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# FOREIGN EXCHANGE CONSTRAINTS, EXPORT GROWTH AND OVERSEAS DEBT

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**Economic Monitoring Group**

NZPC December 1983  
Foreign Exchange Constraints,  
Export Growth and Overseas Debt  
By: Economic  
Monitoring Group

**New Zealand Planning Council Monitoring Report**

CONTENTS

TO THE DIRECTOR

REPORT OF THE DIRECTOR

1983

# FOREIGN EXCHANGE CONSTRAINTS, EXPORT GROWTH AND OVERSEAS DEBT

**Economic Monitoring Group  
Report No.1**

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31 October 1983

The Chairman,  
New Zealand Planning Council,  
WELLINGTON.

Dear Mr Douglas,

We have pleasure in forwarding to you the first report of the newly constituted Economic Monitoring Group, which in accordance with the independent right to publish that the Planning Council has given the Group, will be released shortly.

The new group decided to direct its attention to the basic problems of growth of living standards and employment, and in particular to the ways the economy should adjust to changing conditions. The field is vast and the problems and issues are numerous; the group was faced with its own problem of where to start. We have decided to start with the external issues of trade and borrowing that face us, and the adjustments and adaptations that we must make in response to changing conditions abroad.

In choosing this approach we are aware of the danger that we may be thought to be saying that what happens overseas is the sole or main cause of our destinies. Of course we do not believe that: we believe that our standard of living and our prosperity depends in the last resort on the efficiency with which we organise ourselves and allocate resources - that is a matter, among others, of giving investors and consumers the right price signals, and of avoiding undesirable privilege and protection. Nevertheless, an important part of efficiency is the way we adapt to changing events and conditions abroad, and in view of the public interest at the present time in our trading problems and our borrowing, we have thought it sensible to begin our work with this examination - itself inevitably selective - of the external issues facing us now.

Subsequent reports will take up the issues of domestic adaptation and policies.

Yours sincerely,



C.A. Blyth  
Convenor  
Economic Monitoring Group



## THE ARGUMENT

New Zealand is interrelated with the world economy. It is now less dependent on the British economy than it once was, but it is still much affected by the course of incomes in other countries and the trading rules they adopt. In some ways, such as trade in services and capital market transactions, the links between New Zealand and the world economy have become stronger in recent years. The main connection however is still that New Zealand exports goods in order to finance imports which feed into local activities and enable New Zealanders to have a range of goods comparable to that available in other relatively wealthy countries. One of the major problems of recent decades has been that while local aspirations continue to assume New Zealand should have consumption levels similar to those of other rich countries, our economic growth has not been as fast as theirs. There seems to be little unusual about New Zealand on the import side, but our range of exports has been such that we have found it difficult to finance the desired imports.

The world economy is one of the constraints on New Zealand. This is not to say it is the only determinant of New Zealand's economic performance - indeed other factors may be more significant in determining our rate of growth. The rate of growth of the New Zealand economy is affected also by the resources available to us, by our decisions on the kind and amount of capital accumulation, on our receptiveness to technical change, and on our decisions on appropriate levels of employment incomes. These things affect the goods and services produced in New Zealand, including those which we are able to market overseas to finance desired imports. The Monitoring Group intends to focus on internal mechanisms in future reports, but appropriate stances on factor incomes and on the composition of output will always be moulded to some extent by the world economy. It is the link between New Zealand and the rest of the world which is at the centre of this report.

In recent years, while world incomes have grown slowly, New Zealand has stagnated. In order to sustain consumption levels and to promote development of our energy resources, the Government has engaged in overseas borrowing to a much greater extent than formerly. The borrowing has undoubtedly kept employment and incomes higher than they would otherwise have been, even though unemployment has increased while incomes have not grown much. Unfortunately, it seems to the Monitoring Group that the economy has not used the time adequately when consumption was supported by borrowing, to get into a position from which it could



meet our income aspirations while financing needed imports by our exports. The cost of servicing our overseas debt seems to the Monitoring Group to have reached the position where it would be unwise to continue to rely on borrowing for that purpose much longer. It is therefore necessary to find ways of speeding up the internal adjustment to our international environment, and that will be the focus of the next stage of the work of the Monitoring Group.

The issues the Monitoring Group is addressing are sometimes summed up by saying there is a persisting gap between payments and earnings of foreign exchange. The gap is the result of the ways we organise and manage our economy. Simple solutions to close the gap, such as raising the price of foreign exchange (i.e. devaluing), are unlikely to be fully effective as long as we continue to organise and manage our economy the way we do. The traditional solutions of subsidising exports and protecting local manufacturing have been shown to be equally inadequate. Attempts to increase the earnings of foreign exchange by expanding production for export, lead through higher incomes to increased expenditures on imports, and hence to failure to close the gap. Similarly, attempts to expand production from import replacing industries also lead through higher incomes to increased expenditures on imports and hence - surprisingly as it may seem to many people - to failure to close the gap. Raising the price of foreign exchange will probably ultimately be necessary in a permanent solution to close the gap, but this only makes sense if our economic organisation and management themselves work towards closing, rather than maintaining the gap.

C. A. Blyth  
Convener  
Economic Monitoring Group

## THE FOREIGN EXCHANGE CONSTRAINT

New Zealand's economic problems continue to be severe and the prospects for economic growth, even in the medium term, are far from reassuring. Several policy initiatives have been taken, but their success has been less than is desirable. It is not possible to deal with all the relevant issues at once, and the Monitoring Group has chosen to start with New Zealand's relations with the rest of the world.

The New Zealand economy is not self-contained. In particular, the level and pattern of consumption which we desire is set by what we observe in rich countries overseas. We then need imports, especially of materials for local industries, to support that consumption and we need foreign exchange to finance those imports. Our exports earn foreign exchange and a shortfall between earnings and requirements can be met by direct foreign investment or by external borrowing.

There are strong links between what happens in New Zealand and in the rest of the world. Even though there has been a significant widening in the range of goods and services we export, the international markets, for meat, wool and dairy products remain important. Despite the substantial diversification of our export markets, the total value of our exports remains dependent on the course of incomes overseas and on the readiness of other countries to admit our products to their markets. Import prices, especially for critical products such as oil, are outside domestic control and affect our real incomes both directly and through our institutions for fixing prices, wages and salaries.

It would, however, be wrong to see the problem of obtaining adequate foreign exchange as distinct from our management of the domestic economy. External problems require adjustment of local activities. It is clear that export assistance and import protection have not solved New Zealand's problems in the past and there is no reason to suppose they will do so now. That does not mean, however, that world conditions must be meekly accepted; rather, it means the problem of adjustment must be seen as one embracing the whole field of the efficient use of resources. The Monitoring Group here focuses on the foreign exchange constraint in order to see the size of the problem involved, and to lead into discussion of the extent to which our own institutions have coped with challenges posed. Questions of policy choice are reserved for later treatment in the light of internal adjustment questions.

In order to describe the terms used in this report, Table 1 shows the main elements making up the balance of payments in 1981/82.

Table 1:	Balance of Payments 1981/82		
	\$million		
	Credit	Debit	Balance
<b>CURRENT ACCOUNT</b>			
Exports/imports goods	6621.0	6649.2	
Exports/imports services	1518.8	2430.5	
Internat. invest. income			
- priv. direct invest.	127.0	349.8	
- other priv.	98.8	232.8	
- govt. and official	342.9	294.4	
Balance on Current Account			-1650.1
<b>CAPITAL ACCOUNT</b>			
Direct investment	374.2	116.1	
Private long term capital			
- borrowing	519.4		
- repayment		352.6	
- asset reduction	138.7		
- asset increase		112.8	
Government corporations			
- borrowing	297.5		
- repayment		144.1	
- asset reduction	1.7		
- asset increase		-	
Government & Monetary institutions*			
- borrowing	45.5		
- repayment		67.1	
- asset reduction	2.1		
- asset increase		6.6	
Residual (incl. short term** pr. capital movements plus errors & omissions)	-205.4		
Balance before Compensatory financing			-1275.7
Compensatory financing***			
- borrowing	2807.8		
- repayment		1474.7	
Balance after Compensatory**** Financing			57.4

\* excluding compensatory financing (mainly equipment credits).

\*\* net credits and debits.

\*\*\* defined as capital transactions undertaken by government and central bank for purposes of maintaining level of reserves.

\*\*\*\* means that total official overseas reserves increased by \$m57.4 due to transactions. They were in fact estimated to increase by \$m84.2, the remaining \$m26.8 being the estimated effect of currency valuation changes.

Source: Department of Statistics

## New Zealand's Balance of Payments History

Chart 1 summarises the history of New Zealand's balance of payments since the 1950s. Values are represented as percentages of GDP to emphasise the relativities with overall economic activity. Current account items are depicted as imports and exports of goods, imports and exports of services, and investment income flows. The latter are worthy of separate observation in the context of our present discussion because they are directly linked to past capital flows - interest on overseas debt, profits earned on international investment, and so on. The remaining items are capital flows, chosen because they are an integral part of economic activity or the result of past choices, rather than at the current direct discretion of government. They might be regarded as autonomous or committed transactions. Thus all private capital movements are included, plus government debt repayment. The only major capital flow excluded from the chart, therefore, is government borrowing. Data is averaged for five-year periods to emphasise medium-term trends. This treatment of balance of payments information gives a more useful concept for assessing government's policy options than the narrower focus of the current account.

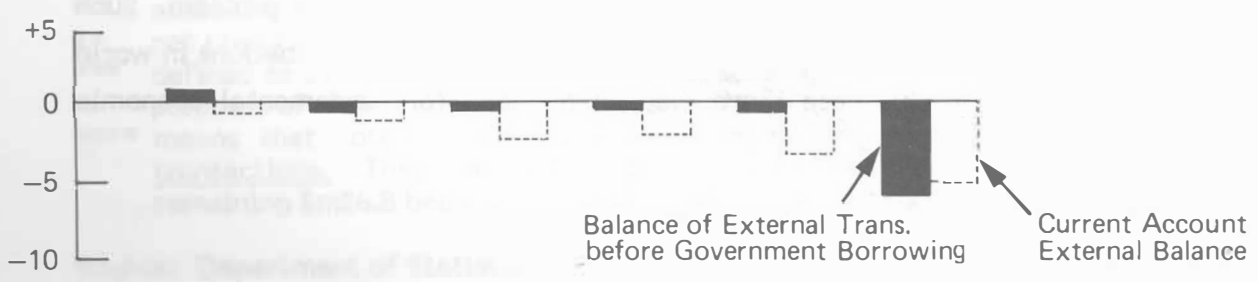
Although there has been steady emergence of the current account deficit as a proportion of GDP throughout the period, this has, until quite recently, been adequately compensated by private capital movements. It is only since the mid-seventies that substantial government borrowing has been carried out on a sustained basis. Before then government tended to borrow during periods of sudden downturn in export prices and was able to bring the economy back into balance within a short period. A second point is that over the last decade government debt repayment has emerged as a significant capital outflow. The two points are of course related. A more detailed analysis of the overseas debt position is contained in Chapter 3.

### Policy Choices

The policy options open to government in the face of disequilibrium in the external accounts and the consequences of these depend on the nature of the problem. Such situations may be temporary, caused, for example, by cyclical fluctuations in world commodity prices. In this case there may be no need for fundamental economic

CHART 1

ITEMS OF EXTERNAL ACCOUNT IN RELATION TO GDP



adjustment (unless the fluctuations themselves are considered undesirable)<sup>1</sup> and the policy response appropriate is rather different from the requirements of a more persistent foreign exchange shortage. One of the difficulties is that it is not easy to judge the scale of the problem as it develops.

Whatever its fundamental cause, any foreign exchange shortage will initially be seen as a rundown of foreign currency reserves held by financial institutions. Because these reserves are finite, sustained pressure on them forces policy decisions on the central government and/or monetary authorities. In very crude terms there are two kinds of reaction the authorities can take. One is to engage in official overseas borrowing so that there is sufficient foreign currency available in the exchange system to meet the demands on it through import demand and capital outflow. The second is to take steps to lower the demand for foreign currency which in the short term usually means some form of overall deflation. As a long-term solution neither of these approaches is satisfactory, and policy debate centres on so-called "expenditure switching" aimed at permanently increasing export income or permanently reducing import payments. These may be exchange rate policies, direct controls, or various kinds of selective measures aimed at altering the pattern of resource allocation.

The need to adjust to external imbalance cannot be considered without understanding the nature of private currency transfers arising out of borrowing and lending activities, especially those which are long-term in nature. Short-term capital flows are important also, but by their very nature may be subject to cyclical factors, and what is seen as a large capital inflow at one time may very soon afterwards become a large capital outflow.

It probably does not need to be said that a situation of substantial official borrowing in the face of persisting net foreign exchange deficits is not acceptable on a long-term basis. The decision to borrow obviously presents an opportunity to avoid immediate economic retrenchment, but if the causes of the imbalance are anything other than temporary, the government should feel obliged to accompany borrowing with policies supporting fundamental economic change. There is not much

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1 This qualification is not trivial. New Zealand has been particularly vulnerable to external cyclical fluctuations. The economic policy which has been followed has been heavily influenced by a desire to neutralise the effects of these fluctuations.

doubt that the process of change would entail considerable economic pain, although some courses may be more severe than others. In practice, governments have always seen fit to influence the outcome.

Ultimately the external constraint occurs when a country becomes insolvent. That is, it has exhausted its overseas reserves and cannot raise any further loans to make payments for imports or to service previously contracted debt. That extreme position is never reached because governments or lenders take evasive action before the situation degenerates to that extent. In recent years a number of developing countries have reached the brink of insolvency - either lenders and international agencies have come to the rescue, or the government of the country concerned has itself stepped back from the edge. It is perhaps pertinent to add that when things get anywhere near the point of no return, the internal consequences of any such "stepping back" are likely to be very severe indeed.

Clearly New Zealand has not, at least in recent years, been anywhere near the brink of insolvency. New Zealand governments have adopted a cautious approach with regard to the balance of payments and have sought to run the economy at a pace which could be sustained with modest overseas borrowing. Government action has mostly taken the form of deflationary monetary and fiscal measures, and more occasionally, devaluation of the currency. Such contractionary measures have been experienced at regular intervals - late 1950s, early 1960s, late 1960s, middle 1970s, early 1980s - and indicate that the problem is a continuing concern. Clearly in the Government's perception the balance of payments has continually intervened as a constraint on economic growth.

In times of widening current account deficits the Government has also expanded its borrowing to cover the gap. Had it been prepared to do so on sufficient scale, technically there would have been no reason to deflate the economy. The real constraint has not been that insufficient foreign currency could not be obtained but that it has been considered prudent to limit external borrowing. Other policies of export assistance and import substitution have also been followed but it is apparent they have not been enough. In the 1980s it seems we have an economy dependent on large official overseas borrowing. But even with borrowing, full employment has not been sustained.

The future is uncertain and the Monitoring Group has not attempted any forecast of future world conditions. However, the future is very much conditioned by the



position the economy is now in, especially because of the borrowing. Nevertheless, the Monitoring Group is not aware of any recent analysis of New Zealand's medium-term prospects predicting a situation in which economic growth and full employment are likely to be combined with external deficit positions that would enable the Government to end its borrowing programme. Two recent examples of comprehensive forecasts of the economy can be found in Gallacher & Bowie (1983) and Hayward et al (1983)<sup>1</sup>.

Before proceeding we wish to deal briefly with two theoretical issues which are the subject of some controversy amongst economic commentators. (The reader who wishes to follow the main thrust of our discussion may go direct to Chapter 2.)

