EXCHANGE RATE SYSTEMS IN PERSPECTIVE Alan C. Stockman

As an economic policy, the choice of an exchange rate regime has been oversold. That choice pales in comparison with establishing a legal system that carefully defines property rights and creates an institutional framework in which people can freely utilize and trade their resources. It also is far less important than avoiding the plunder of political and legal battles that waste scarce resources to fight over the division of wealth, or avoiding taxes and regulations that create static inefficiencies and choke the forces of creativity and progress.

The issue of choosing an exchange rate system is merely a subissue in the broader question of overall monetary policy. And while monetary policy is clearly important, its role can be easily overstated, as Milton Friedman (1968) pointed out more than three decades ago. Given the history of monetary policy in the United States and around the world, including the political forces that inevitably shape the actions of governments, not to mention scientific uncertainty over many key economic questions (and regardless of the fact that many economists operating in the policy realm deny the existence of this uncertainty and arrogantly exaggerate the extent of their knowledge), probably the best way to approach the real-life policy of choosing an exchange rate regime is to take a broad perspective on how to do the least harm

The past few decades have witnessed tremendous turmoil in the exchange rate practices of the nations of the world: from the Bretton Woods system to its inevitable collapse, through a period of floating clean and dirty, through pegs, devaluations, denials of devaluations, and more devaluations, through floating rates, currency boards, and the emergence of a common currency over much of Europe. The massive swings and differences in exchange rate policies contrast with

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the slow emergence of greater knowledge—through advances in the logic of economic models and the accumulation of evidence—about the effects of alternative exchange rate systems.

Not that this increase in knowledge has created a consensus on policy—we are simply not that far along yet, and there are many places to slip and stumble between the knowledge we have to its policy applications, as I shall discuss—but a thoughtful policy analyst cannot afford to ignore this progress or to cast a less-than-critical eye on the cacophony of claims made about exchange rates and exchange rate systems by politicians, bureaucrats, commentators, and, yes, academics.

Traditional Models

Factors such as the relative sizes of money demand shocks versus real shocks, the correlations among shocks in various countries, and the mobility of labor, which played such key roles in the Keynesian (Mundell-Fleming) models of the 1960s continue to play key roles in many theoretical models appearing in major economic journals.

With dominant money demand shocks, a fixed exchange rate system is supposed to be better than a flexible system, because the money supply automatically adjusts to changes in money demand, without requiring interest rate changes or price level changes, and the various short-run disruptions that can result when nominal price levels respond sluggishly. Similarly, a floating exchange rate system is supposed to be better than a fixed rate system when the dominant shocks are real, because under a floating rate system the exchange rate can adjust—as in Milton Friedman's "daylight saving time" story (Friedman 1953:173)—following a real shock, rather than requiring price level changes and the short-run disruptions that sluggish nominal price levels may induce. This latter effect is supposed to be particularly important when an economy lacks substantial labor mobility—because with sufficient mobility, the workers could pack up and

When analyzed carefully, one finds that the implications of these models can be subtle. For example, differing properties of pegged rate and floating rate systems affect optimal price-setting by firms; in turn, this affects the responses of production to changes in underlying conditions as well as the level of production in "normal" times. And these issues affect the models' implications for the benefits and costs of fixed or floating exchange rates.

Unfortunately, the evidence supporting the predictions of these models is only slightly better than the evidence for cold nuclear fu-

sion. Consequently, it is hard to take seriously these issues as the *major* factors that should be involved in a policy decision.

Moreover, the logic that reaches these conclusions about exchange rate policies is rather shallow. For example, the Fed is well aware that money demand shocks occur in the United States. (In fact, many economists argue that those shocks have become so important, with empirical money demand functions breaking down, that statistics on monetary aggregates have become nearly useless for monetary policy.) Yet the Fed has not encountered major difficulties in shortrun stabilization in the 1990s. Why not? Because short-run Fed policy actions focus on targeting a nominal interest rate, and this, like a fixed exchange rate system, allows the Fed to furnish "an elastic currency" with the money supply responding automatically to money demand shocks. The point is not whether this method works perfectly, or whether it is desirable—the point is that there are policy *alternatives* that render unimportant the conclusions of those models that one exchange rate system is better under certain conditions, while another is better under other conditions. Without an extended analysis that considers all such options, the policy conclusions of these models would be nearly useless even if the evidence supported their positive predictions.

