A Review of The Foreign Exchange Market And Exchange Rate Developments

Economic Monitoring Group

New Zealand Planning Council Monitoring Group Report

A Review of The Foreign Exchange Market And Exchange Rate Developments

ECONOMIC MONITORING GROUP
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27 March, 1986

Mr I.G. Douglas,
Chairman,
New Zealand Planning Council,
Wellington.

Dear Mr Douglas,

I have pleasure in forwarding to you the sixth report of the Economic Monitoring Group which in accordance with the independent right to publish which the Planning Council has given the group will soon be released to the public.

This report differs somewhat from earlier ones. It arose from the desire of the Economic Monitoring Group to review the analysis and conclusions of its fourth report, *The Foreign Exchange Market*, in the light of developments since it was published in April, 1985. This involved consultations with a number of people and institutions involved with the foreign exchange market, in the course of which it became apparent that there would be widespread interest in the results of the review. It was therefore decided that what began as a document for our own information should be published even though it does not include evaluation of such broad questions as the overall desirability of floating the exchange rate.

The Economic Monitoring Group accepts responsibility for the contents of this report, but it wishes to record that most of the work underlying it was performed by Mr David Webber, a member of the Planning Council Secretariat. It also thanks those people in the foreign exchange market who co-operated with the review.

Yours sincerely,

G.R. Hawke,
Convenor,
Economic Monitoring Group.

INTRODUCTION

In April 1985 the Economic Monitoring Group (EMG) released its fourth report titled *The Foreign Exchange Market.* That report examined recent major developments in the structure and operation of the foreign exchange market in New Zealand and examined its role in linking the New Zealand economy with international trade and capital flows. The report also contained some preliminary views on the relationships between monetary policies and a floating exchange rate and their implications for New Zealand.

In accordance with its monitoring role, the EMG has conducted a review of the foreign exchange market and exchange rate issues as they have affected the economy since its last report. The EMG recognises the transitional nature of this period in the economy's adjustment to the Government's policies for major economic restructuring. For this reason, we caution against drawing strong conclusions concerning especially the interaction of the floating exchange rate with real economic activity at this stage. However, we consider that this interim review provides a worthwhile opportunity for further consideration and discussion of this major aspect of the Government's policy strategy.

CONTENTS

PART I - THE FOREIGN EXCHANGE MARKET

Market Composition

Approval to become an authorised foreign exchange dealing institution must first be granted by the Minister of Finance. Consent to commence operations can then be obtained from the Reserve Bank.

The total number of 15 authorised dealers (4 trading bank and 11 non-bank) which existed in April 1985 has increased slightly during the last twelve months. Elders Merchant Finance Ltd began operating as from 1 December 1985 and National Australia Bank Ltd has recently received the Reserve Bank's consent to commence foreign exchange operations in New Zealand. Further changes to the composition of the market are also expected in 1986: two further applications are under consideration as at March 1986 and some rationalisation of the NZI Securities and Marac Corporation foreign exchange dealerships may result from the merger of these two finance companies. Broadbank's authority to deal in foreign exchange was withdrawn during 1985.

Although the net impact of these changes in terms of the total number of market participants will not be great, it is possible that the market may consist of up to 18-20 authorised dealers by the end of 1986. The general attitude within the market to this level of expansion is positive on the ground that it will add "depth" to the market thereby spreading risk and helping to reduce volatility. The larger the capital backing of any new entrants, the more stabilising their impact will be. However, enthusiasm for these developments is tempered in some cases by reservations concerning the availability of sufficiently experienced personnel within the industry to support this expansion.

The informal criteria[1] against which new applications for authorised dealing are assessed by the Reserve Bank remain effectively unchanged. Although some criticism of the tightness of these criteria has been recently expressed[2], there remains some requirement for a visible and consistent set of criteria during this transitional phase in the expansion and development of the foreign exchange market.

Although these changes to the list of authorised foreign exchange dealers have so far been few, most individual dealerships have experienced considerable growth in their level of trading and in the range of services and financial instruments on offer. Accordingly, the facility to obtain Reserve Bank approval for increases in individual exposure limits has been employed by some dealers. It is worth repeating the point made in our earlier report [1] that this rapid growth in the market need not arise out of growth in exports and imports but out of an increasing awareness on the part of both dealer and corporate participants of the opportunities and risks involved in the management and transaction of foreign exchange funds.

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(1) See Economic Monitoring Group, *The Foreign Exchange Market* (Appendix II), New Zealand Planning Council, 1985.

(2) New Zealand Institute of Economic Research, *Markets Regulation and Pricing* Research Paper No. 31, NZIER 1985.

Market Turnover

Tables I and II provide a detailed breakdown of turnover in the foreign exchange market from September 1983 to November 1985. The Reserve Bank advises that some caution should be exercised in interpreting these statistics. There are inconsistencies in the data reported by different dealers as well as some double counting especially where third currency transactions are concerned.

Notwithstanding these problems, Table I clearly indicates the dominance of NZ/US currency transactions in both the spot and forward markets. Spot market turnover in US currency has increased approximately ten-fold over the last 26 months and more than doubled since the currency was floated in March 1985. Trading in forward contracts, although much lower in total, has increased in similar proportions overall, but much of this growth has occurred in the last twelve months and as such reflects the increased awareness of and requirement for forward cover in an uncertain floating rate environment.

Table II provides essentially the same data but according to a bank/non-bank classification.(3) For spot trading in New Zealand currency the banks' share of total market turnover has stabilised during the last twelve months at around 60%. However, for the twelve months prior to that this share had declined from about 80% in September 1983 as the non-bank dealers became established in the market. A very similar trend is apparent for the distribution of forward contracts in New Zealand currency with the banks now reporting around 65% of total turnover as opposed to around 80% two years earlier.

The statistics do not record the proportions of interbank (also called "inter-dealer") trading(4) and corporate trading. However discussions with dealers indicated that interbank trading still accounted for around 90-95% of total turnover. This figure is confirmed by the Reserve Bank which advises that an indicator of the proportion of total foreign exchange turnover accounted for by non inter-bank trading is provided by the ratio of total Overseas Exchange Transactions to total foreign exchange turnover. This ratio has approximately halved over the last year or so, falling to around 5 per cent over the year to December 1985.

Competition and Growth

The considerable increase in total market turnover during 1985 has enabled practically all of the bank and non-bank dealers to expand their operations. However, the market remains very competitive in terms of profit margins on exchange transactions and in the provision of advisory services. As expected, several of the non-bank dealers in particular have sought to establish special "niches" within the market based in some cases on the traditional operations of their parent financial institutions, through the provision of specialised expertise to a particular industry or through the provision of specialised financial services such as Eurokiwi issues. Practically all dealers expected the range and extent of their operations to expand further during 1986.

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(3) The bank/non-bank classification is used to distinguish between the operations of the four trading banks and the other licensed dealers.

(4) As described in the EMG's earlier report, "interbank trading" refers to the buying and selling of currency between authorised dealers as part of their risk-sharing and "own profit" operations.

Although the four trading banks retain some clear advantages at present due to their greater capitalisation and ability to provide trade-related retail banking services, the proposed deregulation of the banking sector will almost certainly encourage some merchant banks to expand in these directions. For this reason, descriptions of the foreign exchange market will focus increasingly on the services provided by the different dealers rather than on the traditional "bank/non-bank" distinction.

The major area of growth amongst all authorised dealers relates to the provision of corporate advisory services in foreign exchange funds/risk management. A growing corporate client base is important to dealers not only for the foreign exchange transaction business it provides, but for the market intelligence which it generates for the dealer in relation to its other client and interbank operations. From the dealers surveyed, staff resources allocated to these advisory services will on average more than double during 1986.

In fact, the authorised dealers advised that the majority of new staff appointments in the industry over the next twelve months will be in relation to the provision of corporate advisory services rather than dealing room operators as such. Similar growth is also expected in the advisory positions within the (non-dealing) financial institutions which have clients with significant foreign exchange interests. This intended growth reflects a widespread belief in the industry that the corporate sector's present demand for foreign exchange advisory services is yet to be properly tapped. Although the requirement for these services is partly related to perceived volatility in the exchange rate (and these first twelve months may turn out to be exceptional in this respect) it is likely that currency management will remain important and that new uses will be found for advisory services.

Consultations with the corporate sector tend to support these judgments from the customer side. They noted, however, the importance of quality and experience in the advice they receive.

The deregulation of the foreign exchange market and the floating of the currency was argued by the Reserve Bank in particular to create an environment of competition which would result in lower transaction costs for the corporate sector. This benefit has not been fully realised for two important reasons at least: volatility in the exchange rate has restricted the extent to which spreads between buy and sell rates can be trimmed by dealers (lower, more competitive spreads increase their own exposure risk), while the learning costs for corporates in a volatile market have been higher than expected during this initial phase. (This latter point is considered more fully below.) If anything, spreads on inter-dealer trading have widened on average since the float, though competition for corporate clients has generally ensured a slight narrowing of spreads on corporate business. Few dealers consider that these spreads can now be reduced significantly for anything other than short periods unless there is a marked improvement in exchange rate stability.

The other potential problems of lack of market depth identified by the Monitoring Group in its earlier report have also proved to be real. In particular, transactions of "large parcels" (over $15m) need to be managed astutely given the potential impact which the transaction may have on the exchange rate and in view of the market's ability to distribute the risk associated with large transactions. For the corporate, it is clearly unwise to transmit across the market its intention to buy or sell a large amount of foreign exchange by seeking competing quotes from a number of dealers. As some corporates have already discovered, this approach provides a signal to the market which is several times larger than the actual amount to be exchanged and consequently affects the relevant exchange rate against the interests of the corporate. On larger

markets overseas, it would require a substantially greater sum to have this effect.

For the authorised dealers there is also a difficulty created by transactions of large amounts in a market where several dealers have a relatively low level of capitalisation and hence low exposure risk. In meeting the corporate's requirement for a transaction of the size suggested above it has often been necessary to have the transaction broken down into five or more smaller parcels on inter-dealer trading so as to achieve an appropriate sharing of risk. This level of partitioning causes some frustration and almost certainly raises transaction costs. However, it should not be assumed from this that smaller dealers cannot play an effective role.

In our earlier report, we alluded to the possibility in the New Zealand foreign exchange market that financial institutions may seek to "piggyback" some of their own money through the foreign exchange market in the opposite direction. This involves taking advantage of any movement in the rate which might occur as a result of a substantial transaction undertaken on behalf of a major commercial client. This type of activity is of course difficult to identify, but it is interesting to note that some market dealers acknowledged that such practices are especially possible in the New Zealand market and do occur.

We also noted that a related issue concerned the potential for larger market participants to lead the market (i.e. the exchange rate) in a particular direction on the basis of rumour only and then take a profit advantage from this movement. This possibility is also acknowledged as a continuing consequence of the market's lack of overall depth.

It should be emphasised, however, that the high profile of some larger participants in a relatively small market carries some risks. For example it increases the market visibility of their decisions and hence the potential for being anticipated ("buried") by others in the market. On the other hand, it only requires a small number of these major traders to act similarly at any one time to effect a major (i.e. 5% plus) movement in the exchange rate - as occurred with the sharp fall in the currency in December 1985. Generally, however, such large movements have been rare as indicated in Table VIII.

