THE POLITICAL ECONOMY OF INTERNATIONAL MONETARY RELATIONS

J. Lawrence Broz¹ and Jeffry A. Frieden²

¹Department of Politics, New York University, New York, New York 10003; e-mail: lawrence.broz@nyu.edu

Key Words exchange rates, currency policy, monetary policy, international capital mobility, monetary regimes

■ **Abstract** The structure of international monetary relations has gained increasing prominence over the past two decades. Both national exchange rate policy and the character of the international monetary system require explanation. At the national level, the choice of exchange rate regime and the desired level of the exchange rate involve distributionally relevant tradeoffs. Interest group and partisan pressures, the structure of political institutions, and the electoral incentives of politicians therefore influence exchange rate regime and level decisions. At the international level, the character of the international monetary system depends on strategic interaction among governments, driven by their national concerns and constrained by the international environment. A global or regional fixed-rate currency regime, in particular, requires at least coordination and often explicit cooperation among national governments.

INTRODUCTION

The study of international monetary relations was long the domain of economists and a few lonely political scientists. It was routinely argued that, unlike international trade, debt, or foreign investment, exchange rates and related external monetary policies were too technical, and too remote from the concerns of either the mass public or special interests, to warrant direct attention from political economists (Gowa 1988). This was never really accurate, as demonstrated historically by the turbulent politics of the gold standard and more recently by the attention paid to currency policy in small, open economies such as those of Northern Europe and the developing world. But the tedious predictability of currency values under the Bretton Woods system lulled most scholars into inattention (exceptions include Cooper 1968, Kindleberger 1970, Strange 1971, Cohen 1977, Odell 1982, and Gowa 1983).

²Department of Government, Harvard University, Cambridge, Massachusetts 02138; e-mail: jfrieden@harvard.edu

The collapse of Bretton Woods increased the interest of political scientists in the issue, and in the 1980s, international monetary affairs took so prominent a place in domestic and international politics as to warrant widespread scholarly attention. The 50% real appreciation of the US dollar and the domestic and international firestorm of concern it prompted, dramatic currency collapses in many heavily indebted developing countries, and the controversial attempts to fix European exchange rates all drew researchers toward the topic.

Since 1990, international monetary relations have become extremely prominent in practice, and the study of their political economy has accordingly increased in importance. Exchange rate policies have been at the center of what are arguably the two most striking recent developments in the international economy: the creation of a single European currency and the waves of currency crises that swept through Asia, Latin America, and Russia between 1994 and 1999.

Although most research on the political economy of international monetary relations is relatively recent, it has already given rise to interesting and important theoretical approaches, analytical arguments, and empirical conclusions. We summarize this work without attempting to cover exhaustively a complex and rapidly growing literature. In this section, we outline the analytical problem, delineating the range of outcomes in need of explanation. The next section focuses on one set of things to be explained, the policy choices of national governments, surveying work on the domestic political economy of exchange rate choice. The third section looks at the second set of things to be explained, the rise and evolution of regional and global exchange rate institutions.

Two interrelated sets of international monetary phenomena require explanation. The first is national: the policy of particular governments towards their exchange rates. The second is global: the character of the international monetary system. These two interact in important ways. National policy choices, especially of large countries, have a powerful impact on the nature of the international monetary system. The United Kingdom and the United States were essentially the creators of the classical gold standard and the Bretton Woods monetary order, respectively, and their decisions to withdraw from these systems effectively ended them. By the same token, the global monetary regime exercises a powerful influence on national policy choice. A small country, such as Belgium or Costa Rica, is much more likely to fix its exchange rate—to gold before 1914, to the dollar or some other currency since 1945—when most of its neighbors have done so. The national and the international interact in complex ways, but for ease of analysis it is useful to look at separate dependent variables: the national policy choices of governments and the character of the international monetary system.

National Exchange Rate Policy

Each national government must decide whether to fix its currency—to the dollar, to another national currency, or to gold (in earlier periods)—or to allow it to float. If it chooses to let its currency float, it must decide whether it intends to let currency

markets freely set the currency's value or whether it intends to target a particular range of exchange rates. If the latter, the government needs to determine the desired level of the currency's value—whether, generally speaking, it prefers the exchange rate to be "strong" (relatively appreciated) or "weak" (relatively depreciated). In specific instances, governments may be faced with more immediate choices, such as whether to defend or devalue a currency under attack. There are, roughly speaking, two kinds of national decisions to be made. One concerns the regime under which the currency is managed (fixed or floating, for example), and the other concerns the level of the currency (strong or weak).

These choices have significant economic and political implications, and there is no reigning economic argument as to the optimal national exchange rate policy. In this, international monetary policy differs from trade policy. There are powerful economic arguments for the welfare superiority of free trade, and free trade can usefully be considered a baseline from which national policies deviate, with the "distance" from free trade a measure worth explaining. In currency policy, there is no clear economic-efficiency argument for or against any particular level of the real exchange rate. A strong (appreciated) currency is one that is valuable relative to others; this gives national residents greater purchasing power. However, a strong currency also subjects national producers of tradable products (goods and services that enter into international trade) to more foreign competition, for the strong currency makes foreign products relatively cheaper. Although politicians certainly care about these effects—weighing the positive effects of increased mass incomes versus the negative effects of increased foreign competition—there is no purely economic reason to opt for one or the other. There is a reigning economic approach to currency unions (and, somewhat by extension, to fixed exchange rates), drawn from the literature on optimal currency areas. But this literature is by no means conclusive, so even here there are few purely economic factors that could explain national government policy.

This means that national exchange rate policy must be made with an eye toward its political implications, since the tradeoffs governments must weigh are largely among values given different importance by different sociopolitical actors. Governments must evaluate the relative importance of the purchasing power of consumers, the competitiveness of producers of tradable products, and the stability of nominal macroeconomic variables. Below we survey the political considerations that affect policy, but first we describe the international level of analysis in international monetary affairs.

International Monetary Systems

There are effectively two ideal types of international monetary regime, with actual systems tending toward one or the other. One is a fixed-rate system, in which national currencies are tied to each other at a publicly announced (often legally established) parity. Some fixed-rate systems involve a common link to a commodity such as gold or silver; others use a peg to a national currency such as

the US dollar. The other ideal-typical monetary regime is is a free-floating system, in which national currency values vary according to market conditions and national macroeconomic policies. There are many potential gradations between these extremes.

In the past 150 years, the world has experienced three broadly defined international monetary orders. For about 50 years before World War I, and again in substantially modified form in the 1920s, most of the world's major nations were on the classical gold standard, a quintessential fixed-rate system. Under the gold standard, national governments announced a fixed gold value for their currencies and committed themselves to exchange gold for currency at this rate. From the late 1940s until the early 1970s, the capitalist world was organized into the Bretton Woods monetary order, a modified fixed-rate system. Under Bretton Woods, national currencies were fixed to the US dollar and the US dollar was fixed to gold. However, national governments could and did change their exchange rates in unusual circumstances, so that currencies were not as firmly fixed as under the classical gold standard. From 1973 until the present, and briefly in the 1930s, the reigning order has been one in which the largest countries had more or less freely floating national currencies with no nominal anchor, whereas smaller countries tended either to fix against one of the major currencies or to allow their currencies to float with varying degrees of government management.

Monetary regimes can be regional as well as global. Within the international free-for-all that has prevailed since 1973, a number of regional fixed-rate systems have emerged or been contemplated. Some have involved simply fixing the national currencies of relatively small countries to the currency of a larger nation; for instance, the CFA (African Financial Community) franc zone ties the currencies of 12 African countries to each other and to the French franc (and now to the euro). Several countries in Latin America and the Caribbean have similarly tied their currencies to the US dollar, and others are considering this link. Another type of regional fixed-rate system involves the linking of a number of regional currencies to one another, often as a step toward adoption of a common currency. This has been the case with European monetary integration, which began with a limited regional agreement, evolved into something like a Deutsche mark link, and eventually became a monetary union with a single currency and a common European central bank. Countries in the Eastern Caribbean and southern Africa have also developed monetary unions.

Our dependent variables, then, are (a) the national exchange rate policies of particular national governments, especially their choice of the level and regime of their currencies; and (b) the international monetary regime, especially the degree to which currencies are fixed against one another. To be sure, these two dependent variables are jointly determined. National policy choices depend on the character of the international monetary system, and the evolution of global monetary relations is powerfully affected by the decisions of the major trading and investing nations. By the same token, international monetary relations interact with other economic policies. Currency misalignments have often led to protectionist

pressures and even trade wars, just as the evolution of trade relations affects exchange rate policy choices. Policies toward international financial and investment flows are similarly affected by, and affect, exchange rate movements. These complex interactive effects are important, but we do not know how to think about them in an integrated and systematic way. This essay focuses on the political economy of international monetary policy in and of itself, emphasizing potential answers to our two more narrowly defined explanatory questions.

