THE TREASURY
Kaitohutohu Kaupapa Rawa

Treasury Report: Exchange Rate Developments and Implications

Date:	5 February 2003	**Treasury Priority:**	Low
Security Level:	IN-CONFIDENCE	**Report No:**	T2003/109

Action Sought

	Action Sought	Deadline
Minister of Finance	a **note** the contents of this report; b **note** that we will be providing an oral update on exchange developments at a forthcoming fiscal issues meeting; c **note** that this report has been requested by the media and we are working with your Office on its release.	None
Associate Minister of Finance (Hon Trevor Mallard)	**Note** Contents	None
Associate Minister of Finance (Hon Paul Swain)	**Note** Contents	None

Enclosure: **No**

3 February 2003 MC-1-1-2

Treasury Report: Exchange Rate Developments and Implications

Executive Summary

The New Zealand dollar has appreciated rapidly over the past year, particularly against the US dollar. Underlying this appreciation is an economy that has enjoyed a period of relatively strong and stable growth, which has been associated with interest rates that are high relative to other countries. Other important factors include a weakening of the US dollar and a substantial reduction in New Zealand's current account deficit.

The economy may grow more slowly than expected over the coming year if the TWI continues to appreciate at a similar pace. In the DEFU, real GDP growth was forecast to slow from over 4% in 2002/03 to a still robust 2.5% in 2003/04. The recent appreciation of the exchange rate, if maintained, could act to slow growth further. Just how big the impact of recent developments is depends on a number of factors including:

- the extent and duration of the period the exchange rate spends at or above its current level;
- the reaction of monetary policy;
- the extent of hedging undertaken by firms;
- the response of firms in terms of their investment, pricing and employment decisions; and
- the response of households to lower inflation and possibly lower interest rates.

Some of these factors will act to reduce GDP growth while others could boost growth. Overall, our preliminary modelling suggests that recent developments could be mildly negative for real GDP growth over 2003/04. However, tentative signs that the economy may be carrying more momentum into 2003 than we forecast means that any moderation in growth may occur from a higher starting point.

The Reserve Bank's policy is to look through the direct price level effects of the appreciation and focus predominately on the demand and medium-term inflationary effects of exchange rate movements. This helps to reduce the volatility of output and interest rates but at the expense of somewhat more inflation variability. Attempting to use interest rates to influence the level or direction of the exchange rate regardless of the inflationary consequences of doing so risks allowing inflation to move outside the target range. If this leads to higher inflation expectations a period of prolonged monetary tightness may be required to bring expectations back to a level consistent with the medium-term inflation target of 1 to 3 percent.

Fiscal policy that works in the same direction as monetary policy can help to mitigate the extent of the rise in the exchange rate. Present monetary policy settings are appropriate given an expected slowdown in growth and a moderation of inflation. This suggests that current fiscal policy settings remain appropriate. An unanticipated easing of fiscal policy could weaken or reverse the anticipated effects of monetary policy and put renewed pressure on interest rates and the exchange rate to rise.

Recommended Action

We recommend that you:

a **note** the contents of this report;

b **note** that we will provide an oral update on exchange rate developments at a forthcoming fiscal issues meeting; and

c **note** that a copy of this report is likely to be released to the media and we are working with your Office on its release.