Market Operation

Although the number of fully active authorised dealers in the New Zealand foreign exchange market remains relatively small, there is noticeable diversity of management and operational style. The most commonly used expression to describe interaction in the market was "a game" in which most dealers readily conceded that it was possible and in fact quite common to make both substantial profits and substantial losses over a short period of trading. This uncertainty is attributable to a number of causes but it is clearly accentuated by the "thinness" of the market (and the ensuing volatility) and by the relative inexperience of some personnel (both dealer and corporate) involved. For these reasons, the foreign exchange operations of several financial institutions still appear to be viewed with unease by senior management and some people within the industry consider more professionalism and responsibility on the part of individual dealers to be an important requirement. It is difficult to judge the validity of this claim, but any improvement which results in less uncertainty in the market than that witnessed in 1985 ought to increase confidence in foreign exchange operations and be of benefit to the economy.

The shortage of adequately trained and experienced staff which was forecast at the outset of deregulation in 1984 continues to be a significant factor. Non-bank dealers in particular face a much smaller pool of potential in-house trainees than the banks and must therefore recruit more on the open market. Experienced staff, especially those with overseas backgrounds in foreign exchange dealing, can command high salaries relating to overseas conditions and this has created pressures on relativities within some institutions and within the domestic financial industry. Most of the dealers surveyed, however, had training programmes relating to their own requirements in place (mainly involving some training on overseas markets) and staff shortages are regarded as an inevitable aspect of a new and rapidly growing market. There is general agreement that the development of a more experienced and stabilised pool of foreign exchange dealers and advisers within the industry over the next two years will be of major importance in achieving a more stable and efficient market and one in which the corporate sector can have increased confidence.

Money Market Relationships

In Part II, the important relationship between movements in the domestic monetary economy and exchange rate adjustment are considered in some depth. However it is relevant to note here that the money market and foreign exchange operations of both bank and non-bank dealers are conducted in close proximity if not in the same room in most of the institutions surveyed. This arrangement (which is also not uncommon overseas) may intensify the sensitivity of the exchange rate to movements and events concerning domestic interest rates in particular. In the longer term, the exchange rate may be determined by the combination of factors of which domestic interest rates are only one. However, in seeking to explain short run volatility in the New Zealand foreign exchange market, the impact of well developed communications with money market operations should not be overlooked. The effect is to provide an even stronger mechanism by which conditions in one market spill over very quickly into the other.

The Corporate Sector

The adaptability of different corporates to this new foreign exchange environment has varied enormously. The larger traders (i.e. those in primary products, petroleum products, transport and some major manufacturing industries) have generally moved quickly to strengthen their in-house foreign exchange management capability. However, there remains a considerable number of smaller export and import enterprises who still have a limited understanding of the market and the instruments and services available.

The corporate sector's demand for foreign exchange market understanding and expertise naturally varies according to their degree of currency exposure. For the Dairy and Meat Boards, for example, this exposure is considerable even by international standards and has required the appointment of funds management staff with specific foreign exchange dealing experience. Funds management on this scale relates to both trade-related currency exposure and currency portfolio adjustment. In practice, these corporates read and interpret exchange rate movements and currency opportunities in much the same way as the authorised dealers. However, the thinness of the market has made the currency transaction activities of these larger corporates a difficult and sometimes costly exercise. The impending reorganisation of meat marketing involving a diminished role for the New Zealand Meat Board will remove one of the few larger "players" from the market in 1986. The effect of this will be to spread the meat industry's foreign exchange business across a number of smaller exporting corporates

(as with wool) though it remains uncertain whether this distribution of currency trading will necessarily have a smoothing effect. One less major corporate may be beneficial, but it will increase the relative size of the small number remaining and it is their actions which already tend to accentuate market volatility.

For the majority of New Zealand's exporters and importers, the importance of the foreign exchange market lies in the trend value of the NZ dollar against individual currencies rather than in day-to-day volatility. The economic impact of different exchange rate values is assessed in Part II, but it is worth noting here that the Export Institute's survey of members (August 1985) revealed that over 30% of members took no action to protect themselves against currency fluctuations. A further 30% invoiced in NZ dollars thereby transferring the risk (and the cost of protection from it) to the foreign importer, though this approach is not without some consequence for the competitiveness of the export product.

Consultations revealed that the reality of a deregulated foreign exchange market for small businesses is that the learning and monitoring costs of foreign exchange operations are high and that the services offered by the market operators are either not well known or are not yet confidently regarded. Excluding for the moment the impact of the exchange rate on the competitiveness of New Zealand industry and on economic activity generally, there is no clear evidence that a deregulated foreign exchange market has reduced overall *transaction costs* for the economy. In fact, the opposite is probably true during this initial adjustment period: i.e. the small gains from more competition in the buy and sell rates offered to the corporate sector have tended to be offset by the additional costs for managers in understanding and monitoring the foreign exchange market. As foreign exchange management services become better utilised and better tailored to the needs of small businesses these costs and uncertainty should be reduced.

Reserve Bank Involvement

The role of the Reserve Bank in these developments has generally been in accordance with its stated policies of minimal intervention. Prudential supervision is judged by the market to have been "about right" notwithstanding the financial and legal difficulties into which a small segment of the market has fallen. The Bank's technical involvement in the market via the Government's foreign exchange trading requirements has also been assessed as competent and unobtrusive. No plans for structural adjustment to the market have been publicly proposed by the Bank. However, the removal of withholding tax (although often successfully avoided) would be welcomed by the market.

Reserve Bank trading in the market (on behalf of the Government) can be of sufficient magnitude to precipitate movements in the exchange rate. The Bank's normal policy is to avoid influencing exchange rate movements if possible, though it does reserve the right to enter the market to counter disorderly trading and to use its normal trading to effect some "smoothing" of exchange rate volatility.

This policy is believed by most dealers to have been adhered to though there is a recognised "grey area" between smoothing operations effected during the course of normal Reserve Bank trading (as referred to above) and specific intervention per se. Some dealers consider that the Bank's participation in the market may have exceeded normal trading requirements at least once or twice in the last year in order to cushion major adjustments in the exchange rate, but this is denied by the Reserve Bank. There is no evidence that the Government has sought to influence the overall value of the exchange rate in this period.

Conclusions

It was widely expected that the first year under a floating rate would be a period of substantial learning and adjustment for corporate and financial institutions with respect to foreign exchange operations and management. Two factors, the volatility of the exchange rate and a substantial and unexpected period of currency appreciation combined to make this adjustment period more complex and yet more essential. Stability in the exchange rate and hence to some extent confidence in the market perhaps remains lower at the end of the year than might have been hoped by the Government twelve months ago.

Nonetheless, significant progress has been made in developing levels of competition and competence within currency dealing operations. Although the cost of these improvements has been high in terms of managerial and training inputs and in some cases losses on currency trading, the net impact over a longer period can reasonably be expected to be positive in terms of a more efficient foreign exchange sector providing a wider range of trade-related exchange services and management skills.

At the outset of the float the Governor of the Reserve Bank stated:

> "In the longer term the float (as opposed to a fixed exchange rate) will provide greater rather than less stability to those e.g. exporters and importers who, in the course of business, buy or sell foreign exchange." (R.B. Bulletin, April 1985)

The structural developments in the market which have taken place during 1985 are an important element in achieving this greater stability. These improvements are expected to continue as increased corporate servicing, the entrance of new financial institutions with significant foreign exchange expertise and credit lines to parent institutions, and the greater experience and training of existing dealing and advisory staff adds depth and competence to currency trading.

However, the influence of domestic and international monetary and economic conditions are another matter and are widely believed to be more critical determinants of the volatility and direction of a floating exchange rate. These issues are the subject of Part II.

PART II - EXCHANGE RATE DEVELOPMENTS

1. Why the Float?

In March 1985 the Government decided that the value of New Zealand's currency would henceforth be freely determined in the foreign exchange market. Before analysing some of the recent consequences of this decision, it is worth restating the benefits which were expected to be derived from a floating exchange rate regime:

- Removing price distortions and encouraging market flexibility are major components of the Government's overall economic strategy. A floating exchange rate provides a more accurate and visible indication of foreign exchange supply and demand conditions. The information which this provides regarding the value of the currency enhances the ability of the price mechanism to indicate investment opportunities and encourages more efficient resource allocation.

- A floating rate avoids the necessity for Government to make difficult and sometimes inadequately informed adjustments to exchange rate values - often in response to a crisis. Under a floating rate, adjustment tends to occur automatically in response to changes in the supply of and demand for foreign exchange.

- Floating the exchange rate removes from the Reserve Bank the obligation to buy or sell foreign exchange at the official rate. This enables the Government to pursue monetary policies which are less constrained by foreign exchange market requirements and therefore more firmly attuned to domestic monetary supply control.

- All gains and losses from currency speculation are incurred by the market participants. Speculation against an "official rate" is no longer possible and thus the Government (i.e. taxpayer) is insulated from such activity.

- The floating rate is in effect a flexible price. This enables some of the impact of internal and external shocks to the economy to be absorbed by the exchange rate rather than to be fully passed on to interest rates and the money supply. This provides the domestic economy with added insulation from international economic disruptions.

- Maintenance of a fixed exchange rate may incur for the Government additional and unplanned overseas borrowing. A floating rate restores greater predictability and control in managing the public debt programme.

2. Currency Adjustments under the Float

The New Zealand economy is small by international standards and is sensitive to events or changes in its external sector, i.e. in its dealings with the rest of the world. For these reasons, adjustments in the exchange rate have major implications for the level and direction of an important part of this country's economic activity. However, as the commodities and markets for New Zealand's export production have diversified in recent years, it has become necessary to differentiate carefully between currencies when considering the impact of the exchange rate on tradeables production in New Zealand. This requirement has been intensified since the float owing to the increased freedom with which the NZ dollar may now move in relation to these other currencies. A brief summary of the different currency adjustments which have occurred over the last year

illustrates this point: (Refer to Diagrams I(a) and I(b) and Table III).

(i) The US Dollar

Immediately prior to the float, the value of the NZ dollar stood at just under US45 cents. Initially, trading remained in a range between 43 and 46 cents - generally to the surprise of the market which had expected (and to some extent anticipated) a moderate depreciation. The value of the currency began rising significantly in mid-June and reached a peak of just under US 60 cents in October (a 34% appreciation on pre-float levels). The currency remained only briefly at that peak value and declined rapidly in December to around 48 cents. Since then the rate has generally hovered between 50 and 54 cents (a 20% appreciation over the period).

(ii) The Australian Dollar

The value of the NZ dollar showed a consistent upward trend against the Australian dollar from the float through until early November. This appreciation (of around 50%) and the volatility associated with it stemmed from a combination of a strengthening of the New Zealand currency and a substantial (23%) weakening of the Australian dollar against the US currency just prior to and for the first two months of the float. A mild recovery by the Australian dollar on international markets, and a sharp fall in the NZ dollar in November resulted in our currency finishing 1985 at about 73c Australian (up 16% on pre-float levels). It has since moved within a band between 73c and 77c up to March 1986.

(iii) The Pound Sterling

For the first four months following the float, the NZ dollar depreciated steadily against sterling (max. 15%). The currency began to recover in July and rose, somewhat erratically, to just over its pre-float level of 41p in October. From there, the dollar depreciated again to reach about 35p at the end of the year. The rate has fluctuated slightly around this level during the first three months of 1986. Over the period of the float, the value of the NZ dollar in relation to the pound has varied between a maximum of 43p and a minimum of 34p (about 21%), though it should be noted that sterling itself has shown considerable volatility on international markets throughout this period attributable in part to oil price adjustments and to fluctuating market perceptions of conditions in the British economy.

(iv) The Deutschmark

Movements against the Deutschmark have been similar to those of sterling. A moderate depreciation in the first three months of the float was followed by a rather shakey recovery to a peak of 1.56 marks in September (up 6% on pre-float levels). However, the rate fell heavily in November/December to finish the year around 1.25 marks (an overall variation of 21%). There has been continued volatility in the first part of 1986 with the rate moving between a high of 1.29 in January and a low of around 1.14 in early March. Maximum variation over the twelve month period has been 27%.

