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The Current Account, The Dollar, and Australia's Potential to Export: The Effects of Tight Monetary Policy*

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Abstract

The 1987-90 Labor Government's economic policy has been characterized by a period of rising interest rates directed at a worsening current account deficit (CAD). This paper uses a short-term forecasting model of the CAD, a real exchange rate model, and a survey-based micro study of exporting firms to examine the relationship between interest rates and the deficit. Predictions from these models are used to assess the prospects of the deficit recovering in the medium term.

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I Introduction

Faced with a worsening current account deficit (CAD) throughout the second half of the 1980s, the 1987-90 Hawke-Keating Labor government applied an increasingly tighter monetary policy to reverse the trend in the CAD. It is argued in this paper that this particular policy has not only been unsuccessful but has aggravated the trade balance, largely through its intermediate effect on the dollar.

Medium term forecasts of the current account deficit and the real exchange rate, together with the results of a survey-based study on export performance, are used to assess the impact of the recent monetary policy settings on the external account. Predictions from these models are then used to evaluate the short and medium term prospects for the current account deficit, the dollar and the ability of Australia's export sector to recover from the twin perils of a high dollar and high interest rates.

It is argued that it is possible to produce good trend forecasts of the current account for up to two years and changes in these predicted trends can be used to establish the effects of policy changes. Recent forecasts reveal that the much-awaited interest rate effect on the deficit has not yet emerged. A slight seasonal improvement is expected in the first half of calendar 1990 prior to a further deterioration over the following 12 months.

The real exchange rate analysis implies that exchange rates have moved out of line with the real economy since the floating of the dollar. It is shown that the \$A is severely over-valued, due to the large interest rate differentials, implying that a loosening of monetary policy might produce a dramatic fall in

the value of the currency.¹

A survey-based analysis of the problems facing exporters, outlined in the Hughes' Committee Report [Hughes, 1989], highlights the detrimental effects of dollar valuation and volatility on export potential. Given the effects of current interest rate policy, and the subsequent appreciation of the dollar, a link between monetary policy and an export-led recovery is established.

In conclusion, it is argued that a stable level of the dollar is essential for a restructuring of the economy but, in the transition to a sustainable level, the current account deficit is likely to worsen, due to valuation effects, before any long-term improvement is seen.

II Historical Performance of the Econometric Models

Current Account Forecasts

Owing to seasonality and the extreme volatility of the monthly releases of the provisional current account deficit it is unwise to place any emphasis on a simple comparison of consecutive provisional CAD releases. However, it is extremely important to have good up-to-date information about the state of the external balance if associated policy is to be successful at slowing down the economy without overshooting the target. For these reasons, it is necessary to have a formal model of the CAD so that the effects of provisional data on the *forecasts* can be assessed.²

¹ Interest rates were eased after the first draft of this paper was completed and the dollar fell 4¢ to 76¢. However, the dollar is still over-valued.

² To some extent, the *Australian Bureau of Statistics* attempts to provide data of this type through its trend estimates but there is insufficient information

It is important to note that it is not necessary for an econometric model to incorporate all of the determinants of the CAD when it is used for policy analysis. While forecast accuracy may be enhanced by incorporating all such factors, the omission of a relevant instrument from a model implies that when that instrument is varied, the forecasts will be biased. Therefore, the effect of interest rates on the CAD can be evaluated by comparing actual data with forecasts from a model that does not include interest rate effects. If high interest rates are, indeed, having an effect on the CAD, a persistent bias should exist in such a model.

The model selected for this study is that reported in Bewley, Fisher and Parry (1988a), hereafter BFP, which is a cointegrated VAR (Vector Autoregressive) model based on the theory developed in Bewley, Fisher, and Parry (1988b). This model expresses eight components of the CAD in SDRs and allows for seasonality and the number of working days in each month.³ Forecasts are then transformed back to \$A denominated series at that rate of exchange prevailing at the forecast origin.

The key feature which distinguishes this type of model from simpler time series alternatives is that, in a data-determined fashion, those series which have historically moved together in a long-run sense are predicted to continue in that fashion. This long-run feature of model construction is based on the notion of cointegration.

to judge how accurate these estimates are.