For Secretary to the Treasury

Hon Dr Michael Cullen
Minister of Finance

Treasury Report: **Exchange Rate Developments and Implications**

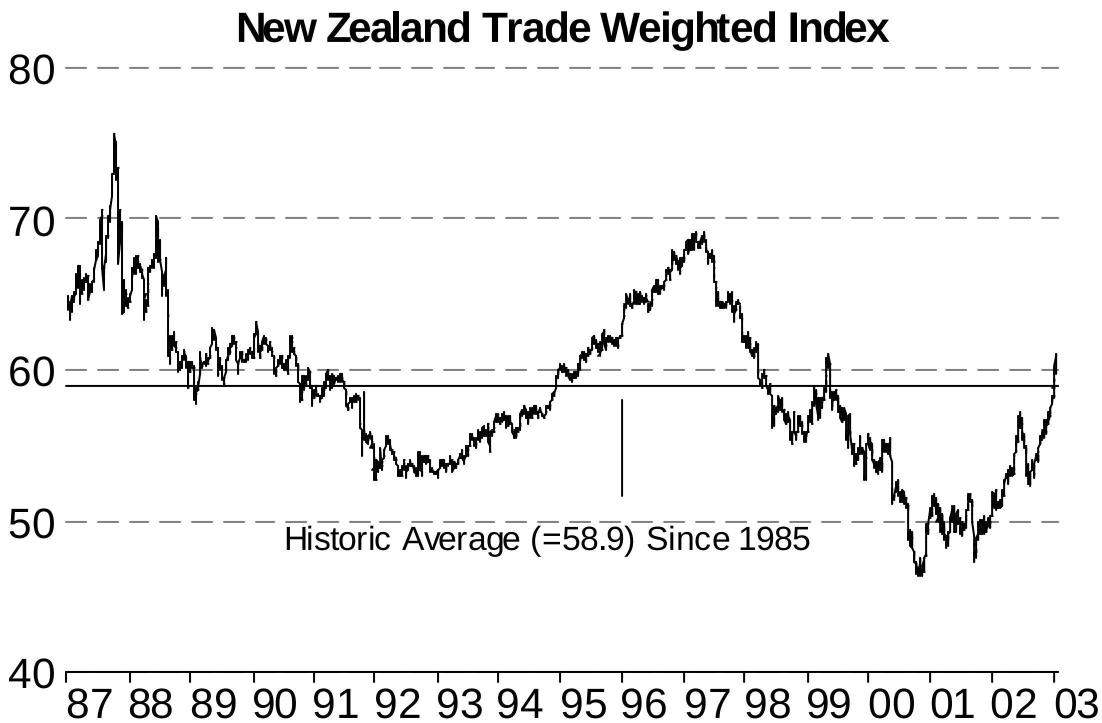
Purpose of Report

1. This report informs you of recent developments in the New Zealand dollar exchange rate, and considers some of the causes and consequences of these developments. It also considers how monetary and fiscal policy can best respond to these developments.