(v) The Yen

The value of the NZ dollar stood at 114 yen prior to the float. This rate remained relatively stable for several months then appreciated to approximately 130 yen in September (up 14%). As with the other currencies, the rate fell sharply in the last two months and finished 1985 at just on 100 yen (down 12.3%). Considerable volatility has also been witnessed in 1986 with the rate moving up to 106 yen in January and down to around 93 yen in early March. (This latter movement reflects the international strength of the yen in recent months involving an appreciation against practically all other currencies.) The maximum variation of the New Zealand dollar against the yen over the last twelve months is about 29%.

(vi) Reserve Bank Index

The Reserve Bank's Index ended the first year of floating almost exactly at its pre-float value (62.7 points). However, during these nine months the rate had varied between a low of about 60.2 points (down 4%) to a maximum of 74.6 points (up 19% on pre-float values). Overall, this represented a 24% variation in values. The weightings used by the Bank to calculate this index are shown in Table VI.

3. Background to the Currency Fluctuations

This initial twelve months of a floating currency has been marked by several distinct phases in terms of exchange rate movements and market activity. The first period, immediately prior to and during the first six weeks of the float, was dominated by the severe liquidity shortage in domestic financial markets (exacerbated by capital outflows in anticipation of a currency depreciation). When the Reserve Bank refrained initially from reliquifying the monetary system those investors who had transferred funds offshore found themselves penalised in terms of domestic interest liabilities and opportunities. The ensuing inflow of capital strengthened the NZ dollar until such time as the Reserve Bank's actions in injecting liquidity moderated capital movements and currency parities returned more to their pre-float levels. The gains and losses experienced during this period emphasised to market participants the uncertainty of a floating rate with the result that willingness to take risks was significantly reduced. Some of these lessons might nevertheless have been worthwhile.

The second period, from the end of April to mid-June 1985, was comparatively quiet - assisted in part by a much less firm US dollar on international markets. Market turnover in New Zealand (both spot and forward) actually declined during this period in terms of NZ$/US$ transactions. Market participants apparently decided (in the wake of the financial sector turbulence in March) to adopt a "wait-and-see" approach with regard to exchange rate developments and the domestic monetary environment. Internationally, this period enabled brokers and investors to assess New Zealand's economic and political direction and to prepare and evaluate investment opportunities.

The following phase, which began in June, was marked by a substantial appreciation of the NZ dollar against each of the major currencies. This appreciation was largely prompted by substantial inflows of capital to New Zealand reflecting major differentials between domestic and international interest rates. (A more detailed description of these flows is provided in Section 5 below.) New Zealand corporates in particular - expecting the Government to persist with tight monetary and high interest rate policies - undertook significant off-shore borrowing at international rates lower than those on the domestic financial market.

The Eurokiwi market became established as an important mechanism through which this interest rate arbitrage could be conducted. Clearly, European and to a lesser extent Japanese, interests found these investment opportunities attractive provided adequate interest rate margins were maintained to cover possible NZ currency depreciation. The Eurokiwi bond favoured both the corporate borrower (by providing funds at a lower cost than domestic alternatives and in NZ currency with no exchange risk) and the overseas lender, the "Belgian Dentist", (by providing a competitive coupon rate without attracting the withholding tax applicable to New Zealand Government stock). Political stability and a firm anti-inflationary stance by the government no doubt enhanced the interest rate appeal for overseas investors, though it also appears that the availability of these capital issues coincided with a period during which international markets were particularly receptive to non-US dollar investments.

This strengthening of the currency in response to large net capital inflows took place against a background of a substantial current account deficit (Diagram II) and at a time when New Zealand's inflation rate was more than double that of most its major trading partners and considerably higher than the OECD average of 4.5% (for the twelve months to January 1986). The harmful impact of this appreciation of the currency on the economy's competitiveness was widely reported as of paramount concern to export industries. The validity of this argument is examined more closely in the next section.

The fourth and final phase of the dollar's movements in 1985 commenced in mid-November with a slight downward adjustment against all the major currencies. Although there was a general (but by no means unanimous) "downside" expectation in the market at this time, there appears to have been no real indication that a subsequent sharp fall was imminent. The precipitating factor for this major adjustment in mid-December appears to have been the decision by a small number of large New Zealand corporates to sell the local currency in advance of further downward drift. The sharp drop which these actions precipitated emphasises the continuing vulnerability of the currency even to the decisions of domestic industries and firms. However, there was general agreement at the time that the relatively high values of the dollar in September/October were unsustainable in terms of the deteriorating balance on the current account and in terms of the competitiveness of the New Zealand economy.

Since December, the average value of the NZ dollar has remained moderately stable against the major currencies (with the particular exception of the yen) though daily volatility has remained reasonably high.

4. The Impact on Exports

Any judgment on the efficacy of a floating exchange rate in respect of the New Zealand economy must include an assessment of its impact on the export sector. The experience of a floating rate in 1985 suggests that two areas require consideration: the uncertainty created by volatility, and the impact on overall competitiveness resulting from the differing adjustments of the dollar against the major currencies.

(i) Volatility

Volatility in a floating currency can be expressed in the degree of movement in the rate on a day-to-day basis and in the overall variation between its highest and lowest values over a period of, say, one year. The daily volatility of the NZ dollar from March 1986 to February 1986 (Table VIII) has been higher than most major currencies including the Australian dollar over a similar period. Overall variation (Table VII)

has also been significantly greater than other currencies except the British pound. This volatility imposed varying costs for different sections of New Zealand's export sector and generalisation of the impact of a fluctuating currency can not convey an accurate picture. For example, smaller businesses complained that the uncertainty created by these parity changes regarding the final value of their exports in New Zealand dollars flowed through into production decisions. Very few of these (mainly manufacturing) exporters considered that they had the time, staff resources, or expertise to monitor currency changes and only a small proportion sought regularly to minimise the income effects of currency fluctuations through the use of forward cover.

For major exporters, especially of primary products, there have been obvious advantages in establishing skilled funds management operations which help minimise the financial impact of a volatile currency. However, efficient foreign exchange management does not eliminate altogether the uncertainty of returns and nor does it insulate the producer from the vagaries of the currency market in the medium and longer term. As an example, Table IV contains the Meat and Wool Boards' Economic Service calculations of the impact of a 10% currency change on farm gate receipts for meat. A currency revaluation of this order reduces schedule prices for the producer by 20% for lamb, 120% for mutton and 12.2% for beef. This degree of impact may certainly affect production planning and is exacerbated by continued volatility. However, the net impact on incomes and competitiveness is given more careful consideration below.

Volatility in the exchange rate therefore increases uncertainty and may lead some firms (especially those not using forward cover) to take a less positive approach to export production. However, it was regarded as a major concern for many of New Zealand's export industries in 1985 which had become accustomed to a relatively stable (or at least predictable) currency environment and, therefore, greater stability of profits. A volatile floating exchange rate can therefore raise some costs and provide an additional challenge to business management. However, coping successfully with this challenge could be argued to be a necessary step in achieving a more efficient economy.

(ii) Competitiveness

The difficulties created by a volatile exchange rate may be compounded for the export sector in particular if the overall trend of the rate is to reduce this sector's competitiveness in the international economy. This aspect of the float received considerable attention for several months during 1985 while the value of the NZ dollar rose well above its pre-float levels in respect of the US and Australian currencies and to a lesser extent the yen. The meat schedule impacts given above were one example. Clearly, the income effects resulting from these price changes are substantial and the Meat and Dairy Boards in particular emphasised publicly and to Government the impact which these price adjustments implied for their industries during the currency appreciation phase in 1985.

It should be noted that the consequences of exchange rate appreciation for the profitability of an industry may vary over time and between industries. For the meat producer, the short run consequences at least were particularly severe. In this case, the reduction imposed by the exchange rate on the returns from meat exports had to be borne primarily by the producer owing to the relatively fixed nature of the returns to the other contributing industries (especially processing and transport).

However, it is not usual for such a large proportion of a currency adjustment to be absorbed in the return to the producer. Costs of production, competitiveness and the exchange rate are all interrelated in a complex manner and there may in the longer term

be significant, offsetting cost changes in other areas relating to production, transport and marketing. An appreciation of the currency which reduces the cost of some inputs (i.e. those which are imported or have some imported content) may thereby have only a minimal overall impact on incomes and competitiveness. A depreciation of the currency, as occurred later in 1985, also reverses these effects. In order to assess the impact of the float on the competitiveness of the export sector as a whole, it is therefore necessary at least to differentiate between export industries and, more particularly, to attempt to isolate the currencies within which each of them is traded.

Table V provides an indication of the importance of the different currency values for the major receipts in the current account. The data contained within this table is drawn from OET statistics and provides by no means a complete picture. However the key figures corresponded reasonably well with figures provided during industry consultations.

From the table, US currency values are of major importance in the export of meat, wool, dairy, forestry and "other merchandise" exports. In total, almost 50% of the September 1985 year current account receipts were in US currency (46% in 1984).

The Australian dollar accounts for approximately 21% of receipts from manufactured products and for about 25% of forest products. Overall, Australian currency has comprised about 10% of total current account receipts in each of the last two years.

The yen appears from these statistics to be of major importance for the manufacturing sector (due primarily to exports of aluminium). In each of the last two years it has made up around 23% of these receipts though it is of minimal importance to other exports.

As one might expect the pound sterling is of significance for meat (especially lamb) export (23%), for dairy products (22.5% in 1984) and for receipts on invisibles (16.7% in 1985). Overall, it now accounts for around 10-14% of total current account receipts as recorded in the OET data. (The 0.4% statistic for dairy product receipts in 1985 is not typical of a normal year.)

The only other significant item in the table concerns the proportion of receipts in New Zealand currency. This is particularly high for wool (26%), manufactured products (29%), "other merchandise" (21%) totalling around 19% overall. Although there appears from consultations to have been an increased preference for invoicing in NZ currency during 1985, this overall figure of 19% may be a little too high. It could be explained by the fact that some exporters exchange foreign currency receipts into New Zealand dollars overseas before remitting the revenue from those exports. (Preferable rates for NZ currency can sometimes be obtained from the small levels of trading in this currency on overseas foreign exchange markets.)

One would expect the varying impacts of these changes in currency values to be captured for the economy as a whole in the Reserve Bank's exchange rate Index (Table VI). However, the Index is based on both export and import trading and as such may not accurately reflect the exchange rate environment for exporters only at any one time. Compared to the OET current account receipts data, the Index accords a much lower weighting to the US dollar and a rather higher weighting to sterling and the yen. The overall impact of these different weightings would appear to produce movements in the Index which understate the volatility and the degree of currency appreciation faced by the *export* sector in 1985. Nonetheless, movements in the Reserve Bank Index in 1985 tend to support the conclusion reached on the basis of overseas experience of a flexible exchange rate regime: i.e. that although exchange rate fluctuations against a

trade-weighted basket have been smaller than in a bilateral context, they have still been higher under floating rates than under the previous regime of pegged rates.

The movements against individual currencies which would have occurred over the last twelve months under the previous fixed rate regime are shown in Table IX. Clearly the value of the NZ dollar as at 22 November 1985 would have been considerably less across each bilateral rate under the earlier fixed exchange rate system, though this situation had changed noticeably by 26 February 1986. At this latter date, the position of the NZ dollar was only about 2% higher (i.e. less competitive) against each major currency than it would have been under the fixed rate system. The fact that our dollar appreciated about 18% against the US dollar and depreciated more than 20% against the deutschmark over this period reflects the considerable realignment which has taken place between the major currencies on international markets.