³ The eight components are: rural exports, nonrural exports, endogenous imports, exogenous imports, services-credits, services-debits, income and unrequited transfers-credits, and income and unrequited transfers-debits.

Although there is no formal economic structure in a time series model, a cointegrated VAR of this type has a typical long-run economic reduced-form relationship between the included variables as its solution [see BFP, 1988b]. Thus, to a limited extent, there are long-run economic relationships in the model ensuring that, for example, imports and services-debits, with its freight component, do not trend in different directions in the forecast period.

BFP (1988a) reported that the CAD model has a high degree of accuracy in predicting the direction of the cumulative 12-month ahead CAD. Longer-term forecasting properties of this model have not previously been analysed.

In order to focus on the trend of the CAD, rather than the accuracy of point forecasts, the actual CAD data has been smoothed with a 3-point moving average in Figure 1. The similarly-smoothed 24-month ahead forecast, with an origin of December 1986 has been superimposed on Figure 1. Since forecast errors from a single origin are autocorrelated, it is inappropriate to apply standard statistical techniques to analyse this relationship, but certain points can usefully be made.⁴ In particular, it is important to note that, throughout this period, the Treasurer, Mr Paul Keating, was repeatedly trying to convince the electorate that his economic policies were about to reverse the trend in the CAD.

In the run-up to the last election in early 1987, Mr Keating argued that the J-curve was at work and, in the September 1987 budget speech, Mr Keating stated, "We have turned the corner and the big gaps in the trade accounts have

⁴ Hansen's (1982) work on GMM (Generalized Method of Moments) estimators was directed at such problems but only a single set of forecasts are considered here rendering the technique inappropriate.

begun to close." In February 1988 the *Sydney Morning Herald* (20/2/88) reported Mr Keating as saying, in reference to increasing foreign debt, "The nation now has now within its grasp the prospect of arresting and turning back our present slide in indebtedness at a much more manageable level than previously thought." Thus, the rising trend in the model's predictions were at variance with official forecasts but turned out to be in broad accord with its realisation.

Figure 2 repeats the exercise from a base of December 1987 and again, given the opinions of the treasurer quoted above, actual and predicted CAD outcomes turned out to have been reasonably informative.⁵ These predictions, together with one made in June 1987, are brought together in Figure 3. The only major departure between actual and predicted in this 30-month span was during the short-lived commodity price boom early in 1988 when some producers received a windfall gain. More importantly, it can be noted from Figure 3 that in late 1988, the period where all three sets of forecasts overlap, there is very little difference between the forecasts. The fact that forecasts with origins six months apart coincide, and are acceptably accurate, implies that no new information *external to the model*, had any significant effect on the CAD. This is the principle that is used in Section III to assess current interest rate policy.

These forecasting experiments have been extended in Figure 4 to cover most of the CAD crisis period. It can be seen from Figure 4 that forecasts with an origin of December 1985 produced a systematic bias throughout 1987. Since the

⁵ Since the actual data are provisional in these figures, it is important to note that there is a significant downward bias in the provisional data to the extent of \$50m-\$100m per month [Bewley and Parry (1987)].

dollar fell dramatically in May 1986, it can be implied that much the difference between the December 1985 and December 1986 based forecasts is a measure of that currency depreciation.

The Current Account and The Dollar

During a period of worsening current account deficits, the currency might be expected to depreciate to help redress the balance. As shown in Figure 5, this has not been the case. Since the commodity price collapse in May 1986, the currency has drifted upwards, except for the short-lived fall in early 1989 after a period of apparent overshooting, and the CAD has gradually deteriorated. There are a number of possible explanations for this positive correlation but three emerge as the most likely for the Australian situation:

- ▷ Expectations of a recovery in the deficit, possibly induced by government policy statements, may have caused increased foreign investment in Australia on the basis that risk is lower.
- ▷ High domestic interest rates make it attractive to invest in Australia.
- ▷ Given that the monthly current account is recorded in nominal terms, an increase at the prevailing rate of inflation is to be expected for the same volume of transactions.

The Real Exchange Rate

Purchasing Power Parity (PPP) is a theory of exchange rate determination that insists on the dominance of trade in real goods and services. As shown in

Figure 6, the relationship between the exchange rate (e) and relative prices (p) for the Australian - United States situation has changed markedly since the float.