Cognate literatures on the political economy of other important international economic policies are useful to the analysis of international monetary policy. Analyses of international trade and investment begin with a prior notion of the distributional interests at stake—factoral, sectoral, and firm-specific—derived either from theory or from empirical investigation. They then explore how these interests are aggregated and mediated by such sociopolitical institutions as labor unions and business associations, political parties, electoral systems, legislatures, and bureaucracies. Finally, they explore the interactions between these nationally derived policies and those of other countries, especially in contexts in which interstate strategic interaction is likely to be important, such as where national government policies depend on the responses of other governments. The emerging structure of analysis and explanation of international monetary and financial politics follows this pattern. In the next section, we summarize the domestic level of analysis, especially how interests and institutions interact in the formation of national policy.

THE DOMESTIC POLITICAL ECONOMY OF EXCHANGE RATE POLICY

National policy makers make decisions about the exchange rate regime and the desired level of the currency. The regime decision is whether to allow the currency to float freely or to fix it against some other currency. Pure floats and irrevocably fixed regimes are, of course, only two possible options. There are at least nine existing regimes on a continuum that runs from a full float to a currency union an extreme kind of fixed-rate system (Frankel 1999). For all regimes between the two extremes of this continuum, policy makers also confront choices related to the level of the exchange rate. Level decisions involve policies that affect the price at which the national currency is valued in foreign currencies. The exchange rate may itself be a target for policy, with a definite rate being set or a clearly observable formula applied. Alternatively, the exchange rate may be actively managed in conjunction with other components of monetary policy. Some governments announce a band within the currency will be allowed to move, or they act (without public announcement) to restrict exchange rate movements to such a target band. Whatever the mechanism, level decisions fall along a second continuum that runs from a more depreciated to a more appreciated currency. Although regime and level decisions are interconnected, we treat them separately for heuristic purposes. We attempt to delineate the domestic political economy factors that influence governments' choices along the two continuums.

Like other areas of economic policy, exchange rate decisions involve tradeoffs between desired goals. An established economics literature examines the costs and benefits of alternative currency policies from the perspective of a benevolent social planner, which is a useful starting point for gauging the attractiveness of policies in terms of national welfare. However, the more recent political economy scholarship incorporates the role of interest-group and partisan pressures, political institutions, and the electoral incentives of politicians. One major theme is that currency policy has domestic distributional implications that shape the sociopolitical environment in which policy makers assess costs and benefits. A second theme is that domestic electoral, legislative, and bureaucratic institutions influence the incentives of politicians as they confront currency policy tradeoffs. We develop these themes below, emphasizing that the economic tradeoffs are politically and institutionally conditioned.

To Fix or to Float?

Our discussion of regime choice focuses on the extreme regimes—hard pegs and pure floats—because the analysis of intermediate cases flows from that of the extremes. The tradeoffs we describe apply to the intermediate choices—target zones, crawling pegs and bands, etc—albeit never as starkly as with the extremes (Frankel 1999). Economic treatments of regime choice come from two perspectives: (a) open economy macroeconomic approaches, including consideration of optimal currency area criteria; and (b) rational-expectations treatments of the credibility problem in monetary policy.

From the open economy perspective, the principal advantage of a fixed-rate regime is to lower the exchange rate risk and transaction costs that can impede international trade and investment (Mundell 1961, McKinnon 1962, Kenen 1969). Volatile exchange rates create uncertainty about international transactions, adding a risk premium to the costs of goods and assets traded across borders. Although it is possible to hedge against this risk in derivatives markets, hedging invariably involves costs, which increase with the duration of the transaction. And recent experience indicates that there is a great deal of unexplained volatility in currency markets, which makes hedging particularly difficult for small countries' currencies. By opting to stabilize the currency, a government can reduce or eliminate exchange rate risk and so encourage greater trade and investment—a desirable objective. Taking the next step to a currency union does away with the remaining transactions costs, providing an even stronger impetus toward economic integration.

Pegging, however, has costs. To gain the benefits of greater economic integration by fixing the exchange rate, governments must sacrifice their capacity to run an independent monetary policy. The "impossible trinity" principle explains that where capital is internationally mobile, a fixed rate and monetary independence are not simultaneously attainable (Mundell 1962, 1963). The principle says

that a country must give up one of three goals: exchange rate stability, monetary independence, or financial market integration. When capital is mobile internationally, domestic interest rates cannot long differ from world interest rates, as capital flows induced by arbitrage opportunities quickly eliminate the differential. There is strong evidence in both developed economies (Marston 1995) and the developing world (Edwards 1999) that financial integration has progressed so far that capital mobility can be taken more or less as a given, which reduces the choice to sacrificing exchange rate stability versus giving up monetary independence. ¹ A fixed exchange rate with international capital mobility renders monetary policy ineffective, meaning that there is no leeway to use monetary policy for purposes of demand management or balance-of-payments adjustment. This poses a tradeoff between two competing values: stability and flexibility. Achieving monetary stability can be a substantial benefit for countries that have endured high and highly variable inflation and other domestic monetary disturbances. But since achieving this stability means forgoing monetary flexibility, this can be a substantial cost for countries that face severe external shocks to which monetary policy might be the appropriate response.

Whereas the traditional case for stable exchange rates hinges on the benefits of integration, recent analyses tend to place more emphasis on credibility issues and the role of fixed regimes in stabilizing inflation expectations. With roots in the rational expectations literature, this work builds on the time inconsistency problem described by Kydland & Prescott (1977) and Barro & Gordon (1983). The problem arises when monetary policy is set with discretion and wages and prices are not fully flexible. Under these conditions, a policy maker may try to fool private agents by inflicting an inflationary surprise, in the hope of engineering a temporary boost in output. However, forward-looking private actors anticipate this incentive and take it into account when forming their ex ante inflationary expectations. These expectations thus introduce an inflationary bias into wage bargaining and price setting. Consequently, when the policy maker adopts surprise inflation, the equilibrium outcome is higher inflation but not higher output. The key to solving this time inconsistency problem is credibility. If the private sector believes that the preannounced policy is credible, then expected inflation is kept in check at no cost to output.

Pegging the exchange rate provides an automatic rule for the conduct of monetary policy that avoids the time inconsistency problem and enhances the credibility of the government's commitment to low inflation (Giavazzi & Pagano 1988, Canavan & Tommasi 1997). In a fixed regime, monetary policy must be subordinated to the requirements of maintaining the peg, effectively eliminating the discretion of the authorities. This privileges such domestic objectives as price stability over such external objectives as payments balance and competitiveness. Historically, a national commitment to a gold standard was the most important

¹Intermediate regimes may allow countries to pursue both objectives to some degree (Edwards & Savastano 1999).

such external anchor. More recently, many countries have pegged to the currency of a large, low-inflation country (Mishkin 1999).

Although pegging is not the only way to commit policy to low inflation—central bank independence with price level or inflation targets may be an alternative—its transparency makes it a common commitment technology in contexts where the alternatives cannot easily be monitored by the public (Herrendorf 1999, Canavan & Tommasi 1997). When a government commits to a peg, it makes an easily verifiable promise. Either the government follows macroeconomic policies consistent with the peg, or it does not, in which case the peg collapses. There is in fact no technical reason why a peg cannot be maintained, even in the face of a large speculative attack (Obstfeld & Rogoff 1995). Therefore, devaluation is a public signal that the government has not lived up to its promise. The transparency of a peg enhances the credibility of the government's commitment to low inflation but comes at price, measured in terms of lost monetary policy flexibility. The tradeoff here is between credibility and flexibility.

Do countries that choose pegs experience increases in trade and credibility? Time-series studies of the relationship between exchange rate volatility and trade (or investment) typically find small, weak negative effects (Frankel 1995). However, much stronger effects are evident in cross-sectional evaluations. Countries that share a common currency (or have a long-term peg) trade more than three times as much as comparable countries that have separate currencies (Rose 2000). As for credibility, pegs tend to be favored commitment devices in countries seeking a quick resolution to chronic inflation (Vegh 1992). Systematic evidence from 136 countries over a 30-year period shows that pegging is indeed associated with lower inflation, but at the cost of more variable output than in flexible exchange rate regimes (Ghosh et al 1997).

