1. Don Brash

Comments on the Coleman paper

At the outset, I would like to thank Andrew Coleman, not only for this very interesting paper, but more importantly for his personal contribution in opening up the issue of New Zealand joining a currency union.

Without Andrew's contribution I don't think that the discussion would yet have developed as far as it has, or reached into the territory that it has.

New Zealanders from all walks of life are currently trying to work out what drives economic success. As a topic of dinner table discussion, New Zealand's economic performance – both absolutely and relative to other countries, especially Australia – is starting to rival rugby and politics!

This is the territory into which Andrew has taken the discussion of currency union. Do the current monetary arrangements – which feature a floating exchange rate and an inflation target to tie down the independent monetary policy that results – maximise growth?

My standard response when asked what monetary policy can do to help maximise economic growth is to say that maintaining price stability is the best contribution that monetary policy can make. However, that contribution is a small one and more akin to removing an impediment than being an active accelerant or a catalyst for transformation.

I do not resile in any way from that answer when I say that it is incomplete. My standard answer addresses the mostly macroeconomic question of whether the long-run Phillips curve is vertical. But there are other, more complete, aspects of the question. What monetary arrangements would best support growth, and is what we currently have the best?

One might note at the outset the irony of asking this question now. We have recently learned how to deliver price stability, and thereby how to remove the impediment to growth that comes from an unstable pricing mechanism. So why are New Zealanders not satisfied?

We are not satisfied because, as we have progressively removed various impediments to growth, we have found that the gains have fallen short of expectations and desires. Macroeconomic and structural policy reforms almost certainly delivered an improvement in economic performance in New Zealand, but not sufficient to begin the process of clawing back New Zealand's four-decade long decline in relative living standards. So we are now looking for the deeper reasons for under-performance.

The case for the current monetary arrangements being perhaps a part of these deeper reasons for under-performance comes from four interconnected lines of thinking. Many of these points have been made by Andrew Coleman in this and earlier papers. Let me comment on each of them.

Floating exchange rates aren't what they were cracked up to be

This is the argument that the current monetary arrangements do not deliver the benefits that we used to think they would. In particular, floating exchange rates are not as good at insulating open economies from external shocks, or at keeping open economies close to equilibrium, as we previously believed.

Andrew Coleman has referred to a very significant body of work that goes to show how much 'noise' there is in market-determined exchange rates, and how difficult it is to relate exchange rate movements to economic fundamentals. I have a good deal of sympathy with the point he is making. Having been on the receiving end of much criticism about exchange rate developments that have not been justified by economic circumstances, and about which I could do nothing, that sympathy is heart-felt. I am sure that Ian Macfarlane likewise accepts the force of the point, especially in the context of the Australian dollar sitting at historic lows after a decade of truly outstanding economic performance and an unusually small degree of structural imbalance.

However, we should be careful not to get carried away with the idea that foreign exchange markets are imperfect. By and large, over the history of floating exchange rates, they do reflect relative economic circumstances. And that seems to be truer for smaller economies than the large, relatively closed, economies for which much of the research has been undertaken. International commodity prices do seem to have been very important determinants of both the Australian and New Zealand dollars (notwithstanding Arthur Grimes' results that Coleman cites, which relate the exchange rate to very odd looking – albeit official – terms of trade data). And I well recall the episode from early 1997 through 1998 when the New Zealand exchange rate fell rather faster than we could explain at the time, only to find that the fall was well justified by the gathering Asian financial crisis.

I think it is probably true to say that real exchange rates are more volatile, and 'unreasonably' so, for floating exchange rate economies than for regions within currency unions. The point is far more true at short-term frequencies than at business cycle frequencies, where for regions within a currency union the scale of real exchange rate change can also be very large, but it is also probably true at business cycle frequencies.

Exchange rate risk is a significant non-tariff barrier to trade

Second, it is argued that the current exchange rate arrangements create a barrier to the kinds of activities and enterprise that would contribute to faster growth. In particular, the existence of exchange rate risk inhibits trade, and hence economic integration with external markets, to a greater extent than we previously believed.