#### (1) The Monetary Approach to the Balance of Payments

Recent theoretical developments have put considerable emphasis on the balance of payments as a monetary phenomenon. This approach equates the supply of money with the sum of the domestic assets of the banking system and the net accumulated reserves from overseas. The demand for money is broadly determined by expenditure plans throughout the economy (largely the result of current income and interest rates but affected by other factors coming under a general heading of "expectations"). The theory suggests any disequilibrium between the supply and demand for money internally will be reflected precisely in the balance of payments. Because this view is so beguiling in its simplicity but so misunderstood in its practical and policy implications, the extremely limited and exceptional circumstances in which the view has relevance should be outlined.

If the resources of the economy were fully employed, inflation absent, and the external accounts in balance at the given fixed exchange rate, a domestically generated increase in the supply of money (i.e. for any reason except an increase in either export receipts or capital inflow) would result in some combination of:

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1 Gallacher J and Bowie Robt. D., Medium Term Review 1983, New Zealand Institute of Economic Research, 1983, and,

Haywood E., Rose D., Stroombergen A., Towards 1990: Patterns of National and Sectoral Development, New Zealand Planning Council, to be published.

(i) a rise in the price level (reducing the real value of the increased money supply), and,

(ii) an external deficit (neutralising the increased money supply).

If, in addition, the domestic price level were pegged by competition to the world price level (which remained unchanged), and domestic interest rates were pegged by competition and free capital flows to world interest rates (which remained unchanged), we would indeed have the pure monetarist world in which the excess supply of money produced its exact equivalent in the balance of payments. In this special world the only things which people can exchange for their excess (unwanted) New Zealand dollars are foreign goods and services or foreign assets. That is, the increase in the money supply is translated into a balance of payments outflow, which in turn reduces the money supply and the system self adjusts.

Let us now consider an economy like that of New Zealand today in which resources are not fully employed. The analysis of the effects of an excess supply of money cannot be traced out with the same simple logic as in the case of a fully employed economy. However, a likely scenario may be painted to give the broad outlines. Let us assume the Government finances its deficit in such a way that an increase in the money supply results. The initial effect of an excess supply of money will be a fall in interest rates and a rise in asset prices as demand for assets (such as land and houses) rises. The extent to which these interest rate and asset price effects will influence consumption and new investment decisions of firms and householders will depend on the prevailing state of expectations. This in turn will depend partly upon the origins of the excess supply of money, i.e. an increase in government expenditure would have a different effect from a strong recovery in export prices.

If domestic activity does respond to the stimulus of lower interest rates and higher asset prices there will inevitably be an increased demand for imports. This would follow any increases in domestic spending and output, and is not dependent on an excess supply of money. Money supply may rise to accommodate but this is not the same thing as saying the rise in the external deficit associated with the rise in imports has been caused by the increase in the money supply. A lower level of domestic interest rates and higher asset prices would, however, in conditions of a free international capital market, lead to an outflow of capital from New Zealand (again, contingent upon the state of expectations). This is a result monetarists would expect.

Our conclusion is that the supply of money is an important instrument affecting and affected by the general state of the economy, including the balance of payments. However, the concentration of attention upon it, as the only or main factor affecting the balance of payments, is quite unjustified. Nevertheless, the monetary approach provides valuable insights into balance of payments problems, particularly through its recognition of the part the capital account plays in the overall balance of payments.

## (2) Floating Exchange Rates

Another recurring debate attending balance of payments adjustment issues is whether fixed or floating exchange rates serve the purpose better. New Zealand has not in recent times attempted a floating (i.e. market determined) rate although more than one formula for fixing has been used. However, since the breakdown of the "Bretton Woods system" of fixed parities which dominated the 1950s and most of the 1960s, most of the major industrial economies have operated flexible exchange rates (although central bank intervention is such that few can claim to have genuinely floated).

Prior to the breakdown of fixed exchange rates it was thought that the introduction of flexible rates would free countries from the balance of payments constraint and enable them to both benefit from trading links with the rest of the world and have independence in national economic policy. The last ten years have not borne that out. The balance of payments has continued to be a constraint and far from reinforcing national independence, flexible exchange rates have strengthened interdependence through interest rate linkages.

With relatively free capital movements allowed between most developed countries, differentials between comparable interest rates, coupled with expectations about exchange rates can lead to substantial capital flows as investors seek to maximise their returns. An expansion of the government deficit in one country, for example, tends to have an upward impact on interest rates if the government operates in internal capital markets to finance the deficit. Should interest rates rise enough, the capital markets may become sufficiently attractive to cause a substantial capital inflow from other countries. In New Zealand's case this is usually a change in the timing or level of offshore borrowing initiated internally, rather than active attempts by overseas wealth-holders to place funds in New Zealand. Over recent

years overseas capital flows have become a greater part of the New Zealand business environment, but to only a limited extent could New Zealand be regarded as integrated with international capital markets. In a situation of floating exchange rates capital inflows can lead to an appreciation of the exchange rate which would be detrimental to the competitiveness of exports from that country. On the other hand, countries which face capital outflow will face depreciating exchange rates and inflationary pressures. One response to that situation in major capital markets is to raise institutional interest rates in an attempt to attract capital which would stabilise the exchange rate.

Thus a rise in interest rates in one major country could fairly quickly be transmitted to other countries, either in the form of higher interest rates as these others seek to protect their exchange rates, or in the form of a depreciating exchange rate. The converse is true if one country has a sharp fall in interest rates. These capital flow transmissions are as a general rule much more quickly activated than the mechanisms applying to markets for goods and services. The latter require lead time, sometimes large, for production and supply responses, whereas substantial capital flows can, and do, occur over a period of a few hours.

The practicality of freely floating exchange rates remains disputable, especially in small open economies. Exchange rate changes would be determined at least in part by the expectations of operators in the foreign exchange market whose judgement might be mistaken. The seasonality of New Zealand's external trade and hence of foreign exchange inflows and outflows increases the possibility of error. Speculative transactions in the foreign exchange market would be guided not by views on the right exchange rate but by guesses as to the views of other operators and could be destabilising. There are grounds for believing operators would eventually recognise the foreign exchange market is interrelated with other markets and that the exchange rate would then follow a smooth adjustment path according to changes in real economic variables, but the learning process could take a long time and be required repeatedly as the economic environment changed. Furthermore, the Government may have objectives which differ from those of buyers and sellers of foreign currency, especially in the area of income distribution, . The temptation to intervene in the foreign exchange market where the Government is likely to be a large participant anyway would be difficult to resist.

These matters are complex, and at this stage there is no clear conclusion on whether New Zealand could cope with a free exchange rate.<sup>1</sup>

We conclude therefore that neither monetarist theory nor free exchange rates constitute an adequate answer to the suggestion that the New Zealand economy operates within a foreign exchange constraint. This report is therefore devoted to examining the nature and severity of such a constraint.

\* \* \* \* \*

In this report we examine the main components of the balance of payments to assess what kind of adjustments might be expected to occur within the existing framework. We begin with the current account, and in Chapter 2 examine the overall characteristics of export and import trade. This provides a framework within which the ability of these sectors to respond in directions which would restore external balance is assessable. We then turn to the capital account, reviewing the nature of direct investment inflows in Chapter 3, and of other borrowing in Chapter 4. In Chapter 5 we draw the threads of the argument together to reach some preliminary conclusions, but the full implications of these will be a continuing aspect of the Economic Monitoring Group's work.

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1 For further discussion of different exchange rate systems, see Deane R.S., Reflection on Exchange Rate Policy, Reserve Bank of New Zealand, Discussion Paper G81/83, June 1981.

## ANALYSIS OF NEW ZEALAND'S TRADE

## Exports

Historically New Zealand found itself on a growth path based on pastoral production. In the nineteenth century industrially powerful Britain required food imports, and the scope for developing specialised primary industries which provided basic foods for this one market was vast. Britain was undergoing enormous social change which probably served only to emphasise its potential as a mass consumer market once refrigeration opened the gate. Add to this the raw fibre requirements of the British woollen industry - suppliers of textiles to the world - and the foundations were laid for what have remained to this day New Zealand's export "big three" of meat, wool and dairy products. The investments in these industries are so massive and fundamental to the nation's economic structure that they defy accounting appraisal. The path has been not without its trials and periods of doubt. At times world recession has affected progress deeply, but it has nevertheless underpinned one of the highest living standards in the world. But the modern world is a vastly different one from the late nineteenth and early twentieth centuries when this trading pattern took root. More relevantly, in terms of practical current concerns, there is little similarity to the world of the 1950s in which the elements of the structure formed in the nineteenth century were substantially intact. It is possible that, had it not been for the exigencies of world war, the essence of interdependence between primary supplier and its market might have come into question sooner, but this is no more than idle conjecture now. It is timely to reassess the relative contributions of export industries in the light of the very different market conditions around the world.

The record indicates that exporting has undergone major change, both in terms of the product mix and in terms of the markets to which goods are destined. This is not the place to chronicle in detail what has occurred, but the broad nature of it is worth laying out. In 1950 over 90 percent of export goods' earnings (i.e. excluding services or any capital flows) came from the three leading industries, whereas by 1980 this was slightly more than 60 percent. Of the three, meat has retained its relative position. Dairy products did so until the mid-sixties but slipped relative to

other exports in the 1970s. From being the largest single category in 1950<sup>1</sup>, wool declined to about 20 percent of the overall share. The more diverse mix of other export products was initially centred on forestry resources and increasing activity by manufacturers in overseas markets. More recently there has been rapid development of fishing and horticulture as export sectors (Table A6).

This account understates the degree of change - within the main product groupings there have been significant changes. The dairy sector for example found new markets and developed new products. Thus the shape of the dairy industry is very different from that at the end of the war when it was a bulk producer of butter and cheese for the British market. Meat has seen shifts of emphasis from mutton to beef and, although less marked than the dairy industry, changes in the form in which final products are delivered. More recently in the late 1970s and early 1980s there has been a shift back to lamb production following low returns from beef in the mid-seventies. Market diversification has also been a feature of the industry's activity. Quite clearly these changes are responses to the market position, and the primary processing and marketing wings of the industries have been successful at least in part in translating change through to the farm. To avoid the danger of overemphasising these events it is worth mentioning that, whatever diversification occurred, it continued to depend heavily on the sheep and the dairy cow, although beef cattle increased in importance. Changes in the breed composition and husbandry certainly took place, and some of this was probably a response to the changing market characteristics. From a national viewpoint, however, the emphasis on growth in livestock numbers as the central ingredient of an economic strategy did not alter very much.

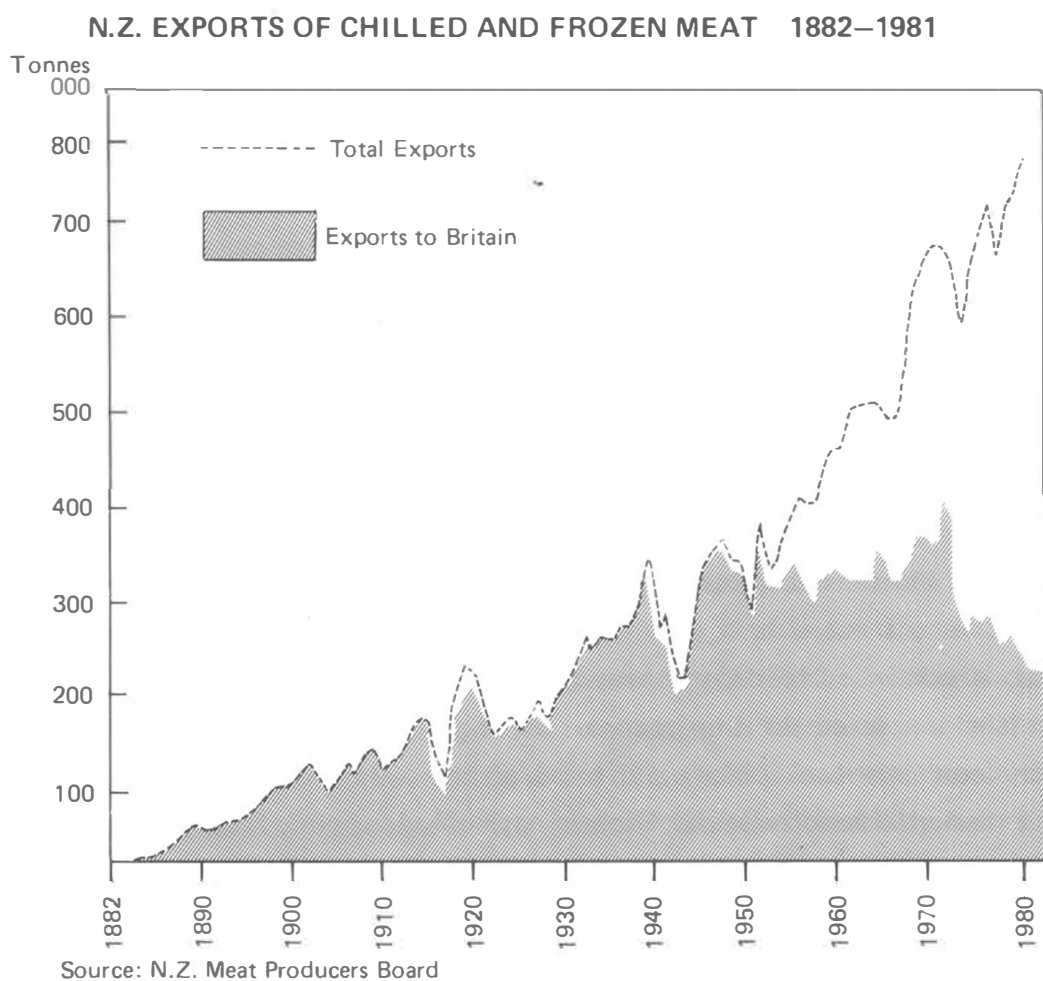
Likewise there has been a marked change in the destination of exports (Table A7). In 1950 two-thirds of export revenue was generated in Britain but by the 1980s the proportion was less than 15 percent. Table A7 shows a grouping depicted as "other" which rose from 11 to nearly 40 percent, indicating a genuine "internationalisation" of trade from New Zealand. The significance of this push into new markets is perhaps highlighted by Chart 2 which indicates dependence on the British market for meat was virtually total until the 1950s.

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1 The effect of the Korean War wool boom to some extent exaggerates the decline in the wool share as depicted in our tables. However the 1951 calendar year rather than 1950 was the period most affected by this temporary phenomenon.



CHART 2:



The process of diversification which ensued probably had several causes. The world entered a particularly expansive phase of growth in which post war reconstruction, rapid advances in communications and transport technology, and lowering of trade barriers all played a part. The British market changed: other countries developed woollen textile industries; the British demand for New Zealand's food products did

not expand as fast as incomes grew; the earlier policy of letting British agriculture compete with cheap imports had been replaced by a new desire to sustain British agriculture. In the 1970s, there appears to have been absolute as well as relative decline in the British market. Britain's membership of the European Economic Community is very pointedly a factor in this, but in all probability it has little more than hastened what was a much deeper process of change. New Zealand's new markets for traditional products, as well as markets for new products, are very much in the developed industrial countries - Japan, North America, Australia, and Western Europe - although the Eastern Bloc and the Middle East have become more significant recently. These external factors do much to explain the changes in the pattern of exporting. The emergent forestry, manufacturing, horticulture and fishing sectors have also emerged in part as a result of external factors.