The Issue of Transaction Costs

Floating exchange rate systems entail transactions costs of changing currencies, and associated information-processing costs of figuring out how to translate prices from an unfamiliar currency into something that one can intuitively understand and place in perspective. However, these costs do not appear to be particularly large in comparison either with the potential costs and benefits of the systems for other reasons (see below), or in comparison to the costs of adding sales taxes (in the United States) or determining the relative merits of the 32-oz size at \$4.29 or the 20-oz size at \$2.98. Moreover, these costs have been falling over time since the advent of calculators made mental multiplication and division less-important tasks for everyday travelers, and they will continue to fall as new technologies provide and process information for us.

Friedman's Daylight-Saving-Time Argument

Friedman's daylight-saving-time argument is likely to involve larger costs and benefits. Just as it is easier to reset clocks than to reset the

times of every daily activity, it is easier for the exchange rate to respond to changes in underlying conditions than for the overall nominal price level to respond, with all the accompanying real disruptions. The main objection to Friedman's argument is that we do not know if the market response will "get it right"—will the exchange rate adjust to the new equilibrium level? The honest answer, of course, is "Who knows?" Economists don't yet have a model of exchange rates with much empirical support. But is no change at all in the exchange rate likely to be better? Again, no one really knows, and current evidence is vastly insufficient to provide a good answer.

Whatever that answer, flexibility, such as labor mobility, capital mobility, financial mobility, absence of laws and regulations that hinder flexibility (such as laws making it difficult to fire people, or raising the costs of hiring new workers) has considerable benefits. The greater overall flexibility, the less likely *any* exchange rate system will have a major effect on human welfare, unless that system leads to a major crisis.

Institutional and Political Economy Issues

Since the middle of the 20th century, the focus of serious discussion on exchange rate systems has shifted from the issues outlined thus far to questions about credibility of monetary (and other) policies, alternative commitment mechanisms for policymakers, the stability and strength of financial systems, and mechanism-design issues —that is, the design of institutions and political-economy issues.

Some of the issues are old. Flexible exchange rates provide the option for a nation to pursue its own monetary policies. Whether that option is a benefit or curse depends on factors such as how political forces operate within the nation's institutions to affect its policies. The corresponding benefit of a fixed exchange rate system is that it constrains monetary policy. Of course, if a nation wants constraints—and has the political will to impose them on itself—it has other options available that it could pursue under a system of floating exchange rates (such as constitutional rules on policy, institutional changes, and so on). A fixed exchange rate system (like these other options) may provide (future) commitment as well as a (current) constraint. However, there are many ways to commit. Certainly there is little reason to believe that a policy of pegging the exchange rate is more credible than alternative institutional arrangements such as independent central banks, currency boards, payment systems that reward or penalize central bankers for economic outcomes, or constitutional requirements for central-bank actions or performance. Some of these may entail greater credibility than pegging an exchange rate (which history shows clearly *not* to be credible).

Do Floating Exchange Rates Cause Variability, Uncertainty, and Risks?

Flexible exchange rates are often accused of creating variability, uncertainty, and risk. But from where do these alleged evils really arise? Unstable underlying conditions or policies may create variability and risks that appear in exchange rate movements when the exchange rate is free to move, but are channeled elsewhere when they are fixed. If unstable speculators are responsible for these risks, does a policy of pegging the exchange rate remove these speculators from the economy, or merely turn them in different directions? That is, fixed exchange rates may not provide true insulation from speculative bubbles. Instead, the sources of those bubbles may simply seek other outlets.

Of course, exchange rates do vary daily under a floating rate system. But international financial markets have developed to allow firms the opportunity to hedge risks associated with these changes. The same opportunities, unfortunately, are not usually available for hedging the risks of speculative attacks and devaluations under pegged exchange rate systems. Nor are they available for hedging the risks associated with various government policy responses (such as regulations and controls on international trade in goods, services, and financial assets) to threats of speculative attacks. Consequently, floating exchange rates may present *less* risk than tenuously pegged rates.

The Issue of Misalignment

Experiences with floating exchange rates in recent decades have led to the concern that floating exchange rates often become "misaligned" because of speculators' actions. Of course, the important issue for research is whether these misalignments are in some sense more or less severe than the misalignments that can occur under pegged exchange rates. The daylight-saving-time argument applies here: When the exchange rate is pegged, economic responses to a misalignment must involve changes in many nominal prices (and associated short-run disruptions).

Currency Competition under Floating

A system of floating exchange rates provides the opportunity for competition among monies. A fixed rate system provides fewer roles for competition, because suppliers (central banks) fix the relative prices of their products.

Similarly, a system of fixed exchange rates also encourages international cooperation in monetary policies. While international cooperation may sound healthy, its real meaning is more likely to be collusion among governments for the benefit of special interests. (Milton Friedman's once stated, half-seriously, that government officials liked pegged exchange rates because the ongoing crises and problems of that system provided opportunities to travel to lavish international meetings.)