From my perspective, this is getting to the nub of the issue. It is one thing to argue that floating exchange rates aren't as useful as we previously thought. Once one allows for the point that real exchange rates sometimes have to adjust, whatever the monetary arrangements, one is trading off one imperfect monetary arrangement for another, and we don't know exactly how large the costs and benefits of such a trade-off actually are. But, if one monetary arrangement adds a barrier to trade that the alternative does not, there is an important issue to be addressed.

To be frank, I don't know what to make of the evidence that others have presented and that Andrew Coleman has cited. Logically, I would expect that the introduction of transactions costs would constitute a barrier. And I would expect that the introduction of risk would also constitute a barrier. But how big of a barrier, given the increasing efficiency and growing accessibility of financial markets? Past research has struggled to show that exchange rate volatility makes any difference to trade. The new research, such as that generated by Andrew Rose, shows that currency unions have a very big effect on trade above and beyond the effects of volatility – so big that I am left wondering about the plausibility of the results. For example, do we really think that trade between the Cook Islands and New Zealand is large because we have a common currency? Or are there other more important reasons?

Gains from trade with a larger region really matter for growth

It is one thing to argue that separate currencies inhibit trade. It is still another to argue that that inhibition to trade damages growth. Interestingly, in the recent thinking about growth that has been going on in New Zealand, economic integration with the rest of the world figures large. Our distance from markets, our relative scale, our relative lack of diversification, and the limited extent to which our potential risk-takers rub shoulders with more entrepreneurial types, all figure in the discussion. If greater trade with a larger area can break down or overcome these kinds of constraints, the growth gains might well justify giving up one's currency and monetary independence.

Again, however, I don't know what to make of the arguments. I am convinced that there are gains from trade that New Zealand hasn't yet exploited. We often describe New Zealand as a small open economy, but with exports now accounting for a little over one-third of total activity we are far from being as open as many economies of comparable size. To be sure, we are not located in the middle of Europe, but nor are Singapore or Malaysia or Hong Kong. Leaving aside the question as to whether the existence of a separate currency is a significant barrier to further openness, are the kinds of gains that *might* come with greater trade likely to be highly relevant to how fast New Zealand can grow? Or, instead, are such gains mostly relevant to the *level* of productivity and real incomes in New Zealand? Tariff barriers can make an economy poorer, but do they usually hamper growth?

Economic adjustment doesn't need the help of a floating exchange rate

Those of us in countries with a floating exchange rate regime normally suppose that, as circumstances change, the process of economic adjustment will be usefully smoothed by a changing nominal exchange rate.

Andrew Coleman asks some pointed questions about the standard analysis of adjustment to region-specific shocks. How prevalent are region-specific shocks? Are they big enough, and frequent enough, to make business cycles behave very differently? For the countries and regions that we are concerned about, how different is the mobility of factors between different regions within currency blocks and between the currency blocks themselves? And how much of such mobility differences as do exist is a product of the very existence of separate currencies? How important is a single fiscal authority, once one allows for the ability of separate fiscal authorities to smooth out income shocks by borrowing?

And one might add some other equally pointed questions. Do we want adjustment to be 'smoothed' by floating exchange rates or fiscal transfers in the first place? If the region-specific shock is temporary, won't individuals smooth consumption anyway; and if the shock is permanent, shouldn't we just get on with the adjustment process?

One of the more intriguing (and if correct, compelling) arguments in favour of currency union that I hear these days is that the floating exchange rate favours the 'wrong' kind of entrepreneur. An exchange rate that buffers swings in commodity prices makes commodity-based activities more attractive, and commodity-based activities are a less dynamic base for growth. And an exchange rate that is volatile and discourages potential entrepreneurs from engaging via trade with other entrepreneurial types also hampers dynamism.

These arguments about harm to the dynamism of the economy are important ones to get to grips with and we are only just starting to scratch the surface of the issue. Interestingly, if these arguments turn out to be valid, it probably points to the desirability for New Zealand of currency union with the United States rather than Australia.