Export of services is a rather neglected subject. However, this has been an increasing proportion of foreign exchange earnings. Little is really known about its economic characteristics. It is undoubtedly closely linked to tourism, and is therefore likely to be linked with growth in real disposable income in Pacific countries, including Australia, and the relative strength of exchange rates in these countries. The earnings of New Zealand service companies with branches or subsidiaries overseas are not counted in this statistic because they are part of investment income transfers (see Chapter 3). However, any remittances for professional services, transport, and so on, provided by organisations operating within New Zealand would be counted. Given that this sector now contributes approximately 20 percent of all current account receipts, compared with only about 5 percent in the 1950s, it warrants closer analysis than it has received.

Despite these changes in the composition and destination of exports, they do not appear to have grown in total fast enough to meet our needs for foreign exchange. The question we now address is whether there is something peculiar to our exports, and the markets in which they are sold, which inhibits growth.

In technical terms this amounts to an analysis of the relevant income and price elasticities of supply and demand.<sup>1</sup> If world income growth is static, there is little option but for us to live with it, and our trade expansion possibilities will be tempered by it. But if we are seeking to base our growth on products which the world has a low propensity to absorb - technically recognised as an income elasticity of demand less than one - diversification into new markets must necessarily proceed faster if we are to maintain our relative world position. The price elasticity of demand is slightly more complex to assess and depends on the relative role of the supplier and the market in determining prices. When the elasticity is low, markets will tend to be sensitive to oversupply, whatever level of consumption might be determined by income. The combination of a low price and income elasticity is therefore likely to constitute severe downward pressure on receipts of foreign exchange. But in the case of market undersupply prices are likely to be easier to sustain. If the price elasticity is high, markets will tend to absorb more (again within the limit imposed by the income elasticity) without severe price depression. But conversely, small increases in prices set by suppliers would probably result in major reduction in quantity taken up. Products with high price elasticities are believed to be those most likely to respond to promotion and product differentiation strategies, although there are no fixed rules on this.

Measurement of the relevant elasticities is an inexact business. There is a long tradition of econometric studies for the main agricultural commodities, but despite the care researchers take with measurement, they are useful more for the general feeling they provide about the nature of markets than precise enumeration of responses. A recent example of this type of work has been published by the Agricultural Economics Research Unit, Lincoln College.<sup>2</sup> This study illustrates very

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1 "Elasticity" is a technical statistical concept which expresses relative proportional change in two variables. Thus the income elasticity of demand refers to the percentage change in quantity demanded for each percentage change in total income. The price elasticity is the percentage change in quantity demanded for each percentage change in price. Because responses to prices are usually in the reverse direction to the source of change, price elasticities are generally negative. In the ensuing discussion this is assumed to be so, only the absolute value of the elasticity being referred to.

2 Blyth N., The World Sheepmeat Market: An Econometric Model Research Paper No. 138, AERU, Lincoln College, July 1983

clearly the nature of the limits of continuing to rely on this industry for growth. Continued increases in production by New Zealand run the risk of significantly depressing prices. It is customary to assume New Zealand production has little effect on world prices, and this thinking underlies much of the economic policy of the 1960s which concentrated on achieving increases in farm production. Even allowing for the possibility that the newer markets in the Middle East, Japan and Eastern Europe still offer scope for development, one simulation based on the model suggests a 10 percent increase in sheepmeat production from New Zealand would depress world prices by 4.4 percent. Similarly a recent appraisal of the wool marketing situation,<sup>1</sup> while it does not formally estimate elasticities, allows a similar conclusion that further increases in production with no change in processing would be likely to force down wool prices.

There is not very much which can be said with authority concerning the supply responses in the main export sectors. Policy-makers have accepted there is a link between farm incomes and production. The ability of livestock-based industries to change quickly is, of course, limited by biological considerations, and it is probably rational for farmers to be cautious about initiating change on the basis of what are, to them, uncertain market signals. Forestry industries are even more difficult to manage in terms of production responses to changing market signals, and any price elasticity of supply calculations in this sector are probably quite low. Other industries, especially in manufacturing, may be more able to adapt to market circumstances, but these are as yet a small section of the overall export effort and suffer from problems of small size, financial insecurity, weak technical resources, and more costly inputs than those of most direct international competitors.

Thus in terms of the type of products which dominate New Zealand's exports there are factors from both the demand and the supply aspects which tend to be unfavourable to the rate of growth of export earnings. The slow growth in New Zealand's exports in relation to other countries (see Table A15) has been a major contributing factor to the relatively slow growth in New Zealand's national income. Most other developed countries have had a considerably faster rate of growth of exports and national income over the last few decades.

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1 Schroder W.R., The Long Term Future for New Zealand Wool, Centre for Agricultural Policy Studies, Massey University, August 1983

A review of econometric work relating to the overall world income elasticity of demand for New Zealand's exports, which is what we are feeling for in the present discussion, has been made by O'Brien<sup>1</sup>. A range of estimates using a number of estimation methods suggests that the world income elasticity of demand for New Zealand's exports is almost certainly significantly less than unity. The most recent estimates carried out by the Reserve Bank indicate an elasticity of around 0.6. That is, for each 10 percent increase in world GNP New Zealand's overall exports would expand by only 6 percent, other things being equal. Despite the uncertainty of any such estimate it is difficult to avoid the conclusion that with its current export mix, New Zealand is not well placed to take advantage of growth in the world economy.

This is not to say agriculture has no role in New Zealand's future or that present agricultural effort should be reduced. Rather we are saying that over the next few years it would be inappropriate to seek to meet our balance of payments difficulties through a deliberate expansion of the pastoral sector. It is conceivable that, over the longer run, product and market development may substantially enhance agriculture's contribution to national development but it is unlikely sufficient progress will be made over say the next five years to change the situation outlined above. A report on agricultural strategy to be published next year by the Planning Council will address some of these longer-term issues.

### Imports

The demand for imports is very largely a measure of New Zealand's aspirations regarding living standards. Quite bluntly, it is why the nation bothers to export. As the economy has developed, the tendency has been for imports of goods to be required in less than finished form. Local industries arose (with considerable policy assistance through tariffs and import control) but whatever they produced, or whatever methods were used, imports were required in one form or another. The flow of imports and its composition is, therefore, an integral part of the production and employment structure which provides incomes.

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1 O'Brien M.B., The External Sector and the Economy: A Review of the Econometric Evidence, Reserve Bank of New Zealand, Discussion Paper G81/3, May 1981

Despite the slowing of economic growth in the 1970s there was a very rapid expansion in the value of imports into New Zealand. Between 1960 and 1970 imports grew by 86.5 percent in nominal terms but between 1970 and 1980 the value of imports increased by 409.3 percent. The dominating reason for this enormous growth in import payments over the last decade was the rise in prices of imports. During the 1960s import prices grew by 28.6 percent. However during the 1970s import prices, reflecting the surge in international inflation, increased by 281 percent. It might perhaps have been expected that such increases in import costs would have hastened any tendencies towards import replacement, but the nature of the economy is such that in the short term all that can be achieved is either a reduction in real incomes, or a growth in the current account deficit with the import price increases being built into inflation.

There has been a dramatic shift in the source of New Zealand's imports over the last 30 years (Table A9). In 1950, 61 percent of imports originated in the United Kingdom, whereas 30 years later this proportion was down to 14.4 percent. Australia is now the largest supplier of imports - about one-fifth, with Japan, the United Kingdom and the United States each supplying 12 to 15 percent. The increase in the "other" category to about one-third of total imports reflects a wide distribution of import sources. These changes may have more to do with relative economic developments within the various countries than with changes within New Zealand. The emergence of Japan, for example, as a supplier of mass-produced, high quality goods such as motor vehicles and electronic equipment, is undoubtedly at the heart of its rising share of New Zealand's imports. Australia has experienced strong economic growth and a marked diversification of its economy since the 1950s, so bearing in mind its geographical proximity it is not surprising that its share of the New Zealand market rose substantially. A very important aspect of New Zealand's import demand is that most forms of investment require imports because of the import content of capital equipment.

Data relating to the commodity composition of imports provide few clues as to the nature of New Zealand's import demand (Table A10). There are increases in the proportion of petroleum products, which reflect the enormous price increases during the 1970s. The chemicals group has trebled its share to reach 10.1 percent in 1980, and the transport equipment group has doubled its share to reach 15.1 percent. The main reductions are textiles and "other". Import statistics

classified by broad categories of end use (i.e. finished consumer goods, capital goods, components, raw materials, etc.) show very little change over the last decade (Table A11). Statistics from input-output tables also show very little change in the ratios of imports to gross outputs in most sectors of the economy, excluding the effect of increases in petroleum costs (Table A13).

Imports have been subjected to a large amount of policy control throughout the period we are looking at. In view of this it is surprising there is not a greater body of research dealing with its composition and relationships with the internal economy. Most of the research relating to imports has looked at total imports as related to aggregate demand. In a review of the econometric work done on New Zealand's income elasticity of demand for imports, O'Brien shows that the long-run elasticity in relation to income is probably a little over unity. That is, for each 1 percent increase in national income, imports will increase by a bit more than 1 percent. O'Brien suggests this elasticity may not be stable, i.e. it may vary with the economic cycle, rising as the pace of economic activity quickens and falling as the rate of growth declines. Most recent Reserve Bank estimates, covering the period from 1961-77, give an estimate for the elasticity of 1.174. Other recent studies confirm a figure of about this magnitude. It is possible that the import elasticity has been rising as a result of increasing industrialisation of the economy. The evidence from input-output statistics seems to indicate rising import ratios in many sectors. If this is the case, the foreign exchange constraint is likely to be more inhibiting if export growth does not rise accordingly.

The elasticity in fact appears to be low on international comparison. Data prepared by Keen, Houthakker and Magee, covering the period 1953-76, shows that most other developed countries have higher elasticities than New Zealand. In Table A15 only Australia and South Africa have a lower income elasticity of demand for imports. Despite this, all previous experience with the New Zealand economy is that, in the absence of either controls or aggregate demand constraints, the economy would absorb more imports proportionately than the increase in income.

### **Growth Limits**

In the long run, a country's GNP growth cannot be inconsistent with balance of payments equilibrium on current account. Economists such as A.P. Thirlwall develop the concept of the maximum rate of growth of GNP that is consistent with balance of payments equilibrium.



Thirlwall derives from his export and import relationships the concept that the balance of payments equilibrium growth rate equals the rate of growth of exports divided by the income elasticity of demand for imports. In testing this equation he demonstrates that for most developed countries, the actual rate of growth over a 20-year period has approximated to this equilibrium rate. The main exception is Japan where actual growth performance has fallen short of the equilibrium rate. As would be expected this has resulted in substantial current account surpluses being accumulated by Japan.

This leads Thirlwall to suggest the above "might almost be stated as a fundamental law that except where the balance of payments equilibrium growth exceeds the maximum feasible capacity growth rate, the rate of growth of a country will approximate the ratio of its rate of growth of exports and its income elasticity of demand for imports"<sup>1</sup>.

This suggests the main way to raise growth performance, particularly when there is surplus domestic economic capacity, is to raise the rate of growth of exports and thereby relax the balance of payments constraint. If demand can be raised to the level that can be satisfied from existing capacity without balance of payments difficulties, the pressure of demand may well lead to an increase in the capacity growth rate. This could happen through further investment (which may carry with it enhanced technology and greater productivity) and through higher participation in the labour market.

New Zealand's average annual growth in exports was 3.93 percent between 1960/61 and 1977/78. This period has been chosen to be consistent with the work done by the Reserve Bank on the income elasticity of demand for imports. Using Thirlwall's equation and the Reserve Bank estimate of income elasticity of demand for imports of 1.174, the balance of payments equilibrium growth rate for New Zealand is  $3.93/1.174$ , or 3.35 percent. Over the period in question New Zealand's average growth rate was about 3.2 percent which is consistent with Thirlwall's thesis that the rate of growth is constrained by the balance of payments.

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1 Thirlwall A.P., Balance of Payments Theory and the United Kingdom Experience, MacMillan, London, 1980

Given that New Zealand's income elasticity of demand for imports is not high by international standards a key factor in our slow growth performance is the much slower growth in exports than achieved by other developed countries. There has in fact been very little growth in real gross domestic product over nearly a decade. One reason for this slow growth relates to our particular mix of export products. The central fact is that unless the New Zealand economy is able to achieve a larger sustainable export income, its growth will remain unacceptably low.

FOREIGN DIRECT INVESTMENT IN NEW ZEALAND

It is apparent that one of the regular forms of foreign exchange receipts for the New Zealand economy through the capital account is direct investment by foreigners in New Zealand. This term is applied to financial transactions involving the purchase or creation of assets. Inward transfers entail increases in ownership by individuals or companies resident in other countries. Outward transfers, which historically are much less significant, relate to the ownership of business assets in foreign economies by New Zealand residents. Direct investment, which is in effect capital importing in the country where the investment occurs, should not be confused with imports of capital goods. The latter refers to the physical import of plant, machinery or other items of equipment which add to the stock of capital, by either residents or non-residents.

Direct investment is a controversial subject not least in New Zealand. The weight of much accepted theory is essentially "internationalist", arguing that a minimum of restriction enhances effective development by quickly linking investment opportunities with the best available technology, and taking advantage of established structures, organisation and skill. The transfer of technology is the most commonly advanced benefit attributed to foreign investment, but in small economies the limitations of the domestic capital market to finance new investment are also regarded as important. This latter justification is even said to apply in the case of a foreign takeover of an existing concern because that will release investment funds more than probably locked in a situation of low profitability or otherwise unsatisfactory economic performance, which can then back more competitive activities. Whether this is so or not depends on the internal economy, on its preference for investment as opposed to consumption, and on its ability to allocate investment in the most socially profitable ways. In terms of any foreign exchange constraint on growth or employment in the New Zealand economy this is a satisfactory event because there is a net foreign exchange inflow from this type of activity. The activities themselves may generate more imports than exports, but this would be a characteristic of the economy as a whole rather than of enterprise supported by foreign investment in particular.

But this argument is by no means universally accepted. It is a fact that most countries have a "policy" relating to inward direct investment, and it almost always

leans in a restrictive direction. Concern about overseas ownership often centres on political and nationalistic issues rather than strictly economic ones. Arguments relate to loss of control over key decision-making. Particularly sensitive areas tend to be operations involving the ownership or exploitation of natural resources, and in industries which are seen as being in some sense "strategic", such as communications and transportation. An interesting aside to the bogey of foreign control is that in countries which export capital there tend to be arguments opposing such capital outflow, usually asserting that employment and development opportunities are being foregone as a result. In the United States, for example, which customarily has excess savings, most of the writing in this field addresses the pros and cons of permitting capital outflow.

The most obvious specific "cost" to the host country is in the form of profits remitted to the foreign shareholders, the remittance being a use of foreign exchange. Offsetting this however, is the original capital inflow and possible foreign exchange earnings for exports. More substantive problems concern possible restrictions or manipulations applied by the parent for the sake of global objectives not necessarily optimal to the host country. Limitations on the exporting of output, usually to protect market shares of the foreign owner's investments elsewhere, are a common form of this. The practice of transfer pricing, whereby the subsidiary or branch will purchase inputs or other goods from the parent at higher than market prices, is another possibility. To some extent such practices might take place because a parent can be expected to use what economic power it has to ensure a reasonable return on its existing investments even though market conditions might have altered. Different taxation rules and rates would be another motivating factor. Whatever form such distortions take, practical considerations suggest they should be taken seriously whenever the foreign-owned enterprise is protected in any way.

The broad pattern of foreign investment in New Zealand is summarised in the appended statistical tables. In the post-1945 period there is little sign of major variations in the amount of inward direct investment as a proportion of total economic activity. The proportion of overseas investment to gross capital formation has averaged approximately 10 percent, although it is higher in some years than others.

