

Deregulation and the Conduct of Monetary Policy

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Abstract

This paper examines the evolution of monetary policy in Australia since the mid 1980s when financial markets were rapidly deregulated. The paper discusses the conduct of monetary policy within the framework of monetary targeting and how deregulation affected this framework. Alternative strategies for conducting monetary policy are discussed. However, it is argued that since 1985, monetary authorities have often changed the focus of monetary policy with no specific framework within which the policy is implemented.

Deregulation has forced interest rates to become the main focus of monetary policy. But, since the deregulation of financial markets, the transmission mechanism by which interest rates affect the economy, has changed significantly.

1. Introduction

The Australian financial system has had a long history of extensive government intervention. Many of the regulations which were in force at the end of the 1970s were designed a number of decades previously when

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the system was much less developed. These regulations were quite extensive and can conveniently be categorized into three types:

- (i) entry and portfolio restrictions on banks and non-bank financial intermediaries;
- (ii) interest rate control; and
- (iii) foreign exchange controls.

The objectives of these regulatory measures can also be summarily categorized as follows:

- (i) to facilitate the implementation of monetary policy;
- (ii) to ensure stability of the financial system while protecting the interests of investor; and
- (iii) to promote certain social objectives.

By the beginning of the 1980s, the vast bulk of these financial regulatory measures had outlived their usefulness and the pressure for their relaxation or abolition had become intense. To this end, the Committee of Inquiry into the Australian Financial System Inquiry (1981) (Campbell Report) and the Australian Financial System Inquiry (1983) (Martin Group), both recommended removal of most of the regulations on financial markets. These recommendations were implemented gradually from December 1980 and more rapidly since the mid 1980s. Monetary policy now operates almost exclusively through prices rather than through quantitative restrictions and controls.

The purpose of this paper is to examine the conduct of monetary policy during and after deregulation of financial markets. In Section 2 the process of monetary targeting, implemented between 1976 and 1985, is discussed. Alternative strategies for monetary policy are presented in Section 3. In Section 4 the developments in monetary policy since the breakdown of monetary targeting are analysed. The greater role of interest rates in a deregulated financial markets is presented in Section 5. Summary and concluding remarks are given in Section 6.

2. Monetary Targeting

Monetary targeting is a process by which the rate of growth of some monetary aggregate is used as an intermediate target for influencing economic activity. In choosing an intermediate target for conducting monetary policy, the authorities must consider the following criteria:

- a) stability and predictability of the relationship between the intermediate and ultimate target;
- b) provision of advance information about the growth of the ultimate target;
- c) controllability.

The first criterion is concerned with the stability and predictability of the velocity of money. Stability and predictability of the velocity of money is the most basic criterion for choosing an intermediate target. The second criterion is related to the use of an aggregate as a guide to policy. Cagan (1982) stated that, in the absence of advanced information, monetary policy would be best guided by concentrating on the ultimate target itself. Finally, there is no reason to specify a target for an aggregate if that aggregate is not under the control of the authorities.

During the 1970s several western industrialized countries chose some form of monetary aggregates as means of both influencing economic activity and providing advance information about the economy. In Australia, a range for the growth of M3 was announced as a part of the Budget since 1976. This practice was suspended in January 1985 as deregulation and financial innovations weakened the relationship between money and economic activity.

The choice of monetary control rather than interest rate control reflected growing belief that the source of instability originated from the real sector (Poole, 1970), and the increasing emphasis being placed on the price stability goal.

In an environment of high inflation and high interest rates, banks and regulated institutions become less competitive relative to the unregulated intermediaries. As the opportunity cost of holding non-interest bearing or low-yielding deposits with banks and regulated institutions rise, the public tends to economize on holding these assets. Through their ability to pay market rates of interest, unregulated intermediaries attract these funds and create liabilities which are good substitutes for money. The process of financial innovations, through the creation of substitutes for money, disrupts the relationship between controlled monetary aggregates and economic activity. Deregulation of financial markets turns the process of innovation to the advantage of regulated intermediaries and allows them to compete more effectively with the unregulated institutions. While competing for funds, deregulated institutions accelerate the growth of monetary aggregates

which are not necessarily related to changes in economic and financial conditions.

