The Political Economy of Exchange Rates

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It is a commonplace of macroeconomics that the exchange rate is the most important price in any economy, for it affects all other prices. In most countries, policy toward the national currency is prominent and controversial. Exchange rates are so central to the world economy that economic epochs are often known by the prevailing exchange rate system – the Gold Standard Era, the Bretton Woods Era. Contemporary developments reinforce the centrality of exchange rates to economic trends, from the creation of an Economic and Monetary Union in Europe to the currency crises that have swept the developed, developing, and transitional economies.

The analysis of the *political economy* of currency policy has focused on two sets of questions. The first is global, and has to do with the character of the international monetary system. The second is national, and has to do with the policy of particular governments towards their exchange rates. These two interact. National policies, especially of large countries, have an impact on the international monetary system. By the same token, the global monetary regime influences national policy choice. For ease of analysis, however, it is useful to separate analyses of the character of the international monetary system from analyses of the policy choices of national governments.

The international political economy of exchange rate policy

International monetary regimes tend toward one of two ideal types. The first is a fixed-rate system, in which currencies are tied to each other at publicly announced rates. Some fixed-rate systems involve a common link to a commodity such as gold or silver; others peg to a national currency such as the U.S. dollar. The second ideal-typical monetary regime is free floating, in which national currency values vary with market

conditions and national macroeconomic policies. There are many potential gradations between these extremes.

In the past 150 years, the world has experienced three broad international monetary orders. For about fifty years before World War One, and again in modified form in the 1920s, most of the world was on the classical gold standard, a quintessential fixed-rate system. Under the gold standard, governments committed themselves to exchange gold for currency at an announced 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, currencies were fixed to the U.S. dollar and the U.S. dollar was fixed to gold. However, national governments could change their exchange rates when they deemed it necessary. Under this "adjustable peg" system, currencies were not as firmly fixed as under the classical gold standard. Since 1973 the reigning order has been one in which the largest countries have had floating national currencies, while smaller countries have 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. Some countries have fixed their currency to that of a larger nation: the CFA franc zone ties the currencies of many African countries to each other and to the French franc (now to the euro). Several countries in Latin America and the Caribbean have pegged their exchange rates to the U.S. dollar. European monetary integration began with a limited regional agreement, evolved into a Deutsche mark link, and eventually

became a monetary union with a single currency and a common central bank. Countries in the Eastern Caribbean and southern Africa have also developed monetary unions.

Global or regional monetary systems are the result of interaction among national exchange rate policies. Fixing as part of a regional or global fixed-rate system is fundamentally different than doing so in the context of generalized floating. In the former case, choosing whether or not to fix is tantamount to choosing whether to participate in the reigning world or regional monetary order. 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 with a trading and investment partner.

Interaction among states' international monetary policies involves *coordination* among national government policies, and/or more complex *cooperation* among them. Coordination entails interaction among governments to converge on a focal point – such as linking national currencies to gold or to the dollar. This implies the existence of a Pareto improving Nash equilibrium (often more than one), such as is the case in an Assurance game: countries want to choose the same currency regime, but may disagree over which one to choose. Cooperation involves interaction among governments to adjust policies consciously to support each other – such as joint intervention in currency markets. This implies the existence of a Pareto inferior Nash equilibrium, which can be improved upon (i.e. to a Nash bargaining solution), such 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; 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 (Meissner 2002; Frieden 1993). Such a fixed-rate system can be self-reinforcing: the more countries were on gold, or tied their currencies to the Deutsche mark, the greater the benefits to other countries of going down this path. This can be true even if the motivations of countries differ: one might particularly appreciate the monetary stability of a fixed rate, the other 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 appear to grow in this way, as additional membership attracts ever more members. 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 its eventual global reach to the gradual accession of other nations to the British-led system. So too did it characterize the process of European monetary integration, in which the Deutsche mark zone of Germany, Benelux, and Austria gradually attracted more European members. But 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 one or more important countries from the system can dramatically reduce its centripetal pull, as

with the collapse of the gold standard in the 1930s: British exit began a stampede which led virtually the entire rest of the world off gold within a couple of years.