Theory and evidence thus suggest that fixing the exchange rate to the currency of a low-inflation country (a) promotes international trade and investment and (b) disciplines monetary policy by providing an observable nominal anchor for the value of domestic money. The advantages of a floating exchange rate, on the other hand, reduce to the single, albeit crucial, property that it allows a government to have its own independent monetary policy. Under a full float, demand and supply for domestic currency against foreign currency are balanced in the market. There is no obligation or necessity for the central bank to intervene. Therefore, domestic monetary aggregates need not be affected by external flows, and a monetary policy can be pursued without regard to monetary policy in other countries. This independence is valuable because it provides flexibility to accommodate foreign and domestic shocks, including changes in the external terms of trade and interest rates. More generally, floating allows monetary policy to be set autonomously, as deemed appropriate in the domestic context (e.g. for stabilization purposes), and the exchange rate becomes a residual, following whatever path is consistent with the stabilization policy.

A related advantage of floating is that it allows the exchange rate to be used as a policy tool. This flexibility is valuable when real appreciation, caused by inertial

inflation or rapid capital inflows, harms international competitiveness and threatens to generate a balance-of-payments crisis—a common syndrome in developing and transition economies that use a fixed exchange rate as a nominal anchor for credibility purposes (Edwards & Savastano 1999). When residual inflation generates an inflation differential between the pegging country and the anchor, it induces a real appreciation that, in the absence of compensating productivity gains, leads to balance-of-payments problems. A more flexible regime allows policy makers to adjust the nominal exchange rate to ensure the competitiveness of the tradable goods sector. However, the more flexible the regime, the smaller the credibility gains. The tradeoff between credibility and competitiveness is particularly relevant in countries where inflation has been a persistent problem (Frieden et al 2001).

Which regime is best for a particular country is partly a matter of the economic characteristics of the country. The literature on optimal currency areas points to several considerations, with openness, economic size, sensitivity to shocks, and labor mobility between regions heading the list. Broadly speaking, when a region is characterized by easy movement of labor, or is highly integrated with its neighbors such that they share common disturbances, the gains of fixed exchange rates are likely to outweigh the costs of giving up monetary independence (Frankel 1995). Countries that are particularly sensitive to external disturbances (e.g. volatility in the terms of trade) are generally better off floating, whereas countries concerned about domestic monetary shocks gain from pegging. Furthermore, when the shocks affecting a country and it neighbors are highly correlated, there is less need of monetary independence because a single policy response is appropriate for the whole region. Beyond this, there is little consensus on the welfare criteria for exchange rate regime choice (Frankel 1999). Given the diversity of economic conditions relevant to selecting the optimal regime, it is not surprising that empirical findings are typically weak or contradictory (Tavlas 1994, Edison & Melvin 1990).

A more fundamental weakness of the both the credibility and open economy approaches is their implicit assumption that policy makers select currency regimes to maximize aggregate social welfare. There is little reason to believe that currency policy is made any less politically than other economic policies. In the next section, we depart from the benevolent social planner assumption and survey work that endogenizes the political incentives and constraints that shape regime decisions.

Interest Groups and Regime Choice

What is optimal for a country as a whole may not be optimal for particular groups within a country. A policy of free trade, for example, creates both winners and losers even though it is widely regarded as welfare-enhancing for the nation. These distributional effects form the basis of "endogenous tariff theory," which accounts for deviations from free trade by delineating the groups that favor and oppose protection and the conditions under which they are most influential (Milner 1999). Currency regime choice, like the choice between free trade and protection, has domestic distributional consequences.

We begin by examining the strengths and weaknesses of pressure group or "demand-side" approaches to regime choice, which take the distributional consequences of exchange rate regime choice as part of the explanation of its causes. We then introduce "supply-side" considerations, such as the character of domestic political and monetary institutions and the incentives of self-seeking politicians that inhabit them. Although aspects of the link between interests, politics, and policies remain underdeveloped, this literature contains the building blocks of the political economy of regime choice.

Regime choice involves tradeoffs between goals, as discussed above. Arguments that stress the demand for regimes maintain that societal groups have different preferences in the stability-vs-flexibility tradeoff. Recall that one important advantage of fixed rates is that international trade and investment can be conducted with minimal risk of capital losses due to currency fluctuations. The tradeoff is that fixed rates require the subordination of domestic monetary policy to currency and balance-ofpayments considerations. A preliminary framework identifies how social groups align on the stability-vs-flexibility tradeoff (Frieden 1991, Hefeker 1997). In its simplest manifestation, groups are arranged along a continuum that measures the extent to which they are involved in international or domestic economic activity. Groups heavily involved in foreign trade and investment (i.e. producers of exportables, foreign direct and portfolio investors, and international merchants) should favor exchange rate stability, since currency volatility is an everyday concern that makes their business riskier and more costly. By the same token, these actors are relatively insensitive to the loss of monetary autonomy, since they typically conduct business in several countries and can therefore respond to unfavorable domestic macroeconomic conditions by shifting business or assets abroad.

By contrast, groups whose economic activity is confined to the domestic economy benefit from a floating regime. The nontradables sector (e.g. services, construction, transport) and import-competing producers of tradable goods belong in this camp. Producers of nontradables are not required to deal in foreign exchange, since their activities are, by definition, domestic. Thus, they are free of the risks and costs of currency volatility. The nontradables sector is, however, highly sensitive to domestic macroeconomic conditions and therefore favors the national autonomy made possible by floating. The same logic holds for producers of import-competing traded goods, with the added proviso that currency volatility may reduce competition from imports by adding to the risks and costs of importing.

The strength of the pressure group approach is that it yields clear predictions on the regime preferences of social groups in a manner similar to endogenous tariff theory. It also provides the basis for refining predictions. For example, the degree to which an export industry is sensitive to currency volatility will depend on its ability to "pass through" the costs to consumers in the form of price changes. Typically, industries in which product differentiation and reputation are important have less pass-through than producers of standardized goods, in which competition is based primarily on price (Goldberg & Knetter 1997). This implies that producers of internationally traded specialized products will be more concerned

to reduce currency volatility than producers of standardized manufactured goods or commodities, and thus more likely to favor fixed exchange rates.

Pressure group arguments, however, are very difficult to evaluate. One problem is that, unlike trade policy, exchange rate regime decisions are rarely subject to votes in legislatures and hardly ever figure prominently in nationwide electoral outcomes and campaigns. The most systematic work on pressure groups and regime choice looks back over a century to the gold standard controversy for suitable data. In the 1890s, the US Congress voted repeatedly on the choice between the gold and silver standards (Frieden 1997). Similarly, the 1896 US presidential election was a rare nationwide election in which the central issue was the exchange rate regime; William Jennings Byran ran on a platform of monetizing silver and floating the dollar against gold standard currencies (Eichengreen 1995). European monetary integration in the nineteenth century provides a few additional cases (Hefeker 1995). These analyses, controlling for other factors, find that pressure group influences are significantly related to vote outcomes.

The number of cases available for empirical analysis may be increasing, as exchange rates have again gained domestic political prominence in recent years. The renewed salience may be due to the revival of international capital mobility, since capital mobility heightens the "impossible trinity" problem (Frieden 1996). In Europe, the post-Maastricht period was characterized by increasing turmoil and polarization on currency union. In developing countries, regime choice is currently a source of heated policy and electoral debate, and countries are experimenting with a variety of regimes (Edwards & Savastano 1999). The considerable variation of currency regimes in Latin America can be exploited to investigate the influence of interest group pressures. In this context, the credibility-vs-competitiveness tradeoff is especially important because of problems controlling inflation in the region. Consistent with the interest group perspective, economies with larger manufacturing sectors are more prone to adopt either floating regimes or backward-looking crawling pegs, 2 both of which tend to deliver more competitive exchange rates (Frieden et al 2001). The influence of the manufacturing sector on the exchange regime is also found to be more important when trade is relatively open, because liberalized trade subjects manufacturers to greater foreign competition. These findings support the argument that the degree to which policy makers opt to sacrifice credibility to competitiveness is a function of the political influence of tradables producers.

The cross-sectional approach appears promising, even among developed countries, where the tradeoff between stability and flexibility is likely to dominate (Henning 1994, Frieden 2000). However, measuring group preferences and political influence is never easy, and data limitations leave analysts with crude proxies (e.g. a sector's share of gross domestic product as a measure of its influence). An alternative strategy is to take the distributional arguments to the individual level

²In a backward-looking crawling peg, the nominal exchange rate is adjusted mechanically according to past inflation differentials.

of analysis and make use of available public opinion data on regime preferences and voting behavior (Scheve 1999). Scheve finds that asset ownership and high skill endowments are positively related to individuals' expressed level of support for European monetary integration and to their voting behavior in nationwide elections. This connects individual preferences on monetary integration to voting, thus providing a direct test of the distributional implications of the open economy approach.