Political Forces

What political forces have affected past choices of exchange rate systems? Who are the winners and who are the losers from changes in the system, or the continued operation of either system? (A rule of thumb: if you don't know, then you're probably *not* one of the big *winners*.) Are the main forces benevolent advocates of some "common good," or more subtle proponents of special interests? Discussion of exchange rate systems has tended to ignore these issues, and focused mainly on costs and benefits for the mythical "representative individual." Yet few changes in government policy, even in (or particularly in) subtle aspects of monetary and financial policies of governments, fail to involve special interests hiding beneath the veneer.

Currencies are naturally tied to central banks (or currency boards). A change to a common currency, such as the Euro, requires a change in institutions for monetary policy. And other institutional changes that affect regulation and oversight of financial markets and institutions, tax policies, regulatory policies, and government spending are likely to accompany that change in monetary institutions. The consequences of these institutional changes may be far-reaching, and might easily dominate other costs and benefits attributable to the difference between a common currency and many currencies.

This issue generalizes beyond a system of common currencies, to a system of pegged exchange rates among nations with separate central banks. Policies of pegging exchange rates can create problems that lead to formation and involvement of institutions (such as the International Monetary Fund) that play various roles in "managing" the "international monetary system." Those changes in institutions involve changes in political pressures and other kinds of policies. Of course, these institutional changes may have net benefits rather than net costs. But when political forces start clamoring for a change in

institutions, it is time for wise men to bolt their doors and close their shutters, before someone from the government arrives on the front stoop.

The Future

One view of the future asserts that the dollar-Euro exchange rate will become the key exchange rate, leading to pressure to stabilize it, and that Japan will want to keep the value of the Yen closely linked to both those currencies. Robert Mundell (1999: 444) believes that "by 2010 we will be back to a world where we get more fixed exchange rates, and the International Monetary Fund will be dragged back to its original function."

An alternative view is not simply less Euro-centric (noting the increased role of Asian nations in addition to Japan in the future world economy), but also less government-centric. While some political forces will seek stabilization of the exchange rate between the dollar and the Euro, other sorts of political pressures will emerge for various national policies that are inconsistent with such stabilization. Meanwhile, technological developments will result in increased sophistication of financial and payment systems that makes the issues increasingly less important. Eventually, people may be able to choose both the units of account and the medium of exchange that they employ for their own transactions, and they may even employ multiple units of account—and multiple media of exchange (which are likely to be increasingly electronic and increasingly provided by private firms) in their various trades (see Dorn 1997). Consequently, people may want competition among units of account so that they can freely choose the one that suits them best. It seems unlikely that fixing exchange rates—or adopting common currencies—will help to create a money that people will choose to adopt as either a unit of account or a medium of exchange. On the contrary, increasing private entry into this market may occur despite difficulties of collecting revenues on a "public good" like a unit of account (although technology may take care of that, e.g. with small royalties for the verified use of such a unit), and these competing units will likely involve marketdetermined relative prices (floating exchange rates). Fifty years from now, government-provided moneys are unlikely to play a major role in most ordinary peoples' lives, unless governments compete aggressively against private competitors, and this competition is likely to entail floating exchange rates (variable relative prices) among these competing commodities.

Conclusion

Where does this leave current policy? Economists lack strong evidence on how exchange rate systems affect the economic variables that people care about, such as long-run growth, avoidance of dislocations from business cycles, and so on. They also lack theory and evidence on how the choice of system affects the political forces that operate on monetary policies of central banks, and on their policies toward regulation, oversight, and bailouts of financial institutions.

However, the *worst* economic outcomes associated with the choice of an exchange rate system are clear. Devastating costs arise from speculative attacks on pegged exchange rates; from the misalignments that arise when countries keep rates fixed despite differences in fundamental policies, by imposing controls on international trade and financial markets, and ultimately allow the peg to break down. The costs of the episodes *vastly* exceed any estimates of any other costs associated with either exchange rate system. These factors provide a strong argument for a policy of either floating exchange rates or a common currency.

These costs are multiplied when a country's banking system is fragile (as in many recent and unfortunate episodes), so that banking crises and exchange rate crises become intertwined, each contributing to the other. These factors make the stability of a country's financial system a key factor in the choice of an exchange rate system, with a sound banking system almost a necessary prerequisite for fixed exchange rates.

My conclusion from informal cost-benefit analysis of alternative exchange rate systems is that floating exchange rates have a strong advantage over fixed exchange rates, at least in the absence of common currencies. The relative merits of a common currency versus floating exchange rates between multiple currencies hinge on answers to questions posed above. My prediction is that technological change will reduce the importance of a definitive answer sometime before economists can provide one.

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