Cooperation in international monetary relations. International monetary relations may require the resolution of serious problems of cooperation. 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 currency stability. Even a system as simple as the gold standard might have relied on agreements among countries to support each others' monetary authorities in times of difficulty. An enduring monetary system, in this view, requires explicit cooperation among its principal members.

The welfare gains associated with inter-state collaboration in the international monetary realm 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: a rapid change in currency values often leads to an import surge, protectionist pressures, and commercial antagonism.

These joint gains may be difficult to realize because they can require national sacrifices. Supporting the fixed-rate system may require painful national adjustment policies to sustain a country's commitment to its exchange rate. This can lead to international conflict over 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 currency. This forced other countries to adapt

their monetary policies to the anchor country, and led to pressures 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 U.S. government refused. In the EMS in the early 1990s, governments in the rest of the European Union wanted Germany to implement less restrictive policies to combat the European recession, while the German central bank refused. International and regional currency systems have often been beset by conflicts over how to allocate the burden of adjustment among countries. Generally speaking, the better able countries are to agree about the distribution of the costs of adjustment, the more likely they are to be able to create and sustain a common fixed-rate regime.

Historical analyses tend to support the idea that inter-governmental cooperation has been crucial to the durability of fixed- rate monetary systems. Barry Eichengreen (1992) argues that credible cooperation among the major powers before 1914 was the cornerstone of the classical gold standard, while its absence explains the failure of interwar attempts to revive the regime. 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).

Two of the most recent such regional ventures, Economic and Monetary Union in Europe (EMU) and dollarization in Latin America, are illustrative of the operation of these international factors. Dollarization appears largely to raise ideal-typical coordination issues, as national governments consider independent choices to adopt the

U.S. dollar. The principal attraction for dollarizers is association with dollar-based capital and goods markets; the more countries dollarize, the greater this attraction will be. On the other hand, while 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 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, the institutionalized EU environment, and the network of policy linkages between EMU and other European initiatives.

Despite the importance of these international factors, it is unquestionable that international monetary cooperation rests on the foundation of national currency policies. And national policies are also subject to substantial political economy pressures.

The domestic political economy of exchange rate policy

Political factors *within* nations give rise to pressures for – or against – coordination and cooperation in the international arena. This is because exchange rate policies involve tradeoffs with domestic distributional and political implications. The tradeoffs governments confront are conditioned by interest group and partisan pressures, political institutions, and the electoral incentives of politicians.

The two most important choices confronting policymakers involve the exchange rate *regime* and its desired *level*. The regime decision involves choosing whether to allow the currency to float freely or to be fixed against some other currency. Floats and

fixed regimes are only two possible options, and a wide variety of intermediate regimes exist (Frankel 1999). For all but irrevocably fixed-rate regimes, policymakers also confront choices involving the level of the exchange rate, the price at which the national currency trades in foreign exchange markets. 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 to ease the exposition.

Choice of exchange rate regime. Regime decisions involve tradeoffs among desired national goals, whose benefits and costs of may fall unevenly on actors within countries. Fixed exchange rate regimes have two main national benefits: they promote trade and investment and they help stabilize domestic monetary conditions. Fixed rates encourage trade by reducing exchange rate risk. Indeed, countries that share a common currency (or have a long-term peg) appear to trade much more than do comparable countries with separate currencies (Rose 2000). A fixed regime promotes domestic monetary stability by imposing a monetary policy *rule* that constrains policymakers to follow a time-consistent path. Without such a rule, monetary policymakers are tempted to choose a suboptimal inflation policy – one that has higher inflation and no lower unemployment than a policy with lower inflation. Fixing is a rule because monetary policy must be subordinated to the peg, effectively "tying the hands" of the authorities. (Giavazzi and Pagano 1988, Canavan and Tommasi 1997). In the nineteenth century, the gold standard eliminated discretion. Today, governments in need of credibility peg their currencies to the currency of a large, low-inflation country.

Fixed rates, however, have costs, the most important of which is the forfeit of domestic monetary policy independence (i.e. the ability to have a local interest rate that diverges from the world rate). Under fixed rates, monetary policy cannot be used for macroeconomic stabilization because domestic interest rates cannot differ from world interest rates. Monetary independence can only be obtained by floating the exchange rate or by limiting international financial flows – options that entail obvious tradeoffs.