The main conclusion to be drawn from this summary is that incomes and competitiveness in a major part of the export sector were genuinely eroded by the appreciation of the NZ dollar against the US and Australian currencies in particular. These industries have continued to be affected as the NZ dollar remains well above its pre-float values in relation to these two currencies though the problem is less severe now than it was in the third quarter of 1985. To some extent, losses suffered by these industries have been offset by a net depreciation against sterling over most of the period of the float benefitting especially lamb exports and receipts from invisibles. The more recent depreciation against the yen has also been of assistance to industries exporting to Japan.

It should be emphasised that the value of the NZ dollar at March 1986 is not greatly different from the value it would have been under a fixed rate system. The disadvantages for exporters arising from the floating of the currency (in addition to uncertainty) are therefore limited primarily to the reduced incomes and loss of markets experienced during the peak period of currency appreciation from August to December 1985.

However it is noted above that by March 1986 the Australian and US dollar values remained significantly higher than their pre-float levels, and when combined with the impact of relative inflation rates, this represents a market net appreciation in the *real* exchange rate (i.e. a loss of competitiveness). As an indication of the extent of this adjustment, BERL (December 1985 Forecasts) have estimated that a fall in the Reserve Bank Index to around 60 points is needed by June 1986 in order to restore a level of competitiveness to the New Zealand economy sufficient to rectify the current account deficit. It should be noted, however, that current account balance may not be an objective of government policy nor therefore a requirement for the exchange rate. A continued deficit may be acceptable provided that the level of borrowing and repayment required to accommodate it can be sustained.

The impact of a sharp currency appreciation on profitability and competitiveness cannot be easily measured even where it affects a broad cross section of export industries. This issue was of considerable concern in the UK in the early 1980s where opinion remained divided on the extent to which a combination of monetary policies, oil price factors and exchange rate appreciation seriously disadvantaged British industry - especially in the export and import-competing sectors. New Zealand's experience in 1985 would appear though to differ in that the period of high currency values was relatively brief and, importantly, was generally *expected* to be so. Therefore, while a significant volume of sales may have been lost or made at reduced profitability during this period (each of the meat, wool, dairy, horticultural and manufacturing industries complained of such), there is much less evidence that longer-term production

decisions were permanently revised in the light of the currency's value.

It is therefore legitimate to conclude that the export sector, although shaken and disrupted over the last twelve months, has not been permanently impaired by currency adjustments. However, in so far as this disruption coincided with other economic pressures - especially in the farming sector - it must be acknowledged that the uncertainty and loss of profitability associated with a floating rate negated at least for this period some of the advantages which the Government may have expected for the external sector from a flexible regime. Certainly, the price signals provided by the floating rate were confusing and complicated the process of making efficient business and investment decisions.

5. Other Sectoral Interests

To look only at developments in the export sector would omit other important areas of economic activity which are affected by the exchange rate. For each seller of a unit of currency there must also be in the market a buyer for whom the prevailing rate is at least acceptable. Appreciation of the currency therefore enabled a number of corporate and individual participants in the market to obtain foreign exchange at a lower cost. Access to these investible funds therefore raised the quantity and lowered the cost of investment for these institutions relative to a lower (or fixed) exchange rate. For some larger firms especially, losses on export revenue due to a higher valued NZ dollar have been offset at least in part by lower borrowing costs on capital markets.

Whether this resulted in a *net* benefit to the economy as a whole is difficult to determine. Nonetheless, this argument forms an important aspect of the conceptual framework underlying the Government's rationale for a floating exchange rate as outlined earlier: more efficient investment (i.e. resource allocation) decisions are likely to result from a foreign exchange price determined by the interests of buyers and sellers than from a price determined by a central authority.

The exchange rate also has important implications for the cost of goods and services imported into New Zealand. It was argued in 1985 that a major benefit of an appreciating currency would by obtained from lower import prices leading to a reduction in inflation. Although there were a number of visible price reductions (such as petrol, meat and imported fruits) the beneficial impact of an appreciation of the exchange rate in reducing the general level of domestic inflation appears to have been less than expected. There are at least two possible explanations for what could be described as this short term downward inflexibility of prices. Importers and import using industries, like exporters, reported that they generally did not expect the appreciation to be lasting. From their point of view, there was therefore little incentive or advantage in passing on a temporary reduction in prices. A much more sustained appreciation of the currency would seem necessary to secure such an impact with its consequent benefit for consumers.

Secondly, and perhaps more generally, it should be noted that approximately 75% of New Zealand's imports have been classified as "intermediate products" i.e. products used in the manufacture of final consumption goods. At the time of this currency appreciation, most industries were experiencing a market increase in costs especially as a result of high interest rates. The gains from lower import prices appear to have been used to offset some of these cost increases. Lower import costs resulting from the appreciation may therefore have had some dampening effect on inflationary pressures in the economy, though their impact on final consumer prices may have been muted for the reasons outlined and certainly less than one would normally expect from a prolonged currency rise.

New Zealand's experience in this respect is not without precedent: a recent study[5] in the United States concluded that an appreciation of 17% in the trade weighted value of the US dollar over the period 1983 to 1985 failed to have any significant impact on import prices and domestic inflation. Although the "pass-through" of the currency appreciation of import prices differed markedly between imported products and materials, the aggregate impact on domestic prices was almost nil. This result was attributed to non-competitive practices and buoyant domestic demand offsetting the deflationary consequences of the currency appreciation. The less sustained appreciation of the NZ dollar in 1985 could be argued to increase this possibility of a low pass-through effect. However, it should be repeated that price increases during this period might well have been greater had not the exchange rate exercised some deflationary pressure.

6. Exchange Rate Determination

Nine months' experience of a freely floating exchange rate may be rather too brief a period on which to base firm judgments on the mechanisms through which the rate is determined. For this same reason, it may also be inappropriate to make assessments of whether this type of regime can bring the benefits expected of it by the Government and its officials. Not only is there a shortage of reliable data and information at this stage, but several participants in the foreign exchange market suggest that the behaviour and the events in the market in this first year may not prove typical in the longer term.

Even so, the behaviour of the market and the exchange rate so far has not been too dissimilar from experience overseas and has on the whole corresponded with the broad theoretical understanding of exchange rate determination. There is also a considerable degree of consistency in the description and expectations of the market's behaviour among corporate, dealing and official participants. All of this suggests that some preliminary conclusions are possible and worthwhile.

(i) Capital Flows

There is very broad agreement that much of the volatility witnessed in the exchange rate in 1985 resulted from a high level of activity in private capital flows. In short, New Zealand's financial and economic structure experienced a period of rapid integration with international capital markets. This opened a new field of opportunity for both foreign and domestic investors. The factors which prompted this integration can be summarised as follows:

- *Removal of Exchange Controls.* This had the effect of lifting restrictions on the movement of capital by New Zealand residents in and out of New Zealand. Some initial market enthusiasm for exploiting the new opportunities which this deregulation offered would have occurred irrespective of interest rate or other incentives.

- *Interest Rates.* The high nominal interest rates experienced in 1985 were a direct result of strong public and private sector competition for loanable funds.

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(5) Federal Reserve Bank of New York Quarterly Review, Autumn 1985.

Overseas capital markets provided one channel by which this demand for credit

Overseas capital markets provided one channel by which this demand for credit could be accommodated. However, lenders in these markets required an interest rate which not only exceeded international rates, but which provided sufficient margin to cover possible inflation and NZ currency depreciation. Borrowing rates of around 16-17% met these requirements of foreign lenders while also enabling New Zealand borrowers to obtain funds at a slightly lower cost than on domestic finance markets.

- *New Zealand's Financial Reputation.* An international perception of New Zealand as a politically stable country with firm anti-inflationary economic policies, an underlying economic strength based on international competitiveness and hence relatively small default or exchange rate risk were listed as important factors in investment flows. (There are surprisingly few small countries which are attractive in terms of security and rates of return for international investors. Even Singapore has suffered some recent loss of credibility.)

- *Other Investment Opportunities.* International capital markets were reputed to be short of attractive investment opportunities due primarily to low US interest rates and exchange rate uncertainty. Moreover, as international capital movements are so immense in dollar terms, it required only a small fraction of this market to impact heavily on the NZ economy. (Total Eurokiwi bonds in 1985 constituted less than one thousandth of total Euromarket issues.)

The importance of these capital flows for the longer term determination of the exchange rate - and hence the New Zealand economy - depends partly on the *nature* of the flows: i.e. to what extent do these flows depict short or long-term investment. As far as exchange rate determination is concerned, it has been said that short-term flows "are as reliable as a bald tyre". The problem of such in-flows under a floating exchange rate is that they tend to accelerate as the currency appreciates, but flow out equally as quickly once the currency starts to depreciate therefore driving it down even further.

The exact nature of these capital flows since March 1985 and their implications for the New Zealand economy as a whole requires further research. Table X, however, provides some preliminary results based on OET data which disaggregate capital flows according to the length of time the capital is expected to be held in the country and according to whether the funds represent (private) overseas borrowing by New Zealanders or private direct investment by foreigners. Over the ten months to December 1985 *net* short-term capital inflows (defined as loans or investments of less than 12 months) amounted to 31.3 per cent of total net flows. The other two-thirds of net capital inflows were in the form of long term borrowing and, to a lesser extent, long term investment. This proportion of long term net capital inflows (68.7%) is considerably higher than in 1984 (26.2%) and slightly higher than in 1983 (63.3%). These results suggest that the capital flows associated with this initial period of the float are based more on longer term assessments of the New Zealand economy and are unlikely to give rise to the possible destabilising effects outlined above.

(ii) Trade Flows

The manner in which trade flows, as reflected in the current account, have influenced the exchange rate during 1985 is not yet easy to determine. Although at first sight the erratic adjustments of the currency can be attributed to decisions in capital markets, there are at least two reasons why current account factors should not be excluded from an overall picture of exchange rate determination during this period.

In the New Zealand market, major exporters such as the meat, dairy, wool and timber industries are amongst the larger movers of foreign exchange. The capital movements of these organisations are closely related to their trading activities and as such may be an important determinant of movements in the rate on both a day to day and seasonal basis. Secondly, the high values reached by the dollar in September/October were unsupported by developments in the current account which continued to reflect a substantial deficit. The sharp drop in the currency in November/December was almost certainly prompted by an assessment that the currency was overvalued in the light of the longer term trends embodied in the current account figures (see Diagram II).

Taking these two factors together, it is therefore reasonable to attribute short run movements in the exchange rate at least in part to export sector activity in funds management and to market perceptions of the eventual impact of the balance on current account. Over a longer period, whether the current account will become the primary determinant of the exchange rate depends at least in part on the nature and sustainability of the private capital flows.

The condition of the current account may therefore assume greater significance in 1986. Predictions regarding movements in the external deficit vary widely. BERL forecast that the deficit for the 1985/86 (June) year will be at least as large as 1984/85 which was itself a "significant deterioration" over 1983/84. Their forecast for 1986/87 is for only a moderate improvement compared with the Reserve Bank Model which anticipates a marked reduction in the deficit for 1986/87 from $2,700m to $1,700m. Most market participants indicated that they would be paying increased attention to current account data in formulating expectations of the exchange rate in 1986.

(iii) Monetary and Fiscal Policy

In the Economic Monitoring Group's earlier report the impact of a large fiscal deficit financed in a non-monetised way was shown to be an appreciation of the currency resulting from inflows of foreign capital. This in fact occurred in 1985. The report went on to explain that the impact of this appreciation on the external accounts depended on whether the assistance it provided to the control of inflation (through lower import prices) and the resulting gain in the competitiveness of New Zealand export production outweighed the short-term impact on export prices and profitability.