The net earnings of foreign-owned enterprises show little overall change in proportion to economic aggregates. For example, net earnings as a proportion of

company income exhibits no long-term change. (Because of the change in the national accounting system there is no equivalent test of this since 1977/78.) There does appear to be a steady increase in the proportion of earnings which are not distributed (i.e. retained within the foreign-owned enterprise).

Again there are a number of statistical reservations which should be made. Firstly, distributed profits are not necessarily remitted abroad, so that undistributed profit is an underestimate of income which, in one way or another, remains in New Zealand. Statistics of remitted dividends or branch profits have not been published since 1961, so no recent estimate is available. In the ten years prior to 1961, 88 percent of subsidiary dividends and only 52 percent of the net earnings of branches were remitted overseas. Secondly, the statistics available provide limited guidance as to what retained profits are used for. When retained within a company they may be used for capital expansion or other non-deductible development expenditure (if deductible for tax purposes, expenditures, say for research, would not be a part of earnings), or they may be used to widen its liquidity position. Non-remitted dividends could be due to New Zealand resident shareholders (foreign ownership is defined statistically as a minimum 25 percent level of effective overseas shareholding), or to decisions on the part of foreign shareholders to retain funds within New Zealand for any reason (e.g. exchange rate speculation, portfolio investment, purchases of shares).

The most obvious reason for any interest by foreign investors in the New Zealand economy is that it constitutes a market. Although the market is rather small and has a reputation of excessive regulation, the standard of living is high and the country is politically stable, hence opportunities arise to seek consumer and industrial products. Quite a complex set of possibilities needs to be considered to interpret why, in the manufacturing sector, the choice would be made to establish processing or assembly operations in New Zealand rather than to bring in and distribute finished or near to finished goods. In most service industries - banking, insurance, shipping, etc - the need for local operations is perhaps self-evident. In manufacturing several possibilities exist:

- (1) Purely technical considerations such as high per unit transport costs for products which in their finished state are bulky. This is essentially the distinction between tradeable and non-tradeable goods. Foreign interests with the available technology and organisations may find the New Zealand markets for non-tradeable goods attractive.

- (2) For some industries it may be quite misleading to regard the New Zealand market as small. For example, there are 70 million sheep. More than \$1 billion worth of meat carcasses is processed and transported per annum. And so on. A large number of manufacturing possibilities arise to service the requirements of the rural economy and primary product processing and distribution, e.g. the establishment of specialist chemical and farm machinery industries.
- (3) Restrictions exist on the import of many manufactured products through direct controls or tariffs. Regardless of the profitability of establishing domestic operations to manufacture branded or patented products in a free market situation, it may become profitable in a protected one.
- (4) New Zealand has natural resources which, if not unique, are relatively scarce. Based on these, foreign interests may find it attractive to establish enterprises. It is significant that the mining and quarrying sector registers the highest ratio of overseas ownership (79.4 percent of total shareholders' funds in 1979/90). Hydro-electricity has also been the focus of interest by smelting and extractive industries.

Although self-interest advocates the efficiency of unrestricted capital flows, in practice it is probably necessary to have at least minimal safeguards. Apart from emotive and nationalistic concerns, in a small economy it cannot be assumed that optimal behaviour by the investor is also optimal in the recipient country. Concerns arise due to the phenomenon of transfer pricing, and in the form of export restrictions placed on subsidiaries by parents. More detailed study would be needed to determine the relative importance of such issues. There is another, more obscure, kind of problem, associated with the existence of protection. This has been described by Rose (1975)<sup>1</sup> and hinges on an argument that protection, quite apart from any arguments that it may distort the pattern of investment, is a form of risk acceptance by society of individual enterprise. It would normally be assumed society would be more willing to accept that risk on behalf of internal investors than overseas ones. On balance, it is in the national interest to have in place a screening device so that foreign investment can be monitored, although a reasonably "liberal" stance is appropriate.

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1 Rose W.D., "New Zealand's Economic Objectives and the Role of Foreign Investment", included in Foreign Investment Policy in New Zealand, N.Z. Institute of Public Administration, ed. R.H. Carey, 1975

The question remains as to how New Zealand's attitude to foreign investment compares with other countries. The OECD has published a report<sup>1</sup> which makes such comparisons. Members are committed to the OECD Convention which states that member countries will "pursue their efforts to extend the liberalisation of capital movements", the spirit of which is embodied in legal form as the "Code of Liberalisation of Capital Movements". Canada, presumably because of the complexities of its relationship to the United States, does not adhere to the Code, and requires authorisation of virtually all foreign investment in terms of its Foreign Investment Review Act, although the criteria applied could well be less restrictive than the practices of other members within the Code. Members adhering to the Code may maintain "reservations or derogations" with respect to specific Articles within it, so that it is not clear whether the attitudes of various countries are in fact liberal or restrictive. Only two countries, Australia and New Zealand, maintain "full reservations" of a "general" nature under the code. This means authorisation procedures not specific to certain sectors are required, and the situation in practice is probably similar to the Canadian one. Four other countries maintain "limited reservations" of a general nature. Nevertheless, all but six members operate formal authorisation procedures which do not require a "reservation" in the legal sense, and it is difficult to compare the scope of screening according to a standardised norm. It would appear New Zealand's policy is towards the restrictive end of the spectrum, but whether this is really so depends on the nature of the criteria applied in the authorisation process. An examination of the rules which apply, plus the nature of their implementation through the Overseas Investment Commission, suggests the regime is reasonably liberal.

Practically all countries apply restrictions of a sector specific nature to foreign investment, and most appear to be concerned at the extent to which investors would seek to raise loans in domestic capital markets. New Zealand is no exception to this but inspection suggests its concerns are not severely restrictive by comparison. Publicly or part publicly owned monopolies in communications, broadcasting, transport and energy are the main areas in which overseas entry is heavily controlled. These sectors, plus banking and insurance, tend to be areas of control in a large number of other countries. Because of the general nature of surveillance in New Zealand it may not in practice be necessary to specify sectors to achieve effective restriction.

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1 Controls and Impediments Affecting Inward Direct Investment in OECD Member Countries, OECD, Paris, 1982



It is necessary to appreciate that the OECD study considers only whether the policies of individual countries discriminate against foreign investment. From an international investor's point of view, differences in domestic policies mean that in practice it is easier to invest in some countries than in others. Thus New Zealand, because of the predominance of internal licensing and regulation in domestic policy, may be seen as a relatively difficult country in which to invest, even though its foreign investment rules as such may be quite liberal.

Any judgement is inevitably subjective. It is probably correct to conclude that, despite the restrictions which exist, New Zealand's overall attitude to foreign investment is reasonably liberal. An unpublished study by K. Vautier of the Planning Council indicates, for example, that New Zealand's policy is less restrictive than Australia's.

Table 2  
Inward Direct Overseas Investment:  
International Comparison

	Dir Inv from Abroad (SDRs)			GNP (b SDRs)	Gross Inv (b SDRs)	Dir Inv ÷ GNP	Dir Inv ÷ Gr.Inv
	1979	1980	1981	1980	1980		
Australia	1308	1344	2108	105.4	26.6	1.5	6.0
Austria	145	183	247	47.1	13.6	.4	1.4
Belg/Lux	1143	878	1189	63.4	14.5	1.7	7.3
Canada**	1403	138	-2468	184.8	49.3	-.2	-.6
Denmark*	80	81	85	37.0	7.8	.2	1.1
Finland*	21	21	15	31.0	9.0	.1	.2
France*	1965	2544	2059	357.7	86.9	.6	2.5
W.Germany*	1260	900	1550	499.2	128.2	.2	1.0
Ireland	300	261	220	10.1	3.4	2.4	7.7
Italy*	279	449	958	216.6	47.3	.3	1.2
Japan*	190	220	160	862.0	276.8	.0	.1
Netherlands*	996	1215	1094	103.6	23.9	1.1	4.2
New Zealand	265	144	-	14.8	2.9	1.5	7.4
Norway	310	46	398	34.3	10.3	.7	2.4
Spain	1082	1147	1415	117.4	24.7	1.0	4.9
Sweden*	87	191		69.4	15.9	.2	.9
U.Kingdom*	3004	4611	1448	316.6	62.7	1.1	4.8
U.S.A.*	9180	10150	18210	2081.6	427.2	.6	2.9

\* - indicates net capital exporting country

\*\* - Although Canada appears as a capital exporting country this is due to the large disinvestment which took place in 1981. The more usual situation is for Canada to experience net capital inflow.

Source: International Finance Statistics, Balance of Payments Statistics, IMF

Table 2 estimates the ratio of direct investment from abroad to GNP in a number of countries. Of the countries experiencing net capital inflow Australia and New Zealand have among the highest ratios, which perhaps explains the degree of policy concern. Interestingly, Ireland has the highest ratio of the countries listed, and it is known to have a particularly liberal attitude to foreign investment - so liberal in fact that there is discrimination in favour of foreign investors through tax provisions and publicly-funded investment grants. However, this bias of policy does not show up in the OECD study because Ireland operates formal authorisation procedures and maintains specific controls in some sectors.

This review of overseas direct investment leads to a fairly neutral conclusion. There is little evidence that New Zealand's policy in this area is particularly unusual or restrictive by international comparison. On balance it is unlikely that foreign investment in recent years has changed the nature of the foreign exchange constraint, although it may have prevented it from being worse. In this respect, foreign investment, as a supplement to domestic savings, is similar to other investment. Our review has not looked at specific industries (fishing for example) where joint ventures may have been significant in adding to export growth. But as a general economic policy it would not appear that foreign investment is an especially fruitful area in which to seek easing of the foreign exchange constraint.

## Chapter 4

### BORROWING AND DEBT SERVICING

In Chapter 1 we addressed the question of whether the New Zealand economy has been constrained in the past by the balance of payments. We came to the conclusion that New Zealand had not been anywhere near the ultimate constraint, insolvency. However, successive New Zealand governments, while engaging in official borrowing to cover foreign exchange shortfalls, have also taken a cautious approach to mortgaging the future. In the face of large and increasing deficits on the current account of the balance of payments, governments have usually opted to take deflationary action as well as engage in overseas borrowing. This has inevitably reduced growth below what would otherwise have been achieved had there been no problem in the external accounts. There has been no indication, at least in recent years, that New Zealand could not have borrowed more to cover foreign exchange shortages and thus avoided the need for deflationary action. In this situation any foreign exchange constraint has assumed a political flavour rather than an actual foreign exchange constraint.

Given the concern historically felt in New Zealand about levels of external debt, the question naturally arises, "Has New Zealand borrowed too much overseas?" This is immediately followed by a second question, "How does one measure whether a country has borrowed too much?"

The answers to these questions depend on the purposes for which the borrowing was undertaken. If, for example, the borrowing was undertaken to finance an investment in productive capacity which would produce for export or import substitution sufficiently to finance the debt servicing, then there should be no concern about the level of borrowing. Similarly, if money is raised overseas to finance a project with a good rate of return, irrespective of whether it directly earns or saves overseas exchange, then the consequential enhancement of economic performance overall should enable such loans to be serviced without concern. In fact, in recent years while some of the Government's borrowing has been for investment in productive capacity (e.g. Electricity Division of the Ministry of Energy), the bulk of the borrowing has clearly been for stabilisation purposes - that is, to maintain domestic economic activity and employment in the short-term and to provide a breathing space to enable necessary structural changes to take place.

When borrowing for stabilisation purposes, the Government is not borrowing to cover its own deficit, even though the receipts from such borrowing are channelled through the public accounts after having been exchanged at the Reserve Bank for New Zealand dollars. The Government raises loans overseas essentially to cover the level of spending on overseas goods and services by all New Zealanders which is not covered by export earnings or other foreign exchange inflows. Without such borrowing, an excess of spending overseas beyond overseas earnings would lead to a run down of overseas reserves until they were exhausted. Overseas borrowing enables reserves to be maintained in the face of balance of payments deficits. By contrast, the Government's budget deficit reflects the shortfall in its own revenue in relation to expenditure. This is usually financed by way of domestic borrowing, not by borrowing overseas. While there is not a direct financing link between the external and fiscal deficits, there is an economic link between the two deficits over the longer term. Thus an expansion of the budget deficit will, over time, be reflected in a higher demand for imports and a larger external deficit which requires financing.

The answer to the question of whether a country has borrowed too much is not straightforward. Apart from the aspect of the purpose for which the funds were borrowed, mentioned above, the essential issue is whether the country concerned earns enough foreign exchange overall to meet interest and principal payments. It is therefore a matter of the real economic performance of the country as a whole, rather than a matter of raising revenue or creating credit domestically. Clearly a range of general economic factors needs to be considered in addition to those dealing specifically with borrowing and debt. In the following sections various measures of New Zealand's external position are considered. The data relating to official debt are set out in Table 3.

(a) Current account deficit as a proportion of GDP

This is a very broad measure of a country's dependence on foreign capital flows; the larger the proportion, the greater the dependence of the economy on being able to raise finance from overseas through either private or official channels. Over the last ten years the size of the current account deficit has fluctuated in relation to GDP. From a relatively high proportion of 13.6 percent in 1974/75, it fell to modest levels by the late 1970s, but has shown a significant upward movement over the two years to 1982/83. The low ebb of economic activity together with a lift in exports in the current year has led to a sharp reduction in the deficit.

TABLE 3

## OFFICIAL DEBT AND DEBT SERVICING IN NEW ZEALAND

	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83
1 Gross Domestic Product \$m (GDP)	6880	7932	9184	10028	11484	13792	15217	17541	20966	24127	28598	31625*
2 Current Account Receipts \$m (Exports)	1647.9	2096.1	2424.6	2306.3	2874.0	3968.6	4418.0	5004.6	6323.1	7370.3	8756.3	9731
3 Current Account Payments \$m (Imports)	1660.9	1934.8	2516.1	3670.7	3889.6	4794.1	5130.4	5473.8	6945.9	8193.1	10406.4	11770
4 Current Account Balance \$m	-13.0	+161.3	-91.5	-1364.4	-1015.6	-825.5	-717.4	-469.2	-623.8	-822.0	-1650.1	-2039
5 Overseas Reserves at 31 March \$m	629.9	917.2	778.5	542.1	684.8	720.6	983.6	803.9	783.6	746.5	836.2	1910
6 Total Official External Debt \$m	653.5	564.0	465.2	1018.2	1983.5	2563.3	3255.8	3676.4	4296.8	4809.0	6776.5	9251.6
7 Interest Payments on Official External Debt \$m	36.3	38.3	34.1	50.5	103.6	159.0	194.6	243.6	303.7	313.4	449.7	614.9
8 Principal Repayment on Official External Debt \$m	54.1	51.2	112.7	40.2	281.1	474.5	431.0	419.6	549.0	1168.4	1541.3	1776.5
9 Debt Service (7 + 8) \$m	90.4	89.5	146.8	90.7	384.7	533.5	625.6	663.2	852.7	1481.8	1991.0	2391.4
10 Current Account Balance/GDP (4/1) %	-0.2	+2.0	-1.0	-13.6	-8.8	-6.0	-4.7	-2.7	-3.0	-3.4	-5.8	-6.4
11 Debt Service/Exports (9/2) %	5.5	4.3	6.1	3.6	13.4	13.4	14.2	13.3	13.5	20.1	22.7	24.6
12 Debt Service/GDP (9/1) %	1.3	1.1	1.6	0.9	3.3	3.9	4.1	3.8	4.1	6.1	7.1	7.6
13 Official Interest/Exports (7/2) %	2.2	1.8	1.4	2.2	3.6	4.0	4.4	4.9	4.8	4.3	5.1	6.3
14 Official Interest/GDP (7/1) %	0.5	0.5	0.4	0.5	0.9	1.2	1.3	1.4	1.4	1.3	1.6	1.9
15 Total Official External Debt/Exports (6/2) %	39.7	26.9	19.2	46.9	69.0	64.6	73.7	73.5	68.0	65.2	77.4	95.1
16 Total Official External Debt/GDP (6/1) %	9.5	7.1	5.1	10.8	17.3	18.6	21.4	21.0	20.5	19.9	23.7	29.0
17 Overseas Reserves/Imports (5/3) %	37.9	47.4	30.9	14.8	17.6	15.0	19.2	14.7	11.3	9.1	8.0	16.2

Sources: Department of Statistics  
Reserve Bank  
Public Accounts

\*Estimate - New Zealand Institute of Economic Research.