Fixed rates stimulate trade and investment and improve inflation performance, at the cost of eliminating autonomous domestic monetary policy. Whether a nation is better off fixing or floating is partly a matter of economic circumstances, and the Optimal Currency Area literature points to openness, economic size, sensitivity to shocks, and labor mobility as important considerations (Tavlas 1994). Whether an *interest group, political party,* or *politician* is better off floating or fixing depends on how the benefits and costs of regime choice are distributed within a nation.

The distributional effects of regime choice are perhaps most pronounced at the interest group level (Frieden 1991). Groups involved in foreign trade and investment (international investors, exporters, multinational banks) should favor exchange rate stability because it reduces the risks of international business. By contrast, groups whose economic activity is limited to the domestic economy (nontradables producers, import-competing sectors) should prefer a floating regime that allows the government to affect domestic economic conditions.

These basic predictions regarding interest group politics have been tested in a variety of contexts (Hefeker 1995, Eichengreen 1995, Frieden 1997, Frieden, Ghezzi, and Stein 2001, Frieden 2002). But research has not yet incorporated many aspects of

exchange rates that should condition the regime preferences of particular sectors. One omission is the impact of exchange rate "pass-through," the extent to which an exchange rate change is reflected in the prices of imported goods. Typically, there is a much higher degree of pass-through for more homogeneous commodities (e.g. wheat or copper), where the law-of-one-price might hold, than for highly differentiated manufactured products. This implies that producers of differentiated goods should prefer fixed regimes, since the prices of their goods are more sensitive to currency volatility. Producers of simple commodities, by contrast, should be less concerned with currency fluctuations.

Research has also failed to give sufficient attention to collective action problems that complicate group lobbying. The broad macroeconomic nature of exchange rates suggests that, under normal circumstances, interest groups will have trouble acting collectively on the issue. A fixed exchange rate regime, for example, benefits *all* industries in the export sector, and thus reduces individual incentives to lobby (Gowa 1988). Concern with collective action is reduced somewhat when political parties are available to articulate the regime preferences of social groups. Political parties may, in fact, be the institutions though which group preferences find political expression (Bearce 2003). More broadly, parties aggregate the preferences of social groups, with centrist and rightist parties likely to support fixed regimes as their business constituencies benefit from the credible commitment to low inflation (Simmons 1994). By the same token, center-right parties are likely to be enthusiastic about stable exchange rates due to 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.

Partisan influences, however, are not straightforward, and several factors condition the regime preferences and political influence of parties. Among the mitigating influences is the degree of capital mobility, the structure of wage bargaining institutions and independence of the central bank, "linkage" to trade and other policies, and policymakers' beliefs. These conditioning factors may, in turn, relate to fundamental differences in electoral and legislative institutions.

Political institutions can affect the electoral incentives of politicians in governing parties to adopt alternative exchange rate regimes (Bernhard and Leblang 1999). In countries where the stakes in elections are high (e.g. single-member plurality systems), politicians may prefer floating exchange rates, as a means to preserve the use of monetary policy to engineer greater support before elections. Where elections are not as decisive (e.g. proportional representation systems), fixing has smaller electoral costs, implying that fixed regimes are more likely to be chosen. When the timing of elections is predetermined, governing parties are less likely to surrender monetary policy by pegging, since it can be a useful tool for winning elections. When election timing is endogenous, there is less need for monetary flexibility, so pegging is more likely.

In the developing world, it may be the extent of democracy, rather than its form, that matters. One regularity is that non-democracies are more likely to adopt a fixed regime for credibility purposes than democracies (Broz 2002, Leblang 1999). Non-democracies may peg because they are more insulated from domestic audiences, and bear lower political costs of adjusting the economy to the peg. Or they may peg because other alternatives, like central bank independence (CBI) are less viable in a closed political

system. More generally, if fixed exchange rates and CBI are alternative forms of monetary commitment, then we should analyze the decision as a joint policy choice.

