The current account balance: an analysis of the issues

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In the year ended December 1997, New Zealand's current account deficit reached 7.7 percent of GDP, high among industrial countries (table 1). Conventional wisdom has it that current account deficits in excess of 5 percent of GDP provide a warning signal to policy-makers and financial markets. However, there are reasons to think that this simple rule of thumb is not too informative. For example, many countries have had current account deficits in excess of 5 percent of GDP for prolonged periods, and have suffered no external crises, and some countries with current account deficits of less than 5 percent of GDP (Indonesia, for instance) have experienced serious problems. To understand the implications of New Zealand's current account deficit, we must therefore look beyond simple rules of thumb.

This article takes a detailed look at the factors influencing New Zealand's current account deficit, and its potential economic ramifications. We conclude that although New Zealand's current account deficit is sizeable and cannot be expected to remain at current levels indefinitely, adjustment when it occurs – and recent depreciation of the exchange rate suggests that that adjustment has already begun – is unlikely to be disruptive to the economy.

1 Introduction

At 7.7 percent of GDP, New Zealand's current account deficit is high among industrial countries. Indeed, as can be seen in Table 1, New Zealand's current account deficit falls in the range of those seen in East Asia (Thailand, Malaysia, Korea, Philippines, and Indonesia) before the onset of the Asian crisis.

Table 1
Current account balances of selected countries

	Current account balance* (% of GDP)
Selected industrialised countries	
New Zealand	**-7.7***
Australia	-3.7
United States	-1.9
Germany	-0.6
United Kingdom	-0.1
Canada	0.5
France	1.3
Japan	1.4
Italy	3.4
Selected East Asian countries	
Thailand	-7.9
Malaysia	-4.9
Korea	-4.9
Philippines	-4.7
Indonesia	-3.3

* New Zealand year ended December 1997, others year ended December 1996.

Source: International Monetary Fund *World Economic Outlook* (Oct 97) and Statistics New Zealand (SNZ).

2 Why might we be concerned about current account deficits?

A current account deficit arises when a nation saves less than it invests, meeting the difference with inflows of foreign capital (see box). In the post-World War II period up to 1972, an era when exchange rates were mostly fixed throughout the world (usually to the US dollar), economists generally agreed that prolonged, sizeable current account deficits posed a policy problem for a nation. The reason was that a persistent current account deficit indicated the need for a nation to devalue its currency, which required explicit government action.

More recently, respected economists – notably Corden (1994) and Pitchford (1989) – have argued that in today's world large and persistent current account deficits are not necessarily a problem for policy-makers. The reason, according to this 'new view', is that since 1972 countries around the world have increasingly adopted floating exchange rates. As a result,

so the 'new view' goes, if a persistent current account deficit emerges when the government's budget is in surplus, the deficit must owe to the choices of businesses and households who are funding consumption and investment with inflows of foreign capital. If investors and financial intermediaries who provide such capital undertake rigorous and independent scrutiny of those to whom they lend, then we should presume that these lending and borrowing decisions are in the best interests of households and businesses. For instance, capital inflows allow a nation's businesses to undertake new, and presumably profitable, investments.

Thus, unless there is reason to believe that the choices of households and businesses are ill-informed, short-sighted, or importantly influenced by pre-existing government policies, or that lenders are not adequately scrutinising borrowers, the 'new view' says that there is little reason for policy-makers to intervene. If a nation's exchange rate floats, it will depreciate as needed to eliminate a current account deficit without any action by policy-makers.

The Corden-Pitchford doctrine provides a useful framework for thinking about the implications of New Zealand's current account deficit. As a starting point, the doctrine suggests that we can be relatively sanguine about New Zealand's current account deficit. New Zealand's currency is freely floating, so in time the exchange rate should adjust to help eliminate the current account deficit. Indeed, the fall in the New Zealand dollar (NZD) seen since April of last year suggests that that process is underway. In the same vein, New Zealand financial institutions appear to have been performing their intermediation role effectively, as banks' balance sheets appear sound.

In addition, however one feels about the 'new view' of current account deficits, a strong case can be made that balance of payments imbalances around the world are likely to be larger and more persistent in coming years than at almost any point in the 20th century. Due to globalisation, technological innovation, financial deregulation, and the end of the cold war, capital flows more freely and more quickly around the world. As we show, capital inflows into a country are the mirror image of its current account deficit. Thus, because capital flows more freely around the world, it follows that many countries may now begin to experience bigger and more persistent current account imbalances.

The preceding point, combined with economic reforms, has likely had a marked influence on New Zealand's current account deficit. By the mid-1980s New Zealand had eliminated controls on capital flows. The economy has been deregulated, and substantial and important reforms, such as the Reserve Bank Act, have been established. Prudent fiscal and monetary policies have been followed. Tariffs have been significantly reduced. All of this has made New Zealand a more favourable locale for foreign investment. In these circumstances, foreign investors have been willing – indeed eager – to tap New Zealand's investment potential. In short, economic reforms have made New Zealand an attractive place to invest and, with no impediments to such investment, capital inflows have resulted. Because the government does not intervene in the foreign exchange market, such capital inflows result in equal, offsetting, current account deficits. Thus, at least to some extent, New Zealand's current account deficit likely represents a vote of confidence by foreigners in our economy.

Still, policy-makers cannot afford to be complacent, especially given the recent economic turmoil in East Asia. Financial markets are looking very closely at the economic fundamentals of nations with large current account deficits, and they may extract a premium from such nations for borrowing on world capital markets. At a minimum, this suggests that it is crucial for New Zealand to continue maintaining prudent monetary and fiscal policies, as well as sensible microeconomic policies conducive to productivity and income growth (which are necessary if the share of income directed to servicing foreign capital is to diminish in the future). Moreover, as other economists have

Box: National income accounting for an open economy

In an open economy, the value of output produced at home (Y) must equal aggregate spending on all goods and services, both domestic and foreign. Domestic spending comprises private consumption (C), private investment (I), and government expenditure on goods and services (G), net of imports of foreign goods and services (M). Exports (X) are an additional source of demand for domestic goods and services. Thus, by definition, output is:

$$Y = C + I + G + X - M \quad (1)$$

If we subtract from both sides of (1) consumption (C) and taxes net of government transfers (T), and then add to both sides of (1) net international transfers plus net international investment income (R) we obtain:

$$Y + R - T - C = I + (G - T) + (X + R - M) \quad (2)$$

Saving, by definition, is $S = Y + R - T - C$. Inserting this definition of saving into (2) and rearranging gives:

$$\text{Current account} = (X-M) + R = (S-I) + (T-G) \quad (3)$$

This fundamental identity states that the current account balance equals the excess of private sector investment over saving plus the government's budget deficit (ie taxes less government spending, denominated as T-G). The current account deficit is reduced if a nation raises its saving rate, if it reduces investment, or the government raises taxes or cuts spending.[1] Suppose, for example, that the government's budget is in balance ($T=G$). Then, the current account deficit must equal the excess of private investment over private domestic saving:

$$-\text{Current account} = (I-S) \quad (4)$$

The current account deficit will shrink if investment falls or saving rises. Note also that, in this case, the current account deficit will be zero only if saving equals investment ($I=S$). Another useful identity links the current account to changes in official reserves (due to the Treasury and the central bank) and to private capital flows:

$$\text{Current account} = \text{change in net official reserves} - \text{private capital flows} \quad (5)$$

When the central bank and Treasury abstain from buying and selling foreign currency, as in New Zealand, *change in net official reserves* is zero. In this case:

$$-\text{Current account} = \text{private capital flows} \quad (6)$$

Thus, **any tendency for capital to flow into New Zealand necessarily generates a current account deficit**. Alternatively, the current account deficit can be eliminated only if private capital inflows halt. Finally, note that if capital inflows halt so that the current account deficit is eliminated, saving and investment will be closely matched. If capital flows cease, then by (6) the current account deficit must be zero. Assuming as in (4) that the government's budget is in balance, then saving by domestic residents must equal investment.