Adam and Bewley (1990) found weak evidence for PPP in the form of a stable linear relationship between $\ln(e)$ and $\ln(p)$ over the whole sample but a much stronger relationship was evident pre-float. While Figure 6 might indicate that the post-float period has been characterised by the exchange rate and relative prices moving in opposite directions, the situation is also consistent with the same positive linear relationship but with a much greater variance.

The exchange rate and its (derived) long-run value computed from the model reported in Adam and Bewley (1990) are depicted in Figure 7. Clearly the oscillations have increased in amplitude since the float. Substantial deviations have occurred and, as is popularly suggested, the \$A overshot its long-run mark both in the down-swing after the May 1986 commodity price collapse and in the upswing of the ensuing commodity price boom.

The current deviation of the \$A from its long-run value is highlighted in Figure 8. The \$A, currently just on 76¢ is approximately 18% above its equilibrium suggesting that when interest rate policy is eventually eased the \$A has a very long way to fall, *particularly if it again overshoots.*

Export Potential

The analysis contained in the Hughes (1989) report on Australian exports, with reference to the performance, obstacles, and issues of assistance, highlights

two major problems facing exporters.

Typically, an exporter goes through various stages to maturity. That is, in the earlier export years, the return on promotional expenditure is relatively low as the exporter seeks to generate market acceptance. Since such an export usually involves 3-4 years, the exporter must not only predict its potential sales at current prices but must build in a factor for future exchange rate risk.⁶

Since much of the burden of exchange rate fluctuations falls on the exporter, it is possible, indeed likely, that a number of exporters who begin their export exposure in typical fashion find that exporting is no longer viable when the exchange rate appreciates. If an exporter, faced with this scenario, exits from the market, most of the promotional expenditure is lost and the whole promotional plan must start all over again if the exchange rate subsequently depreciates. It is for this reason that exchange rate valuation and volatility affects mature exporters while new exporters simply do not attempt to enter a market when the product is not viable.

The implications for this entry/exit behaviour for exporters is that on re-entering a market, there is some delay before the previous levels of exports are attained. In the current context, the increasing strength of the dollar over the last the years may have a depressing effect on aggregate exports for several years to come, even if the dollar were to fall to its long-run sustainable level.

⁶ To an extent, exchange rate variations can be insured against but as the exporter is uncertain of its future returns even in foreign currency, it is a difficult task for such an exporter to plan.

III Current Interest Rate Policy

It was argued in the previous section that the CAD model has acceptable forecasting properties and can be used to detect any effects of changes in important policy instruments on the CAD. In Figure 9, six sets of forecasts made at various times during 1989 are superimposed on the same axes.⁷ The forecast based on data up to February 1989 almost coincides with its predecessor while the following forecasts is only marginally higher. It could be argued that the next three sets are even higher but, even if all of these forecasts were on the same path, it must follow that interest rates have not yet had any effect on the CAD. If and when some effect does filter through to the CAD the forecast paths will begin to lie under previous forecast paths.

It seems to generally accepted that the economy is slowing. However, in this instance, high interest rates have pushed the dollar higher, arguably by 20%, making import prices 20% lower. As a result, the price effect seems to have outweighed the income effect in import demand. Figure 10 presents a comparison of the endogenous imports forecasts based in December 1988 with the actual data.⁸ The latest forecasts based in December 1989 are also included in Figure 10. It is concluded from this section of the analysis that imports have been on track all year and there is yet no news to suggest that the trend in imports has altered.

The current forecast for the CAD is presented in Figure 11. It is shown that, as is usual in the first half of the calendar year, some lower deficits are to

⁷ The intervening forecasts are broadly similar and have been excluded for clarity.

⁸ Endogenous imports excludes such items as aircraft and fuel. In August the *Australian Bureau of Statistics* arguably mis-classified an LPG tanker as endogenous and this accounts for most of the forecast error for that month.

be expected but the trend has not yet reversed. The annual forecasts for the present and previous fiscal years are compared to Treasury forecasts in Figure 12. For the second year in succession it appears that the Treasury has been too optimistic in its projections. In both years, as in previous cases, the CAD model has performed well with reasonably stable cumulative forecasts.