Governments choose among monetary institutions that include a fixed exchange rate, an independent central bank, both, or neither (Bernhard, Broz, and Clark 2003). The conditions under which fixed rates and CBI will be direct substitutes may depend on the availability of fiscal policy as an alternative to monetary policy, and the magnitude of partisan and electoral pressures. Domestic "veto gates" (checks and balances) may also shape the decision. For example, if CBI is more effective in lowering inflation in the presence of multiple veto players, but fixed exchange rates do not require checks and balances to be effective, then domestic institutions play a large role. The particular form of veto player can matter, as when sub-national governments in federalist systems and political parties in multiparty systems are the relevant veto players.

While there is little consensus on the specific role of political influences on exchange rate regime choices, there is recognition that regime decisions involve tradeoffs having domestic distributional and electoral implications. Selecting an exchange rate regime is as much a political decision as an economic one.

To appreciate or depreciate? Policymakers face choices over the desired level of the exchange rate. Governments cannot set the real exchange rate at will, but they can affect trends in the real exchange rate over a period long enough to be of political and economic significance – typically estimated at three to five years. Under all except fully fixed-rate regimes, a government must decide whether it prefers a relatively appreciated or a relatively depreciated currency. Although economists disagree about the

determinants of the real exchange rate, we can identify a basic political-economy tradeoff between *competitiveness* and *purchasing power*.

The real exchange rate affects the demand for domestic traded goods in local and foreign markets; it also affects the purchasing power of those who earn the currency. A real appreciation increases the purchasing power of local residents, by lowering the relative price of foreign (and, more generally, tradable) goods. However, by making domestic goods more expensive relative to foreign goods, it has a negative effect on the "competitiveness" of local tradables producers. A real depreciation has the opposite effects, reducing purchasing power but improving "competitiveness" by lowering the price of domestically produced goods.

There is no clear economic guideline as to the appropriate level of the exchange rate. A relatively depreciated currency encourages exports and expenditure switching from imports to domestic goods, thereby boosting aggregate output. However, depreciation can also have contractionary effects that follow from a higher price level. While changes in real exchange rates have powerful effects on the national economy, some positive and some negative, the net effect on overall national welfare is very hard to calculate.

The level of the exchange rate *always* has distributive consequences domestically, implying a role for interest group politics. Export 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 (and tradable) 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 nontraded industries.

Many factors condition the currency preferences and political capabilities of groups. For example, the degree to which tradable sectors are directly affected by exchange rate changes affects their sensitivity to currency movements. Where 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 through" the exchange rate change into prices chargedto local consumers – they will be less concerned by such an appreciation (this is typically the case for specialized, highly differentiated, products, such as automobiles). Tradables industries with high pass-through will be 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 and Goldberg 1997).

A number of regularities about preferences over the currency level 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: producers of commodities and simple manufactures will prefer a flexible regime and a tendency for 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, Ghezzi and Stein 2001).

Interest group activity on the level of the exchange rate varies greatly over time and across country. Such activity faces substantial collective action problems, and exchange rate policy is only one of a number of potential policy instruments of relevance to affected groups. For example, traded goods industries have the option of lobbying for industry-specific trade policies when the currency appreciates. Currency policy and trade policy are close substitutes: a 10% real depreciation is equivalent to a 10% import tax plus a 10% export subsidy. 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).

The panoply of interests in the exchange rate makes the political institutions within which they are expressed particularly important to explaining policy outcomes. In the absence of some institutional structure, it is indeed hard to know how the cleavages implied by the competitiveness vs. purchasing power tradeoff map to politically relevant interest-group activity. Nor do the distributional effects of the real exchange rate on

profits and wages translate into clear partisan political effects of the traditional left-right or labor-capital variety.

Whatever the institutional character taken by interest group and partisan political pressures on the level of the exchange rate, elections and voting are likely to be of particular importance. This is because the real exchange rate affects broad aggregates like purchasing power, growth rates, and the price level, and these broad aggregates are almost certainly relevant to elections.

Consumer/voters care about their purchasing power and inflation, so politicians are sure to be concerned with the electoral consequences of the exchange rate. Indeed, governments tend to maintain appreciated currencies before elections, delaying a depreciation/devaluation until after the election (Klein and Marion 1997, Frieden, Ghezzi and Stein 2001, Leblang 2000). Electoral cycles in exchange rate policy help 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, Pesenti, and Roubini 1998), delaying devaluation certainly makes the problem worse. Given the 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 in 1993-1994 and Argentina in 1999-2001, for example, electorally motivated delays almost certainly led to far more drastic currency collapses than would have otherwise been the case. 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. Political institutions

condition the extent to which politicians are willing or able to respond to short-run electoral incentives.