In the event, it would appear that the currency appreciation in 1985 had only a minor impact on inflation and caused mainly temporary setbacks for some export industries. It has already been argued that few long-term structural changes were made in the economy as a consequence of these exchange rate signals. However, the experience provided some important indications of the relationships between monetary and fiscal policies, the exchange rate, and production decisions.

In its final chapter, the EMG considered possible outcomes for New Zealand of a large internal deficit and a floating exchange rate. One suggestion was that if deficit reduction proved more difficult than expected there would be a prolonged period of

tight monetary policy and high interest rates with consequent continued volatility in the exchange rate. (Exactly how often and in what direction the rate moved overall would depend on the expectations of both foreign and local market participants and on international monetary and economic conditions.)

How likely is this scenario for the remainder of in 1986? Certainly, the internal deficit is now expected to reach at least $2 billion. The deficit can be expected to remain large in 1986/87. While there is some dispute as to whether monetary policy is actually "tight", there is good cause to expect that the Government's commitment to a fully-funded deficit for the purposes of restraining inflation will result in continuing high nominal interest rates. Although the conditions which gave rise to the substantial capital inflows in 1985 may not all recur, the continued existence of these high interest rates is likely to maintain some upward pressure on the exchange rate as New Zealand corporates in particular seek to borrow further on international capital markets. Under these conditions the value of the exchange rate (although probably not as high as in 1985) could remain above the level conducive to investment and growth in some existing export and import-competing industries. It is much less likely that in 1986 these industries would resist adjustment to these signals on a second and any subsequent occasions - especially as the Government remains committed to removing other forms of industry protection and assistance with might have otherwise deferred their adjustment decisions.

It should be emphasised that the Government's decision to float the exchange rate in March 1985 was taken as much on the grounds of encouraging efficient resource allocation at the firm and industry level as it was for macroeconomic management purposes. There is, therefore, a problem in implementing a combination of monetary and fiscal policies which lead the exchange rate to provide discouraging signals to a visible cross-section of export and import-competing production without knowing exactly in which areas more efficient new investment is occurring. This raises an important question as to whether the price signals provided by a floating exchange rate are sufficiently consistent with improved microeconomic resource allocation.

The problem is not new: very few of the major currencies overseas are now permitted by their governments to float as freely as the NZ dollar. A major difficulty has been that the trend value of their currencies and the short run adjustment paths of the exchange rate have failed to ensure that the signals provided to the economy are fully consistent with both national and international structural adjustment and stabilisation policies. This problem has intensified the requirement for those governments to intervene in the exchange rate determination process at both the domestic and international level. Judging by recent statements by the Australian Government on this issue it would also appear that monetary policies there are now framed with some view to their impact on the exchange rate.

In principle, there are two methods by which a government may intervene to affect the level of the exchange rate: direct intervention involves the Reserve Bank actively buying and selling in the market so as to influence the rate in a particular direction. This may require the use of substantial foreign reserves not only to move the rate but, more importantly, to sustain it at a new level which is probably unsupported by normal supply and demand conditions. Secondly, the government may intervene indirectly through the use of monetary and fiscal policies so as to alter economic conditions and therefore the supply and demand for foreign exchange (e.g. by relaxing monetary control and lowering the interest rate differential). Both forms of intervention may be used to maintain the exchange rate within a band of maximum and minimum values.

The key issue in any discussion of the case for a more active approach by the

government to exchange rate management through either of the methods outlined concerns the ability of the government to intervene with preferable results. Clearly, the present government in New Zealand accepts that complete intervention in the form of a *fixed* exchange rate has not been successful in recent years and that partial intervention (i.e. targetting of a floating exchange rate through monetary or foreign exchange market interventions) is also unlikely to prove practical or more effective in the longer term. Whether this policy stance can be maintained beyond 1986 would now seem to depend in part on how quickly other aspects of the government's economic management permit the attainment of exchange rate values which are more stable and which are seen to be complementary to investment and growth in the economy.

One aspect of the market which may affect the relationships described here concerns the confidence and expectations of the participants. A repeat of 1985's appreciation of the dollar against the currencies of New Zealand's major trading partners may intensify concern over the size of the external deficit. Similarly, any relaxation by the Government on its monetary or fiscal stance would add to inflationary expectations and a downward adjustment of the exchange rate. Either of these factors - i.e. an expectation of further slippage in either the external or internal deficits and the Government's management of them - may moderate or at least shorten the cycle of an exchange rate appreciation induced by further capital flows.

7. Conclusions

An assessment of the merits of New Zealand's floating exchange rate system during these first twelve months tends to conform with earlier experience overseas: it delivered neither the major benefits nor did it create quite the degree of economic disruption which had been earlier argued. The foreign exchange market itself appears to have responded quickly and effectively to the new environment. Currency trading proceeded efficiently and responsibly with only one institution encountering major financial difficulty. A growing awareness by corporates of the importance of foreign exchange management could be expected to lead to greater competence and sophistication in the market.

The floating rate, however, exhibited a volatility which some exporters in particular argued was not conducive to export production and efficient resource allocation. To some extent, this volatility could be expected during the initial period of market adjustment, during a substantial programme of national economic deregulation and during a period of relatively high international exchange rate volatility. However, particularly under such conditions, it would also appear that some of the present policies to which the Government remains committed will, under current economic conditions, make the attainment of a more stable exchange rate unlikely in 1986. Some continuation of the capital inflows experienced in 1985 can be expected thereby maintaining the strength of the NZ dollar against the Australian and US currencies in particular. This outcome would have consequences for the economy's competitive position and may militate against recent improvements in the current account deficit.

Commitment by the Government to a freely floating rate has intensified the requirement emphasised by the EMG in previous reports to secure a reduction in the fiscal deficit and inflation. In the short run, the policies employed to these ends have led to an exchange rate pattern of adjustment which has so far failed to promote confidence and optimism in much of the external sector. Judgments on whether it has stimulated efficient new investment in other areas of the economy must be reserved. This raises an important question as to whether the Government can succeed in obtaining a reduction in the fiscal deficit, control of inflation and the promotion of new investment soon

enough to avoid the need for a more active approach to exchange rate policy. Experience overseas suggests that limited management of a floating rate is eventually required where the external sector maintains an important role in economic development.

Although the last twelve months have imposed some harsh lessons of adjustment particularly on the export sector there have been a number of advantages derived from the floating rate which must also be taken into account. These include the attainment of greater control over the management of official external debt, the removal of the potential for speculation against the New Zealand currency at the expense of the taxpayer, and the development of a more flexible and responsive foreign exchange market in which the Reserve Bank need no longer play a difficult and, arguably, inappropriate role.

However, the key criterion in assessing the efficacy of a floating rate regime concerns the appropriateness of the signals provided by the exchange rate to economic activity and to the allocation of resources in the economy. On this score, the performance has been less satisfactory though the EMG argues that the experience of this initial adjustment phase does not provide sufficient grounds on which to base any major revision of policy. Nonetheless, the last twelve months have demonstrated the importance of these signals in a small open economy and in ensuring that they support the intended thrust of economic policy.

TABLES AND DIAGRAMS

TABLE I

NEW ZEALAND FOREIGN EXCHANGE MARKET TURNOVER
(NZ$M)

(Excluding deals with the Reserve Bank)

MONTH	SPOT			FORWARD			
	NZ$/ US$	NZ$/ Other	3rd Curr	NZ$/ US$	NZ$/ Other	3rd Curr	Total
1983							
September	3,493	706	6,884	693	105	882	12,763
October	4,252	622	7,023	790	126	935	13,748
November	4,596	654	8,240	828	110	834	15,262
December	5,851	624	5,530	957	144	865	13,971
1984							
January	4,975	575	9,144	693	125	989	16,501
February	8,552	775	11,887	1,780	214	2,017	25,225
March	12,170	767	14,914	2,183	181	2,208	32,423
April	8,838	724	10,399	1,431	188	1,351	22,931
May	11,335	985	16,724	1,928	181	2,875	34,028
June	10,853	1,094	15,299	2,314	244	2,932	32,736
July	16,293	1,584	21,611	4,249	343	2,740	46,820
August	14,130	965	22,885	2,590	176	2,702	43,448
September	14,645	1,080	23,576	2,052	216	2,404	43,973
October	17,214	1,298	23,201	2,974	249	3,302	48,238
November	19,820	1,872	30,424	2,969	257	2,855	58,197
December	13,621	972	13,775	2,435	288	1,844	32,935
1985							
January	18,879	987	28,128	3,785	281	3,101	55,161
February	21,149	1,121	33,663	3,916	392	4,232	64,473
March	17,990	1,544	27,710	2,835	283	3,253	53,615
April	15,203	1,289	32,113	2,069	351	5,016	56,041
May	17,349	1,645	40,500	2,213	669	6,148	68,524
June	21,525	1,263	44,584	5,173	718	6,387	79,650
July	36,814	2,116	48,079	10,693	704	4,818	103,224
August	39,361	1,514	32,344	12,640	479	4,463	90,802
September	33,228	1,314	37,678	8,705	393	4,485	85,803
October	32,985	1,251	36,564	8,085	561	4,459	83,905
November	39,948	1,599	39,083	12,433	671	5,072	98,806

TABLE II (4 pages)

NEW ZEALAND FOREIGN EXCHANGE MARKET TURNOVER
(NZ$M)

WEEK ENDING	SPOT						FORWARD						TOTAL
	NEW ZEALAND DOLLAR			THIRD CURRENCY			NEW ZEALAND DOLLAR			THIRD CURRENCY			
	BANK	DEALER	TOTAL	BANK	DEALER	TOTAL	BANK	DEALER	TOTAL	BANK	DEALER	TOTAL	
1983													
Sept 8	775.0	131.0	906.0	1417.0	48.0	1465.0	191.0	20.0	211.0	268.0	3.0	271.0	2853.0
15	845.0	271.0	1116.0	1694.0	43.0	1737.0	184.0	94.0	278.0	145.0	16.0	161.0	3292.0
22	683.0	200.0	883.0	1907.0	53.0	1960.0	95.0	11.0	106.0	141.0	9.0	150.0	3099.0
29	797.0	295.0	1092.0	1605.0	35.0	1640.0	126.0	8.0	134.0	285.0	1.0	286.0	3152.0
Oct 6	1264.0	135.0	1399.0	1476.0	166.0	1642.0	273.0	111.0	384.0	184.0	30.0	214.0	3639.0
13	794.0	401.0	1195.0	1755.0	101.0	1856.0	186.0	51.0	237.0	335.0	89.0	424.0	3712.0
20	849.0	276.0	1125.0	1742.0	79.0	1821.0	165.0	32.0	197.0	109.0	12.0	121.0	3264.0
27	670.4	211.5	881.9	1244.0	56.6	1300.6	101.6	21.5	123.1	168.7	1.2	169.9	2475.5
Nov 3	1025.0	241.0	1266.0	1635.0	120.0	1755.0	168.0	48.0	216.0	154.0	37.0	191.0	3428.0
10	901.4	371.0	1272.4	1717.6	115.6	1833.2	189.8	117.7	307.5	174.5	6.6	181.1	3594.2
17	832.8	391.4	1224.2	2260.4	141.3	2401.7	135.1	30.4	165.5	132.6	27.4	160.0	3951.4
24	677.2	217.0	894.2	2007.4	128.3	2135.7	114.1	88.8	202.9	219.4	8.1	227.5	3460.3
Dec 1	1142.8	356.3	1499.1	1432.9	36.4	1469.3	118.4	34.3	152.7	169.3	1.2	170.5	3291.6
8	1070.3	410.4	1480.7	1799.7	134.0	1833.7	98.0	29.3	127.3	263.6	25.7	289.3	3731.0
15	1096.1	434.7	1530.8	1777.4	121.5	1898.9	242.5	155.2	397.7	245.3	38.1	283.4	4110.8
22	1330.9	591.3	1922.2	797.9	74.4	872.3	273.9	113.8	387.7	104.0	23.8	127.8	3310.0
29	376.4	85.8	462.2	200.4	12.9	213.3	52.4	30.4	82.8	38.7	0.8	39.5	797.8
1984													
Jan 5	572.7	215.5	788.2	688.2	27.7	715.9	115.5	20.4	135.9	17.6	10.7	28.3	1668.3
12	1118.5	437.0	1555.5	2431.1	154.3	2585.4	212.0	46.7	258.7	219.2	20.5	239.7	4639.3
19	842.6	345.1	1187.7	2050.1	120.8	2170.9	135.3	68.0	203.3	213.5	30.2	243.7	3805.6
26	809.5	398.5	1208.0	2345.9	108.4	2454.3	67.3	10.7	78.0	314.1	6.1	320.2	4060.5
Feb 2	1095.3	497.5	1592.8	2107.4	127.5	2234.9	180.2	104.3	284.5	399.6	15.5	415.1	4527.3
9	1432.5	830.8	2263.3	2516.5	166.2	2682.7	473.0	220.4	693.4	353.4	25.2	378.6	6018.0
16	1110.6	741.7	1852.3	2476.3	222.2	2698.5	150.1	136.4	286.5	313.7	34.3	348.0	5185.3
23	1262.8	1060.4	2323.2	2649.5	270.9	2920.4	297.9	129.0	426.9	314.6	105.9	420.5	6091.0
Mar 1	1435.9	935.0	2370.9	2955.2	305.3	3260.5	358.0	149.5	507.5	719.0	11.0	730.0	6868.9
8	1710.8	1174.9	2885.7	3796.9	363.3	4160.2	383.8	112.1	495.9	582.7	87.7	670.4	8212.2
15	1598.1	1020.0	2618.1	2616.8	425.7	3042.5	539.5	305.7	845.2	373.7	123.2	496.9	7002.7
22	1898.7	1117.9	3016.6	2693.0	535.5	3228.5	370.4	217.3	587.7	376.2	61.6	437.8	7270.6
29	2559.2	1355.9	3905.1	3072.7	516.0	3588.7	258.1	80.0	338.1	394.3	69.4	463.7	8295.6