Again, I'm not sure of the answer to these very important questions. One sense I have is that we haven't yet posed the question properly. It seems to me that we tend to analyse the issue of region-specific shocks as if the issue was adjustment to shocks within the 'normal' range of events that different regions are exposed to. For common-garden variety shocks, there's not much of an adjustment issue. The real question is whether one would desirably have a buffering mechanism available when a truly large region-specific shock hit. What if some disease took out New Zealand's dairy industry entirely, for several years? If we pose the question this way, we are asking about the scale of the premium we might be paying – if indeed we are paying a premium – in order to preserve the option to have a massive shift in the real exchange rate occur partly through a change in the nominal exchange rate.

Ladies and Gentlemen, I have spent too much time already telling you how little I know about the answers to these questions. I am, however, quite certain that the questions are much more important than we have allowed up until recently. Our understanding of the importance of the issue, and the growth-dynamic frame within which the issue should be set, has been greatly helped by the innovative contributions of people at this conference, such as Andrew Coleman and Andrew Rose. For that we owe a debt of gratitude.

2. Andrew Rose

What should academics tell policy-makers about monetary union?

Introduction

When I began to work on monetary unions a few years ago¹ it was rare for academics outside Europe to be interested in the subject, and highly unusual to find advocates of monetary union outside a few continental Europeans. Now it is almost the majority view. Accordingly, I find myself in a difficult position, since I agree with almost all of what Coleman and Wyplosz write. In particular, I agree with Coleman that monetary union for New Zealand makes a lot of sense, and I agree with Wyplosz that any broad monetary union for Asia is and should be a long way off.

Currently there seems to be an emerging consensus in favour of monetary union, at least for many small open economies. What are its roots? At a broad level, there are two: (i) the benefits of floating exchange rates have been over-stated; and (ii) the benefits of monetary union have been understated. In my discussion, I will touch very briefly on the first, and review some of the most striking evidence for the second.

But I want to push the argument further. The academic arguments in favour of monetary union have remained ... academic. Outside continental Europe and a few places in Central and South America, the political benefits of national monetary sovereignty are perceived to be high simply because the suggestion of abandoning the national money is usually met by the public with superficial scorn and mindless ridicule. At this point, academics should be persuading policy-makers to lower the perceived political benefits of a national money. Any debate on monetary union must leave the ivory tower of the academy; policy-makers must raise it publicly if the discussion is to be serious. Succinctly, academics should be trying to get policy-makers to raise monetary union to the level of national debate.

^{1.} Quite a few, actually.

The benefits of floating exchange rates are lower than usually perceived

Floating exchange rates are said to provide insulation, and to be an additional tool of monetary policy. In practice, they just as often introduce shocks that have to be offset through other tools of economic policy. Rather than being part of the solution, they are frequently part of the problem. That's why so many countries seem to have a 'fear of floating' in the memorable phrase of Calvo and Reinhart.

No one knows why floating exchange rates seem to be so volatile. Indeed, it is accurate to describe this problem as possibly the most important problem in international finance. But no one denies it. Exchange rates – at least those of low-inflation developed countries – seem to fluctuate in a way that is disconnected from macroeconomic 'fundamentals' (money, income, prices, etc) for significant periods of time; this is the famous finding of Meese and Rogoff (1983). Further, when the exchange rate is fixed – especially in a hard fix – this volatility vanishes from the exchange rate and does not reappear elsewhere in macroeconomic fundamentals, as Flood and I have shown (Flood and Rose 1995). That is, eliminating exchange rate volatility seems almost to be a free lunch, a topic I have pursued in my work with Jeanne (Jeanne and Rose (forthcoming)). As a result, thinking about the exchange rate as an extra tool for macro-management is starting to seem unworldly. There are exceptions of course; everyone knows how depreciation allowed Australia and Canada to stave off most effects of the Asian crisis. But those cases are ... exceptions.