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[1] The current account deficit also shows the rate at which the economy is reducing or increasing its net foreign assets. Net foreign assets (NFA) is defined to be gross claims of New Zealanders on foreigners less gross claims of foreigners on New Zealanders. In effect, NFA measures whether New Zealanders, in aggregate, are indebted to foreigners (NFA is negative) or are net creditors of foreigners (NFA is positive).

pointed out (McKinnon, 1996), although the current account itself is unimportant according to the 'new view', what the current account reflects can be important. This suggests that it is important to understand the causes of New Zealand's current account deficit.

3 Factors influencing New Zealand's current account

Policy-makers must understand the factors influencing the current account deficit if they are to adopt appropriate policies. Some factors, such as economic reforms and new investment opportunities, are beneficial to the economy and probably require no policy response. If the current account balance is being distorted by pre-existing government policies, the most direct solution is to adjust the pre-existing policies. Some factors, such as changes in world commodity prices, are beyond the influence of policy-makers. Finally, to the extent that policies are needed to offset business cycle influences, policy adjustments should probably be short-term ones; long-term policy adjustments would still be in place well after the business cycle influences had waned.

A host of factors is thought to have influenced New Zealand's current account balance. We examine a non-exhaustive list.

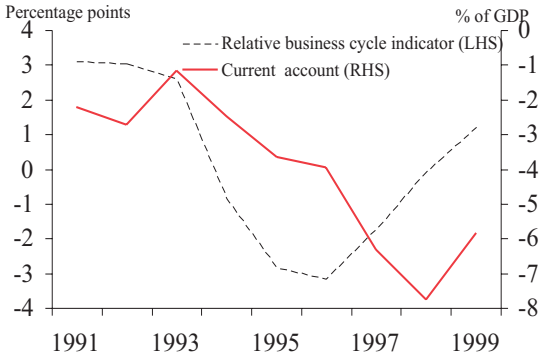
Strength of business cycles in New Zealand and in our trading partners

The current account balance depends to some extent on the stages of business cycles at home and abroad. Strong income growth at home will boost our demand for imports, raising the current account deficit. Conversely, strong economic growth among our trading partners will raise world demand for our exports, reducing the current account deficit. These effects will be most pronounced when our business cycle is out of phase with the business cycles of our trading partners, such as when we are at a business cycle peak and the rest of the world is at a business cycle trough.

Figure 1 examines this 'out-of-synchness' effect. It plots a measure of the strength of New Zealand's business cycle relative to that of our trading partners (dotted line) against New Zealand's current account (solid line).[2] When the thick line is positive our trading partners are seeing more of a boom (or less of a recession) than we are: when the thick line is negative our trading partners are seeing less of a boom (or more of a recession) than we are.

The figure suggests that the rise in the current account deficit from 1993 to the present, at least in part, reflects the relative strength of New Zealand's business cycle. Had our business cycle been more in line with those of our trading partners, the current account deficit would quite likely have been considerably smaller. This does not mean, of course, that policy-makers either should, or could, maintain close synchronisation of our business cycle with those of our trading partners.

Figure 1: Current account and relative strength of New Zealand's business cycle



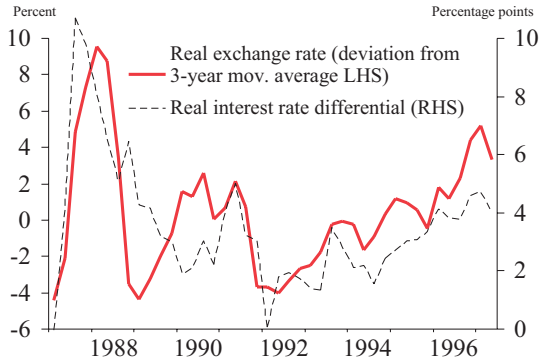
Source: International Monetary Fund (IMF), SNZ and RBNZ calculations. Calendar years. Relative business cycle indicator is a one year lag of the difference between the trade-weighted output gap in the five TWI countries and New Zealand's output gap. Estimates in 1997; forecasts in 1998 and 1999. Current account adjusted to remove large one-off items in 1997 and 1999.

[2] This measure is constructed as the difference between New Zealand's output gap and the trade-weighted output gaps of our trading partners. Technically speaking, the output gaps for the countries entering this calculation are all constructed via the widely-used Hodrick-Prescott filter.

Domestic and world interest rates, and their effects on the exchange rate

A closely related point is that from early to mid-1994 to late-1996 spreads between short-term (real) interest rates in New Zealand and short-term (real) interest rates among our trading partners widened to over 400 basis points (figure 2, dotted line). To an important extent, this reflected the strong demand for credit in New Zealand arising importantly from the housing market, and associated with briskly advancing house prices, as well as from monetary policy tightenings designed to limit inflation pressures. Our relatively high short-term interest rates during this period attracted capital inflows, with the result that much of the monetary tightening was felt as an appreciation of the currency (figure 2, solid line). Thus, some widening of the current account deficit after 1994 was to be expected (as is a narrowing to be expected as demand for credit and real monetary conditions ease).

Figure 2: Inflation-adjusted (real) exchange rate and relative interest rates



Source: RBNZ. Real interest rate differential is the real 90-day New Zealand rate less the trade-weighted average of the real 90-day interest rates in the five TWI countries. Real exchange rate is also in trade-weighted terms.

Effects of increasing openness of world capital markets

As noted earlier (see box), restrictions on international capital flows and foreign currency transactions can play an important role in explaining the size and persistence of a nation's current account balance. In particular, a nation that removes capital controls, as New Zealand did in the mid 1980s, may begin seeing larger and more persistent current account imbalances.

The experiences of Canada and the United Kingdom in the 19th century are instructive (figure 3). It is widely held that capital flowed quite freely around the world during the period running from at least 1870 to immediately before World War I. During these years, the United Kingdom ran substantial current account surpluses (dotted line) as it exported capital, with vast amounts flowing to the New World. During the entire 43 year period, Canada ran a sizeable current account deficit (solid line) as it imported capital from other countries, notably from the United Kingdom.

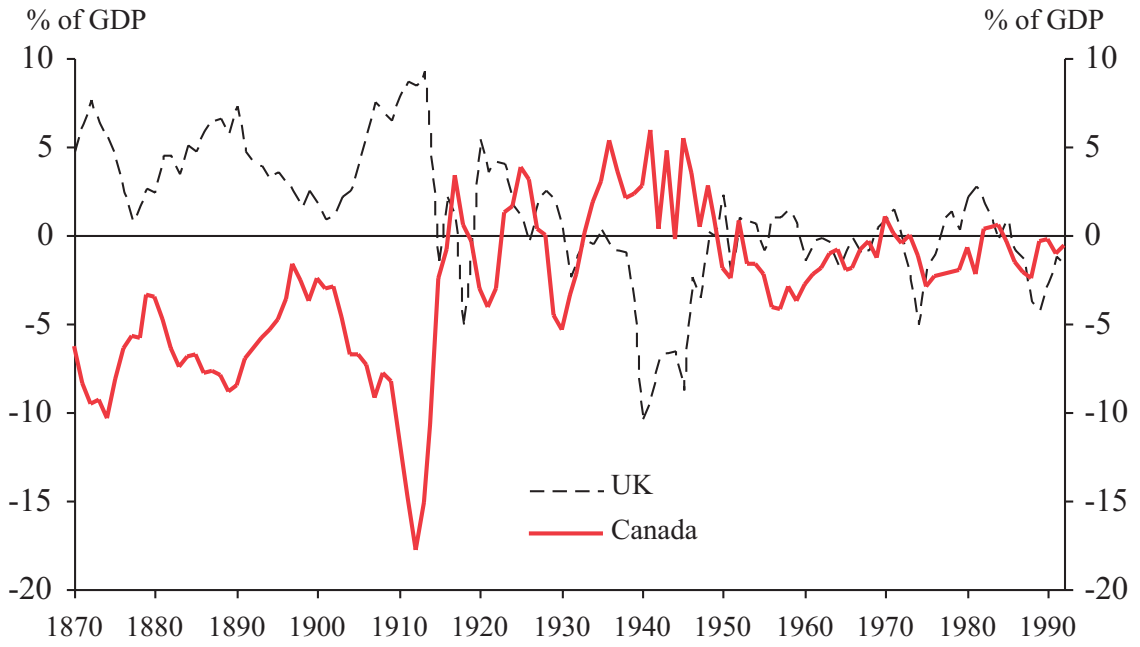
Corporate profitability and the investment income balance