WEEK ENDING	SPOT						FORWARD						TOTAL
	NEW ZEALAND DOLLAR			THIRD CURRENCY			NEW ZEALAND DOLLAR			THIRD CURRENCY			
	BANK	DEALER	TOTAL	BANK	DEALER	TOTAL	BANK	DEALER	TOTAL	BANK	DEALER	TOTAL	
1984													
Apl 5	1791.0	925.7	2716.7	2001.6	345.8	2347.4	359.9	88.5	448.4	249.4	19.4	268.8	5781.3
12	2098.5	1056.7	3155.2	2993.5	330.2	3323.7	390.3	77.5	467.8	318.6	37.2	355.8	7302.5
19	1593.9	927.3	2421.2	2871.5	318.2	3189.7	289.6	135.2	424.8	333.3	42.3	375.6	6411.3
26	524.5	216.1	740.6	718.5	60.3	778.8	153.4	46.2	199.6	105.6	27.8	133.4	1852.4
May 3	1392.5	674.3	2066.8	2897.0	263.6	3160.6	234.7	103.5	338.2	591.1	20.7	611.8	6177.4
10	1958.9	983.0	2941.9	3119.8	529.2	3649.0	415.5	137.8	553.3	566.5	21.6	688.1	7832.3
17	2087.3	886.0	2973.3	3442.0	463.7	3905.7	299.1	68.0	367.1	484.6	67.1	551.7	7797.8
24	1969.5	737.5	2707.0	3855.3	425.9	4281.2	420.4	285.3	705.7	445.6	203.6	649.2	8343.1
31	1839.4	566.8	2406.2	2271.3	418.1	2689.4	177.7	88.4	266.1	416.5	194.1	610.6	5972.3
Jne 7	1675.8	550.4	2226.2	3286.6	212.6	3499.2	145.3	79.1	224.4	527.1	52.1	579.2	6529.0
14	1934.4	700.6	2635.0	3151.6	287.9	3439.5	388.1	185.2	573.3	450.0	118.2	568.2	7216.0
21	1971.6	991.2	2962.8	2331.1	320.9	2652.0	719.1	440.5	1159.6	597.3	113.8	711.1	7485.5
28	2223.9	1134.1	3358.0	4031.8	757.2	4789.0	324.5	223.8	548.3	866.1	121.6	987.7	9683.0
Jly 5	2306.0	1423.9	3729.9	3371.8	796.5	4168.3	246.4	168.0	514.4	692.8	26.7	719.5	9132.1
12	2592.7	1678.8	4271.5	4649.5	1330.7	5970.2	391.5	634.0	1025.5	340.3	67.3	407.6	11674.8
19	2589.8	1440.4	4029.2	2250.6	668.1	2918.7	930.6	517.5	1448.1	331.4	128.1	459.5	8855.5
26	2868.0	1534.1	4402.1	5161.8	772.1	5933.9	585.5	542.8	1128.3	592.3	101.7	694.0	12158.3
Aug 2	2505.7	1282.7	3788.4	6091.5	811.6	6903.1	428.9	285.1	714.0	750.0	160.0	910.0	12315.5
9	2408.3	1203.6	3611.9	4055.4	522.6	4578.0	243.0	134.8	377.8	756.6	230.9	987.5	9555.2
16	2241.3	1458.1	3699.4	5519.2	1653.6	6172.8	379.7	307.7	687.4	419.3	70.4	549.7	11109.3
23	1506.8	1524.0	3030.8	3066.9	836.5	3903.4	396.8	395.7	792.5	234.7	227.5	462.2	8188.9
30	1785.7	827.5	2613.2	3761.6	490.0	4251.6	380.9	196.1	577.0	178.1	105.9	284.0	7725.8
Sep 6	1845.6	1018.1	2863.7	3939.6	978.8	4918.4	287.7	162.1	449.8	476.5	171.6	648.1	8880.0
13	2359.8	1393.1	3752.9	6348.7	963.0	7311.7	492.3	226.8	719.1	525.1	69.0	594.1	12377.8
20	2967.8	1653.3	4621.1	5716.8	912.8	6629.6	295.3	120.0	415.3	463.6	28.8	492.4	12158.4
27	2717.3	1604.5	4321.8	4218.2	842.9	5061.1	475.9	185.8	661.7	549.1	134.3	683.4	10728.0
Oct 4	2592.2	1551.7	4143.9	3677.9	553.5	4231.4	270.5	270.5	541.0	286.2	99.4	385.6	9301.9
11	2195.2	1561.8	3757.0	3639.4	771.2	4410.6	657.7	561.5	1219.2	641.6	294.5	936.1	10322.9
18	2223.3	1905.1	4128.4	4496.5	647.9	5144.4	337.0	136.8	473.8	459.5	69.4	528.9	10275.5
25	2296.1	1383.2	3679.3	3890.3	824.2	4714.5	393.3	124.9	518.2	628.7	66.6	795.3	9707.3

WEEK ENDING	SPOT						FORWARD						TOTAL
	NEW ZEALAND DOLLAR			THIRD CURRENCY			NEW ZEALAND DOLLAR			THIRD CURRENCY			
	BANK	DEALER	TOTAL	BANK	DEALER	TOTAL	BANK	DEALER	TOTAL	BANK	DEALER	TOTAL	
1984													
Nov 1	2688.5	1658.6	4347.1	6229.4	852.6	7082.0	423.9	211.5	635.4	529.6	285.6	815.2	12879.7
8	3733.0	2205.9	6538.9	6814.6	276.0	8090.6	787.6	546.8	1334.4	591.7	206.1	797.8	16761.7
15	2369.4	2027.3	4396.7	4781.6	1288.1	6069.7	250.3	301.1	551.4	460.7	400.3	861.0	11878.8
22	2468.6	2357.2	4825.8	6147.5	1144.7	7292.2	404.0	297.3	701.3	381.6	156.8	538.4	13357.7
29	2406.5	1916.4	4322.9	4638.7	693.4	5332.1	285.0	174.4	459.4	344.2	48.2	492.4	10606.8
Dec 6	2502.3	2390.4	4892.7	5310.1	1020.3	6330.4	416.5	203.8	620.3	390.6	87.9	578.5	12421.9
13	2652.8	2099.5	4752.3	4259.2	862.9	5122.1	645.6	242.1	887.7	390.8	173.0	563.8	11325.9
20	2085.9	1765.4	3851.3	1931.2	823.7	2754.9	521.5	357.1	878.6	274.1	177.8	451.9	7936.7
27	979.0	442.2	1421.2	720.8	106.2	827.0	173.8	120.8	294.6	174.6	45.3	219.9	2762.7
1985													
Jan 3	1190.8	455.4	1646.2	1368.6	142.3	1510.9	234.8	31.7	266.5	206.8	140.4	347.2	3770.8
10	3231.5	2756.7	5988.2	6381.8	1462.3	7844.1	226.6	148.7	375.3	388.2	107.4	495.6	14703.2
17	2928.2	2514.1	5442.3	5334.8	1583.1	6917.9	985.0	591.0	1576.0	562.8	319.6	882.4	14818.6
24	1948.5	1755.1	3703.6	4608.0	1271.9	5879.9	711.5	508.6	1220.1	531.7	208.4	740.1	11543.7
31	2007.2	1443.7	3450.9	5139.1	1103.3	6242.4	579.3	172.6	751.9	575.9	136.7	712.6	11157.8
Feb 7	2936.8	2232.6	5169.4	6167.1	1941.3	8108.4	467.6	227.6	695.2	462.4	375.1	837.5	14810.5
14	2872.2	2711.3	5583.5	6524.0	2476.6	9000.6	500.3	734.9	1235.2	599.1	346.3	945.4	16764.7
21	3838.8	2577.1	6415.9	6535.2	2456.0	8991.2	779.1	388.3	1167.4	877.5	569.3	1446.8	18021.3
28	2903.2	2198.3	5101.5	5240.2	2322.9	7563.1	764.9	445.2	1210.1	544.6	457.6	1002.2	14876.9
Mar 7	3256.9	2444.4	5701.3	3447.8	1707.7	5155.5	602.8	309.8	912.6	243.8	256.5	500.3	12269.7
14	2716.4	2030.4	4746.8	5190.4	1588.6	6779.0	438.3	255.8	694.1	589.1	341.7	930.8	13150.7
21	1777.3	1724.9	3502.2	4994.6	1871.6	6866.2	382.0	270.7	652.7	560.6	390.1	950.7	11971.8
28	2853.5	1941.1	4794.6	5521.9	1981.6	7503.5	437.8	323.0	760.8	563.7	154.5	718.2	13777.1
Apr 4	2127.9	1871.4	3999.3	5663.6	2429.9	8093.5	537.8	322.4	860.2	631.3	409.0	1040.3	13993.3
11	1197.8	1200.6	2398.4	3836.0	1162.9	4998.9	114.6	129.3	243.9	421.5	129.9	551.4	8192.6
18	2742.4	2044.6	4787.0	6290.3	2578.4	8868.7	344.2	164.8	509.0	879.4	330.3	1209.7	15374.4
25	2032.7	1548.5	3581.2	4550.9	1697.1	6248.0	279.0	152.0	431.0	604.3	307.6	911.9	11172.1
May 2	2377.3	1994.3	4371.6	6562.4	1626.5	8188.9	315.8	367.1	682.9	1311.9	771.6	2083.5	15326.9
9	1905.2	1786.5	3691.7	5703.4	1932.0	7635.4	362.5	293.6	656.1	722.6	221.0	943.6	12926.8
16	2495.1	2277.6	4772.7	6668.3	2874.4	9542.7	448.9	207.8	656.7	1107.4	433.6	1541.0	16513.1
23	2243.7	2043.4	4287.1	5949.0	2613.8	8562.8	393.7	209.3	603.0	585.3	252.4	837.7	14290.6
30	1808.8	1823.2	3632.0	6588.1	3256.1	9844.2	387.3	251.4	638.7	1628.8	389.7	2018.5	16133.4

