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Exchange Rate Regimes in Developing and Emerging Economies and the Incidence of IMF Programs

GRAHAM BIRD
University of Surrey, Guildford, UK

and

DANE ROWLANDS *
Carleton University, Ottawa, ON, Canada

Summary. — The global economic crisis will compel many countries to revise key economic policies, including their exchange rate regime. The International Monetary Fund will have significant influence on their choices, and has exhibited a bias against intermediate regimes. We examine the link between exchange rate regimes and IMF program use and find no evidence that countries with intermediate exchange rate regimes require more frequent IMF assistance. Rather they appear somewhat less dependent, especially when compared to fixed exchange rates. Our results suggest that intermediate regimes should remain a viable and possibly desirable exchange rate choice for some countries.

Key words — exchange rates, exchange rate regimes, International Monetary Fund

1. INTRODUCTION

The debate over the relative merits and demerits of alternative exchange rate regimes has been a central component of international macroeconomics for as long as the subject has existed. The issues involved, both theoretical and empirical, are complex. Even so, during the second half of the 1990s, and with a spate of economic crises in various parts of the world, a consensus of sorts appeared to emerge suggesting that any attempt to "softly" manage exchange rates in a world of capital mobility was unwise. These "intermediate regimes," it seemed, had been a common feature of the crisis countries, many of which had ended up with IMF programs. The consensus view was that emerging and developing countries should opt for either of the corner solutions in preference to any intermediate exchange rate regime. In proffering advice about the selection of exchange rate regime, the IMF has appeared to share the bi-polar view, and has expressed skepticism about intermediate regimes. A recent report from the IMF's Independent Evaluation Office (IEO, 2007) has stimulated further debate about the advice that the IMF should be giving on the choice of exchange rate regime and has stressed the need for more analysis.

In this paper we examine whether, and in what way, a country's choice of exchange rate regime affects the probability of it having an arrangement with the IMF, allowing for the other factors that determine the incidence of IMF programs. Do countries with hard pegs or freely flexible exchange rates tend to use the IMF with a frequency that is higher, lower, or comparable to those with intermediate exchange rate regimes? What are the implications for the exchange rate advice offered by the IMF, and should its staff be dissuading countries from adopting intermediate regimes?

The paper is organized in the following way. Section 2 provides a brief summary of the recent literature on the choice of exchange rate regime. Section 3 explains our methodology and presents our findings. Section 4 briefly examines the policy implications of our results, while Section 5 offers a few concluding remarks.

2. LITERATURE REVIEW AND CONTEXT

In principle, all exchange rate regimes have well recognized potential advantages and disadvantages. [1] Firmly pegged rates may encourage foreign trade and investment, may impose discipline on domestic monetary and fiscal policy and may carry sufficient credibility to help avoid speculative attacks. Unfortunately, if the degree of domestic price flexibility is limited, a pegged nominal exchange rate often leads to a disequilibrium real exchange rate. Defending unsustainable hard pegs may involve significant output losses. Conversely, while flexible nominal exchange rates may allow an equilibrium real exchange rate to be maintained over time, they may also be volatile, thereby discouraging foreign trade and investment. They will impose fewer constraints on domestic macroeconomic policy but, as a consequence, may generate less confidence within capital markets.

Intermediate regimes may combine the best or worst of both worlds. The best would be where they limit volatility and reduce the possibility that exchange rates will overshoot their long run equilibrium, while simultaneously permitting some

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degree of discretion over the conduct of domestic macroeconomic policy.[2] The worst would be where they generate neither the confidence associated with hard pegs nor the flexibility required to maintain equilibrium real rates. In these circumstances, and with mobile international capital, they may be particularly vulnerable to speculative attack.

The theoretical shortcomings of intermediate exchange rate regimes appeared to be validated by the high profile balance of payments crises during the 1990s, which seemed to afflict primarily those countries that tried to manage their exchange rates and resist devaluation. These events contributed to the emergence of the bi-polar view that intermediate regimes were inferior to either of the extremes.[3] Simultaneously, the existing currency crisis literature suggested that crises of either a first or second generation type were likely to be associated with a relatively weak commitment to manage exchange rates, that is with intermediate exchange rate regimes that lacked credibility rather than with hard pegs or floating.[4]

The bi-polar view has, however, been open to challenge. Intermediate regimes have not been readily abandoned and seem to work satisfactorily in some instances (Bubula & Otker-Robe, 2002; Corden, 2003; Husain, Mody, & Rogoff, 2005; Masson, 2001). Moreover, corner solutions are not insulated from market pressures and may be associated with exchange rate misalignments that undermine their sustainability (Corden, 2003; Williamson, 2000). Typical of those who have been skeptical of the bi-polar view, Frankel (1999) argues that no single exchange rate regime is right for all countries at all times. Masson (2001) examines regime transition and finds that in practice there is little evidence of sustained movement away from intermediate regimes.