The benefits of monetary union are higher than usually perceived

Much work has been done on monetary unions, usually from a theoretical viewpoint. Alesina and Barro (2000) are the latest word in the area and apply a model that combines the best elements of Mundell's celebrated optimum currency area criteria with more recent work on monetary discipline. From this long literature, one gets the reasonable view that monetary unions have both costs and benefits, but are usually inappropriate for most countries because of the imperfect synchronisation of business cycles or inadequate adjustment mechanisms (sticky prices and wages, few risk-sharing mechanisms and so forth).

Three things are new. First, many view the standard criteria as inappropriate. Wyplosz convincingly shows that the standard optimum currency area criteria were essentially irrelevant for EMU. I prefer more generally to think that data such as the degree of business cycle synchronisation are almost irrelevant, since they are based on historical data that would be irrelevant in the case of monetary union and the changes it induces, a subject I pursued in my work with Frankel (Frankel and Rose 1998).

Second and more importantly, the literature is now more empirical. It uses data on actual monetary unions to get some sense of their effects. For instance, in one of my papers (Rose 2000) I found that a pair of countries in a monetary union seems

to have substantially higher bilateral trade, holding a host of other factors constant. The magnitude of this effect is interesting for two reasons: (a) it is robust; and (b) it is astonishingly high. As a result of such work – the final innovation – monetary unions are now viewed under a much more favourable light. Since monetary union seems to be associated with greater trade, but insignificantly different macroeconomic volatility, the case for monetary union seems stronger than it did a few years ago.

Attention is usually focused with an example. Before 1967 the New Zealand pound had been in a long-term 1:1 very hard fix with the UK which I will treat as a *de facto* monetary union for international commerce. This ended in 1967 when New Zealand abandoned the pound upon decimalisation. As Figure 1 shows, New Zealand's bilateral trade with the UK started to decline around 1967. In particular, the figure shows that the natural logarithm of NZ–UK bilateral trade (adjusted for inflation) had fluctuated around a constant level for the twenty years prior to 1967. However, the establishment of the NZ dollar and the associated exchange rate volatility *vis-à-vis* the pound coincided with the beginning of a long-term trend decline in trade between New Zealand and the UK.²

Figure 1: The Effect of the NZ Dollar on NZ–UK Trade
Log of real US\$ bilateral trade



^{2.} This ocular result can be made more rigorous with simple regression techniques; the decline in NZ–UK trade is a statistically significant 3.7 per cent per year after 1967 though no significant decline is present before 1967. Adjusting the log of trade through the 'gravity model' of bilateral trade still results in a significant downward trend of 2.9 per cent per year after 1967.

An accident? Hardly. My recent work with Reuven Glick (Glick and Rose 2001) exploits the 130 exits from currency unions in the 1948–1997 period using a large panel of IMF bilateral trade data. Using only data on the countries that left or joined currency unions, we find that a pair of countries that dissolve a currency union experience a halving of trade. This is true even after controlling for a number of other things such as preferential trade agreements and income which also affect trade. My work with Jeffrey Frankel shows that the trade boost associated with monetary union seems to have a large effect on real income (Frankel and Rose 2000).

There is of course a caveat associated with this work. It is based on actual currency unions that typically involve small and/or poor countries; thus any extrapolation to large rich countries is...extrapolation. EMU and the recent dollarisations in Ecuador, El Salvador and Guatemala will eventually enable us to quantify the effects of currency union more effectively. Still the debate is slowing shifting the onus of proof towards the doubters of the benefits of monetary union.

De-mystifying the concept of monetary sovereignty

Which brings me to my last point. Suppose the effects of EMU and dollarisation turn out on net to be positive from an economic point of view. We as economists – whether academics or policy-makers – will then have an obligation to contemplate the policy option of monetary union. The main problem at that point will almost surely be the mass hysteria that is associated with any suggestion that a country should surrender its monetary sovereignty. To say that most people find the thought of relinquishing the national money unpalatable is a gross understatement. One only need read a British tabloid, or count the number of European referenda on monetary union, to realise how difficult it is to discuss monetary union sensibly on the national stage. The exceptions to the rule are just that; exceptions.

