Exchange Rate Regimes and

Stability: Where Do We Stand?

Andrew K. Rose¹ CEPR, NBER, and U.C. Berkeley

One of the luxuries of academic life is the ability to ignore problems that cannot be easily solved. Since I get to choose the focus of my research, I try to choose interesting and important problems, but problems that I can handle. This is a luxury that central bankers do not have; some decisions have to be made whether they are easy to make or not. Which brings me to the topic of the session. I have been asked to speak on the issue of exchange rate regimes and stability, and it is one that I have spent much time exploring over the past years. But I do not work on this issue any more. Nor does most of the academic economics profession. The reason is the same: it has simply proven to be too difficult. Despite a large amount of work in the area, we know remarkably little about exchange rates and their linkages (or lack thereof) with other aspects of the economy. I as an academic can simply note this fact and move on to other, more soluble problems. Central bankers and other authorities cannot ignore the issue in this fashion; they have to make choices. Accordingly I want to start not only on a note of humility, but also by openly acknowledging the comfort of being an impotent academic.

Exchange Rate Regimes and Commuting

Let me begin with an analogy. While I freely admit that both the profession and I know little about exchange rate regimes, exchange rate regimes are similar to commuting patterns, and we all care about commuting.

I am currently living in Paris and commuting on business days to Fontainebleau, a small town about 50 kilometers away. The question arises: how should I get back and forth? If I take the train, I have to adhere to a rigorous schedule with a number of associated rules. Still, I have no distractions once I am aboard the train, and can work effectively (as I currently am).

¹ Haas School of Business, Berkeley CA 94720-1900. Tel: +1 (510) 642-6609; Fax: +1 (510) 642-4700; E-mail: arose@haas.berkeley.edu; URL: http://faculty.haas.berkeley.edu/arose.

Similarly, there are "rules of the game" associated with fixed exchange rates, and trade may flourish when the exchange rate can be ignored. If I drive to work, I have a much more flexible timetable and can drive essentially when I want. On the other hand, there are more distractions; I can't type or work while driving. Floating exchange rates are more flexible, but are sometimes distracting. Finally, both styles of commuting carry along the possibility of a disaster. Trains are cancelled; strikes occur; traffic jams happen; cars crash. Both fixed and floating exchange rates can be problematic when rates are unsustainable.

Notice four other features that commuting have in common with exchange rate regimes. First, one *has* to make a choice. Second, there is *heterogeneity*; similar individuals (sometimes the same individuals over time) make different decisions from similar situations. Third, the choice is made *endogenously*, so that it is inappropriate to compare the features of regimes naively. Fourth, mistakes are made. Some are clear *ex ante* (e.g., taking the train during a period of labor unrest), while most are only clear *ex post*.

What do we Know about Exchange Rates and their Links to the Economy?

As I have already said, economists know remarkably little about exchange rate regimes. Let me be more explicit. To a good first approximation, there are essentially no consistent strong links between exchange rates and the macroeconomy for low-inflation OECD economies. This is true of both the *determinants* and *effects* of exchange rates, and it is true of exchange rate *levels*, *volatility*, and *regimes*. Economists should be (and typically are) exceedingly humble in their claims concerning links between exchange rates and the economy. Indeed this generally negative impression has played a key role in discouraging research in international finance over the past couple of decades.

The first important negative result was Meese and Rogoff (1983), which showed that standard models of floating exchange rates worked so badly in practice that their forecasts were outperformed by a naïve "model" which predicted no change in the exchange rate at all, at least for short and medium-term horizons. Despite a massive amount of work performed over the past two decades, this extremely negative result basically still stands. Indeed, the *Journal of International Economics* published a retrospective on the twenty years of research in the area since Meese and Rogoff; the lessons learned make a depressingly short list.

The second result was that of Baxter and Stockman (1989), who showed that if one looks across different exchange rate *regimes*, essentially the only macroeconomic variable that differs substantially and systematically is the variability of the (nominal and real) exchange rates. Again, numerous researchers have investigated this finding further in the last fifteen years and the result essentially stands intact, as shown by e.g., Husain et al (2004) who extend the research to consider developing countries.

These two negative results mean that we as a profession know almost nothing about the determinants of both the level and volatility/regime of the exchange rate. That is, the causes of exchange rates remain essentially unknown to economists. And the bad news is pervasive, since we also know little about the consequences of the levels, volatilities, and regimes of exchange rates. The most obvious place to look for the *consequences* of exchange rate misalignment or exchange rate volatility is international trade. But the literature which attempts to link exchange rate levels and volatilities to international trade flows is, with few exceptions, one of dismal failure. And there is even less reason to believe that either first or second moments of exchange rates have substantial systematic effects on other macroeconomic phenomena; Clark et al (2004) provides a recent overview of the literature.