Despite these advances, it is unlikely that the interest group approach will spawn a literature as deep and rich as analogous work on trade policy. Pressure group activity on exchange rates is more limited than in trade affairs, owing to the macroeconomic nature of exchange rates and associated collective action constraints. Exchange rates have broad distributional effects, which reduce the incentives to lobby. For example, stable exchange rates benefit all industries in the export sector; in contrast, trade protection can be narrowly targeted to create rents for specific industries (Gowa 1988). Exchange rate policy is less excludable than trade policy, implying more free riding (Olson 1971). But just as work on trade has endogenized the free rider problem, so can analysis of currency policy. For example, highly concentrated industries should be more effective lobbyists for exchange rate policies, just as they are in trade policy (Trefler 1993). Although exchange rates may not evince as much lobbying as trade policy, lobbying is possible, even predictable across industries and countries. More attention to collective action considerations would help us develop the links between group preferences, lobbying, and government regime decisions.

Class-Based (Partisan) Approaches to Regime Choice

Inasmuch as exchange rates have broad distributional effects, it makes sense to analyze the politics of regime choice at a broad level of political aggregation. Class-based partisan approaches typify this strategy. Where political parties aggregate the monetary preferences of social classes, centrist and rightist parties are presumed to be more inflation averse than leftist parties (Hibbs 1977). Center-right parties are thus likely to support fixed regimes, since their business constituencies benefit from the credible commitment to low inflation that fixing brings (Simmons 1994, Oatley 1997). By the same token, center-right parties are expected to be enthusiastic about stable exchange rates because of the expansion of trade and investment made possible by fixing. Left-wing parties, by contrast, favor flexible regimes, since labor bears the brunt of adjusting the domestic economy to external conditions (Simmons 1994).

Tests of the partisan arguments have produced mixed and often perverse results. For example, countries with more left-wing representation in government had a *higher* probability of staying on the gold standard during the interwar period than those with less (Simmons 1994, Eichengreen 1992). The reason may be that leftist governments had more need for the credibility that a commitment to gold could bring. However, left-wing governments devalued more frequently, conditioned on a downturn in the business cycle (Simmons 1994). This effect is also evident in

contemporary Europe; leftist parties supported stable exchange rates in the mid-1980s (Garrett 1995, Oatley 1997). More generally, the partisan composition of government had small, weak, and occasionally perverse effects on the stability of European currencies between 1972 and 1994 (Frieden 2000). Another study of OECD countries in the post–Bretton Woods period found no relationship between partisanship and regime choice (Bernhard & Leblang 1999).

Partisan influences on regime choice are thus not straightforward. Indeed, the literature contains a number of factors that condition parties' regime preferences and their political influence. Several of the most important mitigating factors include the degree of capital mobility (Goodman & Pauly 1993); linkage to other issue areas, such as trade, foreign, and agricultural policy (Giavazzi & Giovannini 1989, Frieden 2001); policy makers' beliefs and the role of ideas (Odell 1982, Collins & Giavazzi 1993, McNamara 1998); the centralization of wage bargaining institutions (Hall & Franzese 1998); and the independence of the central bank (Simmons 1994, Oatley 1997). Given the wide range of mitigating factors, it is not surprising that the ideology and influence of political parties vary tremendously among countries. Although this variation makes it difficult to construct generalizations, some of it may be due to analogous variation in electoral and legislative institutions.

Political Institutions and Regime Choice

Various combinations of electoral and legislative institutions can affect the electoral incentives of politicians in governing parties to adopt alternative exchange rate regimes (Bernhard & Leblang 1999). In countries where the stakes in elections are high, politicians might prefer floating exchange rates, so as to preserve the use of monetary policy as a tool for building support before elections (Clark & Hallerberg 2000). This is expected in majoritarian (single-member plurality) electoral systems, where a small swing in votes can lead to a large change in the distribution of legislative seats and to the ouster of the governing party. Electoral stakes are also a function of legislative institutions. In systems with weak, noninclusive committees, the costs of being in the minority are larger than in systems with strong, inclusive committees, since the opposition has little influence over policy. High electoral stakes imply that politicians in "majoritarian-low opposition influence" systems will want a flexible regime to preserve monetary independence, so as to use monetary policy to engineer favorable (if temporary) macroeconomic conditions before elections. In contrast, where elections are not as decisive—as in systems with proportional representation and strong, inclusive committees—fixed exchange rates impose lower electoral costs on politicians, implying that fixed regimes are more likely to be chosen.

A related argument concerns the timing of elections, which in some systems is determined endogenously by the government and in others is predetermined. When election timing is predetermined, governing parties are loath to surrender monetary policy flexibility by pegging, since monetary policy can be a valuable tool for winning elections. In contrast, when election timing is endogenous, there is less

need to maintain monetary flexibility for electoral purposes; hence pegging is more likely (Bernhard & Leblang 1999). These arguments and the supporting evidence suggest that the structure of democratic institutions shapes the regime preferences of politicians and governing parties, so much so that it dominates the influence of partisanship on regime choice. This approach, however, seems to be restricted to developed countries, where democratic structures are well established and stable, and where partisanship typically has a class basis. In developing countries, it may be the extent of democracy rather than its specific form that matters.

Political regime type (democratic to authoritarian) is in fact highly correlated with exchange rate regime choice in developing countries (Leblang 1999, Broz 2000). Nondemocratic systems are significantly more likely to adopt a fixed regime for credibility purposes than are democratic countries. Why authoritarian governments prefer pegs as a means to lower inflation is a matter of debate. Autocratic governments may peg because they are more insulated from domestic audiences and thus bear lower political costs of adjusting the economy to the peg (Simmons 1994, Leblang 1999). That is, lower political costs ex post increase the likelihood that autocracies will choose a peg ex ante. A weakness of the argument is that pegging is an inefficient means of generating credibility, given the availability of alternatives, such as central bank independence (CBI), that do not require a loss of exchange rate policy flexibility and that appear effective at reducing inflation (see Alesina & Summers 1993, Debelle & Fischer 1994, as compared to Ghosh et al 1997, on the relative inefficiency of currency pegs). An authoritarian regime that is insulated enough to maintain a peg would surely be capable of adopting an independent central bank, which would seem likely to improve inflation performance at a lower cost.

A competing argument is that the transparency of a pegged regime makes it a preferred commitment technology in authoritarian systems (Broz 2000). When political decision making is not transparent, as in autocracies, governments must look to a commitment technology that is more transparent and constrained (pegged exchange rates) than the government itself. For autocratic governments, a highly visible commitment substitutes for the lack of openness in the political system to engender low inflation expectations. In the case of legal CBI—an opaque commitment—democratic institutions provide an alternate source of transparency. For democracies, an opaque commitment such as CBI is rendered transparent indirectly through active monitoring by the media, inflation hawks in society, and the political opposition—audiences with stakes in exposing the government's broken promises (Wittman 1989, Fearon 1994). Autocracies are thus more likely to adopt pegs than are democracies. In addition, the effectiveness of CBI in limiting inflation is conditioned on the level of political system transparency (Broz 2000). This suggests that the transparency of the monetary commitment and the transparency of the political system are substitutes. It also challenges the view that fixed regimes and CBI are complementary commitment mechanisms (Simmons 1994, Maxfield 1997).

Although there is no consensus on the role of politics in exchange rate regime choices, it is recognized that considerations of aggregate social welfare provide a partial explanation at best. Regime decisions involve tradeoffs with domestic distributional and electoral implications; thus, selecting an exchange rate regime is as much a political decision as an economic one.

To Appreciate or Depreciate?

If a nation's regime lies between a pure float and an irrevocable peg on the regime continuum, its policy makers face choices about the desired level of the exchange rate. Completely free floats are in fact rare, for most governments act to reduce currency volatility even when the exchange rate is not publicly fixed. By the same token, countries that opt for a pegged regime always have the choice of abandoning the peg (Calvo & Reinhart 2000). Thus, under most regimes, a government must decide whether it prefers a relatively appreciated or a relatively depreciated currency. A full analysis of the costs and benefits involved in choosing the level of the exchange rate depends on the model of exchange rate determination to which one subscribes (portfolio balance, overshooting, new classical, speculative bubble, etc). For simplicity, we consider the tradeoff between competitiveness and purchasing power as especially crucial to the calculations of national policy makers.

