLE 3

GOVERNMENT EXPENDITURE, REVENUE AND DEFICIT AS A PROPORTION OF GROSS DOMESTIC PRODUCT (GDP) AND GROSS NATIONAL EXPENDITURE (GNE)

		69/70	70/71	71/72	72/73	73/74	74/75	75/76	76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84
A GDP	$m	5133	5832	6874	7901	9199	10117	11669	14105	15424	17510	21092	24461	29296	32240	34174*
B GNE	$m	5012	5992	6819	7665	9191	11370	12461	14466	15673	17379	21412	24726	30198	33378	34713*
C Total Net Expenditure	$m	1353.5	1636.1	1902.7	2261.8	2679.3	3462.2	4444.3	4578.2	5668.7	6848.4	7586.7	9133.4	11196.5	12672.5	14250.0
— Expenditure as % of GDP		26.4	28.1	27.7	28.6	29.1	34.2	38.1	32.5	36.8	39.1	36.0	37.3	38.2	39.3	41.7
— Expenditure as % of GNE		27.0	27.3	27.9	29.5	29.2	30.5	35.7	31.6	36.2	39.4	35.4	36.9	37.1	38.0	41.1
D Total Revenue	$m	1277.7	1555.5	1830.4	2055.8	2437.6	3071.8	3442.6	4072.1	4974.3	5402.5	6559.8	7608.5	9378.2	10905.6	11266.0
— Revenue as % of GDP		24.9	26.7	26.6	26.0	26.5	30.4	29.5	28.9	32.3	30.9	31.1	31.1	32.0	33.8	33.0
E Fiscal Deficit	$m	75.8	80.6	72.3	206.0	241.7	390.4	1001.7	506.1	694.4	1445.9	1026.9	1524.9	1818.3	1766.9	2984.0
— Deficit as % of GDP		1.5	1.4	1.1	2.6	2.6	3.9	8.6	3.6	4.5	8.3	4.9	6.2	6.2	5.5	8.7

Sources: Budget Tables 2 and 3
Department of Statistics

*Estimate — based on New Zealand Institute of Economic Research estimate of 6% GDP growth and 4% GNE growth in 1983/84

TABLE 4

15-YEAR SUMMARY OF GOVERNMENT EXPENDITURE AND REVENUE DEFLATED BY THE CONSUMERS PRICE INDEX (CPI)

		69/70	70/71	71/72	72/73	73/74	74/75	75/76	76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84
A CPI (December 1977 = 1000)		413	446	490	521	570	637	737	855	980	1087	1257	1463	1689	1948	2049
B Net expenditure	$m	1353.5	1636.1	1902.7	2261.8	2679.3	3462.2	4444.3	4578.2	5668.7	6848.4	7586.7	9133.4	11196.5	12672.5	14250.0
% change on previous year			20.9	16.3	18.9	18.5	29.2	28.4	3.0	23.8	20.8	10.8	20.4	22.6	13.2	12.4
Net expenditure deflated by CPI	$m	3277.2	3668.4	3883.1	4341.3	4700.5	5435.2	6030.3	5354.6	5784.4	6300.3	6035.6	6242.9	6629.0	6505.4	6954.6
% change on previous year			11.9	5.9	11.8	8.3	15.6	10.9	-11.2	8.0	8.9	-4.2	3.4	6.2	-1.9	6.9
C Total Revenue	$m	1277.7	1555.5	1830.4	2055.8	2437.6	3071.8	3442.6	4072.1	4974.3	5402.5	6559.8	7608.5	9378.2	10905.6	11266.0
% change on previous year			21.7	17.7	12.3	18.6	26.0	12.1	18.3	22.2	8.6	21.4	16.0	23.3	16.3	3.3
Revenue deflated by CPI	$m	3093.7	3487.1	3735.5	3945.9	4276.5	4822.3	4671.1	4762.7	5075.8	4970.1	5218.6	5200.6	5552.5	5598.4	5498.3
% change on previous year			12.7	7.1	5.6	8.4	12.8	-3.1	2.0	6.6	-2.1	5.0	-0.3	6.8	0.8	-1.8