The investment income portion of the current account deficit averaged about 7 percent of GDP from 1995 to 1997, compared with an average of 5 percent of GDP from 1990 to 1994. This rise has made a noticeable contribution to the widening of the current account deficit in the 1980s (figure 4).

The investment income balance can be split into returns earned by providers of direct investment (investment in firms where the investor has a significant equity stake), and returns earned or paid on other sorts of foreign investment. There have been significant changes in the returns earned and paid on direct investment, which help explain the deterioration in the investment income balance.

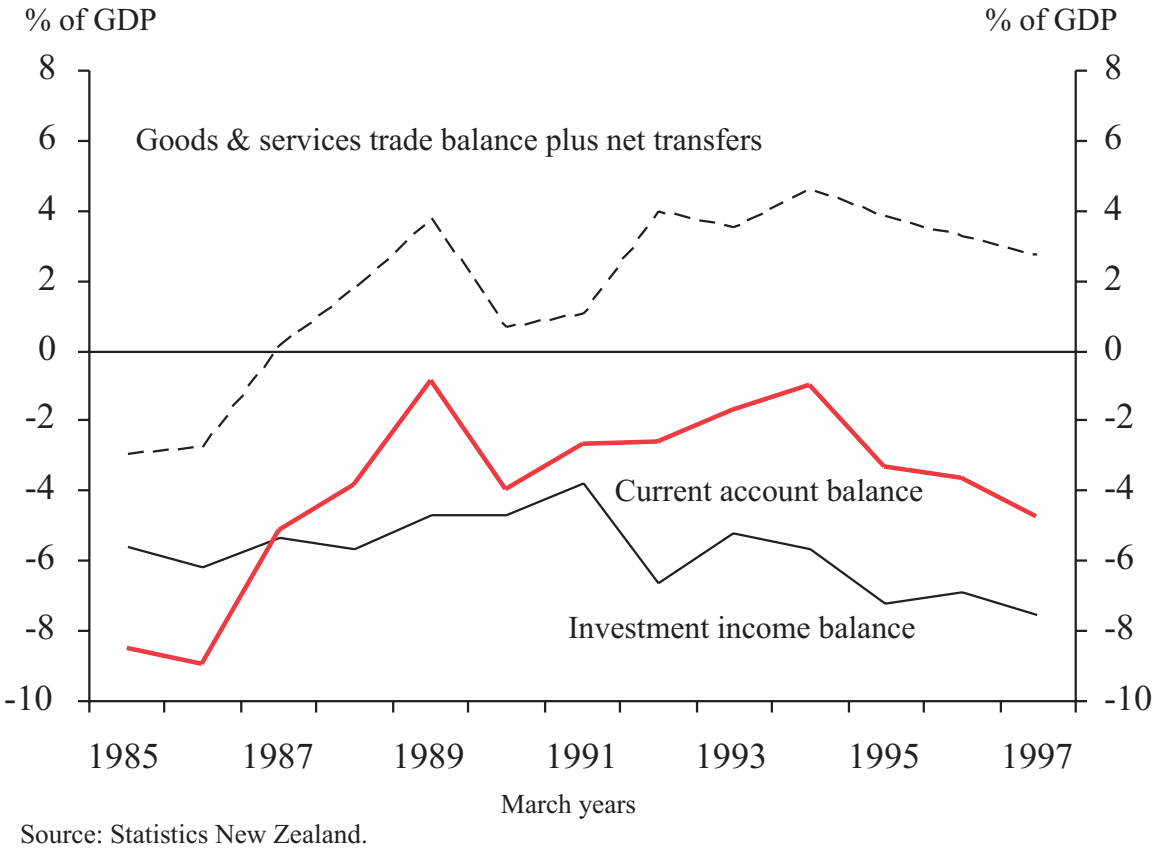
As figure 5 shows, the returns accruing to overseas investors in New Zealand corporations have risen substantially - from an average of around $1.8 billion in the 1992-94 March years to $4.7 billion in the 1995-97 March years. This shift probably in part reflects the New Zealand business cycle. From a low point around 1991-92, the New Zealand economy began a prolonged expansionary period, which boosted the profits of New Zealand enterprises, including foreign owned enterprises.

Figure 3: Current account balances of Canada and the United Kingdom since 1870



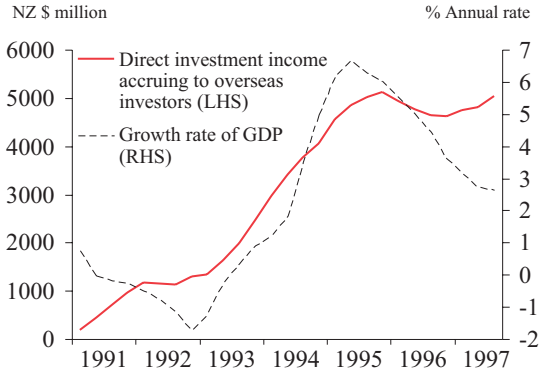
Source: International Monetary Fund

Figure 4: Current account balance and its components



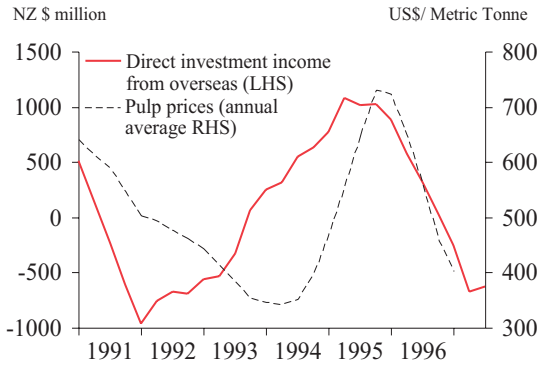
Source: Statistics New Zealand.

Figure 5: Direct investment income accruing to overseas investors



Source: SNZ. Direct investment income is a four quarter funning total. Growth rate of GDP is a one year lag of annual average of production-based GDP.

Figure 6: Direct investment income accruing to New Zealanders



Source: SNZ, Datastream. Direct investment income is a four quarter running total.

A deterioration in the returns received on New Zealand's investments abroad has also acted to boost the investment income deficit recently. Returns received on direct investments overseas appear to have been related to world commodity prices, in particular to the prices of wood-based products (figure 6), a sector in which New Zealand firms have made sizeable investments abroad. Since the December 1995 quarter, pulp prices have fallen sharply, lowering returns on direct investments abroad.