The growth rates of M3, broad money and real output are plotted in Figures 1, 2 and 3 respectively. These graphs show an unusually high growth of aggregates during 1984 to 1986 with no corresponding significant growth of output. These developments led to a fall in the velocity of money and the consequential violation of the basic requirements for a successful conduct of monetary targeting. Velocities of M3 and broad money are plotted in Figures 4 and 5.

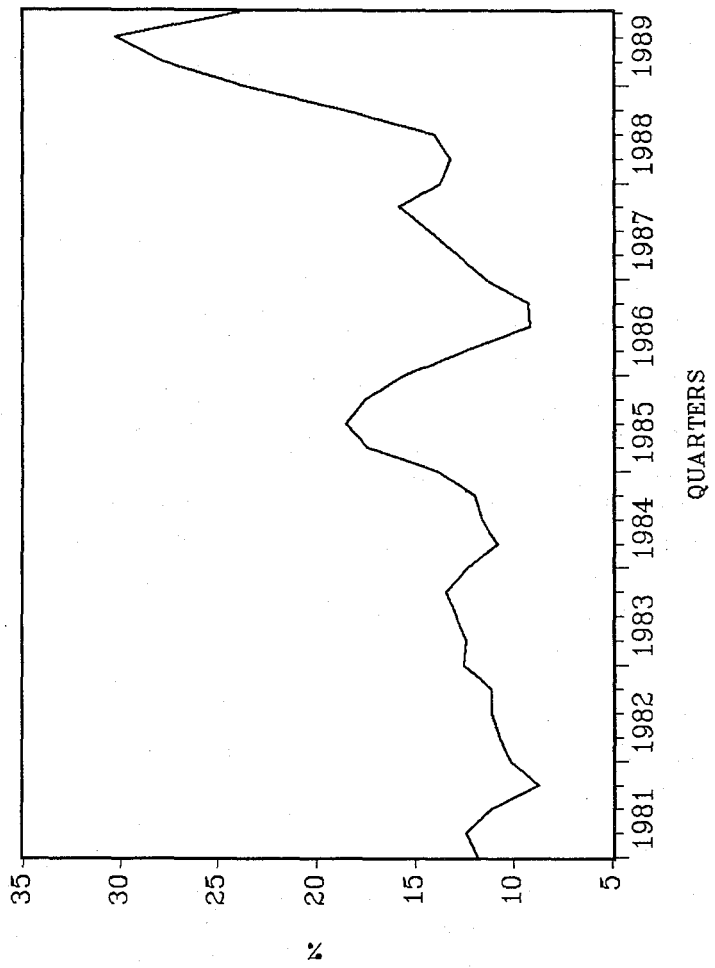
In January 1985, the Treasurer announced the suspension of the "conditional projection" of M3 for the rest of the 1984/85 financial year. Subsequently, he argued that the entry of 16 banks and further deregulations would continue to distort the monetary targets. He expressed doubts about the meaning of M3 and emphasized that the effect of deregulation had distorted the traditional relationship between M3 and economic activity.

3. Alternative Strategies for Monetary Policy

As an alternative to targeting monetary aggregates, several economists have considered credit aggregate, e.g. Friedman (1982a, 1982b, 1982c), Davis (1979) and Kaufman (1978). Friedman showed that in the United States the indebtedness of non-financial sectors as an intermediate target performed as well as monetary aggregates. He suggested that credit should be chosen along with the monetary aggregates, particularly when financial innovations cause difficulty in targeting monetary aggregates.