About the only thing that we can be confident about is that countries – especially developing countries – that fix their exchange rates occasionally suffer currency crises, and that these crises can have sharp (though typically temporary) costs. Any strong assertion above and beyond that is so debatable as to be almost free of content. Economies seem almost to operate independently of whatever drives exchange rate levels, volatilities, and regimes.

It is far from clear what to conclude from this dismal state of affairs. On the one hand, one can conclude – as I have been tempted in the past – that since the *costs* of lower exchange rate volatility are not systematic and large, countries should be encouraged to choose exchange rate regimes with low exchange rate volatility. After all, it is hard to believe that volatile exchange rates are economically desirable *per se*. Still, it is perfectly reasonable to argue from exactly the same grounds that the *benefits* of low exchange rate volatility are low, so that one should ignore the exchange rate and float freely.

Looking Forward

I do not wish to end on a negative note, mostly because I do not think it would be warranted. While it is indeed true that we know remarkably little about the ties between the exchange rate and the macroeconomy, there is every reason to believe that this situation is transitory.

The world really only has substantial experience with a single exchange rate regime, namely fixed exchange rates. These prevailed for most of the world before the First World War, for some of the interwar period, and for over twenty years of the postwar period. Since the breakup of the Bretton Woods system some thirty years ago, there has been extensive experimentation with different regimes as the world pursues a Darwinian search for a new financial order. As this process continues, we have started to accumulate knowledge on the merits (and lack thereof) of alternative international financial regimes. But the process is a slow one, since the relevant time-frame is at least the business cycle, and there have only been a handful of business cycles (and other defining moments of crisis) in the period since Bretton Woods collapsed.

There is currently a great deal of experimentation being pursued in the international financial arena. These trials in progress will eventually shed much light on optimal international monetary arrangements.

The most dramatic international financial experiments are associated with extremely tight monetary arrangements – currency unions. The most important is clearly EMU. It is not obvious whether the benefits to EMU – for instance in terms of real or financial integration – will be large. Also unclear are the costs in terms of inability to cope with imperfect business cycle synchronization in the absence of substantive risk-sharing mechanisms. EMU is still quite young and has yet to face a true "trial by fire" (e.g., a government default, monetary secession, or banking crisis). Perhaps EMU will lead to considerable further integration – both political and economic – and endogenously become an optimum currency area. Perhaps it will disintegrate, perhaps because of the heterogeneity associated with the accession of the central European countries. Time will tell.

But not all the monetary experimentation concerns EMU. El Salvador, Guatemala and El Salvador have all recently unilaterally dollarized, and the verdict on these cases has yet to be formed. There are also plans to create currency unions in the Gulf States, and in West Africa. Indeed, not all the trials are associated with regimes of rigid exchange rates. A number of OECD

countries are cleanly floating, abstaining from intervention to a historically unprecedented degree (e.g., Canada, and New Zealand). On the other hand, a number of the East Asians are floating while retaining stocks of international reserves that are also historically unprecedented. Finally, there is good reason to believe that the current account deficit of the United States (which is both long-term and massive) may be associated in the future with major currency exchange rate movements that will be of unprecedented scale.

Looking forward then, there is much reason to believe that the world will continue to accumulate knowledge about the nature of international financial arrangements. Much of the experience we gain will be acquired only painfully. But we will know more in the future.

Conclusion

When I look back on what we know about the relationship between exchange rate regimes and the macroeconomy, a negative verdict seems warranted. Still, this is unlikely to persist; we have had only one generation of experience since the breakup of the Bretton Woods system. Until we have a lot more experience with alternative international financial systems, we simply have no alternative but to wait.

References

Baxter, Marianne, and Alan C. Stockman (1989) "Business Cycles and the Exchange Rate System" *Journal of Monetary Economics* 23, 377-400.

Clark, Peter, Natalia Tamirisa, and Shang-Jin Wei, with Azim Sadikov, and Li Zeng (2004) "Exchange Rate Volatility and Trade Flows – Some New Evidence" IMF Working Paper.

Husain, Aasim M., Ashoka Mody, and Kenneth S. Rogoff (2004) "Exchange Rate Regime Durability and Performance in Developing versus Advanced Economies" working paper.

Meese, Richard A. and Kenneth Rogoff (1983) "Empirical Exchange Rate Models of the Seventies" *Journal of International Economics* 14, 3-24.