The value of the real exchange rate affects the demand for domestic traded goods in both local and foreign markets. In the case of a real appreciation, domestic goods become more expensive relative to foreign goods; exports fall and imports rise as a result of the change in competitiveness. Real depreciation has the opposite effects, improving competitiveness. Real exchange rate changes sometimes stem from deliberate policy actions (see above). These policies are known as expenditure-switching policies because they alter the allocation of spending between domestic and foreign goods (equivalently, between traded and nontraded goods). Although a weaker currency increases the competitiveness of the international sector, it also raises the prices of foreign goods and services to domestic consumers, thereby eroding national purchasing power. If a nation imports many vital items, such as oil, food, or capital goods, depreciation can reduce living standards and retard economic growth, as well as cause inflation.

Beyond considerations based on the tradeoff between competitiveness and purchasing power, there is little agreement on what the appropriate level of the exchange rate should be. A real depreciation, for example, can encourage exports and a switch from imports to domestic goods, thereby boosting aggregate output. However, depreciation can also be contractionary, owing to its negative impact on real money balances that follows from a higher price level. Suffice it to say that changes in real exchange rates unleash a series of changes in economic relations, some positive and some negative, and the net effect on overall national welfare is very hard to calculate.

Interest Groups and the Level of the Exchange Rate

Despite this ambiguity, it is clear that the level of the exchange rate always has distributive consequences domestically, implying a role for interest group politics. Exporting and import-competing industries lose and domestically oriented

(nontradables) industries gain from currency appreciation (Frieden 1991). Domestic consumers also gain as the domestic currency price of imported goods falls, lowering the cost of living. Currency depreciations have the opposite effects, helping exporting and import-competing industries at the expense of domestic consumers and producers of nontraded goods and services.

Like regime decisions, the currency preferences and political capabilities of groups are conditioned by many factors. For example, the degree to which tradables producers are directly affected by changes in the exchange rate conditions their sensitivity to currency movements. If import-competing firms faced by an appreciation of the home currency are able to keep their prices high—typically because foreign producers do not in fact pass the expected price decline through to local consumers—they will be less concerned by such an appreciation (this is typically the case in markets for specialized, highly differentiated products, such as automobiles).

Generally speaking, tradables industries with high pass-through are more sensitive to the relative price effects of currency movements than those with low pass-through, since their prices respond more directly to changes in exchange rates. By extension, the level of the exchange rate is likely to be more politicized in developing countries than in developed countries, since the former tend to produce standardized goods and primary commodities, for which pass-through is high. The extent to which an industry relies on imported intermediate inputs will also determine whether it is harmed or helped by appreciation. An industry with heavy dependence on imported inputs relative to export revenue may actually see its profitability improve with appreciation (Campa & Goldberg 1997).

Within this complex range of possibilities, there are regularities that can be identified. These are related to points made above about regime preferences. For example, the argument that producers of simple tradables are relatively insensitive to currency volatility complements the argument that they are very sensitive to the level of the exchange rate. Such producers (of commodities and simple manufactures) will prefer a flexible regime and a tendency toward a depreciated currency. On the other hand, the argument that producers of complex and specialized tradables are very sensitive to currency volatility complements the argument that they are relatively insensitive to the level of the exchange rate. These producers will prefer a fixed regime. Capturing an industry's (or an entire nation's) sensitivity to exchange rate changes involves measuring the extent to which it sells products to foreign markets, uses foreign-made inputs, and, more indirectly, competes with foreign manufacturers on the basis of price (Frieden et al 2001).

In most instances, interest group activity on the level of the exchange rate is episodic and asymmetric. By episodic, we mean that it can take extraordinary conditions to move group members to organize on the issue. The 50% real appreciation of the dollar in the early and middle 1980s is a case where traded goods industries lobbied hard for policies to depreciate the dollar (Destler & Henning 1989, Frankel 1994). The rarity of such cases is partially understandable in collective action terms, as lobbying for depreciation is a public good for the entire traded goods

sector. By asymmetric, we mean that lobbying from the "winners" of real appreciation (nontradables, consumers) does not usually arise to counteract pressure from the "losers." That is, the groups that enjoy income gains from appreciation do not seem to mobilize politically. Consumers, of course, face high costs of collective action, and the same constraint may apply to the nontradables sector (Henning 1994). But using the rule of thumb that advanced economies are divided roughly equally between tradables and nontradables, the barriers to collective action should be symmetric.

Why we do not observe symmetric lobbying (or non-lobbying) on the exchange rate is a puzzle. The reason might be that tradables producers have the advantage of prior organization, having paid the startup costs to influence trade policy. A related point is that traded goods industries have the option of lobbying for industry-specific trade policies when the currency appreciates. Note that currency policy and trade policy are close substitutes in terms of the compensation they provide: A 10% real depreciation is equivalent to a 10% import tax plus a 10% export subsidy (McKinnon & Fung 1993). Hence, the tradables sector can organize on an industry-by-industry basis to seek trade barriers or export subsidies, thus mitigating the free rider problem (Stallings 1993). In practice, policy makers do seem to address currency misalignments when demands for protection intensify (Destler & Henning 1989). For the nontradables sector, trade policies are not available, rendering lobbying for currency policies a sector-wide public good. An implication is that the bias in favor of tradables should diminish when free trade or international agreements restrict the ability of governments to use trade policy as a compensatory instrument. Take away trade policy and neither sector organizes. However, liberalizing trade might motivate previously organized traded goods industries to lobby on the exchange rate directly (Frieden et al 2001).

Political Institutions and the Level of the Exchange Rate

Direct interest group activity on the level of the exchange rate is muted, for the distributional effects are very broad based. Indeed, the cleavages implied by the competitiveness—vs—purchasing-power tradeoff map to interest groups only under an expansive definition of the concept (or, as above, when we introduce links to other policies). A class-based partisan approach is not much help, since the distributional effects of the real exchange rate on profits and wages cut across sector (tradables vs nontradables) and not factor (labor vs capital) lines. That is, a strong currency harms workers and capital employed in the traded goods sector and benefits factors engaged in the production of nontradables. There is thus little reason to believe that class-based political parties will find common ground on the preferred level of the exchange rate. More generally, the absence of class cleavages may distinguish currency level politics from currency regime politics.

Whatever the nature of interest group and partisan political pressures on the level of the exchange rate, elections and voting are likely to be of recurrent importance. A voluminous literature on "economic voting" provides robust support for the

proposition that good macroeconomic conditions keep politicians in office whereas bad times cast them out (Lewis-Beck & Stegmaier 2000). The real exchange rate affects broad aggregates such as purchasing power, growth rates, and the price level—the stuff of national elections. Put another way, the macroeconomic effects of the real exchange rate may map closely to electoral processes, the broadest form of political aggregation.

Consumer/voters care about their purchasing power and inflation. Since voting is a low-cost activity, politicians are sure to be concerned with the electoral consequences of the exchange rate. Indeed, governments tend to maintain appreciated currencies before elections, delaying the necessary depreciation/devaluation until after the election (Klein & Marion 1997, Leblang 2000, Frieden et al 2001). An "exchange rate electoral cycle" gives a boost to voters' income in the run-up to an election and imposes costs on voters only after the government is in office. The delay results in a depreciation that is larger (more costly) than if it had occurred immediately, but newly elected governments appear to follow the rule of "devalue immediately and blame it on your predecessors" (Edwards 1994).

The role of electoral cycles in exchange rate policy helps explain some characteristics of the currency crises that have been common over the past 20 years. Although the causes of currency crises are controversial (Corsetti et al 1998), delaying a devaluation certainly makes the problem worse. Given the expected political unpopularity of a devaluation-induced reduction in national purchasing power, however, governments may face strong incentives to avoid devaluing even when the result is a more severe crisis than would otherwise be expected. In Mexico, for example, the attempt to delay a devaluation of the peso until after the 1994 election almost certainly led to a far more drastic collapse of the currency than would have been the case without the electorally driven delay. As it became clear that the government was manipulating the exchange rate for political purposes, investors sold off the peso in droves, for the government's exchange rate promises had lost all credibility. This run on the peso in turn called into question the credibility of other Latin American currency pegs, creating negative externalities for the region.

The electoral cycle is likely to be muted in countries where the central bank has sufficient insulation from political pressures or the government has a time horizon long enough to endogenize the higher costs of delayed action on the exchange rate. Where an independent central bank is in charge of exchange rate policy, the pursuit of price stability implies that politicians will be less able to manipulate the exchange rate for electoral purposes (Clark & Reichert 1998). Likewise, a government that expects to be in the majority across elections may have less incentive to exploit the short-term gains of real appreciation. The point is that political institutions condition the extent to which politicians have the capacity and/or the incentive to act on their short-run electoral goals, at the expense of macroeconomic stability and the competitiveness of their economies (Henning 1994).

The real exchange rate has international as well as domestic distributional consequences and thus plays an important role in international economic policy making.