In Australia, Valentine (1983) suggested that using a range of financial aggregates, including bank credit, is preferable to targeting M3 alone. Empirical evidence from Horne and Monadjemi (1985) does not support the preference of total credit over monetary aggregates. But their findings provide sufficient support for using bank credit as an intermediate target. However, perhaps due to the lack of reliable data, the performance of total credit was very poor relative to the performance of other financial aggregates. The authors concluded that if structural changes cause serious problems for targeting monetary aggregates, authorities may consider bank credit as an additional target. Juttner (1984) mentioned the central bank's insufficient power to control the expansion of total credit. Mohl (1985) proposed a measure of the indebtedness of non-finance sectors as an additional source of information on financial conditions. This aggregate includes borrowing by the non-finance sectors from all financial intermediaries plus direct financing through equities, industrial debentures, trade credit and borrowing from overseas.

FIGURE 1
QUARTERLY GROWTH OF M3
(PERCENTAGE CHANGE OVER FOUR QUARTERS)



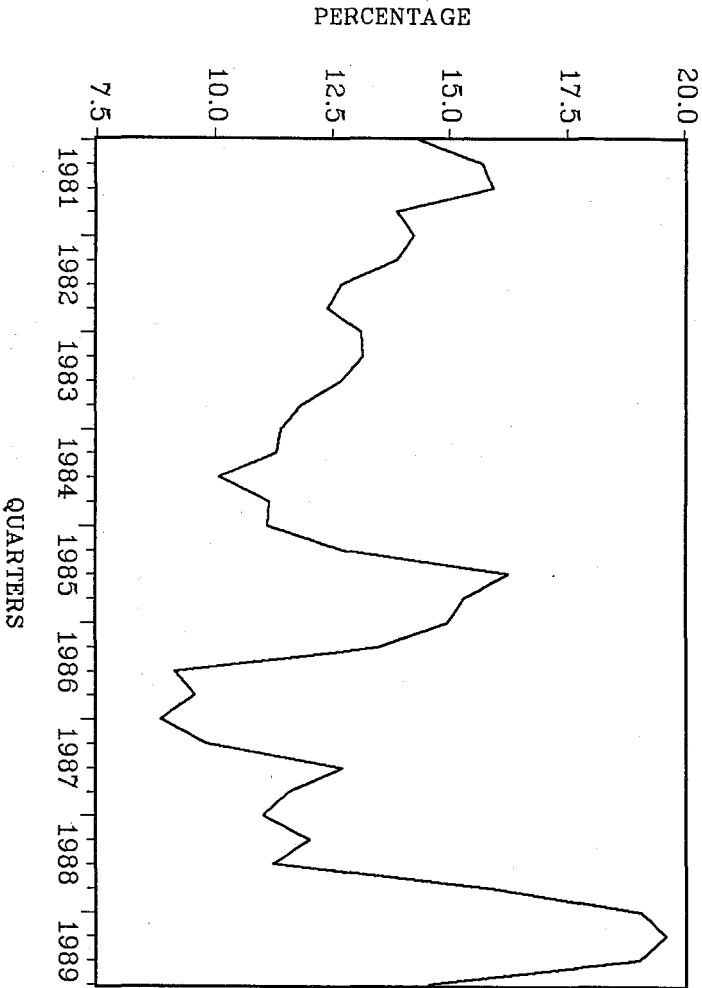
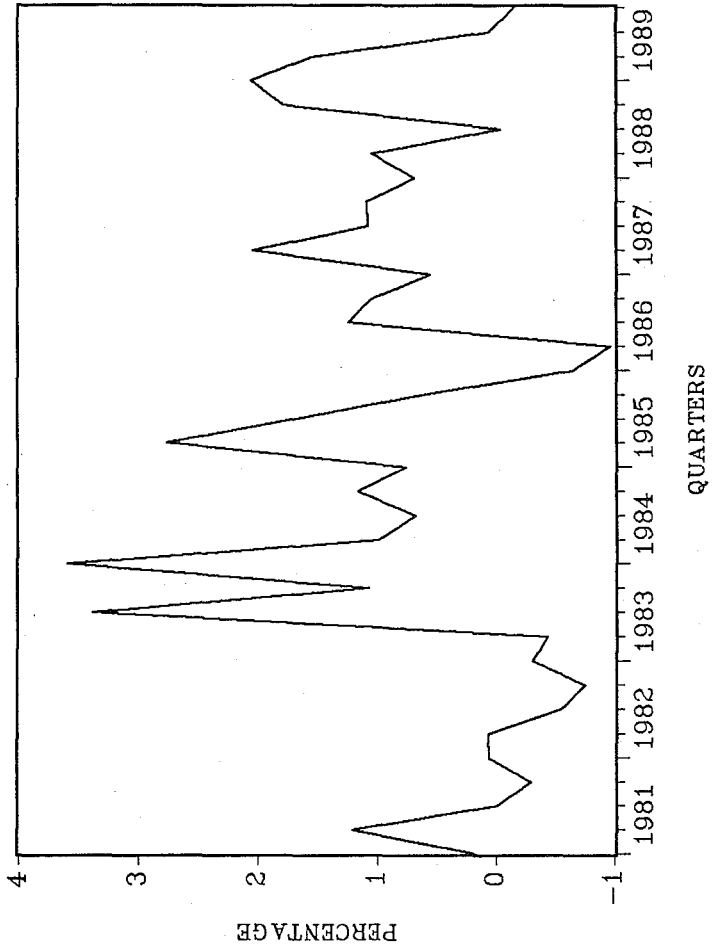