Conclusions

Exchange rates are prominent features of economic life, and the study of their political economy is important. Scholars have made substantial progress in understanding how regional and international currency regimes emerge and evolve, and why governments pursue the exchange rate policies they do.

At the international level, the study of global and regional monetary regimes has incorporated developments in the analysis of international coordination and cooperation to explain the origin and operation of such systems over the past two centuries. At the domestic level, there is a reasonably well-developed set of arguments about the economic interests at stake, and about how political institutions affect currency policy choices.

Future research confronts several challenges. First, it needs to better integrate international and domestic sources of exchange rate policy. Second, it needs to clarify and refine the theoretical and empirical uncertainties that remain in existing scholarship. Third, in concert with scholars 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 ten years have seen impressive progress in the study of exchange rate politics, and there is no reason to doubt that the coming decades will be just as fruitful.

References

Bearce, David. 2003. "Societal Preferences, Partisan Agents, and Monetary Policy Outcomes." *International Organization* 57, 2 (Spring): 373-410

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

Bernhard, William, J. Lawrence Broz, and William Roberts Clark. 2003. *The Political Economy of Monetary Institutions*. Cambridge, MA: The MIT Press

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. 2002. *Political system transparency and monetary commitment regimes.* International Organization 56, 4 (Autumn): 861-87.

Campa J, Goldberg L. 1997. The evolving external orientation of manufacturing: a profile of four countries. *Fed. Res. 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

Cohen BJ. 2001. Beyond EMU: The problem of sustainability. In *The Political Economy of European Monetary Unification*, 2nd edition, ed. B Eichengreen, J Frieden. Boulder CO: Westview

Corsetti G, Pesenti P, Roubini R. 1999. *What caused the Asian currency and financial crisis?* Japan and the World Economy 11, 3 (October):305-373.

Eichengreen B. 1992. *Golden Fetters*. Oxford: Oxford University Press

Eichengreen B. 1995. The endogeneity of exchange rate regimes. In *Understanding Interdependence*, ed. P Kenen, pp. 3-33. Princeton, NJ: Princeton Univ. Press

Frankel JA. 1999. *No single currency regime is right for all countries or at all times*. Essays in International Economics 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,* eds. R Jervis, J Snyder. Boulder, CO: Westview

Frieden J. 1997. Monetary populism in nineteenth-century America: an open economy interpretation. *J. Econ. His.* 57:367-95

Frieden, Jeffry A. 2002. "Real Sources of European Currency Policy: Sectoral Interests and European Monetary Integration." *International Organization* 56, 4 (Autumn):831–60

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*, eds. J Frieden and E Stein. Baltimore: Johns Hopkins University Press.

Giavazzi F, Giovannini A. 1989. *Limiting Exchange Rate Flexibility*. Cambridge, MA: MIT Press

Gowa J. 1988. Public goods and political institutions: trade and monetary policy processes in the United States. *Int. Organ.* 42:15-32

Hefeker C. 1995. Interest groups, coalitions and monetary integration in the nineteenth century. *J. Eur. Econ. His.* 24:489-536

Klein M, Marion N. 1997. Explaining the duration of exchange-rate pegs. *J. Dev. Econ.* 54:387-404

Leblang D. 1999. Democratic political institutions and exchange rate commitments in the developing world," *Int. Stud. Q.* 43:599-620

Leblang D. 2003. *To devalue or defend: the political economy of exchange rate policy*. International Studies Quarterly, 47:533-559.

Meissner, Christopher M. 2002."A New World Order: Explaining the Emergence of the Classical Gold Standard." NBER Working Paper No. 9233 (October).

Rose A. 2000. One money, one market: estimating the effect of common currencies on trade. *Econ. Pol.* 30:7-46

Simmons B. 1994. *Who Adjusts?* Princeton, NJ: Princeton Univ. Press

Stallings DA. 1993. Increased protection in the 1980s: exchange rates and institutions. *Public Choice* 77:493-521

Tavlas G. 1994. The theory of monetary integration. *Open Econ. Rev.* 5