(b) Debt servicing payments (interest and principal) as a proportion of current account earnings

This is perhaps the most commonly used ratio and indicates the proportion of a country's current earnings required to service debt. While this ratio covers both interest and principal payments, it is likely that in many cases principal repayments will be covered by new borrowings rather than out of current earnings. It does, however, indicate the extent to which adjustment would be required should an international crisis preclude the rolling over of debt. Furthermore, it indicates the size of the base load to be borrowed before finance is found to cover current deficits. A recent IMF publication<sup>1</sup> suggests a rule of thumb that when this ratio is below 10 percent it is acceptable but above 20 percent it is potentially dangerous. A rigid application of this rule would, of course, be inappropriate.

The ratio of official debt service to exports has had three phases over the last ten years. In the early 1970s this ratio was low ranging, between 4 percent and 6 percent. In 1975/76 it jumped from 3.9 percent to 13.4 percent and remained about that level until 1979/80. Since then it has climbed to 24.6% in 1982/83. This recent rise reflects a threefold rise in official debt servicing from \$852.7 million in 1979/80 to \$2391.4 million in 1982/83.

In addition to official debt, corporate debt - both private and quasi-government - needs to be brought into the picture. At 31 March 1983 private sector debt surveyed by the Reserve Bank totalled \$2,263 million. The Reserve Bank has estimated a further \$150 million which was outside of the survey and \$570 million which was borrowed overseas for investing overseas. While this latter category should not require significant servicing from New Zealand, there may be some outflow from New Zealand in the early years. Outstanding external loans incurred by the quasi-government sector add a

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1 "External Indebtedness of Developing Countries", IMF, Occasional Paper No.3, May 1981.

further \$2218 million to the total. Thus the total overseas debt at 31 March 1983 amounted to \$14,320 million of which \$570 million would require minimal servicing from New Zealand<sup>1</sup>. As historical data of the cost of non-official debt does not exist, precise servicing ratios shown in Table 3 cannot be calculated for the total external debt. Clearly, however, as total external debt is some 50 percent higher than official external debt, the servicing ratios will be significantly higher than those shown for official debt only - in percentage terms probably at least in the mid-thirties.

An alternative measure is to take debt servicing as a proportion of GDP rather than of exports. The proportions over the period are of course much lower, although they follow the same trend.

(c) Interest payments as a proportion of export earnings from goods and services

This ratio provides a measure of the "burden" of external debt - the cost of servicing the interest on borrowings in terms of imports foregone. The balancing factor is, of course, the additional imports which the original borrowing permits.

Interest payments on official debt have shown a steady rise throughout the 1970s from \$34 million in 1973/74 to \$615 million in 1982/83. As this rise in interest payments has been at a greater rate than export earnings, the ratio of interest payments to exports has also risen over this period. Over the second half of the 1970s this ratio varied between 3.5 percent and 4.8 percent but has jumped to 6.3 percent over the last two years. Inclusion of private and quasi-government debt would lead to a similarly higher ratio as indicated under (b) above.

Alternatively, interest payments can be considered as a ratio of GDP. Using this measure a similar but less marked upward move can be seen over recent years.

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1 See Survey of Overseas Borrowing by Private Sector, Reserve Bank Bulletin, September 1983. The figures shown here differ slightly from those shown in Table 4 for the reasons listed in the footnotes to Table 4.

(d) Official foreign debt as a ratio of export earnings

The previous paragraphs deal with measures of the cost of servicing external debt. This ratio deals with the relationship between the stock of debt and exports.

New Zealand's total official external debt (covering both government and Reserve Bank indebtedness, but not government corporation or private sector debt) rose steadily throughout the 1970s, but has jumped dramatically over the last two years. In fact in the two years 1980/81 - 1982/83 official overseas debt has practically doubled from \$4,809 million to \$9,252 million.

While the level of official overseas debt rose steadily throughout the 1970s this was not the case when expressed as a proportion of export earnings or of GDP. Between 1974/75 and 1977/78 official external debt doubled from 10.8 percent to 21.4 percent of GDP. Over the next three years the proportion declined slightly to 19.9 percent in 1980/81. It then increased sharply over the next two years to reach 29 percent in 1982/83. Expressed as a proportion of exports the pattern is similar not showing a great deal of variation in the late 1970s but rising from 65.2 percent in 1980/81 to 95 percent in 1982/83. Total external debt at 31 March 1983, at \$14,320 million, amounted to 45.3 percent of GDP and 147.2 percent of current account receipts in 1982/83.

(e) Reserves as a proportion of imports

This gives a measure of the immediate flexibility a country has in the event of a sharp and serious downturn in export earnings. The level of New Zealand's overseas reserves did not change significantly in the ten years to 1981/82, varying between \$542 million and \$984 million. As a proportion of the growing import bill this level of reserves showed a significant declining trend. At 31 March 1973 reserves were equivalent to nearly 50 percent of annual imports but this had reduced to 8 percent at 31 March 1982. That is, reserves amounted to about one month's imports at 31 March 1982. Overseas reserves rose sharply throughout 1982/83 to reach \$1,910 million by 31 March 1983, or 16.2 percent of 1982/83 imports, due, in large part, to a sudden private capital inflow. This is still less than the equivalent of two months' imports.



There are also lines of credit readily available to cover short-term emergencies. Provided the reserves are at a level sufficient to give reasonable security, there are advantages in minimising the level of surplus reserves. Consequently we do not regard measures based on reserves as particularly significant.

Most of these ratios seem to indicate a deterioration in New Zealand's position, particularly over the last few years. Gross official borrowings have risen by a factor of 3 since 1979/80, official debt servicing has also risen by a factor of 3 over the same period, and official overseas debt has doubled over the last two years.

These figures cannot be considered in isolation, but need to be read along with a range of other economic factors, among them:

- the dependence of the country on a small range of exports or markets
- the degree of variability of exports around the trend
- trends in export prices and volumes for major products
- the degree to which domestic demand can be adjusted to reduce imports without unacceptable effects on the domestic economy
- the historical and likely future pattern of macroeconomic management, particularly in relation to such matters as inflation. (External debt problems seem to have been concentrated in high inflation countries.)

The first three factors deal with the degree of exposure to the risks of fluctuations in export markets. The greater these risks, the more importance is assumed by the level and trend in debt and debt servicing.

New Zealand depends on a narrow range of exports which are subject to considerable price fluctuations. Among OECD countries, New Zealand has one of the highest concentrations of exports in a small range of commodities. In 1977 New Zealand had the third highest export concentration. Clearly the degree of concentration of New Zealand's exports is diminishing and will presumably continue to do so as non-traditional exports expand. This high degree of concentration of exports is associated with considerable price fluctuations in these export products. In comparison with other OECD countries New Zealand has had a high degree of export

price volatility but has faced even relatively more volatility in the movements of its terms of trade. Between 1961 and 1979 only Japan and Turkey faced more volatile terms of trade.

The high degree of concentration of exports and the volatility of New Zealand's export prices and, even more, terms of trade, increase the degree of exposure faced by the New Zealand economy to events in the international economy. Clearly this has implications for the way one views the risks associated with a comparatively high level of debt.

While this report will not comment on domestic economic management, clearly the recent substantial reduction in the rate of inflation, if it can be maintained, will make an important contribution to the restoration of a satisfactory external position.

#### Future Trends in Debt Servicing

At 31 March 1983 New Zealand's official external debt stood at \$9,251.6 million. Table 4 shows a profile of the interest and principal repayments of this debt into the future. This profile is not precise because assumptions have had to be made about the spread of repayments with debt involving non-specific repayment dates. In some loans variable interest rates are involved and assumptions have had to be made about these.

Table 4 assumes that as loans fall due they will be repaid out of current earnings. It is more likely, however, that new loans will be raised, effectively to enable the maturing loans to be renewed. Thus the interest profile into the future is likely to be greater than that shown in Table 4. The extent to which external debts are rolled over rather than repaid will add to the "bow-wave" of servicing in the future.

Table 4 also shows the profile of private sector and quasi-government external debt repayments. As no information is available on the interest payable on this debt, interest rates have been assumed for illustrative purposes, as shown in the footnote to the table. As interest and repayments are required to be made in overseas currencies, an exchange rate factor has been included from 1984/85 in an attempt to quantify additional payments which may be required as a result of depreciation of the New Zealand dollar. The average movements of the various currencies against

TABLE 4

## PROFILE OF SERVICING FOR EXISTING LEVEL OF NEW ZEALAND'S EXTERNAL DEBT

	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94+
<u>Government Loans</u>											
Principal	484.3	1060.5	1081.6	654.6	1485.3	1056.6	517.7	248.7	336.1	410.6	113.3
Interest	563.7	565.5	448.4	377.9	249.0	130.3	101.8	67.3	48.2	23.7	4.2
Sub-Total	1048.0	1626.0	1530.0	1032.5	1734.3	1186.9	619.5	316.0	384.3	434.3	117.5
<u>Government Equipment Credits</u>											
Principal	73.3	60.6	50.4	43.4	35.5	27.8	10.3	6.8	3.9	2.4	1.0
Interest	24.8	19.1	14.1	9.8	6.3	3.3	1.5	0.9	0.4	0.2	-
Sub-Total	98.1	79.7	64.5	53.2	41.8	31.1	11.8	7.7	4.3	2.6	1.0
<u>Reserve Bank</u>											
Principal	200.3	89.7	72.4	386.9	107.1	154.6	177.1	149.5	149.5		
Interest	129.2	119.5	114.0	98.8	65.8	51.0	39.0	22.4	7.5		
Sub-Total	329.5	209.2	186.4	485.7	172.9	205.6	216.0	171.9	157.0		
<u>Total Official</u>											
Principal	757.9	1210.8	1204.4	1084.9	1627.9	1239.0	705.1	405.0	489.5	413.0	114.3
Interest	717.7	704.1	576.5	486.5	321.1	184.6	142.3	90.6	56.1	25.9	4.2
Sub-Total	1475.6	1914.9	1780.9	1571.4	1949.0	1423.6	847.4	495.6	545.6	438.9	118.5
<u>Quasi-Government Organisation</u>											
Principal	130	241	368	182	289	155	163	134	127	163	191
Interest	194	179	150	125	103	84	68	54	41	26	10
Sub-Total	324	417	518	307	392	239	231	188	168	189	201
<u>Private Sector</u>											
Principal	373	151	354	230	303	232	187	137	130	42	125
Interest	201	187	153	124	100	73	51	36	22	14	6
Sub-Total	574	338	507	354	403	305	238	173	152	56	131
Possible Exchange Rate Factor	-	119.8	290.1	389.5	685.5	628.5	503.2	423.2	506.2	396.5	331.7
Total Possible Payment Profile	2373.6	2789.7	3096.0	2621.9	3429.5	2596.1	1819.6	1280.0	1371.8	1080.4	782.2

Footnote

(1) Information on interest rates on private and quasi-Government debt is not available. The following assumptions have been made:

Debt denominated in US dollars, pounds sterling, Australian dollars, NZ dollars	- 10 percent per annum
Debt denominated in Swiss francs, Deutchemarks	- 6 percent per annum
Debt denominated in Japanese yen	- 7 percent per annum
Debt denominated in other currencies	- 10 percent per annum

(2) Government debt has been converted to NZ dollars at the mid rates on 8 March 1983.

(3) Reserve Bank debt has been converted to NZ dollars at interdealer buy rates for 31 March 1983.

(4) Private and Quasi-Government debt has been converted to NZ dollars at indicative mid rates for 31 March 1983.

(5) Railways Corporation debt incurred prior to 1 April 1982 (i.e. while it was still a Government Department) is included under official debt rather than Quasi-Government debt.

the New Zealand dollar over the last five years have been assumed to continue into the future, with the exception of 1983/84. The extent of any exchange rate movement is, of course, highly uncertain. We consider it unlikely New Zealand's economic performance will improve to the extent that the value of existing overseas debt expressed in New Zealand dollars will be stabilised over the medium term. Consequently, an exchange rate factor needs to be built in. Each 1 percent variation in the average exchange rate movement from that assumed, will alter the figures by something within a range of \$10 million to \$30 million per annum. Adding together the servicing cost of official, private and quasi-government debt and the exchange rate factor, the servicing profile indicates that over the next six years external debt servicing on the present stock of debt will average nearly \$3,000 million per annum. Thereafter the servicing cost reduces considerably.

If New Zealand fails to achieve balance on current account, after taking into account direct foreign investment, additional sums will be required to be borrowed to cover the shortfall. Table 5 sets out three possible scenarios for the future financing of the external debt. Scenario 1 assumes that \$500 million is required to be borrowed each year to cover the annual current account deficit (excluding interest payments on existing debt included in Table 4) which is not covered by private capital inflow. (In this scenario a borrowing requirement of \$500 million is equivalent to an external current account deficit of \$1,500-\$2,000 million: about \$300 million coming from net direct private investment and \$700-\$1,200 million being interest payments on official debt brought in from Table 4 leaving a balance of around \$500 million.) Scenarios 2 and 3 assume that this sum is \$1,000 million and \$1,500 million respectively. No allowance has been made for the servicing costs of any additional private direct investment. On the assumptions made about the type of borrowing entered into, debt servicing outlays for the next several years are clearly already largely determined. The level of borrowing which will actually be required in the future depends on too many variables to be precise, but we think the three scenarios in Table 5 provide reasonable parameters for the likely outcome over the medium term. Clearly, each further year that borrowing is required delays the time when debt servicing commitments will reduce. At the upper level (Scenario 3) debt servicing will grow in money terms for the next ten years at least.

To seek to express these possible debt servicing requirements as a proportion of exports or GDP is even more uncertain, and we have not attempted this.

TABLE 5

NEW ZEALAND'S POSSIBLE FUTURE FINANCING OF THE EXTERNAL DEFICIT

	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93
<u>Scenario 1</u>										
(i) Interest cost - assume loans totalling \$500m per annum raised mid-year at 7% for 7 years with no sinking fund requirement *	17.5	52.5	87.5	122.5	157.5	192.5	210	210	210	210
(ii) Repayments							500	500	500	500
(iii) Debt servicing for future deficits (ii and iii) (rounded to nearest \$10m)	20	50	90	120	160	190	710	710	710	710
(iv) Debt servicing for existing debt (from Table 4)	2370	2790	3100	2620	3430	2600	1820	1280	1370	1080
(v) Possible total debt servicing (iii + iv)	2390	2840	3190	2740	3590	2790	2530	1990	2080	1790
<u>Scenario 2</u>										
Same method as Scenario 1 except with an assumed financing requirement of \$1,000m per annum										
(vi) Possible total debt servicing	2410	2890	3280	2860	3750	2980	3240	2700	2790	2500
<u>Scenario 3</u>										
Same method as above except with an assumed financing requirement of \$1,500m per annum										
(vii) Possible Total debt servicing	2430	2940	3370	2980	3910	3170	3950	3410	3500	3210

## International Comparisons

Table 6 is set out in the same format as Table 3 and relates to the debt and debt servicing situation of the non-oil developing countries. The categories are not all precisely parallel between Tables 3 and 6, but are sufficiently parallel to enable a broad comparison to be made. It should be noted that Table 3 contains only official debt, whereas Table 6, in relation to developing countries, contains estimates of overall external debt. Total New Zealand external debt is around 50 percent larger than the official debt. Thus New Zealand's total external debt is about the same proportion of the exports as the average for the non-oil developing countries, but a somewhat higher proportion of GDP (45.3 percent compared with 34.7 percent).