FIGURE 2
QUARTERLY GROWTH OF BROAD MONEY
(PERCENTAGE CHANGE OVER FOUR QUARTERS)

FIGURE 3
GROWTH OF REAL GDP



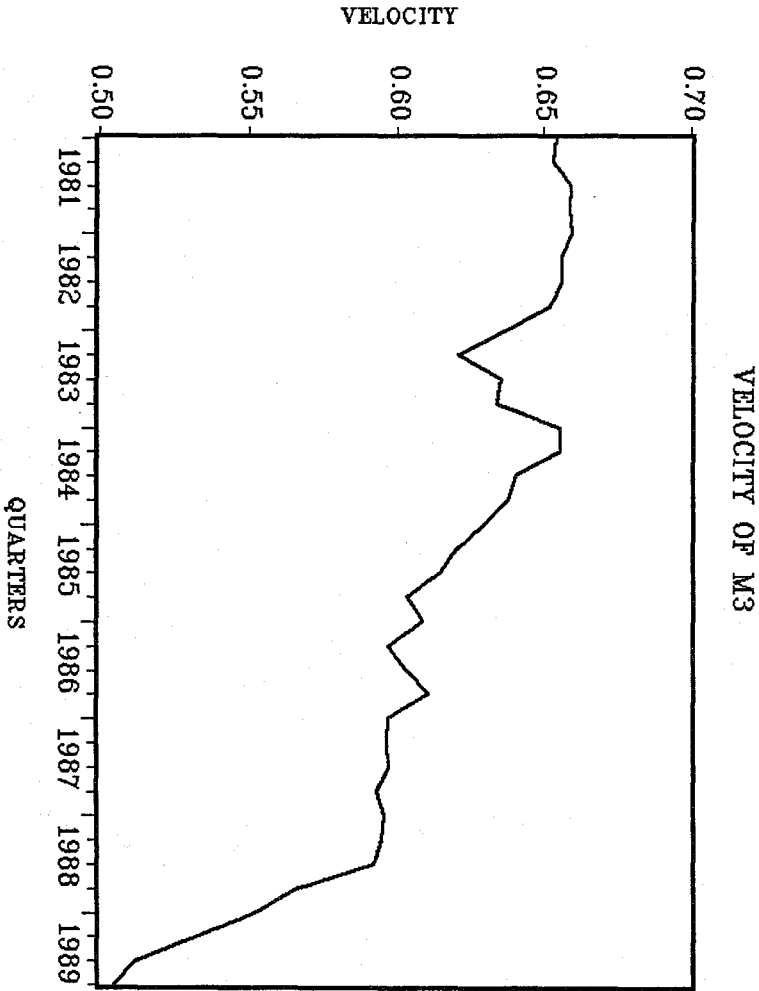
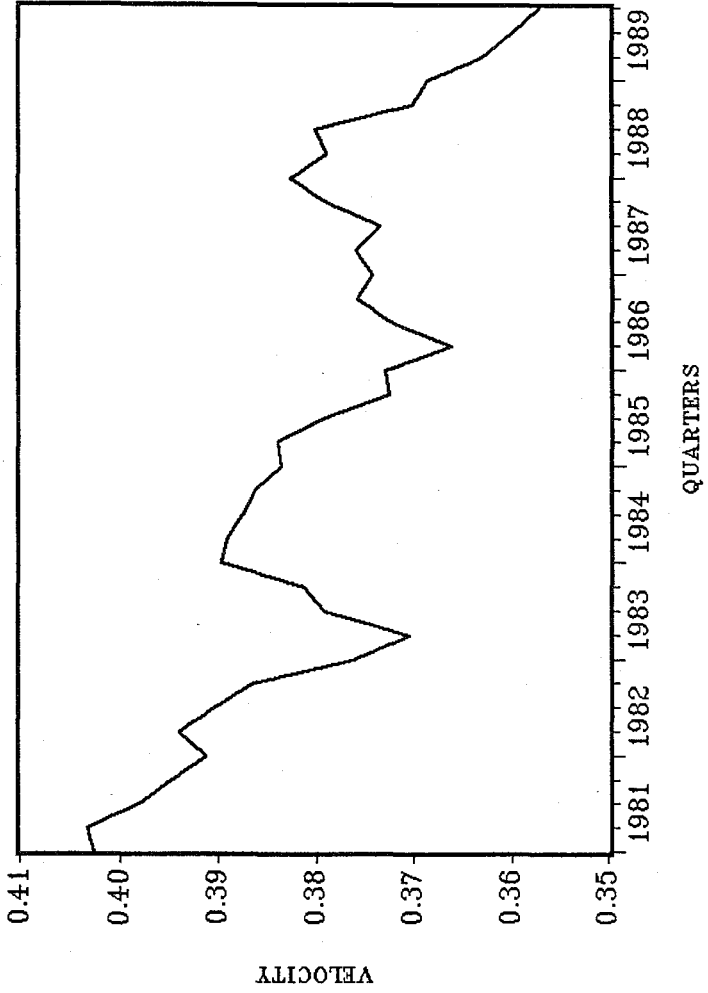


FIGURE 4

VELOCITY OF M3

FIGURE 5
VELOCITY OF BROAD MONEY



A credit aggregate may be less affected by structural changes which are not related to spending. The close relationship between credit and spending is due to the fact that any growth in credit reflects the spending intention of some borrower. Therefore, when movements of money and activity fall apart, movements of credit may provide a more reliable guide about movements of the economy. For example, when M3 and broad money both grow as a result of increased intermediation, a credit aggregate may not be affected because both direct and indirect financing are included in the aggregate credit.

Unfortunately the time lag in the availability of information on the credit aggregate prevents it from providing advance information on the economy. The data on credit aggregates are available annually with a long lag after the data on the national accounts have been published. For this reason and also because of the limited nature of central banks' control over credit, this aggregate may not be a practical substitute for monetary aggregates.