There are costs and benefits of monetary union. Coleman has provided us with a careful economic analysis as to whether it is in New Zealand's own interests to retain monetary sovereignty. Evidence like his may one day convince technocrats of the desirability of an ANZ monetary union. But even that very important step will mean little without proper preparation in the political sphere. It is time to try to begin educating the public so that any future discussion by the public on monetary union can be sober and thoughtful. Thinking the once unthinkable is a long slow process, as Wyplosz has shown. It is time in Asia to begin.

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^{3.} The paper and associated data sets can be freely downloaded from my website at: http://www.haas.berkeley.edu/~arose>.

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3. General Discussion

There was a range of issues discussed in this session. Some participants expressed concern that a common currency would not be trade-creating but merely trade-diverting. In response to this argument, it was pointed out that a currency union just reduces costs of trade within the region – as such it should be welfare-enhancing as the old patterns of trade are still available to the countries. Furthermore, econometric evidence suggested that countries in currency unions trade more with everyone, not just their union partners.

There was some discussion of the figure Andrew Rose used on the effect of currency union dissolution on NZ–UK trade. A number of participants suggested that the main cause of the decline in trade was the entry of the UK to the European Union and the resultant loss of access by New Zealand to UK markets. In response to this argument, it was pointed out that econometric work that controlled for this and other factors still identified a significant effect from currency unions.

Some participants questioned how applicable the European experience was to Asia. They pointed out that countries within Europe are culturally similar and that there was a political imperative to tie Germany more closely to the rest of Europe. While cultural similarity is clearly relevant for Australia and New Zealand, it is probably less so for the rest of Asia. Other participants raised the question of what the best first step towards union should be. While trade integration was the choice in Europe it may be more appropriate to take some alternate route in Asia as the economies are more globally focused in their trade, making regional trade agreements difficult to develop. One participant suggested that the first step towards a wider Asian currency union would be small regional arrangements between similar countries, for example, the original ASEAN members, Australia and New Zealand, and Korea and Japan.

Some participants felt that the dismissal of the optimum currency area (OCA) analysis by Wyplosz went too far. They argued that European union was possible because none of the OCA conditions were grossly violated. In contrast, the experience of Argentina suggests that even with the greatest political will. gross violation of OCA conditions can lead to significant problems.

There was some discussion about the need for fiscal transfers in a currency union. It was suggested that while fiscal transfers may not be essential, a sharing of seigniorage was probably a minimum requirement in any workable union. In discussion about the Euro area it was suggested that development funds were used as *de facto* fiscal transfer mechanisms. Nonetheless, most people felt that the size of these funds were not large enough to have any significant stabilisation effect. In response to these points, it was suggested that, provided countries could borrow in international financial markets by issuing bonds, they could stabilise their economy using inter-temporal transfers rather than intra-regional ones. It was also pointed out that the empirical evidence suggested that currency unions would tend to synchronise countries' business cycles so the need for fiscal transfers would, in any event, diminish.

One participant, drawing on the experience of Latin America, suggested that the value of currency unions, in particular, those to the US could be overstated. He pointed to the experience of Panama, which had unilaterally adopted the US dollar, and Brazil and Chile which had floating rates. Brazil and Chile are doing well economically, however, Panama is not performing as well. There was also some discussion about Argentina's experience. People felt that they did not really have the option of an independent currency because, in contrast to New Zealand for example, people were unwilling to hold Argentinean pesos. It was also pointed out that Argentina was not in a monetary union with the US – the significant interest rate premium on peso-denominated, as opposed to US dollar-denominated, debt when both are issued by the Argentinean authorities, made it clear this was not the perception of international markets.

One participant suggested that the choice of floating or fixed rates could be thought of as a choice of how to take out insurance against large shocks. A floating exchange rate is truly valuable when there is a large shock but for the rest of the time it may possibly impose costs. A fixed exchange rate may, perhaps, be preferable during normal times but is not as good at dealing with large shocks. With a fixed exchange rate, fiscal transfers can be used to offset the effects of large shocks. The question then becomes, how frequent are large shocks and what price are countries willing to pay to insure against the risk of large shocks? In this interpretation the costs of a floating exchange rate for some countries may be too high relative to the insurance against large shocks that it provides.