As far as servicing is concerned, New Zealand's ratio of debt servicing to exports is considerably worse than the average of the non-oil developing countries. On official debt only, New Zealand's ratio at 24.6 percent is higher than the total debt servicing ratio of 19.3 percent for non-oil developing countries. When total debt servicing for New Zealand is taken into account, the debt servicing ratio may well be around twice as high as for the non-oil developing countries.

TABLE 6

## DEBT AND DEBT SERVICING - NON OIL DEVELOPING COUNTRIES\*

Calendar Years	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
1 Gross Domestic Product (US \$bn)	580.8	737.6	801.7	887.2	1016.4	1180.0	1443.3	1717.4	1790.3	1764.8	1914.4
2 Exports (goods and services) (US \$bn)	112.6	153.5	155.9	181.7	225.3	264.7	342.1	433.0	464.2	448.1	482.9
3 Imports (goods and services) (US \$bn)	131.2	198.6	211.0	224.2	267.5	322.0	421.1	544.0	592.6	555.8	572.8
4 Current Account Balance (US \$bn)	-11.3	-37.0	-46.3	-32.6	-28.9	-41.3	-61.0	-89.0	-107.7	-86.8	-67.8
5 Overseas Reserves (US \$bn)	41.2	42.9	40.3	52.9	67.4	83.4	93.9	95.2	96.0	90.6	96.8
6 Total External Debt (US \$bn) (including private external debt)	130.1	160.8	190.8	228.0	278.4	336.3	396.9	474.0	555.0	612.4	664.3
7 Interest payments on total external debt (US \$bn)	6.9	9.3	10.5	10.9	13.6	19.4	28.0	40.4	55.1	59.2	55.1
8 Principal repayments on long-term external debt (Amortisation) (US \$bn)	11.1	12.8	14.6	16.8	21.1	30.9	36.9	35.8	39.7	47.9	38.1
9 Debt Service (7 + 8) (US \$bn)	17.9	22.1	25.1	27.8	34.7	50.3	65.0	76.2	94.7	107.1	93.2
10 Current Account Balance/GDP (4/1) %	1.9	5.0	5.8	3.7	2.8	3.5	4.2	5.2	6.0	4.9	3.5
11 Debt Service/Exports (9/2) %	15.9	14.4	16.1	15.3	15.4	19.0	19.0	17.6	20.4	23.9	19.3
12 Debt Service/GDP (9/1) %	3.1	3.0	3.1	3.1	3.4	4.3	4.5	4.4	5.3	6.1	4.9
13 Total Interest/Exports (7/2) %	6.1	6.1	6.7	6.0	6.0	7.3	8.2	9.3	11.9	13.2	11.4
14 Total Interest/GDP (7/1) %	1.2	1.3	1.3	1.2	1.3	1.6	1.9	2.4	3.1	3.4	2.9
15 External Debt/Exports (6/2) %	115.4	104.6	122.4	125.5	126.4	130.2	119.2	112.9	124.9	143.3	144.4
16 External Debt/GDP (6/1) %	22.4	21.8	23.8	25.7	27.4	28.5	27.5	27.6	31.0	34.7	34.7
17 Overseas Reserves/Imports (5/3) %	31.4	21.6	19.1	23.6	25.2	25.9	22.3	17.5	16.2	16.3	16.9

Source: IMF - World Economic Outlook 1983

\* This group of countries consists of all IMF members except those listed as "industrial countries" (containing most OECD members) or as "oil-exporting countries" (being Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Oman, Qatar, Saudi Arabia, U.A.E., Venezuela).



## Chapter 5

### CONCLUSIONS

This report has reviewed the main elements of New Zealand's external economic relationships. The central concern was to trace possible external explanations of New Zealand's slow rate of growth. The main points of our argument are that the relationship between New Zealand's growth and world growth has been unsatisfactory, but that this relationship can and must be changed. The quantitative characteristics of the connection are determined by the basic structure of the world economy on the one hand (something over which New Zealand has no influence), and by the structure of the New Zealand economy on the other (the result of past economic decisions, which may be changed, although probably not quickly). A lowering of world growth or certain changes in world structure (or a combination) will reduce New Zealand's growth, although this may be avoided by overseas borrowing. In the longer run this cannot sustain growth if something is not done to change the fundamental relationship. History suggests New Zealand has a permanent tendency for lower growth than the world with which it trades and our report has explored some of the possible reasons for this. It also examines the extent of overseas borrowing. That there may be even more important internal causes of weak economic performance is not rejected by this approach. As such, any conclusions with respect to policy are provisional.

The approach taken was to look at each of the main items making up the balance of payments account and to consider what links these had internally. It appeared that imports of goods and services were essentially a residual characteristic, essential for providing income and employment, and dependent on how buoyant or otherwise internal conditions might be. Outward capital flows are for the most part the repayment of debt and, as such, very largely determined by past behaviour. Only a very small proportion of this has been the action of New Zealand residents seeking investment opportunities abroad. Inward direct investment takes place because foreigners see profitable opportunities in New Zealand. Our review of this particular item revealed nothing which suggests it has been either a depressing or expansionary force on New Zealand's growth rate. Its contribution seems more likely to be determined by the internal economic environment in which the enterprises established in this way necessarily operate. Other private capital inflows are predominantly related to the debt positions of internal enterprises, and

it can be assumed the borrowers can service this from income arising out of their own activities. The other currency inflows are therefore the main determinants of New Zealand's foreign exchange availability, and of the growth of the economy as a whole. These are payments for export, and official overseas borrowing.

Overseas borrowing and debt matters are not always discussed in a fully objective manner and it is important that the correct nuances of interpretation are captured in any remarks. The value of borrowing is that it may sustain internal expenditures at higher levels than would otherwise be possible, and that it may provide support to employment. On the other hand, the idea that borrowing is anything other than a means of bridging economic transition is a highly dangerous one. If policies are in place which can be expected to induce resource allocations, which in turn lower the burden of debt, high levels of borrowing may not matter. The picture we have painted is patently one of rising debt levels. The point has certainly been reached where the conventional ratios used to measure the burden of debt must be regarded as being on the high side. This does not necessarily mean that the decision to borrow has been ill-judged, or even that further borrowing should be eschewed. It will continue to be possible for the Government to tap international capital markets although we suggest it is necessary to question the wisdom of pursuing this course very much longer unless steps are taken to alter the fundamental growth potential. It is possible that world growth will increase with associated benefits for New Zealand, irrespective of what is done inside New Zealand, or that its structure will change in a way that benefits New Zealand. But it would be quite irresponsible to continue borrowing on this basis.

New Zealand's upper limit on borrowing is more likely to be determined by its own prudent requirements than by refusal from international creditors. A stable political environment and a good record with respect to past loans are as important in determining "country risk" as more conventional "balance sheet" matters. In this respect New Zealand's credentials are impeccable. Our interpretation of recent lowering of New Zealand's credit status in some published banking indices, a matter which has been widely reported in the press, is that international financiers are signalling that they have noted the poor performance of the economy in relation to the amount of borrowing that has been done. It is unlikely it represents the proximity of any inability of the New Zealand Government to roll over loans or take up new debt in the absence of an international financial crisis. However, the high and rising servicing level does pose a real risk given the present

uncertainty in international financial markets. If this interpretation is correct, it should be judged alongside the fact that, since external influences turned heavily against New Zealand in the early 1970s, borrowing has risen substantially to cushion adjustment processes. Although some changes have certainly occurred, we are not convinced they are enough.

The other major conclusion of this report is that it is no longer realistic that New Zealand's economic growth strategy be based largely on livestock growth. The critical policy problem has traditionally been seen in terms of expanding agricultural production. Today, the pastoral industries are under considerable strain, and this pressure will be intensified if, by being induced to increase output levels too quickly, a weakish market position is made even worse. The pastoral industries must be given breathing time so that market development can be allowed to precede production expansion, rather than the other way around. The combination of internal cost pressures on sheep, beef and dairy production (these are probably intensified by internal economic distortions) and the low elasticities of demand in some export markets mean that the competitive position of primary industries and subsequent processing will be eroded even further if national policy continues to emphasise farm production growth as a central element of its overall growth strategy.

The low income elasticity of demand for exports is probably not surprising considering that New Zealand's exports have primarily been temperate zone pastoral commodities which have a number of features unlikely to yield large response to increased income levels. Firstly, they are largely products considered as basics in developed markets and therefore not likely to be very responsive to income growth. Secondly, restrictions on international markets do not allow growth in exports commensurate with income growth. The popular emphasis on marketing through institutional reform and advocacy of more aggressive presentation through promotion and product development are no doubt targeted at changing these elasticities. It may be possible, for example, by a combination of product differentiation and promotion to adapt a larger proportion of output for market segments seeking specific product forms which do increase more than proportionately with income. The long-standing traditions are perhaps disadvantages to adaptability in this sense, if the institutions involved in marketing are not subjected to competitive pressures in a way which induces them to seek this kind of opportunity.

On the other hand, the meat, wool and dairy industries are large by any standards, and can be expected to use their own resources to initiate new technologies, provided they receive the correct price and cost signals. Furthermore, quite apart from the marketing issues, production cannot be expanded quickly in the face of higher demand because of the length of the animal breeding cycle. There is not much doubt that the strategy of pursuing growth through industries, which are not well placed to take advantage of favourable price movements and whose market situation seems to be less than favourable, was bound to produce disappointing results during the past decade. There needs to be a link between basic market potential and industry growth, and policy should not distort this relationship.

It would be quite misleading to suggest no other policy initiatives have been followed. Exchange rate adjustments have occurred from time to time, and although these might be seen mainly in terms of boosting farm incomes, it appeared, especially in the early 1970s, that this instrument was used to improve the position of manufactured exporters, especially in the Australian market. There have been various forms of assistance available to exporters outside traditional areas since the early 1960s. In addition some policy emphasis has been given to import substitution, the most notable examples being the investments in large energy conversion projects with substantial public sector participation. Furthermore, expansion in fishing, horticulture and forestry (forestry will become even more significant in the 1990s) has helped to diversify the exporting base. In spite of the progress made in this area, it seems unlikely that growth in exports from non-pastoral industries will sufficiently bridge the gap between the foreign exchange we need to maintain incomes and employment and service debt, and the foreign exchange we earn by exporting.

While there has been a recent improvement in the current account, we do not see this as affecting our view about the medium term. The improvement is the result of a downturn in imports (reflecting the depressed New Zealand economy) and some improvement in pastoral exports (reflecting at least in part a one-off disposal of stockpiles).

What is required is a changed relationship between world growth and growth in New Zealand. With the present relationship, if world growth is good, New Zealand lags behind, but if world growth is slow, New Zealand's growth stagnates. There can however be temporary improvements.

In order for this to be achieved in a market economy, a significant change in relative costs and prices is required. Essentially this will involve a shift in prices in favour of exporting and import replacement industries, an increase in the cost of using imports of any kind, and lower costs per unit of output. The growth industries likely to emerge from change of this nature are those involved in exporting and import replacing, but using a low level of imported content.

It must be remembered, however, that the Monitoring Group sees this as emerging from decisions by investors and entrepreneurs in response to appropriate market signals. There is no support here for discredited policies of import protection and export assistance. There is indeed no simple answer. Increasing exports will not be easy, especially in traditional products - it is difficult to reduce dependence on imports, and the possibilities of borrowing in order to permit a slower and less immediately painful adjustment are coming to an end. It is necessary to look at our own use of resources quite generally, beginning with the ways in which we determine their relative values.

In order to achieve this sort of change, there needs to be a removal of the impediments to changing relative prices and to providing the right signals to investment in the growth areas. A number of key policy questions are involved here, namely the level of protection at the frontier and the rate of change of protection, the exchange rate, regulation and distribution and the Government's fiscal and monetary posture. Clearly these are interlinked. They will be discussed in more depth in a later report.

## APPENDIX

Table A1: Net Overseas Borrowing

\$ million

	Net Private Borrowing	Net Government Borrowing*	Balance of Payments Current Surplus/	Change in Official Reserves (Transactions)**
1950/51	10.7	-14.0	56.3	53.0
1951/52	30.3	-9.2	-61.3	-40.3
1952/53	53.7	2.2	-9.2	46.7
1953/54	-32.7	17.2	71.9	54.2
1954/55	-11.2	13.2	-71.6	-69.6
1955/56	35.4	5.3	-59.6	-18.9
1956/57	17.6	20.1	-28.4	9.3
1957/58	7.3	3.6	-90.1	-79.2
1958/59	21.1	68.2	-39.2	50.1
1959/60	-	-35.2	80.6	45.4
1960/61	33.6	-12.6	-109.1	-88.1
1961/62	76.0	18.8	-112.5	-17.7
1962/63	72.6	32.5	-46.1	59.0
1963/64	31.7	-7.5	-30.4	-6.2
1964/65	30.8	-1.0	-37.0	-7.3
1965/66	137.8	5.3	-186.3	-43.2
1966/67	64.4	109.9	-174.0	0.3
1967/68	97.3	82.1	-109.6	69.8
1968/69	13.3	-54.3	24.9	-16.2
1969/70	68.6	-113.5	11.6	21.3
1970/71	220.2	-26.9	225.8	-32.5
1971/72	195.8	-21.2	-15.6	159.0
1972/73	309.3	-129.2	138.8	318.9
1973/74	144.4	-6.1	-91.5	46.8
1974/75	537.8	607.9	-1364.4	-218.7
1975/76	304.0	777.7	-1015.6	66.1
1976/77	390.0	442.3	-825.5	6.8
1977/78	471.1	323.2	-712.4	81.9
1978/79	-144.6	552.5	-469.3	-61.4
1979/80	478.4	406.7	-831.5	53.6
1980/81	129.9	613.4	-822.8	-79.5
1981/82	253.4	1453.1	-1650.1	57.4

\* This has been calculated as a residual as a convenient method of reconciling successive revisions of the Current Account balance.

\*\* Excluding changes in Treasury securities, and IMF and SDR reserve positions which have become significant in the last decade.