4. Development in Monetary Policy Since 1985

In Australia, as elsewhere, the monetary authorities have reacted to the breakdown of the money/income relationship by formally abandoning the explicit targeting of the growth rates of various monetary aggregates. The Reserve Bank of Australia has replaced its emphasis on monetary targeting by reference to a broader spectrum of macroeconomic variables. The so-called "checklist" includes monetary aggregates, interest rates, exchange rate, the external account, asset prices, inflation and inflationary expectations. The advantage of this approach lies predominantly in its pragmatism. The disadvantages stem from the fact that conflicting signals about the state of the economy can be derived from the "checklist".

The abolition of exchange controls together with the floating of the Australian dollar occurred at a time when the world's financial markets were becoming increasingly integrated. The monetary authorities in Australia cannot conduct monetary policy with purely domestic objectives in mind. Poor trading performance puts downwards pressure on the foreign exchange value of the Australian dollar and this necessitates an intervention or higher domestic interest rates in order to prevent the occurrence of a depreciation - inflationary spiral.

There is much evidence to suggest that toward the end of 1985, the "checklist" approach was replaced by the exchange rate targeting. Shields (1988) designated the period from November 1985 to mid 1986 as the period when monetary policy primarily focused on the exchange rate. Marsden and Jones (1988) argued that since the floating of the Australian dollar in

December 1983, monetary policy and exchange rate policy have been highly integrated. However, these authors documented evidence showing that it was not until July 1986 to mid 1987 that authorities heavily intervened in the foreign exchange market. In figure 6 the increased volatility of the gold and foreign exchange holdings of the Reserve Bank within the period of mid 1986 to mid 1987 may indicate more frequent government intervention into the foreign exchange market.¹ Milbourne (1990) argues that exchange rate targeting is beneficial for investment and exports and short-run price stability. However, by targeting the exchange rate authorities lose their control over the supply of money. Moreover, when disturbances originate from the real sector, the exchange rate targeting leads to a wider fluctuation of output.

5. The Importance of Interest Rates

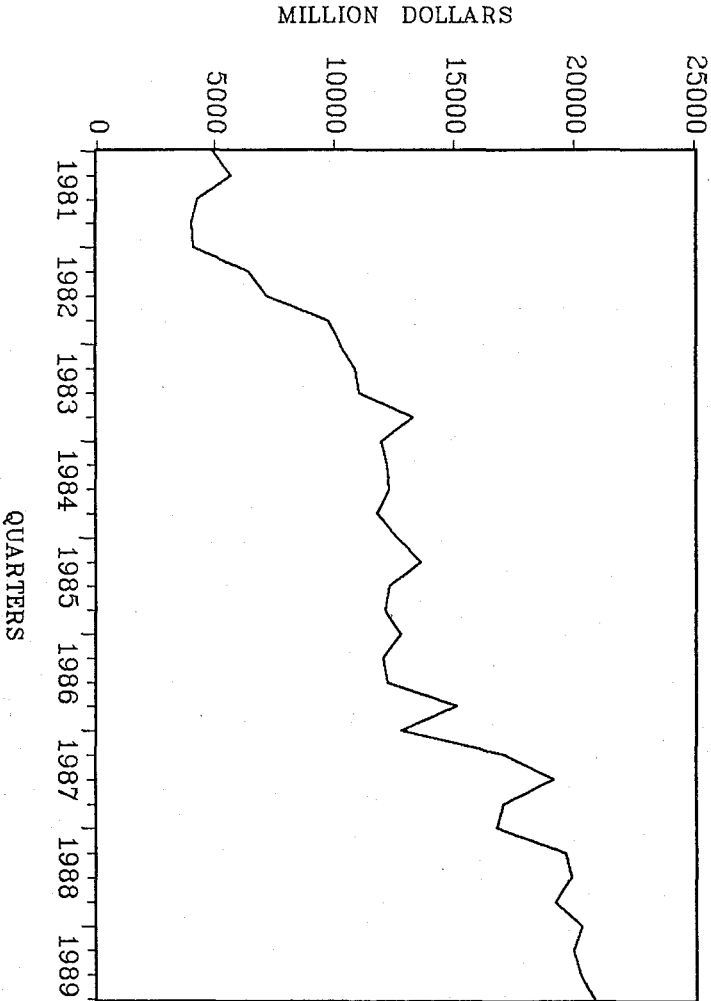
There is widespread agreement amongst economic analysts and policymakers that the process of financial deregulation necessarily places interest rates at the centre of the design and implementation of monetary policy. This occurs in so far as the proliferation of many interest-bearing financial instruments which are highly substitutable will preclude the monetary authorities from being able to measure, monitor and control the growth of any chosen monetary aggregates or to interpret the economic significance of changes in monetary growth however defined.