Analysis

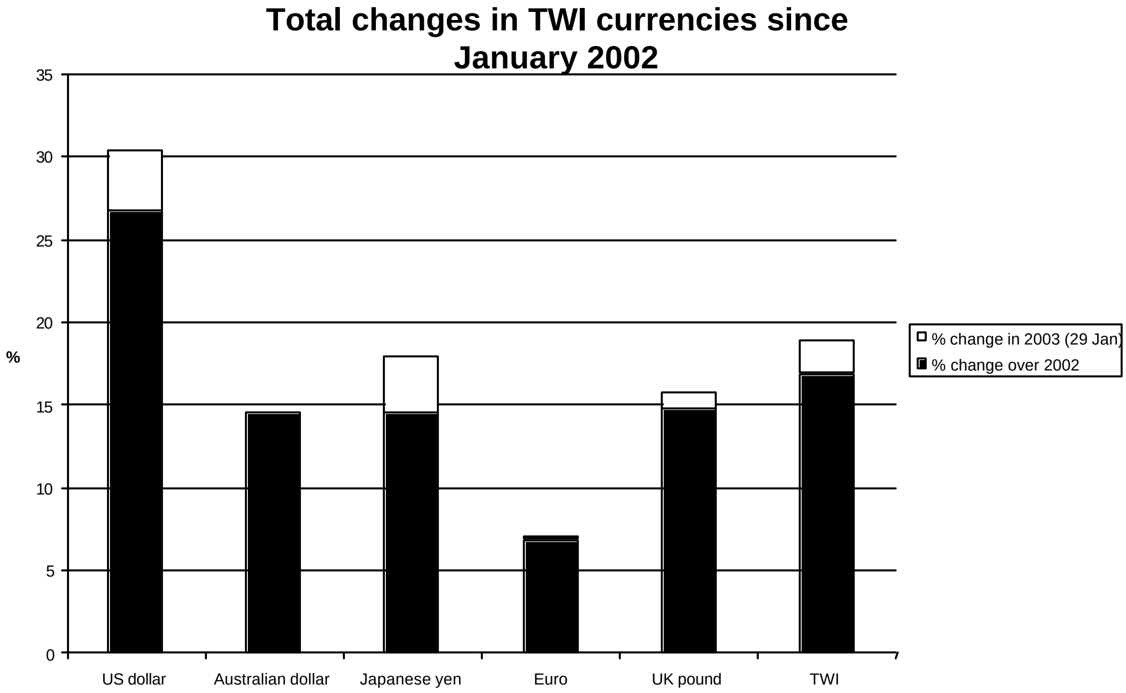
Recent developments

2. The New Zealand dollar exchange rate has been trending strongly upwards over the past year. At around 60 the Trade Weighted Index (TWI) of trading partner currencies is now a little above its post-float average.



3. The TWI graph also shows that departures of the exchange rate from its long-run average can be long lasting and sizable.

4. The pace of the New Zealand dollar's rise has been rapid, particularly against the US dollar. Since the beginning of 2002 it has increased by about 19 percent on the TWI measure and by over 30 percent against the US dollar. Strong gains have also been made against other currencies. 2003 began with a continuation of these trends, but the upward movement has tailed off in recent weeks.



Influences

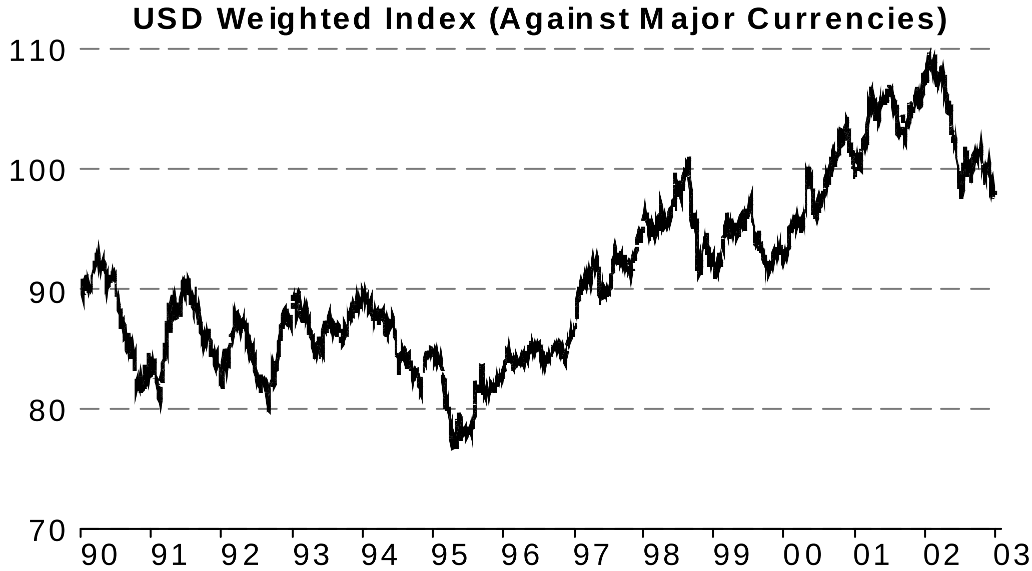
5. The recent appreciation of the exchange rate reflects a number of factors including:

- general US dollar weakness;
- good economic performance and prospects for the New Zealand economy relative to the rest of the world; and
- high interest rates relative to the rest of the world.