Two key questions currently face policy analysts. When will interest rates be eased and by how much; and what will be the effect of that easing on the economy.

The former question is in the control of the Reserve Bank but it is popularly suggested that as the 1990 general election approaches, rates may fall by 2-4 per cent. If this easing takes place because one or two CAD results are a little below expectations, yet possibly due only to "noise", easing interest rates combined with a subsequent poor CAD result could trigger a major fall in the dollar. The immediate effect of such a fall would be to increase the deficit valued in \$A, the valuation effect, and this could precipitate further falls in the dollar. The real effect, that is on volumes rather than value, would be small in the short-run but imports, facing higher \$A prices, could then fall sharply. However, the effect on exports is less clear. Although export volumes should rise through more competitive pricing, lack of market presence due to a previous exit could make export expansion a very slow process. Unless some stability is subsequently *expected* for the currency, the delay in turning around the CAD could be even further off, particularly as exporters are currently facing high interest rates which are depressing investment in expanding export potential.

IV Conclusions

The medium term prospects for the Australian economy are somewhat bleak. The deficit is still not recovering, the dollar is seriously over-valued and interest rate policy is working in the wrong direction by propping up the dollar. The longer interest rates are held up, the worse will be the fall but the important question is not will the economy have a soft or hard landing, but will it ever take off again. Exporters did attempt to expand their overseas presence after the May 1973 depreciation but, with the dollar climbing steadily since that time, exporters are facing a dollar that is more over-valued since it has been at any time since the general floating of exchange rates in 1974.

A stable, appropriately-valued dollar is required as a minimum to establish an export led recovery. One solution to maintaining a low dollar and an improving CAD is to remove the dependence of economic policy on interest rates by introducing some form of consumption tax. Unlike interest rate policy, a consumption tax can be used to manage demand without distorting the relative prices of domestic and imported goods.

VI References

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Figure 1: Smoothed CAD Forecasts
Forecast Origin : December 1986