The period since the beginning of the 1980s has witnessed historically high and volatile interest rates in Australia. This trend is not unique to the domestic economy, it has occurred in many of the major industrialized countries. The international macroeconomic policy mix has contributed to the generation of these high interest rates. The process of financial innovation and deregulation has contributed to the volatility of interest rates during this period.

- (i) The introduction of the tender system for the sale of Australian government securities, in addition to generating sounder debt management policy, had the effect of creating greater flexibility in interest rate movements.
- (ii) This effect was reinforced by the relaxation of interest rate controls, especially those which were applied to bank deposits.

1 The coefficient of variation (standard deviation divided by the mean) of foreign reserves was 0.13 for July 1986 to July 1987 and 0.05 for January 1984 to December 1989 excluding the above period

FIGURE 6
GOLD AND FOREIGN EXCHANGE HOLDINGS OF
THE RESERVE BANK



These institutions responded to their greater freedom by expanding their use of interest-sensitive financial instruments in managing their balance sheets.

(iii) The abolition of foreign exchange controls together with the floating of the Australian dollar succeeded in partially reversing this trend towards greater variability of interest rates. This reversal has been incomplete however, and it is impossible to disentangle the relative strengths of the opposing influences.

The volatility of interest rates and the exchange rate prior and after deregulation is pictured in Figure 7. This graph tends to indicate a more volatile exchange rate and interest rates in the 1980s. The coefficient of variations for the 90 days bank bill rate and the exchange rate against the U.S. dollar is given in Table 1.