Influence of New Zealand's reforms

In light of New Zealand's economic reforms, foreign investors probably view New Zealand's prospects much more favourably. Foreigners want to invest in countries with low and stable inflation rates, flexible labour forces, fiscally prudent governments, and well-developed and open financial markets. Reforms have wrought these changes in New Zealand, helping to create a stable macroeconomic environment.

In part evincing foreign investors' new-found confidence in New Zealand, foreign direct investment surged in the 1990s (table 2). A net inflow of foreign direct investment, being a capital inflow, raises the current account deficit (see box). However, foreign direct investment is thought to be reasonably stable and so is not very likely to contribute to a cur-

Table 2: Flows of foreign direct investment into New Zealand

	Gross flows of foreign direct investment (billions of $)	Net flow of foreign direct investment (billions of $)
1991	4.6	0.1
1992	4.4	3.0
1993	5.1	8.7
1994	8.3	7.0
1995	4.1	2.3
1996	6.4	2.6

Source: SNZ; March years

rency crisis.[3] Moreover, such investment gives New Zealand businesses access to foreign technology and business management practices, positive factors for the economy. Consequently, it would be counterproductive for policy-makers to intervene to prevent this influence on the current account deficit.

Improved consumer expectations

Since 1984, many New Zealanders have probably come to believe that their long-term wealth and income prospects have improved. This is natural as the reforms were intended to help the economy operate more efficiently. Households that expect higher future incomes may borrow against that future income to raise their consumption today. This will tend to lower our savings ratio today, in turn raising the current account deficit.[4] It is of course possible that New Zealanders might be too optimistic about their future income prospects, and policy-makers may be able to help by pointing out the risks and consequences of excessive exuberance. Going a step further, if such exuberance raised the probability of an upswing in inflation, the Reserve Bank might need to intervene directly by tightening monetary policy. For example, house price inflation accelerated substantially from a cyclical low in 1992 until early 1995, in part probably reflecting households' beliefs that, with better income prospects in the future, they could support higher mortgage payments now.

Influence of fiscal policy on the current account

The government has been running fiscal surpluses since 1994, and this has almost surely helped to restrain the current account deficit. In general though, a fall in the government's budget surplus (or a rise in a budget deficit) will tend to boost the current account deficit.[5] Although fiscal policy in New Zealand remains tight in the sense that the government is continuing to run budget surpluses, it has become looser of late. Spending increases and tax cuts, and additional tax cuts planned for 1998, will have meant that fiscal policy has exerted less of a restraining influence on the current account deficit than was previously the case.

Retirement income policies

Fiscal and tax policies can have important influences on household saving for retirement. Households make judgements about what the government is likely to provide for them in retirement. Today's wage and salary earners will factor these judgements into their saving and retirement decisions, for example possibly saving less over their lifetimes than they would in the absence of a government-sponsored retirement plan. If both the government and individuals have consistent expectations, then each — the government through fiscal policy and individuals through retirement savings plans — will save accordingly. Where this does not happen, either individuals will not achieve their expected retirement incomes or, perhaps just as likely, the government will end up providing more to the aged than it allowed for. In the latter case, fiscal and current account deficits are likely to result.

One-off items

The current account deficit was boosted importantly by two one-off items in 1997. In the June quarter of 1997, the government took possession of the frigate *Te Kaha*, which had the effect of lowering the trade balance by $563 million. In addition, in the same quarter some offshore subsidiaries of New Zealand corporations recorded extra-ordinary write-offs. These write-offs are estimated to have boosted New Zealand's investment income deficit by some $400 million, and thus the current account deficit by the same figure. The current account deficit will again be boosted by a one-off event in March 1999; at that time the government will take possession of a second frigate, *Te Mana*,

[3] For evidence, see Frankel and Rose (1996).

[4] To make up for this, our savings ratio would have to rise at some point in the future. Precisely when that would occur is an open question.

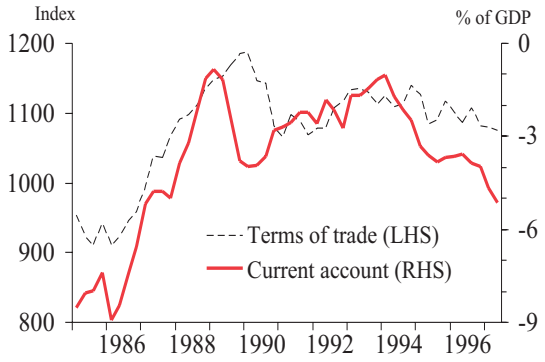
[5] Empirical evidence, both for New Zealand and other countries, tends to support this notion. See, for instance, Debelle and Faruqee (1996).

raising the current account deficit in that year by $563 million.

The terms of trade

In contrast to historical patterns in New Zealand, terms of trade shocks have not had an important influence on the behaviour of the current account after 1991, as the terms of trade (dotted line, figure 7) have been relatively stable since then. Before that, a significant improvement in the terms of trade from 1986 to 1989, and the subsequent deterioration up to early 1991, did play a role in shaping the current account.

Figure 7: New Zealand's current account and terms of trade



Source: SNZ and RBNZ. Current account figure adjusted to remove two large one-off items in the June 1997 quarter.

Summary of factors influencing the current account deficit

New Zealand's economy has changed dramatically in the past 15 years. Reforms and internationalisation have had marked effects on the economy, and in particular on the current account balance. One lesson is that a current account deficit today implies something quite different than did a current account deficit in the post-war period up to 1984. A corollary is that in today's world there are probably no simple rules for deciding whether a given current account deficit poses a problem. Indeed, attempts to apply simple rules may lead to simplistic conclusions. These points are drawn out more extensively in the next section.

4 Is New Zealand's current account deficit 'sustainable'?

Over the years, economists have expended considerable effort trying to pinpoint factors that tell whether a given current account deficit is 'sustainable'. The reason is that a large unsustainable current account deficit implies the need for a big correction, either in the exchange rate in particular, or in policy in general.

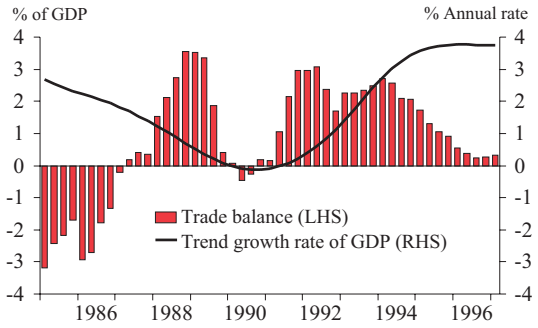
Indebtedness to foreigners is obviously a problem if a nation cannot meet payments of interest and principal on those debts.[6] A useful analogy is one's credit card debts. Banks do not allow credit card users to accumulate credit card debt without limit. This means that once one's credit limit is reached, a customer has to make monthly payments that at least cover the monthly interest, so that accrued interest does not continuously add to one's outstanding balance. In principle, this condition also applies to the indebtedness of countries.

A nation will service its debt and will not accumulate ever increasing debt if it runs a trade surplus at least as large as the cost of servicing already existing foreign debt. In other words, to service its foreign debt fully a country must run a trade surplus at least as large as its investment income account deficit. Otherwise, at least part of the cost of servicing the capital already provided by foreigners is being added to the outstanding balance of foreigners' claims on the economy.

Just how big a trade surplus is needed to stabilise the level of debt depends on the level of interest rates, the potential growth rate of the economy and the stock of liabilities to foreigners. In general, the higher the level of interest rates, the lower the long-term growth rate of the economy, or the higher the liabilities to foreigners, the higher is the required trade surplus.

[6] In the discussion here, foreign indebtedness, and interest payments on foreign debt should be understood broadly, and to encompass all forms of financing from abroad, including for example foreign direct equity investment and the earnings on that investment that are attributable to the foreign investors.