US dollar weakness

6. 2002 was a year of US dollar weakness. The US dollar has fallen against all major currencies, with the exception of Mexico and Brazil. The US dollar has fallen by over 20% against the currencies of New Zealand, Norway, Sweden and South Africa, and by about 15% against the Australian dollar. Many analysts believe further depreciation is necessary to correct the overvaluation of the US dollar.

7. The general weakness of the US dollar goes a long way towards explaining the NZD/USD appreciation and the appreciation of the TWI, which has a weight of about one-third on the US dollar.



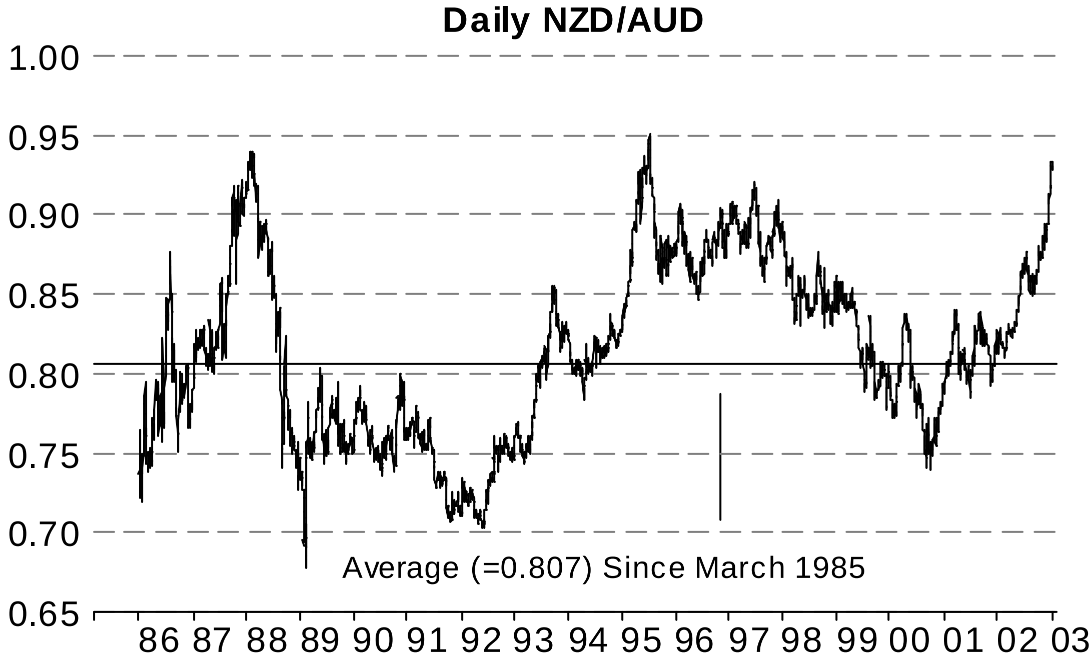
8. Explanations for the US dollar depreciation include weak US growth, doubts about the sustainability of growth and concerns about the integrity of corporate sector reporting. Concerns about the sustainability of the US current account deficit, which is currently around 4½ % of GDP, are also prominent.

9. In general, an orderly depreciation of the US dollar is perceived as positive for the global economy. A weaker US dollar may help unwind some of the economic imbalances, including those evident in the large external imbalances between the main industrialised countries that are currently weighing on global growth. Relative to the size of trade flows current account balances, most notably in the US and Japan, have risen to levels almost never seen in the post-war period.