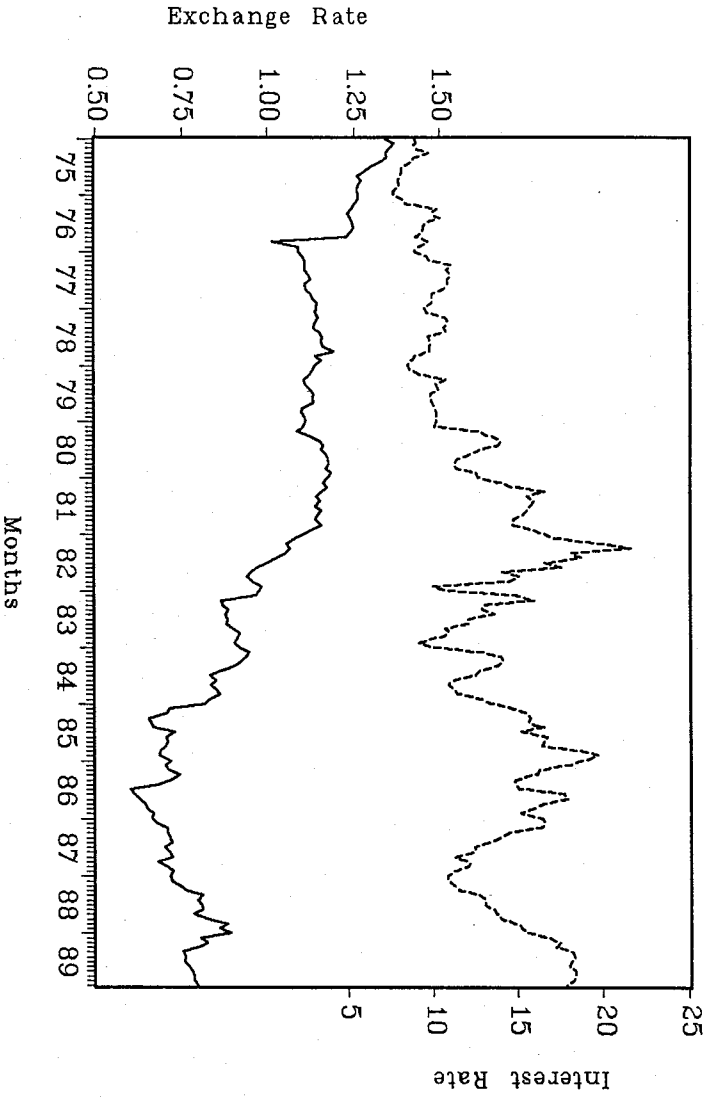
Table 1: Coefficients of Variation

	(1975.1-1979.12)	(1980.1-1989.12)
Exchange Rate	0.07	0.19
Interest Rate,	0.09	0.18

The data are monthly observations on 90 days bank bill rate and the exchange rate against the U.S. dollar.

The trend away from quantitative restrictions has the effect of adding to the burden of influence which must be borne by prices in the transmission of monetary impulses. The relaxation of exchange controls and balance sheet restrictions implies a declining role for 'non-price rationing' such as credit availability effects in transmitting monetary impulses and a corresponding greater role for interest rates. Sometimes it is argued that this development contributes towards enhancing the average interest elasticities of the components of aggregate demand. However, this argument is refuted in Milbourne (1990). He provides graphic evidence showing virtually no correlation between real interest rates and the growth gross national expenditure during the 1980s. Milbourne (1990), goes on to question the validity of the standard transmission mechanism between interest rates and activity with an unregulated financial markets. In a separate article Morris (1988) argues that in a deregulated financial market the central bank loses its direct control over the monetary aggregates. Morris points out the narrower interest differential between money and other financial assets and argues that the usual transmission mechanism of monetary policy is no longer applicable.

FIGURE 7
Australian/U.S. Dollar Exchange Rate And
The 90 Days Bank Bill Rate



The above analysis may suggest that, in a deregulated financial market, monetary policy assigns a more central role to interest rates. However, with the removal of regulation there is very little evidence to suggest to show that the transmission mechanism of monetary policy will remain unchanged. Further research on this important topic is highly desirable.

6. Conclusions

Monetary targeting was implemented in Australia from 1976 to 1985. This process was based upon announcing a "conditional projection" for the growth of M3 at the time of Commonwealth budget proposal. Unlike the U.S. and United Kingdom governments, the Australian government chose the "conditional projection" rather than rigid targets because of changes which could necessitate revisions of the targets. Subsequently the government has often indicated that a wide range of aggregates are preferable to a single one.

Rapid dismantling of financial regulations has changed the relationship between M3 and GDP and M3 cannot serve as a reliable target for monetary policy. This developments led the government to suspend the conditional projection of M3 for the rest of the 1984/85 financial year. Abandonment of the M3 targets left the financial markets without a guide to signal future changes in economic activity. Subsequently the government suggested that a "checklist" approach including a wide range of variables was preferable to a single monetary aggregate. This approach lasted for a short period of time and subsequently the exchange rate became the main focus of the monetary policy.

Since 1985, the role of interest rates in implementation of monetary policy has increased significantly. This is because in a deregulated market, monetary controls operate through prices rather than quantities. However, there are doubts about the effect of interest rate changes on output. Some economists argue that the old transmission mechanism of monetary policy is no longer applicable and authorities must seek more information regarding this important issue. The analysis of this paper indicates that since 1985, monetary authorities have repeatedly changed the focus of monetary policy without having a specific goal and strategy.

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