Figure 8: Trade balance and trend growth rate of output



Source: RBNZ estimates of trend growth. SNZ figures on trade balance (balance on goods and services). March years.

As figure 8 shows, the trade surplus (solid bars) has fallen since 1994, so perhaps there is cause for concern. On the other hand, though, the trend growth rate of income in New Zealand (solid line) has risen significantly. Thus, even though New Zealand is now running smaller trade surpluses than was the case a few years ago, the nation's ability to pay more in the future is probably greater. On balance, financial market participants, at least until now, have been willing to extend New Zealand further credit against the prospect of stronger income growth and thus a growing debt servicing capacity.

In the following sections we compare and contrast New Zealand's circumstances with those of other (selected) countries that have had external crises. There are some similarities between circumstances in Mexico which suffered a currency crisis in 1994, the countries in East Asia now undergoing difficulties, and those in New Zealand. On the face of it, these similarities might suggest that New Zealand is headed for a sharp correction. However, there are crucial differences. We argue that these crucial differences mean that New Zealand is quite unlikely to experience the disruptive kind of external correction seen in Mexico in 1994, or more recently in East Asia. [7]

Similarities between New Zealand and other countries that have had balance of payments difficulties

New Zealand – like Mexico in 1994 and the countries in East Asia that have recently had balance of payments difficulties – has a high and rising current account deficit, a high external debt-to-GDP ratio, and an exchange rate that appreciated significantly over an extended period (more or less continuously from 1992 to early 1997). In addition, as in these other countries, the growth rate of bank lending has been brisk, and certain asset prices, notably New Zealand housing prices, have risen considerably. We elaborate on some of these factors.

Current account deficit

Statistically speaking, many researchers have concluded that the current account balance is a very poor indicator of a forthcoming currency crisis.[8] A few examples are instructive. Mexico's and Thailand's current account deficits were 5.9 percent and 8.0 percent of GDP, respectively, before their crises began. On the other hand, Singapore ran current account deficits averaging 10 percent of GDP from 1965 to 1985, yet Singapore experienced no currency crises. Australia has run current account deficits averaging 4 percent in the 1990s, so far without repercussions. Indonesia's current account deficit in 1996 was a relatively modest 3.3 percent of GDP, yet it is now in the midst of a serious crisis.

Growth of bank lending, credit expansion, and asset price inflation

Too-rapid credit expansion, and the stimulus it provides to asset prices, has been apparent in the Asian crisis. In some cases, banks lent aggressively into property markets, possibly believing that property prices would continue to rise indefinitely. Businesses and households – encouraged by strong business growth and tempted by potential capital gains – were willing to take out loans that in some instances left

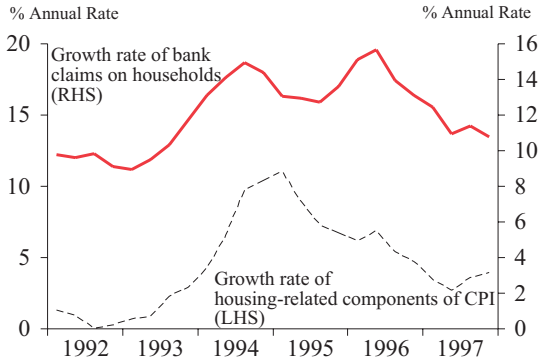
[7] The approach in this section is similar to that used by Milesi-Ferretti and Razin (1996).

[8] See, for example, Frankel and Rose (1996) and Kaminsky, Lizondo, and Reinhart (1997), and the references therein.

them highly leveraged, in others tied their payments to the US dollar, or both. As is typically the case in financial boom-bust cycles, such strategies work only in the absence of unfavourable economic shocks.

Some of these features have been evident in New Zealand. From March 1993 to June 1996, the growth rate of bank lending to households nearly doubled (solid line, figure 9). Asset price inflation was similarly apparent, with inflation in the housing component of the CPI rising from near zero in the March-year 1992 to over 10 percent by March-year 1995 (figure 9, dotted line). However, the Reserve Bank tightened monetary policy in 1994, and for the most part retained a firm grasp on the monetary reins through the end of 1996 (although there was a brief easing in the fourth quarter of 1995). Subsequently, house price inflation fell, and the growth rate of lending to households moderated. Although the growth rate of lending to households has remained elevated (10.8 percent for the year-ended December 1997), the fall-off in house price inflation has probably significantly dampened households' expectations that house prices could only move up. Thus, early and substantial monetary tightening by the Reserve Bank has likely done much to mitigate one of the important factors that led to financial and external instability in Asia.

Figure 9: Growth rate of bank lending to households and house price inflation



Source: SNZ and RBNZ.

Composition and direction of trade

Countries whose exports comprise a high proportion of primary commodities may see sharp swings in export revenues. This is because commodity prices tend to be relatively volatile, leading to swings in export revenues that show up in the trade balance, and therefore the

Table 3: Composition of New Zealand merchandise exports

(percent of total merchandise exports)

Category	*Percent of exports**
Forestry-based	11.3
Dairy products	17.6
Fruit and vegetables	5.2
Meat products	14.0
Other farm-related products†	11.0
Subtotal land-based products	*59.1*
Fishing	4.9
Minerals/gas & oils/metals^	10.7
Manufactured and all other merchandise exports	25.3
Total	*100.0*

*Year ended June 1997.

† Includes wool, casein and caseinates, tallow, and raw hides & skins & leathers

^ Includes iron ore, mineral fuels, methanol, iron and steel products, and aluminium products

Source: SNZ

current account as well. A high proportion of New Zealand's export sector is primary industry-based (table 3), suggesting that unfavourable shifts in world prices of dairy products, meat products, wool or timber could subject the export sector to stress. Australia's exports are also concentrated, albeit more heavily in mining, mineral fuels, and metals (42 percent of exports)[9]. Because New Zealand is linked to Australia via a free-trade agreement and Australia buys roughly half of New Zealand's manufactured exports, difficulties in Australia could spill over into New Zealand. These considerations indicate that, in so far as possible, New Zealand may need to maintain a stronger than average external position so as to leave a margin to absorb external shocks.

Appreciation of the real exchange rate

Real exchange rate appreciation often precedes a currency or balance of payments crisis. This was the case in Mexico before its 1994 crisis, and was the case in Thailand, Indonesia, and Malaysia in the lead-up to the Asian crisis.[10] Appreciation of the real exchange rate can be a precursor to balance of payments difficulties because exports become less competitive on world markets and imports become more competitive in the local market. As exports slow and imports increase, the current account deficit will rise, suggesting the need for the currency to depreciate.

On an inflation-adjusted basis, New Zealand's exchange rate appreciated by nearly 30 percent from the bottom of the business cycle in early 1993 to its peak in early 1997 leaving it 15 percent above its previous 15 year average. Thus, at least superficially, on this score New Zealand is similar to the countries in East Asia that have recently been experiencing difficulties. On the other hand, however, since early-1997 the New Zealand dollar (trade-weighted basis) has depreciated roughly 14 percent, and has depreciated 22 percent against the US dollar from its peak in November 1996.

Differences between New Zealand and countries having balance of payments difficulties

Despite the similarities, there are important – indeed crucial – differences between New Zealand's circumstances and those of countries such as Mexico in 1994 and those of East Asia today.

Exchange rate regime

One crucial difference is that New Zealand's currency has been freely floating since early 1985, while those of Mexico, and most East Asian countries – were pegged, typically to the US dollar.

In recent years the US dollar has been strengthening against most currencies. Their pegs to the US dollar, combined with somewhat higher inflation rates than in trading partner countries, resulted in real exchange rate appreciations for most East Asian countries.