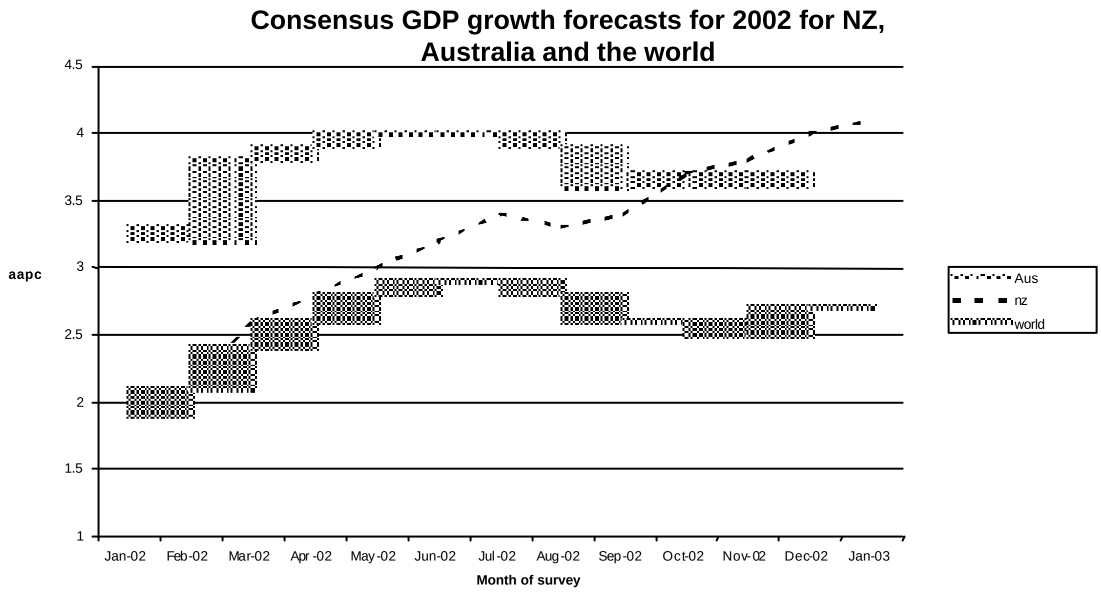
10. One of the major concerns associated with the global imbalances is the possibility of an abrupt and disruptive change in exchange rates and financial markets. Key to reducing the risk of disorderly adjustment is a pick-up in growth of current account surplus countries, namely the Euro area and Japan. A particular concern is that medium-term growth in Japan and Europe is constrained by structural problems and that an appreciation of their currencies reduces the growth of output and demand and slows global output growth. Japan may be especially hard hit given their limited room for interest rate reductions to offset the impact of a rising currency.

Slowdown in Australia

11. Relative to its historical average the New Zealand dollar is currently at a high level against the Australian dollar.



12. Here again part of the explanation appears to lie in the contrasting economic fortunes of the two economies. As the graph below shows, growth forecasts for the Australian economy were revised down over the second half of 2002, whereas in New Zealand they were consistently revised up. By the end of 2002 expectations for growth in New Zealand were about double that at the start of the year.



13. Similarly, expectations for New Zealand's GDP growth over 2003 have remained broadly stable, in contrast to the decline in expectations evident elsewhere.

Interest rates

14. Interest rates that are high relative to those in other countries have also been a factor in moving our currency upward. A number of mid-sized economies including Australia, New Zealand and Sweden, who were raising interests rates last year and whose growth prospects appeared strong have experienced an appreciating exchange rate, particularly against the US dollar. Some of these countries have since eased interest rates and in some cases expectations of easing are emerging.

15. However, a reduction in interest rates does not mechanically or automatically generate a lower exchange rate. In fact the issue of how exchange rates respond to monetary changes is anything but settled. In the simplified textbook model lower interest rates lead to a drop in the home currency's value and stimulate net exports. This chain of events often occurs but there are a disconcerting number of exceptions. In these cases interest rate cuts can lead to improved prospects for equity rates of return, or to assurances that the central bank is doing its job, and to a rise in the home currency's value.

Future directions

16. There is a high level of uncertainty in predicting where the exchange rate might go from here. Given the pace of the recent appreciation and extent of past cycles a further material appreciation cannot be ruled out, but neither can it be ruled in. Which way it goes will depend on the balance struck between a number of factors.