Increasing the competitiveness of the domestically produced goods sector by depreciating the currency necessarily means reducing the competitiveness of foreign goods. The use of the exchange rate to gain a competitive advantage, of course, cannot work when other countries retaliate with similar depreciations, as happened during the Great Depression. This is but one of many instances in which the domestic impact of national currency policy depends on the character of interstate monetary relations. This implies a direct connection between national exchange rate policies and the state of the international monetary system, to which we now turn.

THE INTERNATIONAL POLITICAL ECONOMY OF EXCHANGE RATE POLICY

The above analysis of national policies has left aside the important question of how to explain the development of global or regional monetary systems. Perhaps more than any other economic area, national exchange rate policies depend on those of other nations.³ This is certainly true with regard to the level of the nominal exchange rate, which is after all only meaningful in relationship to other countries' nominal exchange rates. Another basic limitation of national analyses is that they do not take into account the nature of the international monetary system. This is especially the case when countries are faced with the choice of a fixed or flexible regime for national currencies, since fixing is a fundamentally different enterprise in the context of a global fixed-rate system than in the context of generalized floating. In the former case, such as under the gold standard or Bretton Woods, choosing whether or not to fix was tantamount to choosing whether or not to participate in a worldwide monetary order. A similar consideration applies to broad regional fixed-rate arrangements, such as the various monetary integration schemes of the European Union after 1973, or the Latin and Scandinavian monetary unions before 1914. Conversely, when the world monetary system is one of floating currencies, a national choice to fix the exchange rate is principally available to small countries that want to lock their currencies into step with their principal trading and investment partner, as many small Caribbean countries have done with the United States for decades. Especially given the analytical and empirical importance of international fixed-rate systems, it is important to investigate the reasons for their origins and evolution.

Generally speaking, three interrelated factors affect the evolution of international monetary systems. The first are the sorts of national policy choices discussed above, especially in the principal members of the system. The second are

³We are reminded of the remark attributed—apocryphally, no doubt—to a provincial American policy maker, who angrily told European complainers, "You worry about your exchange rates, we'll worry about ours!"

global economic factors that may affect global monetary relations, such as trends in the international economy (growth, stagnation, crisis) and the state of international trade and payments. Third are purposive relations among states, including strategic interaction among governments, driven by their national concerns and constrained by the international environment.

In this section, we focus on this third set of factors, the interaction among states' international monetary policies. Such interaction can be thought of as involving coordination among national government policies and/or cooperation among them, which is more complex. By coordination, we mean interaction among governments whose principal challenge is for national policies to converge on a focal point, for which the mutual adjustment of policies is unnecessary—such as simply choosing to link national currencies to gold or to the dollar. This implies the existence of a Pareto-improving Nash equilibrium (often more than one), as is the case in a Battle of the Sexes game—countries benefit from choosing the same currency regime, although there may be disagreement over which one to choose. By cooperation, we mean interaction in which national policies must be adjusted consciously to support each other—such as joint intervention in currency markets to support mutually agreed-on exchange rates. This implies the existence of a Pareto-inferior Nash equilibrium, which can be improved on (i.e. to a Nash bargaining solution), as is the case in a Prisoners' Dilemma game—countries can work together to improve their collective and individual welfare. The two problems are not mutually exclusive, or even strikingly different; indeed, the resolution of one usually presupposes the resolution of the other. But for purposes of analysis it is helpful to separate the idea of a fixed-rate system as a focal point, for example, from the idea that its sustainability requires deliberately cooperative policies.

Coordination in International Monetary Relations

An international or regional fixed-rate regime, such as the gold standard or the European Monetary System, has important characteristics of a focal point around which national choices can be coordinated (Frieden 1993). As a focal point, a fixed-rate system can be self-reinforcing; the more countries that were on gold, or that tied their currencies to the Deutsche mark, the greater the incentive for other countries with significant commercial and financial ties to go down this path. Coordination here is particularly important as an ever larger monetarily integrated trading and investment area provides ever greater opportunities to other countries that might consider joining. This can be the case even if the motivations of countries differ. One might particularly appreciate the monetary stability of a fixed rate, another the reduction in currency volatility. It does not matter, so long as the attractions of the regime increase with its membership (Broz 1997).

Most fixed-rate regimes do appear to grow in this way. This was certainly the case of the pre-1914 gold standard, which owed its start to the centrality of gold-standard Britain to the nineteenth-century international economy and owed its eventual global reach to the gradual accession of other major industrial nations to the British-led system. The same kind of growth characterized the process of

European monetary integration, in which the Deutsche mark zone of Germany, Benelux, and Austria gradually attracted more and more European members. It should be noted, however, that just as the focal nature of a fixed-rate system can lead to a "virtuous circle" as more and more countries sign on, so too can the unraveling of the regime lead to a "vicious circle." The departure of any important commercial or financial centers from the system can dramatically reduce its centripetal pull, as was the case with the collapse of the gold standard in the 1930s. Britain's exit began a stampede that led virtually the entire rest of the world off gold within a couple of years. To some extent, then, the gold standard, Bretton Woods, and other such international and regional monetary regimes represent simple solutions to a coordination problem.

Cooperation in International Monetary Relations

International monetary relations may require more than simple convergence around a visible anchor and indeed may call for the resolution of more serious problems of cooperation. In other words, fixed-rate systems may only be stable when governments actively choose to cooperate with one another. A fixed-rate system may, in fact, give governments incentives to cheat, such as to devalue for competitive purposes while taking advantage of other countries' commitment to monetary and currency stability. Such a system would not be stable should such free riding overcome attempts at coordination. By the same token, even a system as simple as the gold standard might have relied on explicit or implicit agreements among central gold currency countries to support each others' monetary authorities in times of difficulty. An enduring monetary system, in this view, thus requires explicit cooperation at least among its principal members.

The problem is a familiar one, in which there are international gains from cooperation but potential national costs. It is useful to identify explicitly both the welfare gain associated with international collaboration and the issues over which nations are likely to disagree. In the international monetary realm, the gains from a stable system of fixed rates are several. First, reduced currency volatility almost certainly increases the level of international trade and investment. Second, fixed rates tend to stabilize domestic monetary conditions, so that international monetary stability reinforces (and may even increase) domestic monetary stability. Third, predictable currency values can reduce international trade conflicts—for a rapid change in currency values, particularly the appreciation of one currency against others, often leads to an import surge, then protectionist pressures, and eventually commercial antagonism.

But, as discussed above, commitment to a fixed exchange rate has costs, and the form of the international monetary regime affects these costs. The principal

⁴The status of this problem is somewhat ambiguous. After all, a country that devalues is reducing its purchasing power. However, it is not difficult to imagine that governments are concerned about the competitiveness of their tradables producers, in the context of which a unilateral devaluation can be tantamount to cheating.

cost is that the government cannot use the exchange rate to affect the domestic economy; it must, so to speak, adjust the economy to fit the exchange rate. The most common source of international conflict in this regard has to do with the international distribution of adjustment costs. For example, under Bretton Woods and the European Monetary System, one country's currency served as the system's anchor or key currency. This forced other countries to adapt their monetary policies to the anchor country's and led to pressures from the other governments on the key-currency government to bring its policy more in line with conditions elsewhere. Under Bretton Woods, from the late 1960s until the system collapsed, European governments wanted the United States to implement more restrictive policies to bring down American inflation, while the US government refused. In the European Monetary System in the early 1990s, governments in the rest of the European Union wanted the Germans to implement less restrictive policies to combat the European recession, but the German central bank refused. This conflict between the attempts of the anchor country and others to shift the burden of adjustment has been a common theme of international and regional currency systems and the source of much acrimony. Generally speaking, closer countries come to agreement about the distribution of the costs of adjustment, the more likely they are to create and sustain a common fixed-rate regime (on closely related problems of international macroeconomic policy coordination, see Espinosa & Yip 1993).

Historical analyses tend to support the idea that the success or failure of intergovernmental cooperation has been crucial to the durability of fixed-rate international and regional monetary systems. Eichengreen's (1992) magisterial study of the interwar gold standard points explicitly to the centrality of international cooperation based on credible domestic political support. Such cooperative activities might include lending by the Bank of France to the Bank of England in the event of pressure on the pound sterling or the coordination of monetary policy measures in a time of international financial distress. Credible cooperation among the major powers before 1914 was the foundation stone of the classical gold standard, according to Eichengreen, and its absence explains the failure of the feeble interwar attempts to revive the gold standard. Many regional monetary unions, too, seem to obey this logic. Where political and other factors have encouraged cooperative behavior to safeguard the common commitment to fixed exchange rates, the systems have endured, but in the absence of these cooperative motives, they have decayed (Cohen 2001).