When a nation's real exchange rate becomes overvalued, there are basically two ways for it to return to a more normal level. Either the nominal exchange rate must fall or the inflation rate must fall. However, as a rule, exchange rates, which are set by financial markets, adjust much more quickly than inflation rates. Indeed, a sharp fall in the inflation rate can typically be brought about only by a recession or a significant slowdown in business activity. Initially, most of the countries in East Asia had fixed nominal exchange rates. Consequently, when their real exchange rates became overvalued, they could restore the competitiveness of their export sectors via a sharp slowdown in economic growth, or choose to devalue their currencies. Ultimately, most East Asian coun-

[9] Source for Australian figure is *Yearbook Australia*, 1996. It includes exports of metalliferous ores and scrap, mineral fuels (coal, petroleum, natural gas), manufactured goods classified as non-ferrous metals, and exports of non-monetary gold.

[10] On the other hand, real exchange rate appreciation was rather muted in Korea in the lead-up to the Asian crisis. Real exchange rate appreciation was strong and steady in Hong Kong and Singapore from 1990 to 1996, and yet these countries have thus far avoided the worst effects of the Asian crisis. On balance, it seems that real exchange rate appreciation, by itself, gives a mixed signal of impending external difficulties for a particular country.

tries involved in the crisis chose, or were forced by economic circumstances, to float and allow their currencies to depreciate.

Nevertheless, allowing their currencies to float has not saved Thailand, Korea, Indonesia (and to a lesser extent the Philippines) from economic hardship. Their economies are slowing sharply, and they are having to undertake painful structural reforms. To an important extent, this has happened because the previously pegged exchange rates tended to discourage businesses from hedging against foreign currency risk and tended to promote borrowing in foreign-currency-denominated debt. In such circumstances, the currency devaluation has caused economic disruption by sharply raising the costs to businesses of servicing or retiring outstanding debts. As a result, businesses have been forced to cut back production and employment, and some have been forced into bankruptcy.

Such circumstances can be avoided if a government is able to sustain its currency peg. Invariably, however, pegged exchange rates are susceptible to speculative attacks by financial markets. When a speculative attack is mounted, a government comes under extreme financial pressure to abandon its currency peg despite the economic disruption such abandonment might cause. For example, during a speculative attack interest rates typically rise markedly, sometimes into the triple-digit range. Thus, East Asian countries found themselves in the uncomfortable position of needing to (indeed being forced by markets to) abandon their currency pegs, but at the risk of suffering severe economic disruptions from doing so. One way around this difficulty is to not peg the exchange rate in the first place, thus avoiding raising false expectations on the part of the private sector that the government can and will maintain its currency peg forever. Alternatively, a country that is already operating with a pegged exchange rate may choose to abandon it, but at a more opportune time. Perhaps in large part in recognition of these features of pegged exchange rates, over the last twenty years the number of countries with pegged exchange rates has fallen markedly.[11] In New Zealand's case, because its exchange rate has been floating for 13 years, the nation is probably much less susceptible to a currency crisis.

Inflation

Low inflation is a strong indicator of sustainability of a current account deficit, especially if the exchange rate is pegged. Under a pegged exchange rate regime, a rise in the inflation rate leads to a rise in the real (or inflation-adjusted) exchange rate, even though the nominal exchange rate is pegged. In turn, the rise in the real exchange rate will cause a loss of competitiveness of domestic export and import competing firms, and will tend to boost the current account deficit. To offset this loss of competitiveness, a country may eventually decide to devalue its currency, or simply let its currency float. However, this should be of less concern for New Zealand because its currency already floats.

Low inflation also makes a given current account deficit more sustainable in a more general way. Financial market participants are wary of investing in inflation-prone countries because inflation eats away at returns on financial instruments (especially debt instruments with interest payments fixed in nominal terms). Hence, New Zealand's low and stable inflation rate likely means that foreign investors will be more content to leave their funds here. This has a direct effect on the sustainability of the current account, because the capital account is the means of financing the current account deficit.

Political uncertainty

Political uncertainty has been an important trigger for currency crises. It played a role in the Mexican crisis, and has been playing a role in Thailand, Indonesia, and to some extent Korea. For example, Mexico's 1994

[11] The IMF reports that in 1976 out of 100 countries, 86 (or 86 percent) had pegged currencies. By 1996, just 55 out of 123 countries (or 45 percent) had pegged exchange rates. See IMF *World Economic Outlook*, August 1997.

balance-of-payments crisis was preceded by two uprisings in Chiapas and the assassination of two prominent political figures in 1994. New Zealand's change to an MMP system of government may have introduced uncertainties for some financial market participants, but, if so, these will have dissipated as it has become apparent that the key elements of the New Zealand economy policy regime enjoy broad based political support.

Structure of the financial industry, financial deregulation, and the quality of bank supervision

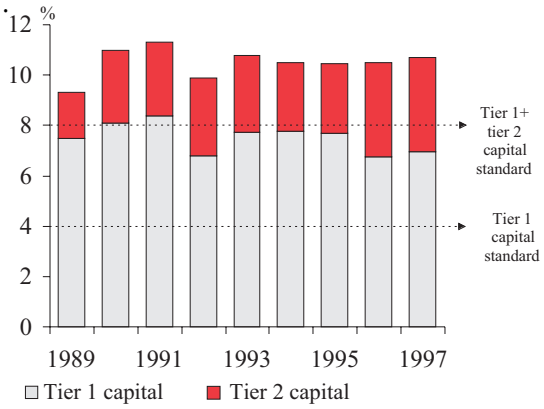
Financial structure, the initial steps a country takes toward financial deregulation, and the soundness of the financial system can all work together to produce or abet currency crises.[12] Financial liberalisation has often been accompanied by credit booms, which, when combined with weak prudential standards for financial institutions, may end in banking crises. Banks in Thailand, Malaysia, Indonesia, and Korea have had weak prudential supervision, and have recently come under substantial pressure due to poor loan quality. The banking systems of these countries were not strong enough to withstand economic shocks.

On the other hand, too much government interference in the banking systems of these countries has been noted as a primary factor leading to difficulties among Asian banks. Much of the bank lending in these countries was at the behest of their respective governments, or certain industries were given either implicit or explicit loan subsidies. In some cases these loans were thought to have implicit, if not explicit, government guarantees of performance. With such guarantees, banks were willing to lend to less-than-creditworthy customers.

In New Zealand, financial markets have been deregulated for more than a decade. Although some banking problems arose early on during the reforms and culminated in some failures and

[12] In a recent paper, Kaminsky and Reinhart (1996) found that, of 25 external crises they studied, banking problems helped predict balance of payments crises, rather than the reverse.

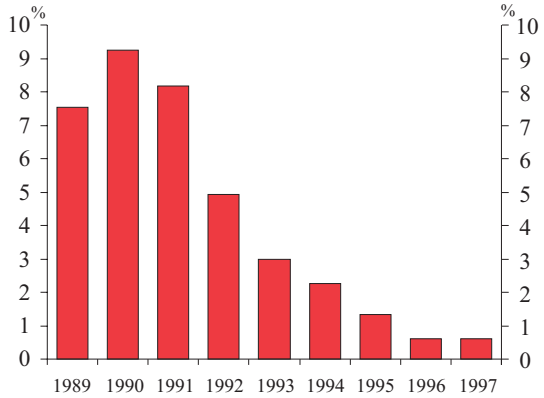
Figure 10: Capital ratios of New Zealand registered banks



Source: RBNZ. Figures are as at December quarter, except 1997, which is September quarter.

bailouts, banks are now healthy and are making healthy profits. Capital ratios of New Zealand banks have recently exceeded international standards by a comfortable margin (figure 10). Non-performing loans (as a percent of total loans) have fallen markedly this decade and are now quite low by almost any standard (figure 11). The regulatory structure has been revamped to provide the market with data on which to assess the health of banks. An important feature of the regulatory scheme has been to emphasise that the government will not bail out banks that run into difficulties. There is no guarantee that banks will always make prudent loans, but at least government policy does not encourage them to make imprudent loans. Finally, in contrast to circumstances in Thailand, Korea, and Indonesia, all but one of New Zealand banks are part of an international banking

Figure 11: Impaired assets of New Zealand banks as a percent of loans



Source: RBNZ. Figures are as at December quarter, except 1997, which is September quarter.

group. This is a significant source of strength for the New Zealand banking sector – both in terms of access to expertise and risk management resources, and in terms of access to additional capital if required. Overall, on this front New Zealand appears to be at low risk.