17. Factors that may cause further appreciation include:

    - continued US dollar weakness; and

    - continued strong growth of the New Zealand economy and continued inflationary pressures that sustain high interest rates relative to the rest of the world.

18. Restraining influences may include:

    - a widening current account deficit;

    - the possibility of interest rate cuts should inflationary pressures abate, as signalled by the Reserve Bank at the January OCR review;

    - war in the Middle East. Typically, in times of heightened uncertainty investors tend to shy away from peripheral markets such as New Zealand. However, geopolitical tensions have been present for some time now and do not appear to have had a significant adverse effect on investor preferences for New Zealand dollar assets.

Assessing the economic impacts

19. In our June 2002 *Pre-election Economic and Fiscal Update* (*PREFU*) we noted that the main point of departure from our forecasts in the May 2002 *Budget Economic and Fiscal Update* (BEFU) was a rapid appreciation in the exchange rate. At the time of the *PREFU* we saw the appreciation of the exchange rate impacting on the economy through a number of channels:

- lower New Zealand dollar export prices that contribute to reduced farm incomes and reduced overall export receipts. However, firms that source some of their imports or capital from overseas will get some offset, reducing or even eliminating the adverse impacts on profitability;
- lower export volume growth, particularly evident in manufactured exports;
- lower New Zealand dollar import prices that contribute to increased demand for imported goods;
- direct impact on CPI inflation as import prices fall. This also has the effect of raising real income growth for wage and salary earners and boosting household spending;

20. We concluded that because the magnitude of the change to the assumed exchange rate path was modest there would only be a modest effect on GDP growth and this would be felt mainly over the year to March 2004.

21. The further appreciation since the *PREFU* and our recent *December Economic and Fiscal Update* (*DEFU*) will tend to magnify these impacts. To give us some idea of how large the impacts might be we have used the Treasury's macroeconomic model, the New Zealand Treasury Model (NZTM), to look at a number of possible scenarios.

22. As with all economic models the impacts depend on the assumptions built into the model and the scenario assumptions you start with. In this case we have used our *DEFU* forecasts, which assume that the TWI remains at around 57.0 and that interest rates also remain at about their current levels, as the baseline. We then compared the baseline to the results generated by different assumptions about the paths of the exchange rate and interest rates.

23. In summary the results of this work show:

- A negative impact on GDP over the next few quarters. How negative it is depends on the extent and duration of the currency appreciation.
- Beyond the next few quarters lower interest rates can provide a partial or complete offset to the effect of the currency. For example, a TWI that reaches 65 by mid-year, before slowly declining, and that is accompanied by lower interest rates (around 75 basis points) has a negative impact over the next few quarters but then leads to higher growth over the following quarters.
- Weaker GDP growth reduces inflation pressures and provides scope for monetary policy to ease interest rates while still meeting the objective of CPI inflation outcomes that average between 1% and 3% over the medium-term.
- A larger than forecast deficit on the current account of the balance of payments.

24. Overall, GDP growth in the year to March 2004 might be lower than our *DEFU* forecast of 2.5% by between 0% and ¾% for the range of assumptions that we used about the paths of the exchange rate and interest rates. Beyond 2004 the model shows higher growth as the exchange rate falls below, and then recovers, to its long-term average.

25. The direction of the impact on inflation and the current account is probably more clear cut – downward pressure on inflation and a widening of the current account deficit – although we are less sure about the magnitudes of these effects.

26. Ultimately, any impact will depend on:

- the extent and duration of the period the exchange rate spends at or above its current level;
- the reaction of monetary policy;
- the extent of hedging undertaken by firms;
- the response of firms in terms of investment, pricing, productivity and cost control; and
- the response of households to lower import prices, lower interest rates and lower inflation.

27. For now, the economy continues to perform well. Partial indicators for the December quarter show that growth is consistent with our assessment of the economic outlook in the *DEFU*. At this early stage the risk to our forecasts appears to be for stronger than expected growth leading into 2003. Should these risks materialise any moderation in growth arising from the currency's appreciation will begin from a higher starting point.