This raises the question of what stimulates cooperation on exchange rate issues. Cooperation is stimulated within the specifics of international monetary relations by much the same factors as elsewhere in international politics (Willett 1999, Simmons 2000). One factor is a shared interest in currency stability. A major reason for the collapse of the Bretton Woods system was that American policy makers simply were much less concerned about the effects of exchange rate volatility than

⁵For the view that cooperation was not central to the gold standard, see Gallarotti (1995).

Europeans were. A second factor is linkage to other policies. The existence of cooperative ventures outside the monetary realm can stimulate currency cooperation. It is in fact doubtful that Economic Monetary Union (EMU) would have been possible had it not been part of a broader process of European integration (Garrett 2001, Martin 2001). A third, often related, factor is the institutionalized nature of interstate cooperation. Formal or informal mechanisms for governments to work out their monetary differences appear to be associated with greater cooperation. A fourth factor is numbers—the presence of a small group of large states willing and able to take the lead in monetary relations has been common to most successful fixed-rate orders, whether during the gold standard, Bretton Woods, or any number of regional systems. A final factor is environmental economic conditions. Most cooperative monetary arrangements have been sorely taxed by recurrent or protracted macroeconomic downturns.

It should be kept in mind that the relevant level of international monetary cooperation in many instances may be regional rather than global. There have been at least three distinctive global monetary regimes, whose emergence, evolution, and demise are all worth explaining. But there have been many more formal or informal regional monetary regimes, and they have had varying degrees of success, from the Latin Monetary Union of the nineteenth century to the East African Community of the 1960s and 1970s. Proposals for new regional currency arrangements have proliferated in recent years, with the successful establishment of EMU the most prominent example. Analysis of such international monetary ventures requires attention to the focal-point nature of fixed-rate systems, to the welfare gains such a system provides and the distributional effects it implies, and to the factors widely understood to affect interstate cooperation more generally.

Two of the most recent such regime-related topics, EMU in Europe and ongoing debates over dollarization in Latin America, illustrate the operation of these international factors. Dollarization appears to raise ideal-typical coordination issues, as national governments consider independent choices to adopt the US dollar. The United States has indeed explicitly ruled out any meaningful cooperation with dollarizing governments. The principal attraction for potential dollarizers is association with large and dynamic dollar-based capital and goods markets; and the more countries dollarize, the greater this attraction will be. On the other hand, although the course of EMU from 1973 to completion did have features of a focal point, especially in the operation of the European Monetary System as a Deutsche mark bloc, the more complex bargained resolution of the transition to EMU went far beyond this. This bargaining solution involved mutual, indeed unanimous, agreement on the structure of the new European Central Bank, the national macroeconomic policies necessary for membership in the monetary union, and a host of other considerations. These difficult bargains were unquestionably made much easier by the small number of central players (arguably only Germany and France), the highly institutionalized EU environment, and the complex network of policy linkages between EMU and other European initiatives.

CONCLUSIONS

Until recently, scholarly analysis of the political economy of national exchange rate policies and of international monetary relations lagged far behind their political and economic importance. Over the past decade, however, substantial progress has been made in understanding why governments pursue the currency policies they do, and why regional and international currency regimes emerge and evolve. Many of these advances build on preexisting work on the political economy of international trade and investment, but others come specifically from the study of international monetary politics.

At the domestic level, we now have a reasonably well-developed set of arguments about the economic interests at stake and about how political institutions affect currency policy choice. The theoretical and empirical status of these arguments remains undecided, but together they constitute an emerging body of scholarship with clear dependent and candidate explanatory variables. At the international level, the study of global and regional monetary regimes has incorporated developments in the analysis of international cooperation, using them to explain the ebb and flow of such systems over the past two centuries.

Future research on the political economy of international monetary relations has to confront several challenges. First, it needs to clarify and work toward resolution of the various theoretical and empirical ambiguities in existing scholarship. Second, it needs to work toward an integration of the international and domestic sources and effects of exchange rate policy, for the two are integrally interrelated. Third, in concert with research in other areas of political economy, it needs to incorporate the impact of such closely related issue areas as trade and financial policy on international monetary affairs. These are substantial challenges, but the past decade has seen impressive progress in the study of international monetary policy, and there is no reason to doubt that the coming decades will be just as fruitful.

ACKNOWLEDGMENTS

The authors acknowledge the helpful comments of Marc Busch, Benjamin J Cohen, Randall Henning, Lisa Martin, and Andrew Rose.

Visit the Annual Reviews home page at www.AnnualReviews.org

LITERATURE CITED

Alesina A, Summers LH. 1993. Central bank independence and macroeconomic performance: some comparative evidence. *J. Mon. Cred. Bank.* 25:151–62

Barro RJ, Gordon D. 1983. Rules, discretion,

and reputation in a model of monetary policy. *J. Mon. Econ.* 12:101–22

Bernhard W, Leblang D. 1999. Democratic institutions and exchange-rate commitments. *Int. Organ.* 53:71–97

- Broz JL. 1997. The domestic politics of international monetary order: the gold standard. In *Contested Social Orders and International Politics*, ed. D Skidmore, pp. 53–91. Nashville, TN: Vanderbilt Univ. Press
- Broz JL. 2000. *Political system transparency* and monetary commitment regimes. Presented at Annu. Meet. Am. Polit. Sci. Assoc., Washington, DC
- Calvo GA, Reinhart CM. 2000. Fear of floating. Natl. Bur. Econ. Res. Work. Pap. No. 7993
- Campa J, Goldberg L. 1997. The evolving external orientation of manufacturing: a profile of four countries. Fed. Reserv. Bank NY Econ. Pol. Rev. 3:53–70
- Canavan C, Tommasi M. 1997. On the credibility of alternative exchange rate regimes. J. Dev. Econ. 54:101–22
- Clark WR, Hallerberg M. 2000. Mobile capital, domestic institutions, and electorally induced monetary and fiscal policy. Am. Polit. Sci. Rev. 94:323–46
- Clark WR, Reichert U. 1998. International and domestic constraints on political business cycles in OECD economies. *Int. Organ.* 52:87– 120
- Cohen BJ. 1977. Organizing the World's Money. New York: Basic
- Cohen BJ. 2001. Beyond EMU: the problem of sustainability. See Eichengreen & Frieden 2001, pp. 179–204
- Collins S, Giavazzi F. 1993. Attitudes toward inflation and the viability of fixed exchange rates. In A Retrospective on the Bretton Woods System, ed. M Bordo, B Eichengreen, pp. 547–77. Chicago: Univ. Chicago Press
- Cooper RN. 1968. *The Economics of Interde*pendence. New York: McGraw-Hill
- Corsetti G, Pesenti P, Roubini R. 1998. What caused the Asian currency and financial crisis? Parts I and II. Natl. Bur. Econ. Res. Work. Pap. Nos. 6833 and 6844
- Debelle G, Fischer S. 1994. How independent should the central bank be? In *Goals*, *Guidelines*, *and Constraints Facing Monetary Policymakers*, ed. JC Fuhrer, pp.

- 195–221. Boston, MA: Fed. Reserv. Bank Boston
- Destler IM, Henning CR. 1989. *Dollar Politics:* Exchange Rate Policymaking in the United States. Washington, DC: Inst. Int. Econ.
- Edison H, Melvin M. 1990. The determinants and implications of the choice of an exchange rate system. In *Monetary Policy for a Volatile Global Economy*, ed. W Haraf, T Willett, pp. 1–50. Washington, DC: Am. Enterp. Inst.
- Edwards S. 1994. The political economy of inflation and stabilization in developing countries. *Econ. Dev. Cult. Change* 42(2)
- Edwards S. 1999. How effective are capital controls? *J. Econ. Perspect.* 13:65–84
- Edwards S, Savastano M. 1999. Exchange rates in emerging economies. Natl. Bur. Econ. Res. Work. Pap. No. 7228
- Eichengreen B. 1992. *Golden Fetters*. Oxford, UK: Oxford Univ. Press
- Eichengreen B. 1995. The endogeneity of exchange rate regimes. In *Understanding Interdependence*, ed. P Kenen, pp. 3–33. Princeton, NJ: Princeton Univ. Press
- Eichengreen B, Frieden J, eds. 2001. The Political Economy of European Monetary Unification. Boulder, CO: Westview. 2nd ed. In press
- Espinosa M, Yip CK. 1993. International policy coordination: Can we have our cake and eat it too? *Fed. Reserv. Bank Atlanta Econ. Rev.* 78:1–12
- Fearon JD. 1994. Domestic political audiences and the escalation of international disputes. *Am. Polit. Sci. Rev.* 88:577–92
- Frankel JA. 1994. The making of exchange rate policy in the 1980s. In *American Economic Policy in the 1980s*, ed. M Feldstein, pp. 293–341. Chicago: Univ. Chicago Press
- Frankel JA. 1995. Monetary regime choice for a semi-open economy. In *Capital Controls*, *Exchange Rates and Monetary Policy in the World Economy*, ed. S Edwards, pp. 35–69. Cambridge, UK: Cambridge Univ. Press
- Frankel JA. 1999. No single currency regime is right for all countries or at all times. *Essays Int. Econ.* No. 215, Princeton Univ. Press