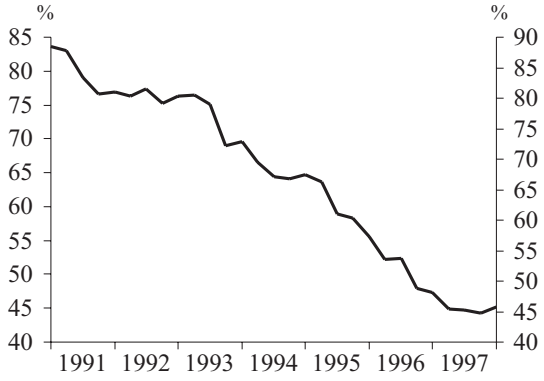
Composition of external liabilities

The composition of external liabilities seems to play an important role in currency crises. For example, the easier it is for investors to withdraw their funding from a country, the quicker a currency may fall. Other things being equal, the greater the proportion of external obligations that is debt rather then equity or the greater the proportion of external debt that is short term, the greater is the potential for external difficulties.

Problems may also stem from debt denominated in foreign currencies. If New Zealand corporations have obligations that are fixed in terms of, say, US dollars, a fall in the value of the New Zealand dollar relative to the US dollar means New Zealand corporations will spend more of their New Zealand dollar revenues servicing and paying off those obligations. Under such circumstances, a sharp drop in the value of the New Zealand dollar might lead to reduced business profitability.

Balance of payments difficulties are also more likely the greater is the percent of debt whose interest payments are adjusted frequently. Evidence is accumulating that balance-of-payments difficulties have been triggered (or at least abetted) by swings in interest rates in large industrial countries such as the US. Because the US is a big player in world capital markets, it, unlike New Zealand, can influence world interest rates. When interest rates rise in the US, interest rates may rise in other parts of the world as well. To the extent that domestic corporations (or households) have obligations with floating interest rate payments, rising interest rates abroad may drive up the cost of servicing debts at home.

Figure 12: Percentage of overseas debt denominated in foreign currencies



Source: SNZ.

In New Zealand, through conscious effort by the government, public debt denominated in foreign currency has been eliminated in net terms.[13] Partly as a result, the proportion of New Zealand's total external debt (gross terms) denominated in foreign currencies has fallen dramatically since 1990 (figure 12). By the first quarter of 1997, it had fallen to less than 50 percent of total external debt.

This means that any fall in the New Zealand dollar will have less deleterious consequences than an equal fall would have had earlier on in the decade. Even the current 50 percent figure may be overstated. Some of the 50 percent figure represents bank borrowing from overseas. To the extent that banks have fully hedged against the foreign currency risks posed by these borrowings, the 50 percent figure probably overstates the actual risks that New Zealand banks face. And disclosure data and anecdotal evidence do indicate that banks are well hedged against foreign currency risks.

Another reason to be relatively sanguine about New Zealand's external position is that much of our external liabilities is foreign direct investment. Foreign-based companies have made large fixed capital investments in New Zealand. In theory of course, they could sell these in-

[13] In gross terms, there is still some outstanding government debt that is denominated in foreign currencies. However, this government liability is balanced by an offsetting foreign currency asset, namely the government's holding of foreign currency reserves.

vestments, and if this were to occur on a large scale it could be disruptive for the New Zealand economy. But in the case of foreign direct investment this is generally not viewed as a concern. Foreign direct investments are mostly made with a view to the long term, and withdrawal on a large scale would likely occur only in circumstances where the long-term outlook for the economy deteriorated substantially. Thus, foreign direct investment tends to be more stable than debt capital in periods of adversity.

What do we make of these 'sustainability' indicators?

For New Zealand, sustainability indicators (summarised in the 'scorecard' in table 4) point to some strengths, as well as some weaknesses. Although caution is warranted as this summary reflects our subjective views, it is probably reasonable to conclude that New Zealand's strengths considerably outweigh her weaknesses. At a minimum, circumstances in New Zealand are dramatically different from those seen in Mexico before its 1994 crisis, and more recently in East Asia. Thus, any external correction here is unlikely to be of the extremely disruptive variety seen in Mexico in 1994, or of the kind East Asian countries are now working through.

And are there other issues?

New Zealand's current account deficit is high by international standards, as is New Zealand's overall level of foreign 'indebtedness'. These considerations turn the spotlight onto New Zealand's external position, especially when world financial markets are being roiled by currency crises in other countries. At a minimum, they may lead financial markets to demand higher interest rates for lending to New Zealand businesses. Recent empirical work at the OECD suggests that countries with elevated current account deficits tend to have higher than average long-term interest rates.[14]

In addition, emerging concerns about a weak current account are likely to be revealed in the form of a downward adjustment in the exchange rate and, with that, a rise in inflation. While that has obvious consequences for the stance of monetary policy, there is no reason to believe that such an adjustment process must be disruptive. In fact, an adjustment of that sort has been underway in New Zealand for some time, and it is likely to prove quite benign. One reason is that the currency correction is likely to be accompanied by a drop in non-tradeables inflation. To the extent that the exchange rate decline is accompanied by rising interest rates, demand for housing, and thus house prices, is likely to moderate.

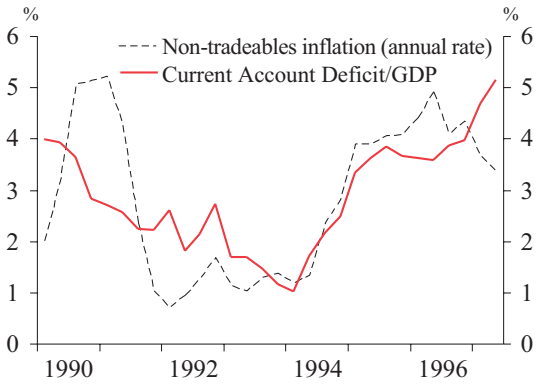
Table 4: Summary of 'sustainability' indicators

Sustainability indicator	*Favourable*	*Potentially favourable*	*Neutral*	*Potentially unfavourable*	*Unfavourable*
Current account balance			✔	✔	
Growth rate of bank lending			✔	✔	
Rising asset prices			✔	✔	
Appreciation of exchange rate				✔	
Composition of trade				✔	
Exchange rate regime	✔				
Inflation	✔				
Trade balance	✔				
Structure of financial industry	✔				
Composition of external liabilities	✔				
Transparency of policy	✔				

[14] See Orr, Edey, and Kennedy (1995).

This is important because house prices feed through to the construction costs component of non-tradeables inflation. Since at least March-year 1991 there has been a marked correlation between capital account surpluses (proxied by the current account deficit) and non-tradeables inflation (figure 13). Consequently, a currency correction, which would reduce capital inflows, might well reduce upward pressure on non-tradeables inflation.[15]

Figure 13: Non-tradeables inflation and capital inflows



Source: SNZ and RBNZ. March years. Current account figure adjusted to remove two large one-off items in the June 1997 quarter.