WEEK ENDING	SPOT						FORWARD						TOTAL
	NEW ZEALAND DOLLAR			THIRD CURRENCY			NEW ZEALAND DOLLAR			THIRD CURRENCY			
	BANK	DEALER	TOTAL	BANK	DEALER	TOTAL	BANK	DEALER	TOTAL	BANK	DEALER	TOTAL	
1985													
June 6	2194.8	2308.2	4503.0	6373.4	3403.0	9776.4	364.7	231.0	595.7	1043.4	493.5	1536.9	16412.0
13	1862.8	2179.2	4042.0	7267.9	3058.7	10326.6	834.1	289.4	1123.5	776.9	484.6	1261.5	16753.6
20	3656.4	3313.5	6969.9	8427.7	3165.2	11592.9	904.6	712.9	1617.5	1383.1	289.5	1672.6	21852.9
27	3544.7	3118.4	6663.1	9509.1	4044.3	13553.4	1541.4	779.5	2320.9	1251.0	688.2	1939.2	24476.6
July 4	4825.8	3621.3	8447.1	6028.3	2434.5	8462.8	1685.3	777.8	2463.1	540.6	300.3	840.9	20213.9
11	4805.7	2851.0	7656.7	7971.2	2476.8	10448.0	1213.3	837.0	2050.3	630.1	511.3	1141.4	21296.4
18	4668.8	3526.1	8194.9	9488.3	3530.2	13018.5	1422.4	859.5	2281.9	772.3	577.7	1350.0	24845.3
25	5217.0	3594.6	8811.6	7211.1	2920.7	10131.8	1557.4	1332.8	2890.2	485.9	407.5	893.4	22727.0
Aug 1	5477.7	3994.7	9472.4	7016.8	2655.0	9671.8	1673.8	1064.3	2738.1	679.6	390.4	1070.0	22952.3
8	5128.1	3047.1	8175.2	5630.7	1939.0	7569.7	1401.7	975.5	2377.2	635.9	582.6	1218.5	19340.6
15	5219.5	4444.5	9664.0	5680.2	1646.8	7327.0	1800.3	1611.0	3411.3	690.9	409.2	1100.1	21502.4
22	6138.3	4070.5	10208.8	6001.6	1889.7	7891.3	2074.7	996.8	3071.5	492.0	338.6	830.6	22002.2
29	5439.2	3532.9	8972.1	4906.8	1337.8	6244.6	1795.3	1045.4	2840.7	644.8	217.5	862.3	18919.7
Sept 5	4162.5	2720.4	6882.9	4724.0	1740.2	6464.2	1388.8	570.6	1959.4	714.3	455.3	1169.6	16476.1
12	6153.2	3912.9	10066.1	7275.4	2524.3	9799.7	1523.8	846.6	2370.4	743.5	286.7	1030.2	23266.4
19	4750.2	3630.0	8380.2	6276.9	2275.6	8552.5	1599.7	630.5	2230.2	552.5	298.2	850.7	20013.6
26	4650.9	3280.0	7930.9	7779.8	2549.2	10329.0	1446.6	974.4	2421.0	735.2	540.5	1275.7	21956.6
Oct 3	5105.7	4154.8	9260.5	7869.2	2194.2	10063.4	1738.1	938.7	2676.8	808.4	264.0	1072.4	23073.1
10	4314.5	2838.6	7153.1	7325.5	2540.7	9866.2	1340.9	908.8	2249.7	849.3	363.2	1212.5	20481.5
17	5934.4	3742.2	9676.6	6902.4	1855.4	8757.8	1401.0	557.2	1958.2	768.1	139.3	907.4	21300.0
24	5254.7	3622.9	8877.6	5927.8	1900.3	7828.1	1214.9	578.0	1792.9	763.1	253.0	1016.1	19514.7
31	1344.5	773.7	2118.2	2162.1	1446.7	3608.8	329.4	497.5	826.9	386.6	152.6	539.2	7093.1
Nov 7	5246.9	2903.6	8150.5	6726.6	2573.9	9300.5	1913.5	722.5	2636.0	1058.5	300.1	1358.6	21445.6
14	5261.2	3642.4	8903.6	5907.5	2475.0	8382.5	2301.3	866.2	3167.5	854.7	328.2	1182.9	21636.5
21	7685.2	4420.3	12105.5	6760.9	2697.0	9457.9	2239.0	1108.4	3347.4	886.7	388.4	1275.1	26185.9
28	5952.1	3811.3	9763.4	6795.8	2908.3	9704.1	1942.6	1216.2	3158.8	909.3	173.5	1082.8	23709.1

TABLE III: NEW ZEALAND DOLLAR VALUES AND PERCENTAGE CHANGES
JULY 1984 - DEC 1985

Column	A	B	C	D			E			F			G
Currency/Unit	Pre-Devaluation July 84	Post Devaluation July 84	Pre Float Mar 85	End of Period Mar 86			Highest Point Post Float			Lowest Point Post Float			Max Change Post Float
				Value	% Change on B	% on C	Value	% Change on B	% on C	Value	% Change on B	% on C	
US Dollar	0.63	0.49	0.45	0.52	+6%	+16%	0.59	+20%	+31%	0.43	-8%	-	+37%
AUST Dollar	0.73	0.59	0.63	0.74	+25%	+17%	0.88	+49%	+40%	0.63	+7%	-	+49%
Pound Sterling	0.47	0.38	0.41	0.36	-5%	-15%	0.43	+13%	+5%	0.34	-11%	-17%	-21%
D-Mark	1.77	1.43	1.47	1.16	-19%	-22%	1.56	+9%	+6%	1.14	-20%	-22%	-27%
Yen	150.6	121.6	114.0	93.5	-23%	-18%	130.30	+7%	+14%	93	-24%	-18%	-29%
RES. BK INDEX	78.4	62.7	62.7	62.8	0%	0%	74.6	+19%	+19%	60.2	-4%	-4%	+24%

Notes

Figures are rounded.
Denominator for percentage calculations is based on chronological order of movements.

TABLE IV

Devaluation & Revaluation Effects on Schedule Prices (1984-85, F.O.B. PRICES $ PER KILOGRAMME)

A. 10% Devaluation:

	LAMB			MUTTON			BEEF		
	Pre Deval $	Post Deval $	% Change	Pre Deval $	Post Deval $	% Change	Pre Deval $	Post Deval $	% Change
F.O.B.	2.38	2.64	+11.1%	1.17	1.30	+ 11.1%	2.70	3.00	+11.1%
Charges	1.18*	1.18		1.07*	1.07		0.48	0.48	
Schedule	1.20	1.46	+21.7%	0.10	0.23	+130.0%	2.22	2.52	+13.5%

B. 10% Revaluation:

	LAMB			MUTTON			BEEF		
	Pre Deval $	Post Deval $	% Change	Pre Deval $	Post Deval $	% Change	Pre Deval $	Post Deval $	% Change
F.O.B.	2.38	2.14	-10%	1.17	1.05	- 10%	2.70	2.43	-10%
Charges	1.18*	1.18		1.07*	1.07		0.48	0.48	
Schedule	1.20	0.96	-20%	0.10	-0.02	-120.0%	2.22	1.95	-12.2%

* Net of M.I.S.A. support
Source: N.Z. Meat & Wool Boards' Economic Service

Note: - a 10% devaluation effect is calculated by dividing the F.O.B. price by a factor of 0.9 (e.g. $2.38 ÷ 0.9 = $2.64)

- a 10% revaluation is calculated by multiplying the F.O.B. price by a factor of 0.9 e.g. $2.38 x 0.9 = $2.14

TABLE V

CURRENT ACCOUNT RECEIPTS - BY CURRENCY

OET DATA - YEARS ENDING SEPTEMBER - PERCENTAGE FIGURES

	POUND STERLING		AUST $		US $		D M		YEN		NZ $		OTHER		% OF TOTAL CURRENT TRANSACTIONS	
Export	1984	1985	1984	1985	1984	1985	1984	1985	1984	1985	1984	1985	1984	1985	1984	1985
Meat	23.5	23.4	0.6	0.8	58.6	54.0	2.1	3.1	0.9	0.9	7.5	9.2	6.8	8.6	17.8	15.4
Wool	11.6	7.9	2.9	3.0	58.7	55.2	0.5	2.2	1.3	1.9	22.1	26.3	2.9	3.5	10.6	10.3
Dairy Products	22.5	0.4	1.7	1.5	67.7	94.3	3.9	2.1	0.0	0.0	3.4	1.2	0.8	0.5	13.3	15.7
Forest Products	0.0	0.0	23.6	25.1	65.8	63.9	0.0	0.0	1.0	1.5	9.3	9.0	0.3	0.5	6.7	5.3
Manufactured Products	1.3	1.6	21.1	20.7	16.0	19.7	0.8	0.9	23.3	23.8	29.8	28.7	7.7	4.6	15.9	15.6
All Other Merchandise Exp.(1)	3.9	4.6	7.4	7.4	50.6	53.8	2.1	3.1	2.8	4.1	30.0	20.9	3.2	6.1	12.4	11.6
Total Other Current Transactions(2)	19.2	16.7	16.6	16.5	29.8	29.2	0.9	0.7	2.9	2.7	25.5	28.9	5.1	5.3	23.3	26.1
TOTAL CURRENT TRANSACTIONS	13.6	9.6	10.4	10.4	45.8	49.2	1.5	1.7	5.1	5.3	18.9	19.2	4.7	4.6	-	-

Notes: (1) Includes: Other Animal Products, Other Primary Products, Miscellaneous.
(2) Includes: Transport, Insurance, Travel, Investment Income, Miscellaneous Current Transactions.

TABLE VI

RESERVE BANK INDEX WEIGHTINGS

Basket Currencies	Weightings	
	June 1985	September 1985
United States Dollar	30.9	30.1
Pound Sterling	22.4	22.6
Australian Dollar	24.7	24.6
Japanese Yen	18.2	18.9
West German Mark	3.8	3.8
	100.0	100.0

NOTE: The weightings in this index cannot be compared directly with the somewhat higher percentages for the same currencies in Table V. That table includes OET receipts of New Zealand currency and therefore reduces the percentage figure for each of the foreign currencies.

TABLE VII
COMPARATIVE EXCHANGE RATE VARIATION

(1985 Values Against US$)

	High	Low	% Variation
NZ $	59.85 (15/10)	43.10 (5/3)	38.9
Yen	199.80 (25/11)	263.05 (25/2)	24.0
UK Pound	1.4655 (25/11)	1.0520 (26/2)	39.3
A $	.8230 (11/1)	.6305 (22/4)	23.4
DMK	2.5590 (25/11)	3.4510 (25/2)	25.8
SFr	2.0920 (25/11)	2.9230 (5/3)	28.4

Note: Denomination for percentage calculation is based on chronological sequence of rate movements.