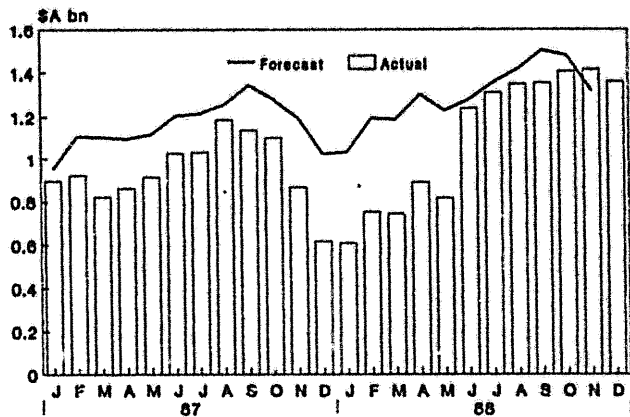


Figure 2: Smoothed CAD Forecasts
Forecast Origin : December 1987

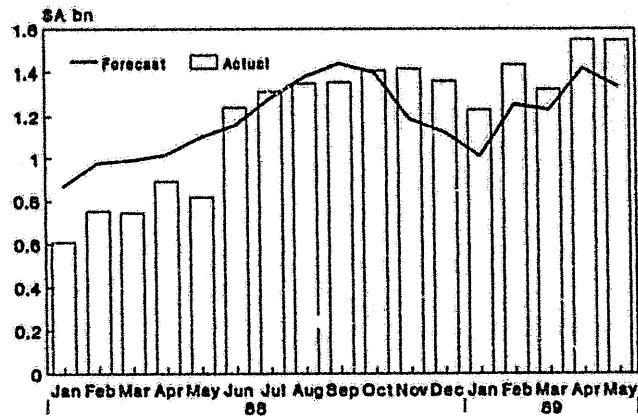


Figure 3: Smoothed CAD Forecasts
Effects of Commodity Price Boom

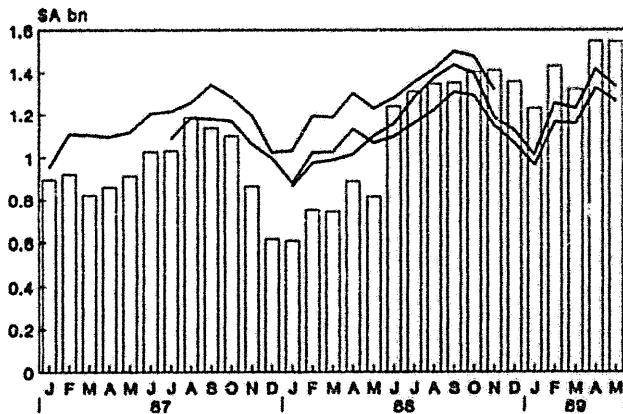


Figure 4: Smoothed CAD Forecasts
Effects of Currency Depreciation

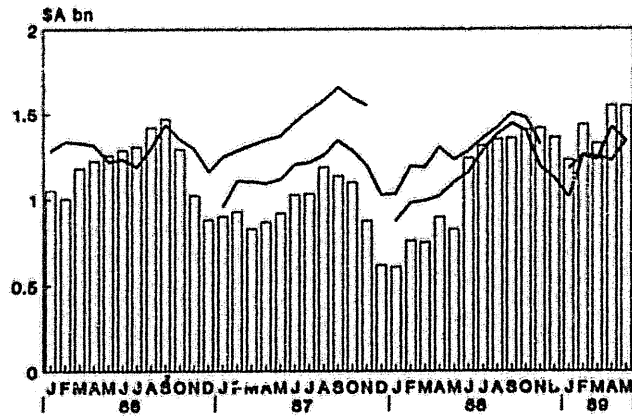


Figure 5: CAD and The Dollar

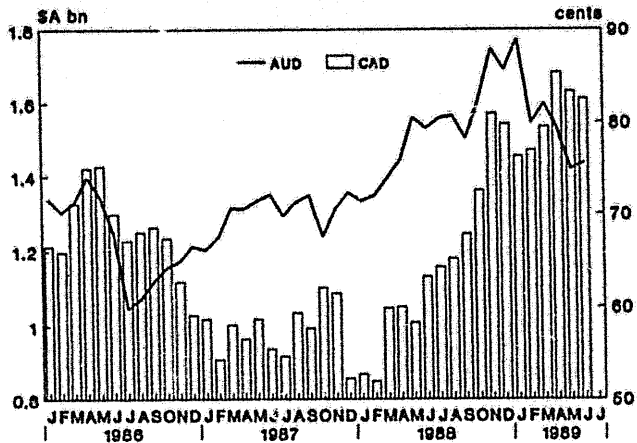


Figure 6: Purchasing Power Parity

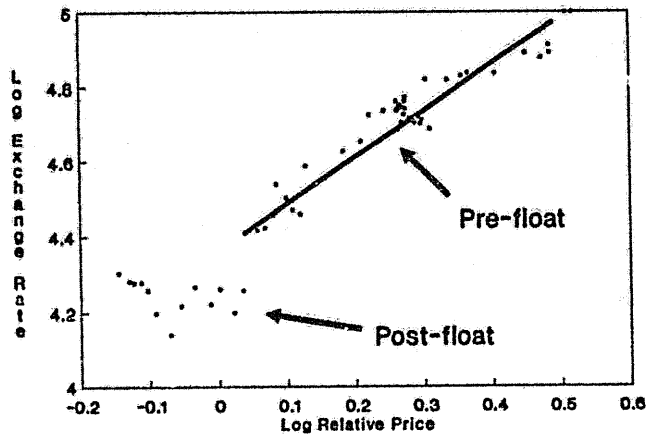