Sources: Budget Tables
Department of Statistics

TABLE 5

TAXATION OVER 15 YEARS

		69/70	70/71	71/72	72/73	73/74	74/75	75/76	76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84
A CPI (December 1977 = 1000)		413	446	490	521	570	637	737	855	980	1087	1257	1463	1689	1948	2049
B Total Revenue	$m	1277.7	1555.5	1830.4	2055.8	2437.6	3071.8	3442.6	4072.1	4974.3	5402.5	6559.8	7608.5	9378.2	10905.6	11266.0
C Direct Taxation	$m	808.4	989.6	1189.9	1346.5	1735.2	2180.8	2353.6	2890.1	3540.1	3717.8	4526.1	5349.6	6580.9	7521.8	7522.6
% change on previous year			22.4	20.2	13.2	28.9	25.7	7.9	22.8	22.5	5.0	21.7	18.2	23.0	14.3	—
Deflated by CPI	$m	1957.4	2218.8	2428.4	2584.5	3044.2	3423.5	3193.5	3380.2	3612.3	3420.2	3600.7	3656.6	3896.3	3861.3	3671.4
% change on previous year			13.4	9.4	6.4	17.8	12.5	-6.7	5.8	6.9	-5.3	5.3	1.6	6.6	-0.9	-4.9
D Personal Income Tax	$m	541.2	673.6	863.8	1015.7	1309.8	1694.0	1867.5	2296.2	2887.6	3198.0	3815.2	4709.9	5844.2	6602.9	
Deflated by CPI	$m	1310.4	1510.3	1762.9	1949.5	2297.9	2659.3	2533.9	2685.6	2946.5	2942.0	3035.2	3219.3	3460.2	3389.6	
% change on previous year			15.3	16.7	10.6	17.9	15.7	-4.7	6.0	9.7	-0.2	3.2	6.1	7.5	-2.0	
Proportion of total revenue		42.4	43.3	47.2	49.4	53.7	55.1	54.2	56.4	58.1	59.2	58.2	61.9	62.3	60.5	
E Company Income Tax	$m	238.0	283.7	297.3	298.8	386.1	442.0	428.3	532.3	595.2	457.0	550.4	589.1	670.6	852.5	
Deflated by CPI	$m	576.3	636.1	606.7	573.5	677.4	693.9	581.1	622.6	607.3	420.4	517.4	402.7	397.0	437.6	
% change on previous year			10.4	-4.6	-5.5	18.1	2.4	-16.3	7.1	-2.5	-30.8	23.1	-22.2	-1.4	10.2	
Proportion of total revenue		18.6	18.2	16.2	14.5	15.8	14.4	12.4	13.1	12.0	8.5	9.9	7.7	7.2	7.8	

Sources: Department of Statistics
Department of Inland Revenue

THE PUBLIC DEBT (1)

TABLE 6

		1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
A Public Debt Outstanding (as at 31 March)	$m	2877.1	3007.0	3186.6	3503.1	3734.5	4199.7	5557.9	6289.2	7483.8	8819.5	10346.4	11617.1	14381.4	18732.8
Comprising															
(i) Overseas Debt NZ	$m	525.8	576.4	653.5	564.0	465.2	862.8	1463.2	1826.6	2446.7	2920.1	3567.5	4236.1	5549.4	7764.7
% of Public Debt		18.3	19.2	20.5	16.1	12.5	20.5	26.3	29.0	32.7	33.1	34.5	36.5	38.6	41.4
(ii) Public Debt held in NZ	$m	2351.3	2430.5	2533.0	2939.1	3269.3	3336.9	4094.7	4462.6	5037.1	5899.4	6778.9	7381.0	8832.0	10968.1
% of Public Debt		81.7	80.8	79.5	83.9	87.5	79.5	73.7	71.0	67.3	66.9	65.5	63.5	61.4	58.6
B Public Debt as % of GDP		56.1	51.6	46.4	44.3	40.6	41.5	47.6	44.6	48.5	50.4	49.1	47.7	49.4	58.4
C Interest Paid (Year ended 31 March)	$m	144.2	153.0	166.8	184.8	200.3	221.0	270.0	367.0	464.5	590.1	757.8	891.5	1202.9	1475.8
Comprising															
(i) Overseas Interest NZ	$m	30.8	32.1	36.3	38.3	34.1	41.3	68.8	110.4	133.2	174.2	220.1	256.3	416.3	515.0
% of Interest Paid		21.4	21.0	21.8	20.7	17.0	18.7	25.5	30.1	28.7	29.5	29.0	28.7	34.6	34.9
(ii) NZ Interest	$m	113.4	120.9	130.5	146.5	166.3	179.7	201.2	256.7	331.3	415.9	537.6	635.2	786.7	960.8
% of Interest Paid		78.6	79.0	78.2	79.3	83.0	81.3	74.5	69.9	71.3	70.5	71.0	71.3	65.4	65.1

(1) Does not include debt held by the Reserve Bank, by Quasi-Government agencies or by Local Authorities.

Source Budget Tables
Public Accounts

DATE DUE

9 DEC 1984

N.L. 11/1

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