5 Policy responses to New Zealand's current account deficit

New Zealand's approach to dealing with its current account deficit has been to let its currency float freely, apply strong market discipline in the banking sector (mainly by ensuring that banks publish comprehensive and timely data on their financial and prudential status), maintain a low and stable inflation rate and run fiscal surpluses. Many commentators have noted that the turmoil in East Asian economies has been exacerbated by a lack of transparency about policy, as well as concerns among investors about the commitment of those countries to lasting economic reforms. New Zealand has maintained transparent monetary and fiscal policies, and has continued to press forward with trade liberalisation. So far, New Zealand's approach has been reasonably robust.

Still, policy-makers might wish to consider a range of policy interventions designed to promote earlier and faster external adjustment than market forces alone require. If so, what might they be? Some of the possibilities that have been suggested are:

Alter monetary policy

Some have argued that New Zealand's inflation goals are too exacting and that the Reserve Bank ought to run less stringent monetary policy. Looser monetary policy, so the argument goes, would push down New Zealand's interest rates, helping to stem capital inflows and lower the exchange rate, thereby reducing the current account deficit. However, if asked, most economists would probably say that monetary policy has no impact on the current account deficit in the long-run. Over long stretches, monetary policy can influence only the inflation rate; the current account is in the long-run shaped by the nation's saving and investment patterns, which are set by the behaviour of households and businesses, and by the spending and taxing policies of the government.

Even over the short- to medium-term, monetary policy that was too loose could boost aggregate demand, increase imports and worsen the current account deficit. Moreover, in the short-term, inappropriately loose monetary policy would likely be viewed as a portent of permanently higher future inflation, which financial markets would abhor. In the worst of circumstances, a monetary policy easing intended to help stem the current account deficit could initiate an investor pullback, triggering the kind of sharp, hard-to-manage correction that policy-makers are so eager to avoid. Consequently, the best course for monetary policy is to maintain a steady hand on the tiller, adjusting when necessary to keep inflation at a low and stable level.

[15] Nadal De Simone (1997) discusses the mechanics (in the context of a model of a small open economy in which the central bank targets the inflation rate) that give rise to the correlation in figure 13.

Sterilised intervention

Sterilised intervention intended to depreciate the exchange rate has sometimes been advocated as a means of offsetting pressures on the exchange rate caused by capital flows. To counter upward pressure on the exchange rate caused by capital inflows the central bank (or Treasury) would buy foreign currency with New Zealand dollars. However, unless this transaction is offset, it would boost New Zealand dollar liquidity in the domestic economy, and lead to more rapid lending growth and greater inflation pressures. To avoid boosting the inflation rate, the Reserve Bank would need to undertake offsetting transactions, preventing the increase in domestic liquidity. The required offsetting transaction would be to sell (government) securities denominated in New Zealand dollars. This latter transaction is the 'sterilising' operation.[16] Taken together, if these two transactions had the desired effect, they would push down the value of the New Zealand dollar and, importantly, do so without raising New Zealand's inflation rate. Unfortunately, evidence is that sterilised intervention has little, or no, lasting impact on a nation's currency. Moreover, the sterilising operation may be self-defeating: it will typically cause interest rates to rise helping to sustain capital inflows, and thereby rekindling upward pressure on the exchange rate.[17]

In addition, sterilised intervention can be quite costly. Sterilised intervention involves the government or central bank investing in foreign currency securities, as an offset to foreigners' investment in New Zealand dollar securities. If, as tends to be the case, the government invests in prime, lower yielding assets, while foreigners invest here in higher yielding investments, there is a net cost to the country. Recognising these difficulties, many countries that have tried sterilised intervention have ultimately abandoned it as ineffective or too costly.

Other kinds of central bank interventions

Central banks in East Asia and elsewhere have used a host of interventions to try to offset the effects of capital inflows. These include controlling the buying and selling of foreign exchange, raising reserve requirements of commercial banks, imposing restrictions on mortgage markets, taxing foreign exchange transactions, and others. Under certain circumstances, these kinds of interventions can have potent short-run effects. In the longer run they tend to become ineffective, as financial intermediaries find inventive ways around them. In addition, many of these policies are of the intrusive, economically costly, kind that New Zealand has purposely avoided since 1984. And, perhaps most importantly, the lesson from East Asia is that these kinds of policies do not prevent, and indeed may even exacerbate, currency crises.

Tighten fiscal policy

Fiscal policy has been tight, but the rise in government spending in 1997 and the recent tax cuts, as well as the tax cuts planned for 1998, have loosened the fiscal reins considerably. Maintaining a firm grasp on fiscal policy, at least until difficulties in East Asia sort themselves out, would reassure financial markets about New Zealand's commitment to prudent policy. This policy stance has been advocated by the IMF amongst others.

Policies to address retirement savings issues

Retirement savings issues have figured prominently in public policy debates for most of the last two decades, notably in relation to the appropriate balance between public and private provision for retirement incomes. As noted

[16] In effect, the two transactions taken together mean that the central bank buys securities denominated in foreign currencies, paying for them by selling from its portfolio securities of the New Zealand government.

[17] See, for instance, Obstfeld (1990). An important exception is where sterilised intervention is thought to presage a change in monetary policy. For example, if financial markets interpret an episode of sterilised intervention as a lead-in to easier monetary policy, the sterilised intervention may well cause a drop in the exchange rate. On this view, though, the sterilised intervention is just a guise for looser monetary policy.

earlier in this article, there is a possibility that the private sector will assume a greater level of future public provision than today's government intends. To the extent this is an issue, steps by the Government that increase certainty as to the level of publicly provided pensions in future would likely be helpful.

Market-led adjustment

A final possibility is to adopt a wait-and-see attitude, keeping a close eye on developments in the external sector. This approach has much to recommend it. Importantly, it gives the economy's self-correcting market mechanisms a chance to operate. Indications are that this process is already underway. As noted earlier, since its peak**,** the currency has depreciated by nearly 22 percent against the US dollar; on a trade-weighted basis the New Zealand dollar has fallen about 14 percent. In time, this depreciation should help to boost the trade balance and therefore reduce the current account deficit.

Another reason to adopt a wait-and-see stance is that it may be the least injurious of all policy options. Although there is a range of other policy options, as we have noted many of them carry significant risks of doing more harm than good to the economy. Moreover, many of these other policy options have been tried in Mexico and East Asia and have apparently not prevented crises in those countries.

That is not to say that New Zealand will, or can, indefinitely sustain a current account deficit (relative to GDP) at recent levels. Looking forward, the evolution of the current account will be influenced by the rate of growth in New Zealand's economy – and, related to this, in net exports and net saving – as well as the continued attractiveness of New Zealand as a place to invest relative to other countries. An important role of policy-making is to help enable the transition to a lower current account deficit to take place as smoothly as possible. The conclusions that emerge from this article are that policy-makers can help enhance a smooth transition by:

- maintaining prudent and highly transparent monetary and fiscal policy;
- adopting microeconomic and trade policies to enable markets – especially import and export markets – to maintain flexibility;
- adopting micro and macro economic policies conducive to sustainable long-term economic growth;
- adopting regulatory and supervisory schemes that help ensure transparency of the banking and financial systems; and
- maintaining open and flexible foreign exchange markets.

New Zealand has done these things. Thus, although New Zealand's current account deficit is sizeable, and will undoubtedly not remain at such an elevated level in the long-run, there are few reasons to believe that the transition to lower current account deficits will be disruptive to the economy.

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