Source (Exchange Rate Data): Reserve Bank of New Zealand

TABLE VIII
(A) EXCHANGE RATE VOLATILITY: Daily[1]

	NZD	DMK	YEN	GBP	AUD	INDEX
Average[2]	.973	.349	.287	.418	.681	1.01
Standard Deviation	.910	.288	.294	.366	.533	.880
Greater than 1%[3]	75[4]	7	7	12	41	80[4]
Greater than 2%[3]	21[4]	1	1	2	6	20[4]
Greater than 3%[3]	8[4]	0	0	1	1	7[4]
Less than .5%[3]	76	188	201	159	98	63

1. Volatility measured over 231 working days from 4 March 1985 to 31 January 1986.

2. Simple average of the percentage movement from highest to lowest bid rates quoted hourly each day.

2. Number of days on which exchange rate movements exceeded the percentage stipulated.

4. Four of these occurred in the first week of floating.

(B) EXCHANGE RATE VOLATILITY: WEEKLY

	NZD	DMK	YEN	GBP	AUD	INDEX
Average[2]	3.26	2.08	1.39	2.61	2.65	3.11
Standard Deviation	1.97	1.33	1.23	1.92	1.86	2.02
Highest[3]	10.0	6.7	7.9	9.5	9.5	11.5
Lowest[4]	0.5	0.3	0.2	0.2	0.3	0.6
Below 2.5%[5]	17	35	41	28	26	22
Above 5.0%[5]	8	2	1	4	5	6

1. 48 weeks from 4 March 1985 to 31 January 1986

2. Simple average of percentage variation in bid rates each week from highest to lowest hourly rates quoted.

3. The highest weekly percentage variation.

4. The lowest weekly percentage variation.

5. The number of weeks on which percentage movement qualified.

Source: Reserve Bank of New Zealand

TABLE IX
EXCHANGE RATE MOVEMENTS: A COMPARISON OF VALUES AND PERCENTAGE CHANGES BETWEEN FIXED AND FLOATING

A. Currency Values

Currencies	Pre Float (1 March 1985)	As at 22 November 1985		As at 26 February 1985	
		Actual	Under Fix	Actual	Under Fix
NZ/US	.4469	.5728	.4981	.5288	.5181
NZ/STG	.4149	.3968	.3451	.3565	.3493
NZ/AUST	.6303	.8387	.7294	.7462	.7310
NZ/YEN	116.1	115.55	100.49	95.79	93.84
NZ/DMK	1.4956	1.4810	1.2879	1.1889	1.1648
Index	62.7	72.1	62.7	64.0	62.7

B. Movement from 1 March 1985 to 22 November 1985

	Actual	Under Fix
NZ/US	+28.2%	+11.5%
NZ/STG	-4.4%	-16.8%
NZ/AUST	+33.1%	+15.7%
NZ/YEN	+0.5%	-13.4%
NZ/DMK	-1.0%	-13.4%
INDEX	+15.0%	-

C. Movement from 1 March 1985 to 26 February 1986

	Actual	Under Fix
NZ/US	+18.3%	+15.9%
NZ/STG	-14.1%	-15.8%
NZ/AUST	+18.4%	+16.0%
NZ/YEN	-17.5%	-19.2%
NZ/DMK	-20.5%	-22.1%
INDEX	+2.1%	-

Note: + = appreciation of NZ$
- = depreciation of NZ$

Source: Reserve Bank of New Zealand

TABLE X

NET PRIVATE CAPITAL FLOWS

	Mar.-Dec. 1985 (Float)		Mar.-Dec. 1984		Mar.-Dec. 1983	
	NZ $m	%	NZ $m	%	NZ $m	%
Investment	535.3	36.2	1,578.2	83.5	161.5	20.9
Borrowing	945.4	63.8	310.8	16.5	611.5	79.1
TOTAL	1,480.7	100.0	1,889.0	100.0	773.0	100.0
Short Term	463.0	31.3	1,393.8	73.8	283.4	36.7
Long Term	1,017.7	68.7	495.2	26.2	489.6	63.3
TOTAL	1,480.7	100.0	1,889.0	100.0	773.0	100.0

Note: Short term flows are determined as less than 12 months.

Source: Reserve Bank of New Zealand

Diagram I(a)

Exchange Rate Movements

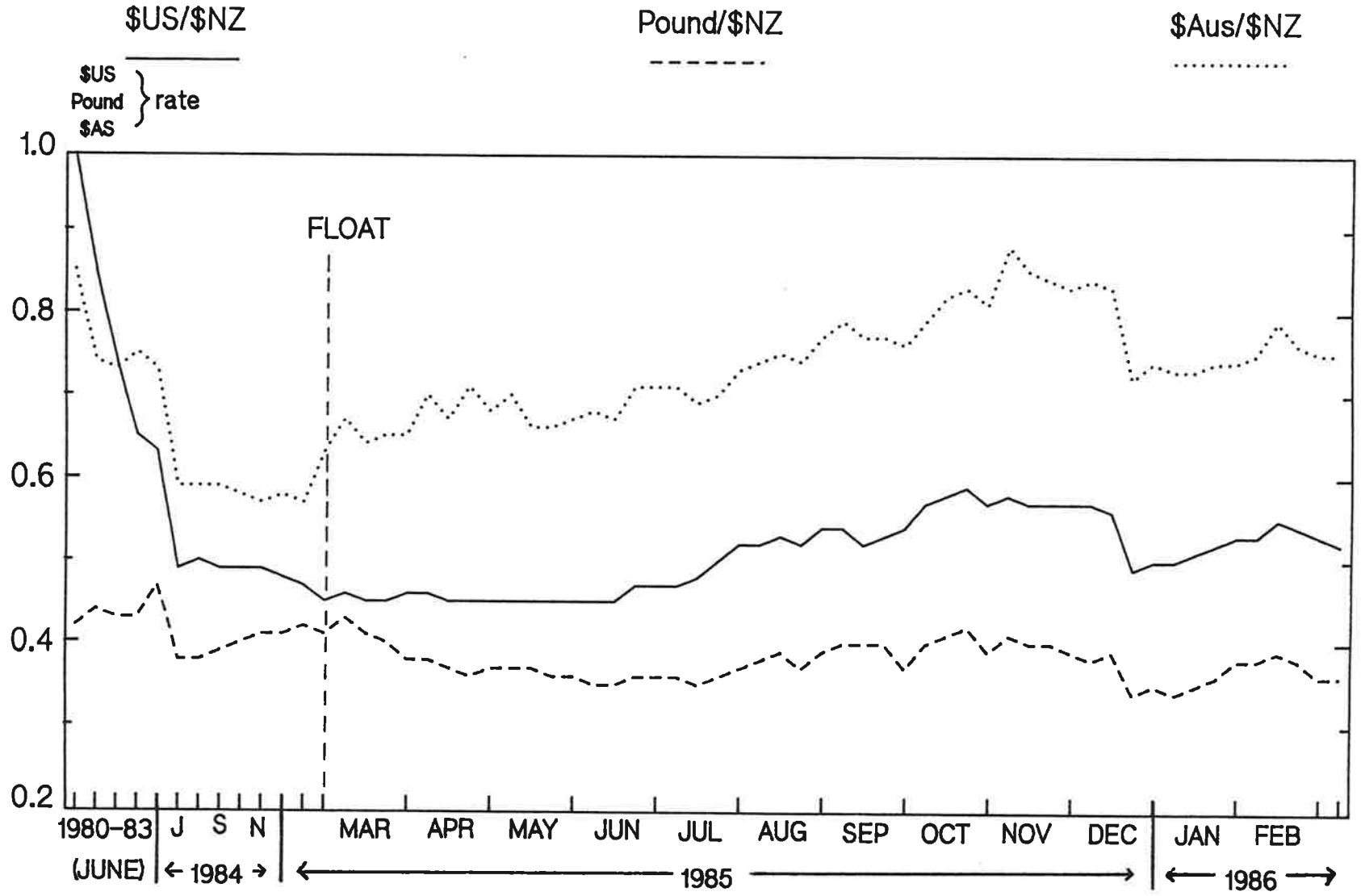

Diagram I(b)
Exchange Rate Movements

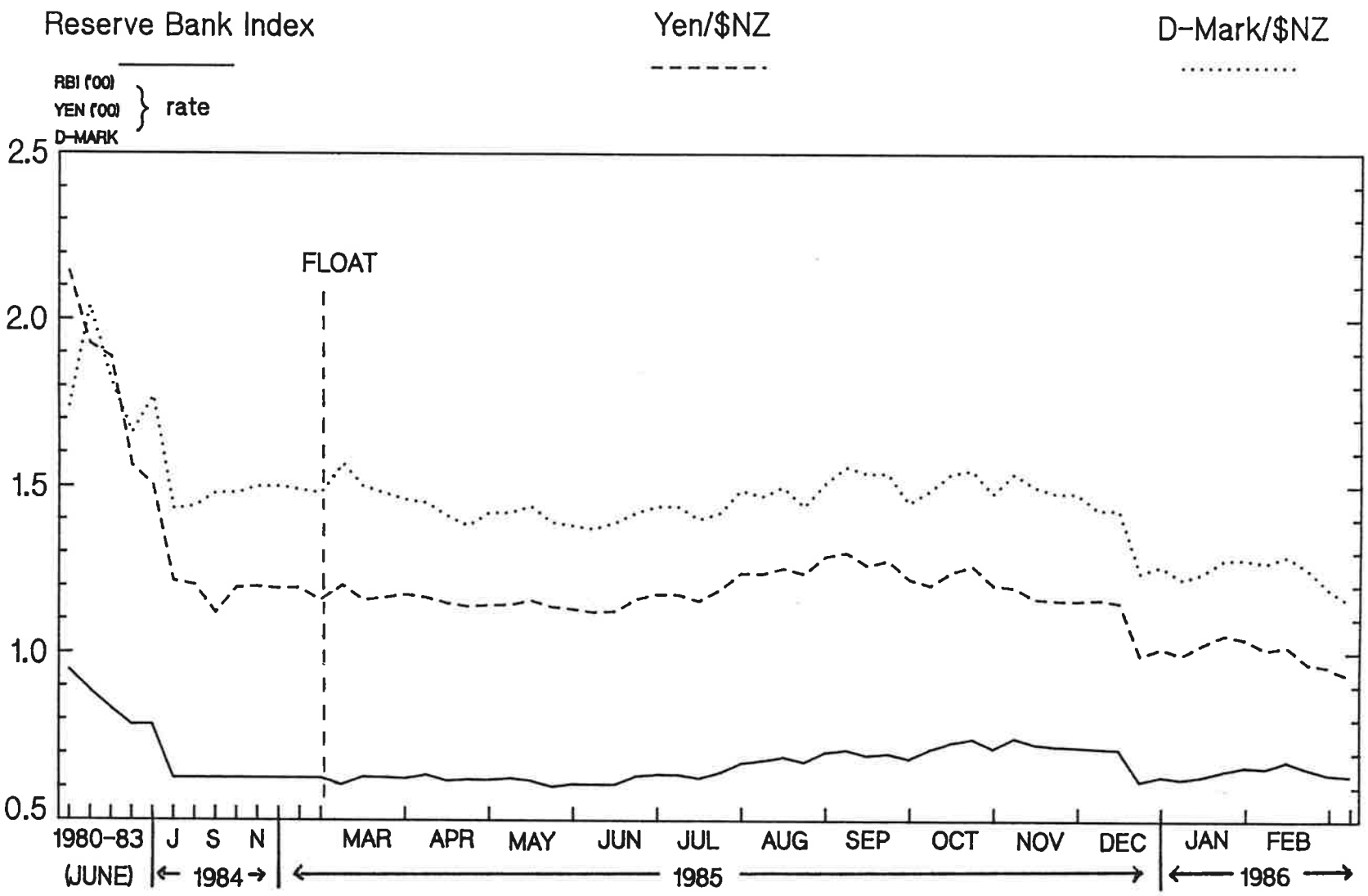

Diagram II

Balance On Current Account