- Frieden J. 1991. Invested interests: the politics of national economic policy in a world of global finance. *Int. Organ.* 45:425–51
- Frieden J. 1993. The dynamics of international monetary systems: international and domestic factors in the rise, reign, and demise of the classical gold standard. In *Coping with Complexity in the International System*, ed. R Jervis, J Snyder. Boulder, CO: Westview
- Frieden J. 1996. Economic integration and the politics of monetary policy in the United States. In *Internationalization and Domestic Politics*, ed. RO Keohane, HV Milner, pp. 108–36. Cambridge, UK: Cambridge Univ. Press
- Frieden J. 1997. Monetary populism in nineteenth-century America: an open economy interpretation. J. Econ. Hist. 57:367–95
- Frieden J. 2000. The political economy of European exchange rates: an empirical assessment. Unpubl. pap.
- Frieden J. 2001. Making commitments: France and Italy in the European Monetary System, 1979–1985. See Eichengreen & Frieden 2001, pp. 23–48
- Frieden J, Ghezzi P, Stein E. 2001. Politics and exchange rates: a cross-country approach to Latin America. In *The Currency Game: Exchange Rate Politics in Latin America*, ed. J Frieden, E Stein. Baltimore, MD: Johns Hopkins Univ. Press. In press
- Gallarotti G. 1995. The Anatomy of an International Monetary Regime: The Classical Gold Standard, 1880–1914. New York: Oxford Univ. Press
- Garrett G. 1995. Capital mobility, trade, and the domestic politics of economic policy. *Int. Or*gan. 49:657–87
- Garrett G. 2001. The politics of Maastricht. See Eichengreen & Frieden 2001, pp. 111–30
- Ghosh A, Gulde AM, Ostry JA, Wolf HC. 1997.
 Does the nominal exchange rate regime matter? Natl. Bur. Econ. Res. Work. Pap. No. 5874
- Giavazzi F, Giovannini A. 1989. Limiting Exchange Rate Flexibility. Cambridge, MA: MIT Press

- Giavazzi F, Pagano M. 1988. The advantage of tying one's hands: EMS discipline and central bank credibility. *Eur. Econ. Rev.* 32:1055–75
- Goldberg PK, Knetter MM. 1997. Goods prices and exchange rates: What have we learned? J. Econ. Lit. 35:1243–72
- Goodman JB, Pauly LW. 1993. The obsolescence of capital controls? World Polit. 4:50–82
- Gowa J. 1983. Closing the Gold Window: Domestic Politics and the End of Bretton Woods. Ithaca, NY: Cornell Univ. Press
- Gowa J. 1998. Public goods and political institutions: trade and monetary policy processes in the United States. *Int. Organ.* 42:15–32
- Hall PA, Franzese R. 1998. Mixed signals: central bank independence, coordinated wage-bargaining, and European Monetary Union. Int. Organ. 52:505–36
- Hefeker C. 1995. Interest groups, coalitions and monetary integration in the nineteenth century. *J. Eur. Econ. Hist.* 24:489–536
- Hefeker C. 1997. *Interest Groups and Monetary Integration*. Boulder, CO: Westview
- Henning CR. 1994. Currencies and Politics in the United States, Germany, and Japan. Washington, DC: Inst. Int. Econ.
- Herrendorf B. 1999. Transparency, reputation, and credibility under floating and pegged exchange rates. J. Int. Econ. 49:31–50
- Hibbs D. 1977. Political parties and macroeconomic policy. *Am. Polit. Sci. Rev.* 71:1467–87
- Kenen P. 1969. The theory of optimum currency areas. In *Monetary Problems in the Interna*tional Economy, ed. R Mundell, A Swoboda. Chicago: Univ. Chicago Press
- Kindleberger C. 1970. Power and Money: the Economics of International Politics and the Politics of International Economics. New York: Basic Books
- Klein M, Marion N. 1997. Explaining the duration of exchange-rate pegs. J. Dev. Econ. 54:387–404
- Kydland FE, Prescott EC. 1977. Rules rather than discretion: the inconsistency of optimal plans. *J. Polit. Econ.* 85:473–92

- Leblang D. 1999. Democratic political institutions and exchange rate commitments in the developing world. *Int. Stud. Q.* 43:599–620
- Leblang D. 2000. To devalue or defend: the political economy of exchange rate policy. Presented at Annu. Meet. Am. Polit. Sci. Assoc., Washington, DC
- Lewis-Beck MS, Stegmaier M. 2000. Economic determinants of electoral outcomes. *Annu. Rev. Polit. Sci.* 3:183–219
- Marston RC. 1995. *International Financial Integration*. Cambridge, UK: Cambridge Univ. Press
- Martin L. 2001. International and domestic institutions in the EMU process and beyond. See Eichengreen & Frieden 2001, pp. 131–55
- Maxfield S. 1997. Gatekeepers of Growth: The International Political Economy of Central Banking in Developing Countries. Princeton, NJ: Princeton Univ. Press
- McKinnon RI. 1962. Optimum currency areas. *Am. Econ. Rev.* 53:717–25
- McKinnon RI, Fung KC. 1993. Floating exchange rates and the new interbloc protectionism. In *Protectionism and World Welfare*, ed. D Salvatore, pp. 221–44. Cambridge, UK: Cambridge Univ. Press
- McNamara K. 1998. The Currency of Ideas: Monetary Politics in the European Union. Ithaca, NY: Cornell Univ. Press
- Milner HV. 1999. The political economy of international trade. *Annu. Rev. Polit. Sci.* 2:91–114
- Mishkin FS. 1999. *International experiences* with different monetary policy regimes. Natl. Bur. Econ. Res. Work. Pap. No. 7044
- Mundell RA. 1961. A theory of optimum currency areas. *Am. Econ. Rev.* 51:657–64
- Mundell R. 1962. The appropriate use of monetary and fiscal policy under fixed exchange rates. IMF Staff Pap. No. 9. Washington, DC: Int. Monet. Fund
- Mundell R. 1963. Capital mobility and stabilization policy under fixed and flexible

- exchange rates. Can. J. Econ. Polit. Sci. 29:475–85
- Oatley T. 1997. Monetary Politics: Exchange Rate Cooperation in the European Union. Ann Arbor: Univ. Mich. Press
- Obstfeld M, Rogoff K. 1995. The mirage of fixed exchange rates. *J. Econ. Perspect.* 9:73–96
- Odell JS. 1982. U.S. International Monetary Policy: Markets, Power, and Ideas as Sources of Change. Princeton, NJ: Princeton Univ. Press
- Olson M. 1971. *The Logic of Collective Action*. Cambridge, MA: Harvard Univ. Press
- Rose A. 2000. One money, one market: estimating the effect of common currencies on trade. *Econ. Pol.* 30:7–46
- Scheve K. 1999. European economic integration and electoral politics in France and Great Britain. Presented at Annu. Meet. Am. Polit. Sci. Assoc., Atlanta, GA
- Simmons B. 1994. *Who Adjusts?* Princeton, NJ: Princeton Univ. Press
- Simmons B. 2000. International law and state behavior: commitment and compliance in international monetary affairs. Am. Polit. Sci. Rev. 94:819–35
- Stallings DA. 1993. Increased protection in the 1980s: exchange rates and institutions. *Public Choice* 77:493–521
- Strange S. 1971. Sterling and British Policy: A Political Study of an International Currency in Decline. London: Oxford Univ. Press
- Taylas G. 1994. The theory of monetary integration. *Open Econ. Rev.* 5:211–30
- Trefler D. 1993. Trade liberalization and the theory of endogenous protection. *J. Polit. Econ.* 101:138–60
- Vegh CA. 1992. Stopping high inflation: an analytical overview. IMF Staff Pap. 39. Washington, DC: Int. Monet. Fund
- Willett TD. 1999. Developments in the political economy of policy coordination. *Open Econ. Rev.* 10:221–53
- Wittman D. 1989. Why democracies produce efficient results. *J. Polit. Econ.* 97:1395–424