Figure 7: Real Exchange Rate

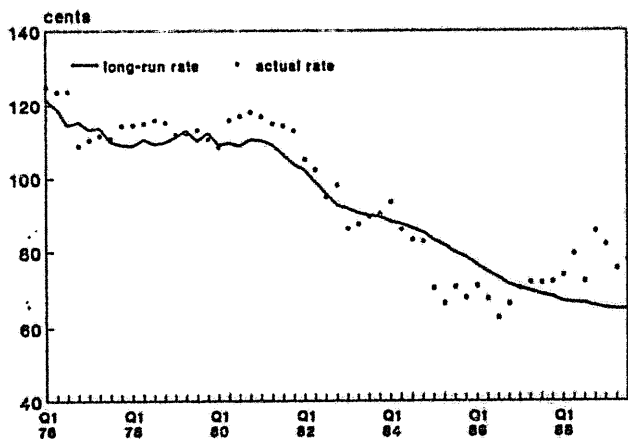
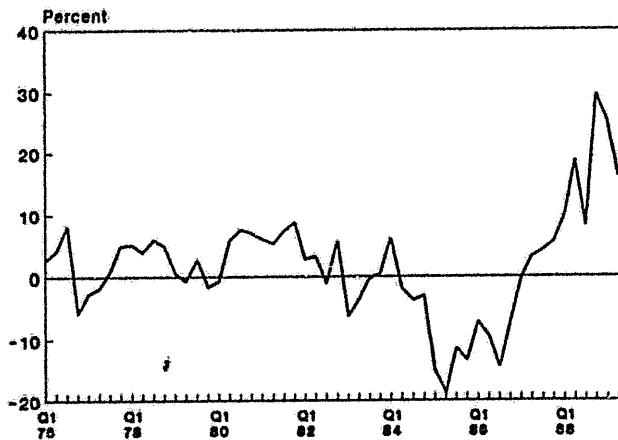


Figure 8: Valuation of AUD



**Figure 9: CAD Forecast Updates
December '88 - November '89 Origins**

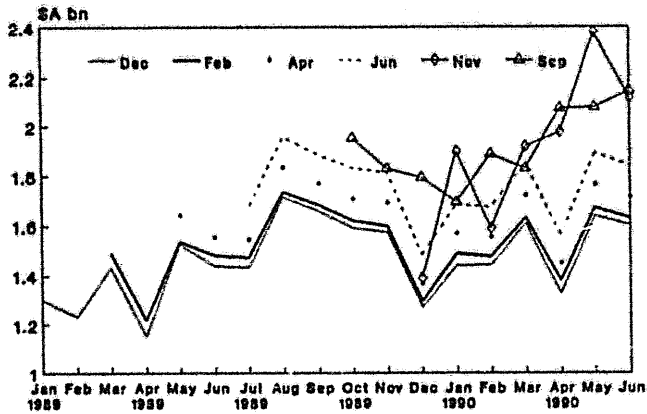


Figure 10: Predicted Endogenous Imports

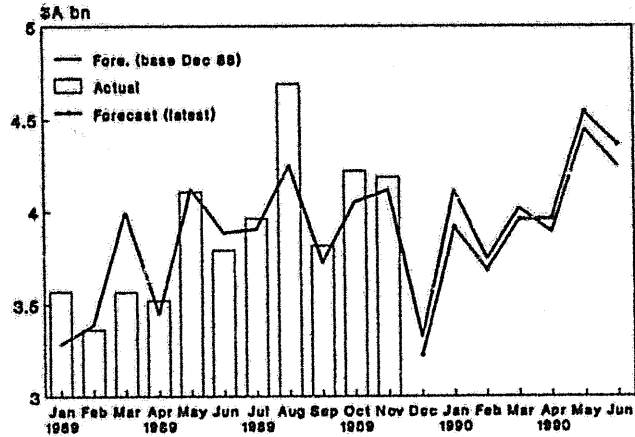
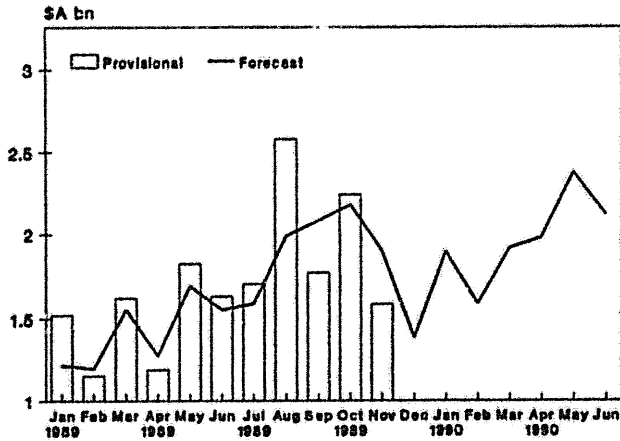


Figure 11: CAD Forecasts



**Figure 12: Annual CAD Forecasts
Updated Cumulative 12-month Forecasts**