Sectoral impacts

28. Divergent sectoral impacts are likely regardless of the overall impact on GDP. The higher exchange rate will reinforce pressures already on those exporters facing weak global demand and reduced prices. This may lead to a shift in resource demands between exporting and import-competing sectors, and importing and non-tradeable or services sectors. In the medium-term the shift of resources may help to alleviate some of the resource pressures evident in the non-tradeables sector.

29. It is also important to bear in mind that at current levels the exchange rate is not obviously over or under-valued. It does however reflect a reversal of the relative fortunes of the external and domestic sectors. Through 2000 and 2001 economic reports highlighted the "two-speed" or "dichotomous" nature of the New Zealand economy where the external sector was growing strongly but domestically orientated sectors were not. The appreciating exchange rate, along with other factors, has led to a re-balancing of growth over 2002. Further appreciation may see the "two-speed" scenario reappear, but with the sectoral balance reversed.

Policy responses

30. It is certainly possible for fiscal, monetary or other government policy to influence the exchange rate, but they cannot do so systematically or precisely for any length of time. The Government's current macroeconomic strategy is to focus monetary and fiscal policy on appropriate medium-term objectives. A stable, predictable and credible macroeconomic strategy reduces an important source of shocks to the exchange rate.

31. Monetary and fiscal policy must take full account of the implications of their actions on the other to ensure the success of this macroeconomic strategy. Transparent reporting and the medium-term focus of policy are important elements of this framework.

32. The Reserve Bank's policy is to look through the direct price level effects of the appreciation and focus predominately on the demand and medium-term inflationary effects of exchange rate movements. This helps to reduce the volatility of output and interest rates but at the expense of somewhat more inflation variability. If the Reserve Bank were to seek to use interest rates to influence the level or direction of the exchange rate regardless of the inflationary consequences of doing so, it would risk allowing inflation to move outside the target range. This could lead to an upward movement in inflation expectations and may require a prolonged period of monetary tightness to bring expectations back to a level consistent with the medium-term inflation target of 1 to 3 percent.

33. The Reserve Bank's views on the impact of the exchange rate appreciation were summarised in the January 2003 OCR review. The Bank expects the higher exchange rate, if sustained, to dampen future economic activity and medium-term inflation pressures. If these expectations are realised there may be scope for a cut in the OCR later in the year.

34. The sectoral impact of monetary policy depends on its "mix" in terms of the configuration of interest and exchange rates. With free capital movements and a floating exchange rate the "mix" is effectively determined in the capital markets – while the OCR is set by the Bank the level of the exchange rate is, as we have seen, determined by the markets. Monetary policy is too blunt a tool to be able to target inflationary pressures in one sector or region or another – its affects are felt across the entire economy.

35. Fiscal policy can also have significant short-term impacts on aggregate demand and inflation. Ensuring the impacts of fiscal policy complement those of monetary policy makes an important contribution to macroeconomic stability. For example, strongly expansionary fiscal policy during an economic upswing could place additional pressure on monetary policy to restrain demand and lead to larger movements in interest rates and the exchange rate than otherwise.

36. Present monetary policy settings are appropriate given an expected slowdown in growth and a moderation of inflation. This suggests that current fiscal policy settings remain appropriate. An unanticipated easing of fiscal policy could weaken or reverse the anticipated effects of monetary policy and put renewed pressure on interest rates and the exchange rate to rise.

37. Fiscal policy and other government policy can also have an indirect effect on the exchange rate over the medium-term. For example, policies that help firms to raise the underlying competitiveness of their business through enhanced productivity, development of innovative products, or better matching between skills and employment opportunities will tend to take some of the cost and price pressures off exporters and others in the traded goods sectors over the medium-term. These real impacts would help to support a higher nominal exchange rate.

Publicity

38. This report is likely to be released to the media and may attract some comment. We are working with your Office on its possible release.