Source: Balance of Payments Statistics

Table A2:

Government and Monetary Institution Capital Movements  
(Excluding Compensatory Financing)  
\$ Million

	Government Owned Corporation		Capital Equipment Credits		Other Government Capital Movements					Capital Movements by Monetary Institutions				
	Incr. Assets	Decr. Assets	Incr. Liab.	Decr. Liab.	Incr. Liab.	Decr. Liab.	Incr. Assets	Decr. Assets	Incr. Liab.	Decr. Liab.	Incr. Assets	Decr. Assets	Incr. Liab.	Decr. Liab.
1971/72	..	..	3.2	-24.0	17.6	-7.1	-0.4	..	0.4	1.4	-4.3	..	..	-5.4
1972/73	0.1	..	17.6	-17.5	20.9	-9.3	-2.0	..	1.2	1.4	-0.5	..	..	
1973/74	..	..	39.8	-58.4	6.9	-9.3	-1.9	..	1.1	0.9	-5.7	..	..	
1974/75	-6.7	..	47.9	-56.6	11.5	-12.4	-2.1	..	1.3	0.9	-8.2	..	..	
1975/76	-19.4	..	158.7	-119.1	67.5	-16.8	-2.5	..	2.5	-1.5	-8.4	..	..	
1976/77	-27.4	0.2	136.5	-118.8	72.0	-24.2	-1.4	..	1.	-0.5	-6.2	..	..	
1977/78	-22.7	..	3.1	-99.3	59.2	-39.0	-	..	..	-0.8	..	..	3.4	
1978/79	-2.6	..	193.6	-291.7	56.3	-45.8	-0.9	..	1.4	-0.8	-1.3	..	..	
1979/80	-2.7	0.1	204.7	-49.7	53.0	-51.6	-9.4	0.2	8.5	-0.7	-1.4	..	2.6	
1980/81	-37.1	..	265.8	-250.3	64.3	-85.2	-2.8	..	1.8	-0.9	..	1.7	..	
1981/82	..	1.7	297.5	-352.6	41.1	-65.8	-6.6	..	4.4	-1.3	-	2.1	..	

Sign depicts direction of currency movement (i.e. positive means increase overseas currency holdings of New Zealand residents)

Source: Balance of Payments Statistics

Table A3

## Compensatory Financing

	Govt Borrowing		Reserve Bank Borrowing		\$ Million Other Official Borrowing		IMF Compensatory Financing		IMF Oil Facility	
	Incr. Liab.	Decr. Liab.	Incr. Liab.	Decr. Liab.	Incr. Liab.	Decr. Liab.	Incr. Liab.	Incr. Liab.	Incr. Liab.	Decr. Liab.
1971/72	108.8	-47.0								
1972/73	30.4	-91.6								
1973/74	1.6	-57.3								
1974/75	324.8	-23.0	106.1						100.5	
1975/76	511.5	-138.9	190.6	-119.9			155.7		47.4	
1976/77	470.5	-202.1	74.1	-58.2			117.8			
1977/78	848.6	-385.6	53.4							-6.4
1978/79	558.6	-221.6						-14.0		-43.0
1979/80	669.3	-272.4						-49.2		-77.5
1980/81	1512.6	-676.0	151.8	-203.8	30.2			-84.8		-79.4
1981/82	2100.9	-1277.1	101.2	-67.9	605.8			-56.9		-72.9

Note: Sign depicts direction of currency movement

Source: Balance of Payments Statistics



Table A4:

Changes in Official Reserves  
\$ million

	Special Drawing Rights	Reserve Position at IMF	Overseas Assets of Banking	Treasury Held Securities	Total due to trans- actions	Net Change Effect	Estimated change in Reserves
1971/72	8.8		159.0	69.8	237.6	20.0	257.6
1972/73	4.6		318.9	82.0	405.8	-118.5	287.0
1973/74			46.8	24.6	22.2	-158.3	-136.1
1974/75	-47.3	-45.1	=218.7	14.5	=296.6	46.8	249.8
1975/76	4.9		66.1	20.3	91.3	47.5	138.8
1976/77	9.6		6.8	-6.5	9.9	28.7	38.6
1977/78	24.2	13.8	81.0	120.2	240.1	26.9	267.0
1978/79	-29.2	29.7	060.5	-178.5	-239.5	35.1	-204.4
1979/80	-44.7	-43.5	53.6	-3.1	-37.7	61.2	23.5
1980/81	-25.0	36.4	-85.8	-5.2	-79.5	34.3	-45.3
1981/82	-16.2	-39.3	-18.6	131.5	57.4	26.8	84.2

Source: Balance of Payments Statistics

Table A5:

Private Sector Capital Flows  
\$ Million

	Overseas Direct Investment		NZ Direct Investment		Other Long-Term Capital Movements				Residual
	Incr. Liab.	Decr. Liab.	Incr. Assets	Decr. Assets	Incr. Assets	Decr. Assets	Incr. Liab.	Decr. Liab.	
1971/72	97.5		-10.7		-14.4	21.4	109.6	-24.0	15.1
1972/73	106.4		-2.7		-21.1	3-.5	97.8	-17.5	112.3
1973/74	152.7		-13.5		-9.8	17.5	101.8	-58.4	-38.2
1974/75	179.8		-15.0		-12.1	12.1	265.9	056.6	162.0
1975/76	114.7		-17.7		-10.5	22.4	266.6	-119.1	43.1
1976/77	278.9		-35.8		-7.4	33.9	143.8	-118.8	112.6
1977/78	159.2		-32.9		-24.2	24.3	209.0	-99.3	235.8
1978/79	263.9		-35.9		-19.9	26.2	215.2	-291.7	-303.3
1979/80	342.7		091.6		-25.9	107.3	136.5	-49.7	59.1
1980/81	193.7		-118.4		-114.8	179.0	316.0	-250.3	-96.3
1981/82	374.2		-116.1		-112.8	138.7	519.4	-252.6	-205.4

## Notes:

- (1) Sign depicts direction of currency movement
- (2) Residual includes short-term private capital movements and errors and omissions

Table A6:

Commodity Composition of New Zealand Exports  
(\$ million f.o.b., percentage shares in parenthesis)

	Calendar Years			June Years			
	1950	1955	1960	1965	1970	1975	1980
Beef & Veal	7.0	26.8	44.4	57.4	154.2	161.8	528.4
Lamb & Mutton	45.6	83.8	97.2	135.0	182.9	238.7	583.9
Other Meat	12.0	25.7	20.7	31.1	45.7	60.5	113.4
All Meat	64.6 (17.7)	136.3 (26.3)	162.3 (26.8)	223.6 (30.3)	382.8 (35.6)	461.0 (29.1)	1225.7 (24.4)
Hides & Skins	20.0 (5.5)	18.4 (3.6)	26.6 (4.4)	31.7 (4.3)	48.7 (4.5)	62.7 (4.0)	180.1 (3.6)
Wool	149.1 (40.9)	187.8 (36.2)	204.8 (33.9)	208.6 (28.3)	204.2 (19.0)	261.7 (16.5)	930.8 (18.5)
Butter	71.7	102.0	100.3	119.6	109.7	122.1	360.6
Cheese	29.1	27.4	37.1	40.7	44.3	48.4	105.9
Other Dairy	8.0	10.8	19.5	37.4	59.8	120.7	331.9
All Dairy	108.8 (29.8)	140.2 (27.1)	156.9 (26.0)	197.7 (26.8)	213.8 (19.9)	291.1 (18.4)	798.4 (15.9)
All Fruit & Vege	1.4* (0.2)	2.6* (0.5)	7.8 (1.3)	10.7 (1.5)	21.6 (2.0)	41.2 (2.6)	128.7 (2.6)
Forest Pr	0.7* (0.2)	4.8** (0.9)	16.0** (2.6)	23.2** (3.1)	57.2** (5.3)	119.1 (7.5)	440.3 (8.8)
Other	20.3 (5.6)	28.0 (5.4)	29.8 (4.9)	42.2 (5.7)	146.9 (13.7)	346.6 (21.9)	1318.5 (26.3)
Total	364.9 (100.0)	518.1 (100.0)	604.6 (100.0)	737.6 (100.0)	146.9 (100.0)	346.6 (100.0)	1318.5 (100.0)

\* apples and pears only

\*\* excludes category "other paper"

## Notes:

- (1) Some fluctuation in shares occurs due to price instability. For example, wool receipts in the years 1949 to 1951 were \$93.1m, \$149.1m and \$256.3m respectively, reflecting the spectacular surge in prices caused by the Korean wool boom. Subsequent to this annual receipts fell to about \$160m during the mid-fifties.
- (2) Principal items of produce exported in 1979/80 classified under "other" include: Mineral fuels \$68.2m; Chemicals and related products \$193.7m; Iron and Steel \$49.7m; Aluminium \$151.1m; Textiles etc. \$100.3m; Machinery and Transport Equipment \$167.5m.

Source: Department of Statistics

Table A7:

Country Destination of New Zealand Exports  
(\$ million f.o.b., percentage shares in parenthesis)

	Calendar Years			June Years			
	1950	1955	1960	1965	1970	1975	1980
Australia	6.9 (1.9)	12.9 (2.5)	26.3 (4.3)	34.6 (4.7)	87.8 (8.2)	188.4 (11.9)	634.1 (12.6)
Canada	7.1 (1.9)	8.5 (1.6)	7.3 (1.2)	10.6 (1.4)	45.3 (4.2)	45.1 (2.8)	98.0 (2.0)
France	16.2 (4.4)	30.6 (5.9)	40.6 (6.7)	33.9 (4.6)	28.7 (2.7)	43.3 (2.7)	126.7 (2.5)
Germany FR	11.9 (3.3)	25.4 (4.9)	21.3 (3.5)	29.8 (4.0)	29.7 (2.8)	42.3 (2.7)	116.2 (2.3)
Japan	2.0 (0.5)	4.0 (0.8)	17.8 (2.9)	32.0 (4.3)	105.6 (9.8)	187.1 (11.8)	635.2 (12.6)
U. Kingdom	243.4 (66.7)	339.3 (65.5)	320.7 (53.0)	374.8 (50.8)	386.0 (35.9)	351.7 (22.2)	714.9 (14.2)
U.S.A.	36.8 (10.1)	30.2 (5.8)	79.1 (13.1)	93.4 (12.7)	172.9 (16.1)	190.9 (12.1)	721.4 (14.3)
Other	40.6 (11.1)	67.3 (13.0)	91.6 (15.2)	128.6 (17.4)	219.2 (20.4)	534.7 (33.8)	1975.9 (39.3)
Total	364.9 (100.0)	518.1 (100.0)	604.6 (100.0)	737.6 (100.0)	1075.2 (100.0)	1583.5 (100.0)	5022.5 (100.0)

## Notes:

- (1) In 1950 "other" is dominated by other Western European countries which absorbed approximately 9 percent of total exports.
- (2) Country diversification by 1979/80 was dominated by the Middle East and South East Asia.

Source: Department of Statistics

Table A8:

## Exports of Services

March year	Exports Goods	Exports Services	Total
1950/51	405.2 (94.7)	22.7 (5.3)	427.9 (100.0)
1955/56	526.0 (93.1)	39.2 (6.9)	565.2 (100.0)
1960/61	572.0 (91.1)	56.1 (8.9)	628.1 (100.0)
1965/66	743.2 (98.6)	86.4 (10.4)	829.6 (100.0)
1970/71	1096.6 (85.7)	182.3 (14.3)	1278.9 (100.0)
1975/76	2038.2 (77.8)	580.0 (22.2)	2618.2 (100.0)
1980/81	5691.8 (82.5)	1210.2 (17.5)	6902.0 (100.0)

Source: Department of Statistics

Table A9:

Origin of Imports by Principal Countries  
(\$ million v.f.d., percentage shares in parenthesis)

	Calendar Years			June Years			
	1950	1955	1960	1965	1970	1975	1980
Australia	35.4 (12.3)	62.8 (12.5)	92.7 (18.3)	132.3 (18.1)	219.5 (23.2)	574.3 (23.0)	1026.9 (21.3)
Canada	6.6 (2.2)	16.2 (3.3)	15.3 (3.0)	25.4 (3.4)	35.9 (3.8)	49.9 (2.0)	94.9 (1.9)
W. Germany	.4 (0.1)	13.0 (2.5)	15.1 (2.9)	17.7 (2.4)	35.1 (3.7)	105.3 (4.2)	208.1 (4.3)
Japan	.8 (0.2)	5.0 (0.7)	14.3 (2.8)	36.2 (4.9)	75.8 (8.0)	330.9 (13.2)	589.6 (12.2)
U. Kingdom	175.2 (61.0)	281.1 (56.0)	222.3 (43.9)	261.9 (35.9)	299.9 (31.7)	574.9 (23.0)	693.2 (14.4)
U.S.A.	20.3 (7.0)	40.4 (8.0)	52.8 (10.4)	75.1 (10.2)	122.9 (13.0)	369.1 (14.0)	590.8 (12.2)
Other	55.0 (19.2)	99.3 (19.7)	109.0 (21.5)	206.2 (28.3)	191.1 (20.2)	537.5 (21.6)	1701.0 (35.4)
Total	287.1 (100.0)	501.3 (100.0)	506.2 (100.0)	729.4 (100.0)	944.3 (100.0)	2492.0 (100.0)	4809.6 (100.0)

Note: Oil exporting countries are prominent among suppliers of New Zealand imports in 1979/80: e.g. Bahrain \$68.4m, Kuwait \$106.6m, Iran \$55.6m, Saudi Arabia \$218.5m, Indonesia \$64.6m, Malaysia \$66.6m; a large proportion of \$273.2m from Singapore is for petroleum products. Other countries featuring no sources of import goods are: Canada \$94.9m, Sweden \$64.0m, Belgium \$23.3m, France \$54.2m, Netherlands (also a supplier of some oil products) \$61.6m, and Hong Kong \$70.8m.

Source: Department of Statistics

Table A10:

**Imports by Major Classification**  
 (\$ million v.f.d., percentage shares in parenthesis)

	Calendar Years			June Years			
	1950	1955	1960	1965	1970	1975	1980
Petroleum	20.4 (7.1)	33.0 (6.5)	41.4 (8.1)	51.6 (7.7)	59.0 (6.2)	316.8 (12.7)	943.2 (19.6)
Chemicals, etc	9.0 (3.1)	21.5 (4.2)	30.9 (6.1)	48.4 (7.3)	88.7 (9.3)	225.9 (9.0)	489.9 (10.1)
Fertiliser	4.8 (1.6)	5.0 (0.9)	5.4 (1.0)	10.1 (1.5)	17.2 (1.8)	55.2 (2.2)	78.9 (1.6)
Textiles, etc	29.1 (10.1)	39.2 (7.8)	40.3 (7.9)	43.6 (6.5)	59.9 (6.3)	109.0 (4.3)	176.6 (3.6)
Iron & Steel	15.1 (5.2)	37.4 (7.4)	41.8 (8.2)	54.6 (8.2)	74.9 (7.9)	212.2 (8.5)	263.1 (5.4)
Machinery	50.8 (17.6)	94.6 (18.8)	105.4 (20.8)	143.0 (21.5)	184.6 (19.5)	545.1 (21.8)	726.5 (15.1)
T'port Eqp	21.7 (7.5)	59.0 (11.7)	41.8 (8.2)	88.0 (13.2)	135.1 (14.3)	276.5 (11.0)	572.5 (15.1)
Rubber	4.9 (1.7)	7.2 (1.4)	8.9 (1.7)	10.0 (1.5)	15.0 (1.5)	35.0 (1.4)	68.6 (1.4)
Food, Bev & Tobacco	21.4 (7.4)	30.0 (5.9)	25.5 (5.0)	26.8 (4.0)	39.7 (4.2)	86.5 (3.4)	161.9 (3.3)
Other	109.9 (38.2)	174.4 (34.7)	164.8 (32.5)	186.6 (28.1)	270.2 (28.6)	629.8 (25.2)	1328.4 (27.6)
<b>Total</b>	<b>287.1</b> <b>(100.0)</b>	<b>501.3</b> <b>(100.0)</b>	<b>506.2</b> <b>(100.0)</b>	<b>662.7</b> <b>(100.0)</b>	<b>944.3</b> <b>(100.0)</b>	<b>2492.0</b> <b>(100.0)</b>	<b>4809.6</b> <b>(100.0)</b>

Source: Department of Statistics



Table All:

Classification of Imports by End-Use  
(\$ million c.i.f., percentage shares in parenthesis)

June Years	Fin Cap Goods	Comp&M Capital Goods	Compl Tport Items	Parts Tport Items	Other Compl Items	Parts Other Items	Fin Cons Goods	Compn Cons Goods	Mater Used Prodn	TOTAL
1964/65	92.8 (12.9)	84.8 (11.8)	12.8 (1.7)	55.4 (7.7)	12.8 (1.7)	17.2 (2.4)	86.6 (12.0)	97.0 (13.5)	250.6 (34.9)	716.2 (100.0)
1965/66	121.4 (15.3)	104.7 (13.2)	16.7 (2.1)	58.1 (7.3)	13.4 (1.7)	16.4 (2.1)	94.6 (11.9)	104.9 (13.2)	261.2 (34.0)	792.6 (100.0)
1966/67	115.9 (14.3)	109.4 (13.5)	18.7 (2.3)	54.5 (6.7)	12.8 (1.6)	16.8 (2.1)	93.2 (11.5)	898.5 (12.1)	264.8 (32.6)	813.2 (100.0)
1967/68	93.7 (13.8)	78.3 (11.6)	10.4 (1.5)	43.4 (6.4)	8.7 (1.2)	16.9 (2.5)	85.3 12.6	90.4 13.4	254.4 (36.3)	674.6 (100.0)
1968/69	122.1 (14.3)	89.1 (10.4)	9.1 (1.1)	60.1 (7.0)	15.0 (1.8)	21.2 (2.5)	106.4 (12.5)	107.1 (12.6)	315.6 (37.0)	852.8 (100.0)
1969/70	132.3 (13.1)	119.0 (11.8)	19.5 (1.9)	69.7 (6.9)	16.3 (1.6)	24.7 (2.5)	116.0 (11.5)	125.1 (12.4)	365.5 (36.3)	1007.2 (100.0)
1970/71	164.2 (14.2)	149.7 (12.9)	29.6 (2.5)	77.7 (6.7)	18.7 (1.6)	31.4 (2.7)	136.6 11.8	143.6 (12.4)	391.0 (33.8)	1155.5 (100.0)
1971/72	187.7 (15.1)	137.1 (11.1)	60.6 (4.9)	96.2 (7.8)	18.0 (1.5)	31.2 (2.5)	152.4 (12.3)	156.0 (12.6)	389.6 (31.4)	1239.0 (100.0)
1972/73	205.6 (15.0)	138.7 (10.1)	49.4 (3.6)	114.3 (8.4)	22.5 (1.6)	32.8 (2.4)	177.4 (13.0)	167.6 (12.3)	443.5 (32.5)	1366.4 (100.0)
1973/74	272.9 (13.9)	187.7 (9.2)	83.1 (4.0)	140.2 (6.8)	28.6 (1.4)	41.3 (2.0)	257.2 (12.6)	267.2 (13.1)	747.2 (36.6)	2036.7 (100.0)
1974/75	435.2 (15.8)	320.2 (14.3)	58.7 (2.1)	158.9 (5.8)	43.7 (1.6)	63.4 (2.3)	311.0 (11.3)	320.7 (11.6)	1030.7 (37.3)	2763.1 (100.0)
1975/76	454.2 (15.3)	395.3 (13.3)	118.2 (4.0)	180.3 (6.1)	40.6 (1.4)	72.9 (2.5)	314.8 (10.8)	339.0 (11.4)	1021.9 (34.5)	2961.6 (100.0)
1976/77	524.3 (14.8)	371.4 (10.4)	100.7 (2.8)	202.3 (5.7)	48.8 (1.3)	82.5 (2.3)	391.4 (11.0)	421.5 (11.9)	1373.0 (38.8)	3538.0 (100.0)
1977/78	433.8 (13.2)	375.1 (11.4)	39.4 (1.2)	202.6 (6.2)	49.1 (1.5)	78.8 (2.4)	420.2 (12.8)	376.0 (11.5)	1269.3 (38.7)	3276.6 (100.0)
1978/79	445.2 (11.6)	398.4 (10.4)	137.6 (3.6)	249.7 (6.5)	87.9 (2.3)	89.9 (2.3)	436.3 (11.4)	443.6 (11.6)	1528.2 (39.8)	3840.5 (100.0)
1979/80	573.0 (11.0)	487.4 (9.4)	120.9 (2.3)	313.0 (6.0)	109.0 (2.1)	116.1 (2.2)	586.0 (11.2)	548.1 (10.5)	2249.8 (44.3)	5172.6 (100.0)
1980/81	935.0 (15.5)	551.7 (9.2)	77.6 (1.3)	595.9 (6.6)	111.8 (1.9)	122.2 (2.0)	616.2 (10.2)	566.3 (9.4)	2673.4 (43.6)	6023.0 (100.0)

Source: Department of Statistics



Table A12:

**Imports of Services**  
 (\$ million, percentage share import payments  
 in parenthesis)

March Year	Imports Goods	Imports Services	Total
1950/51	292.4 (82.8)	60.8 (17.2)	353.2 (100.0)
1955/56	499.0 (82.3)	107.8 (17.8)	606.8 (100.0)
1960/61	547.2 (79.3)	142.5 (20.7)	689.7 (100.0)
1965/66	721.1 (77.0)	216.0 (23.0)	937.1 (100.0)
1970/71	1065.5 (75.0)	354.5 (25.0)	1420.0 (100.0)
1975/76	2604.2 (76.2)	812.2 (23.8)	3416.4 (100.0)
1980/81	5186.9 (72.1)	2002.3 (27.9)	7189.2 (100.0)

Sources: Department of Statistics

Table A13:

## Cumulative Import Coefficients

March Years	1959/60	1965/66	1971/72	1976/77
1 Agriculture	.093	.086	.098	.116 (.098)
2 Hunt & Fish	.172	.081	.119	.099 (.088)
3 Forestry	.050	.082	.062	.096 (.070)
4 Min & Quarr	.096	.108	.105	.161 (.148)
5 Food etc.	.120	.108	.117	.145 (.129)
6 Text etc.	.256	.248	.226	.229 (.214)
7 Wood etc.	.132	.120	.114	.146 (.126)
8 Paper & publ.	.179	.140	.124	.165 (.146)
9 Chemic. etc.	.331	.447	.401	.509 (.379)
10 Non-met mins.	.165	.137	.125	.161 (.144)
11 Basic metals	.319	.310	.348	.447 (.436)
12 Metal & Mach.	.290	.329	.315	.321 (.312)
13 Other mfg.	.259	.270	.209	.176 (.156)
14 Elect. & Gas etc.	.062	.036	.037	.078 (.058)
15 Constr.	.124	.151	.149	.188 (.173)
16 Trade	.044	.042	.054	.085 (.076)
17 Tport & stor.	.094	.077	.128	.182 (.138)
18 Commun	.056	.045	.032	.081 (.078)
19 Finance	.051	.074	.030	.053 (.047)
20 Services	.093	.080	.145	.172 (.156)

## Notes:

- (1) Derived from published input-output statistics.
- (2) Figures in parenthesis for 1976/77 exclude the increase in cumulative co-efficient for imported petroleum. Because of the "oil shock" in the 1970's, the uncorrected figures are likely to be dominated by price increases, thus swamping any "structural" effects.

Source: Department of Statistics

Table 14:

March Year	Real GNP (Annual % Change)	Export Volume (Annual % Change)
1961/62	+3.60	+ 8.7
1962/63	+2.60	+ 3.6
1963/64	+6.30	+ 3.5
1964/65	+5.80	- 0.5
1965/66	+6.31	+ 3.7
1966/67	+3.53	- 0.5
1967/68	-0.54	-13.8
1968/69	+1.63	+10.0
1969/70	-4.85	+ 5.4
1970/71	+4.43	+ 0.3
1971/72	+2.74	+ 4.8
1972/73	+3.98	+ 2.5
1973/74	+7.25	-11.3
1974/75	+4.22	- 2.5
1975/76	+0.84	+17.8
1976/77	-0.87	+10.7
1977/78	<u>-2.91</u>	<u>- 3.4</u>
Average	+3.17	+ 3.93

Source: Derived from Department of Statistics data

Table A15:

Calculations of the growth rate consistent with  
balance of payments equilibrium, 1953-76

Country	% Change of Real GNP (y)	% Change in Export Volume (x)	Income Elasticity of Demand for Imports (n)	Balance of Payments Equilibrium Growth Rate from Applying Equation (10.9)
United States	3.23	5.88	1.51	3.89
Canada	4.81	6.02	1.20	5.02
West Germany	4.96	9.99	1.89	5.29
Netherlands	4.99	9.38	1.82	5.15
Sweden	3.67	7.16	1.76	4.07
France	4.95	8.78	1.62	5.42
Denmark	3.58	6.77	1.31	5.17
Australia	4.95	6.98	0.90	7.76
Italy	4.96	12.09	2.25	5.37
Switzerland	3.56	7.20	1.90	3.79
Norway	4.18	7.70	1.40	5.50
Belgium	4.07	9.24	1.94	4.76
Japan	8.55	16.18	1.23	13.15
Austria	5.17	11.12	n.a.	-
United Kingdom	2.71	4.46	1.51	2.95
South Africa	4.97	6.57	0.85	7.73
Spain	5.94	11.10	n.a.	-
Finland	4.55	6.63	n.a.	-

Source: Kern (1978) and Houthakker and Magee (1969)

Table A16:

March Years	Overseas Dir Inv in NZ \$m	Gross Domestic Prod(\$m)		Total Capital Formation (\$m)		Private Capital Formation (\$m)	
		Nat In	SNA	Nat In	SNA	Nat In	SNA
1950/51	11.2	1408	.	252	.	152	.
1951/52	22.0	1459	.	292	.	186	.
1952/53	21.2	1528	.	349	.	202	.
1953/54	6.4	1690	.	373	.	215	.
1954/55	22.2	1877	.	441	.	277	.
1955/56	31.5	1977	.	453	.	266	.
1956/57	20.2	2078	.	459	.	256	.
1957/58	19.2	2225	.	501	.	287	.
1958/59	27.7	2321	.	504	.	290	.
1959/60	6.5	2482	.	523	.	297	.
1960/61	34.2	2687	.	599	.	366	.
1961/62	36.2	2783	.	634	.	393	.
1962/63	55.3	2999	.	642	.	387	.
1963/64	38.1	3273	.	709	.	423	.
1964/65	43.5	3569	.	812	.	500	.
1965/66	62.8	3877	.	916	.	573	.
1966/67	28.9	4039	.	960	.	589	.
1967/68	28.1	4183	.	869	.	493	.
1968/69	38.9	4436	.	963	.	590	.
1969/70	76.2	4907	.	1019	.	709	.
1970/71	130.0	5609	.	1263	.	831	.
1971/72	97.4	6526	6880	1429	1411	932	935
1972/73	106.4	7617	7932	1639	1761	1047	1168
1973/74	152.7	8813	9184	1960	2064	1375	1456
1974/75	179.8	9578	10028	2344	2573	1569	1712
1975/76	114.7	11152	11484	2892	3125	1890	1904
1976/77	278.9	13189	13792	3153	3448	2159	2241
1977/78	159.2	.	15217	.	3346	.	2031
1978/79	263.9	.	17541	.	3546	.	2084
1979/80	342.7	.	20966	.	3729	.	2428
1980/81	193.7	.	24127	.	4314	.	2870
1981/82	374.2	.	28958	.	5929	.	4004
1982/83							

Table A17:

	Net Earnings (\$m)	Undistr. Profits (\$m)	Operating Surpl (SNA) Before Tax (\$m)	Company Income After Tax (\$m)	Earning/ Comp Inc (%)	Undistr. Prof/ (%)
1950/51	13.2	5.7	.	78	16.9	43.2
1951/52	11.9	3.6	.	81	14.7	30.3
1952/53	14.7	5.3	.	74	19.9	36.1
1953/54	18.8	7.5	.	99	19.0	39.9
1954/55	22.8	8.2	.	103	22.1	36.0
1955/56	21.8	9.2	.	89	24.5	42.2
1956/57	22.8	7.7	.	96	23.8	33.8
1957/58	21.8	4.1	.	109	20.0	18.8
1958/59	25.6	6.6	.	113	22.7	25.8
1959/60	22.1	4.7	999*	136	16.3	21.3
1960/61	40.1	13.3	1095*	168	23.9	33.2
1961/62	33.3	8.8	1038*	141	23.6	26.4
1962/63	46.0	14.7	1183*	182	25.3	32.0
1963/64	46.8	19.1	1313*	210	22.3	40.8
1964/65	60.7	27.6	1426*	225	27.0	45.5
1965/66	55.0	23.8	1509*	272	20.2	43.2
1966/67	61.9	27.5	1465*	247	25.1	44.4
1967/68	39.4	10.0	1510*	234	16.8	25.4
1968/69	72.6	38.8	1595*	310	23.4	53.4
1969/70	88.8	48.1	1768*	367	24.2	54.2
1970/71	70.2	33.8	1846*	360	19.5	48.1
1971/72	78.4	37.4	2240	356	22.0	47.7
1972/73	116.7	64.1	2712	614	19.0	54.9
1973/74	165.1	99.4	3096	632	26.1	60.2
1974/75	115.9	63.2	2966	547	21.2	54.5
1975/76	135.6	80.1	3425	716	18.9	59.1
1976/77	258.4	170.8	4464	776	33.3	66.1
1977/78	226.3	132.6	4604	n.a.	n.a.	58.6
1978/79	261.3	175.8	5298	n.a.	n.a.	67.3
1979/80	170.4	89.0	6587	n.a.	n.a.	52.2
1980/81	225.3	125.0	7035	n.a.	n.a.	55.5
1981/82	349.8	211.4	8269	n.a.	n.a.	60.4

\*Unofficial SNA estimates published by Reserve Bank

Table A18: Direct Overseas Investment as Percentage of:

	Gross Domestic Product (%)		Total Gross Capital Formation (%)		Private Gross Capital Formation (%)	
	Nat In	SNA	Nat In	SNA	Nat In	SNA
1950/51	.8		4.4		7.4	
1951/52	1.5		7.5		11.8	
1952/53	1.4		6.1		10.5	
1953/54	1.4		1.7		3.0	
1954/55	1.2		5.0		8.0	
1955/56	1.6		7.0		11.8	
1956/57	1.0		4.4		7.9	
1957/58	.9		3.8		6.7	
1958/59	1.2		5.5		9.6	
1959/60	.3		1.2		2.2	
1960/61	1.3		5.7		9.4	
1961/62	1.3		5.7		9.2	
1962/63	1.8		8.6		14.3	
1963/64	1.2		5.4		9.0	
1964/65	1.2		5.4		8.7	
1965/66	1.6		6.9		11.0	
1966/67	.7		3.0		4.9	
1968/69	.9		4.0		6.6	
1969/70	1.6		7.0		10.7	
1970/71	2.3		10.3		15.6	
1971/72	1.5	1.4	6.8	6.9	10.5	10.4
1972/73	1.4	1.3	6.5	6.0	10.2	9.1
1973/74	1.7	1.7	7.8	7.4	11.1	10.5
1974/75	1.9	1.8	7.7	7.0	11.5	10.5
1975/76	1.0	1.0	4.0	3.7	6.1	6.0
1976/77	2.2	2.0	8.8	8.1	12.9	12.4
1977/78		1.0		4.8		7.8
1978/79		1.5		7.4		12.7
1979/80		1.6		1.2		14.1
1980/81		.8		4.4		6.7
1981/82		1.3				



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