Much of the recent research on the merits and demerits of different exchange rate regimes has sought to examine the connection between them and economic crises, as captured by pressure in foreign exchange markets.[5] Defining currency crises as sharp falls in the exchange rate, the IMF (1997) found that, over the period 1975–96, crises had occurred under all forms of *de jure* exchange rate regime. In a more recent study, and using the currency crises identified by Glick and Hutchison (1999) and Ghosh, Gulde, and Wolf (2003) find that firmly pegged regimes carry the lowest probability of crisis.[6] Bubula and Otker-Robe (2003) build on this work. They use their own *de facto* classification of exchange rate regimes and distinguish between soft and hard pegs. They define currency crises as episodes of severe market pressure as reflected by sharp movements in both exchange rates and interest rates. This allows them to identify speculative attacks that were successfully repelled as well as those that led to devaluations. They then measure how crisis-prone different regimes are by computing the frequency with which crises occurred under each regime, rather than by examining the share of each regime in the total number of crises. They find that pegged regimes are more crisis-prone than floating regimes, particularly for developed and emerging market economies that are integrated with international capital markets. For 1990–2001 and across all countries they find that, although the polar extremes are not exempt from crisis, intermediate regimes—whatever precise form they take—are more crisis-prone; they interpret this as providing support for the bi-polar view.[7]

In a related study Husain *et al.* (2005) (henceforth HMR) investigate the durability of exchange rate regimes. In the light of the bi-polar view one might expect intermediate exchange rate regimes to be less durable on average than hard pegs or fully floating regimes and for countries to exit from them. HMR discover a more complex picture. On the one hand, using the Reinhart–Rogoff "natural" classification of exchange rates, which they claim to be superior to other available classifications because it distinguishes between freely floating and freely falling exchange rates (Reinhart & Rogoff, 2004), they find that countries benefit by having increasingly flexible exchange rate regimes as they become richer and more financially developed. For more advanced economies, flexible exchange rate regimes are more durable. On the other hand, for developing countries with little access to international capital markets, pegged regimes are "notable for their durability." For emerging market economies during the 1990s, by contrast, pegs are the least durable regime and carry a high risk of crisis generally as well as the highest risk of "twin" banking and currency crises. The latter risk declines as exchange rates become more flexible.[8] Contrary to what the bi-polar view would predict, HMR find that there is no tendency for intermediate exchange rate regimes to give way to regimes at the corners. This is especially the case in emerging economies where the bi-polar view might have been anticipated to be at its most relevant. For the two decades prior to 2001, when their data end, most emerging economies had opted for intermediate regimes and showed no inclination to move away from them. Indeed, the overall trend appears to be in the opposite direction, away from pegging and towards intermediate exchange rate regimes.

While, as reported above, different studies reach different conclusions, there appears to be a reasonably strong consensus that it may be unsafe to use the official *de jure* classification of exchange rates, since the way in which countries actually behave may differ from the way in which they announce they will behave.[9]

In this paper we deviate from the literature described above and adopt a different focus. We seek to investigate in what way the choice of exchange rate regime affects the probability of a country having a program with the IMF. In examining this question we allow for different ways of classifying exchange rate regimes and different types of IMF program. This focus is particularly apposite at a time when the Fund is reviewing the advice it proffers on the choice of exchange rate regime, and is under some pressure to adopt a more aggressive and proactive approach (Truman, 2006).

There are logical reasons to believe that a country's proclivity to use IMF credits will be influenced by its choice of exchange rate regime. In order to borrow from the IMF countries have to demonstrate a balance of payments "need." This need is conventionally associated with a current account deficit but in reality could also reflect a turn around in capital flows. In either event, governments have to make a choice about balance of payments policy. They could seek to adjust by devaluing the exchange rate (expenditure switching) or by compressing aggregate domestic demand (expenditure reduction). Alternatively, they could seek to finance the deficit by foreign borrowing. In the absence of sufficient private financing or official donor flows, countries committed to defending either a fixed or managed exchange rate may have little option but to turn to the IMF.

It is interesting to explore this issue in more detail. Does the nature of the exchange rate regime significantly affect the probability of having an arrangement with the IMF, and if so, in what way? Do flexible exchange rates allow countries to avoid the IMF? Do hard pegs generate confidence in the disciplined conduct of domestic macroeconomic policy and a willingness in capital markets to lend, allowing countries with them to by-pass the Fund? Or does the probability of involving the IMF diminish reasonably smoothly as the exchange rate regime becomes more flexible? It is these questions that the remainder of this paper examines.