Democratic Institutions and Exchange-rate Commitments

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From the end of World War II until 1971, exchange-rate practices were governed by the Bretton Woods system (or the dollar standard)—an international regime of fixed exchange rates with the U.S. dollar serving as the anchor currency. The system operated smoothly through the 1950s, but strains appeared in the 1960s, reflecting a combination of the gold overhang and lax U.S. macroeconomic policies. In 1971 the Nixon administration slammed the gold window shut, effectively ending the Bretton Woods system. Since the early 1970s, countries have been able to choose a variety of exchange-rate regimes ranging from a freely floating exchange-rate arrangements adopted by the industrial democracies since 1974. We focus on domestic political institutions to explain a government's choice among three main exchange-rate options: a floating exchange rate, a unilateral peg, and a multilateral exchange-rate regime (specifically, the Snake and the European Monetary System).

The choice of exchange-rate arrangement, although often shrouded in highly technical language, has relatively predictable consequences for an economy. A fixed (pegged) exchange rate helps to stabilize the external trading environment by decreasing uncertainty surrounding the exchange rate and by reducing transaction costs across countries. Additionally, a fixed rate can provide a nominal anchor to macroeconomic policy. On the other hand, adherence to a fixed exchange rate implies a loss of domestic monetary policy autonomy.¹ Without the ability to use monetary policy to counter localized economic shocks, countries may suffer unnecessary welfare losses in output or employment.

Commitment to a fixed exchange rate also has implications for domestic political competition. A fixed exchange rate might stabilize the environment for trade or help achieve certain macroeconomic policy goals, but it limits politicians' discretion over monetary policy. Under a fixed exchange rate, politicians in the governing parties lose the ability to manipulate monetary policy for electoral or partisan reasons. The

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^{1.} Mundell 1961.

loss of policy discretion potentially harms their ability to maintain their position in office. A floating exchange rate, on the other hand, gives politicians the flexibility to use external adjustment not only to counter local shocks but also to employ macroeconomic policy for electoral or partisan advantage. This political dilemma raises an interesting question: Under what conditions will politicians commit to a fixed exchange-rate regime?

We argue that politicians' incentives over the exchange-rate regime reflect the configuration of domestic political institutions, particularly electoral and legislative institutions. In systems where the cost of electoral defeat is high and electoral timing is exogenous, politicians will be less willing to forgo their discretion over monetary policy with a fixed exchange rate. In systems where the costs of electoral defeat are low and electoral timing is endogenous, politicians are more likely to adopt a fixed exchange-rate regime. Consequently, differences in domestic political systems can help account for variations in the choice of exchange-rate arrangements.

In the first section we review the conventional literature about exchange-rate arrangements. In the second section we develop our argument concerning the relationship between domestic political institutions and exchange-rate regime choice. In the third section we draw on the optimal exchange-rate and international political economy literatures to identify control variables, including systemic influences, domestic economic conditions, and other political factors. In the fourth section we evaluate the importance of domestic political institutions on a sample of twenty countries using a constrained multinomial logit model. We present our conclusions in the final section.

Choosing an Exchange-rate Arrangement

Two broad literatures address the choice of exchange-rate arrangement. First, the optimal exchange-rate literature considers the type of exchange-rate commitment that is "best" given the characteristics of a nation's economy.² This literature focuses on country characteristics such as economic openness, country size, and labor mobility. More recent contributions argue that the optimal exchange arrangement depends not only on the structure of the economy but also on the sensitivity of the economy to domestic and international macroeconomic shocks.³

One major problem with this literature is that it does not specify the origin of politicians' policy preferences. In fact the conclusions and policy prescriptions reached

3. See Fischer 1977; and Savvides 1990.

^{2.} For example, Bosco 1987; Dreyer 1978; Heller 1978; Holden, Holden, and Suss 1979; Savvides 1990; and Wickham 1985. A related literature concerns optimal currency areas. This literature considers whether regions should participate in a currency union based on factors such as common vulnerability to shocks. It is optimal for countries experiencing similar shocks to join a currency union, whereas the existence of dissimilar shocks makes a floating exchange arrangement the more prudent choice. The seminal contributions of Mundell and McKinnon focus, respectively, on the importance of external balance and price stability. See Mundell 1961; and McKinnon 1963. More recent variants of this literature examine the source of the shocks (for example, Tavlas 1993; Frankel and Rose 1996; and Eichengreen 1992a) and the question of whether the EC constitutes an optimal currency area.

in this literature vary according to initial assumptions regarding whether the policymaker's objective function emphasizes price stability or aggregate output.⁴ We argue that the configuration of domestic political institutions will influence politicians' need to maintain policy flexibility, which, in turn, shapes their preferences over the exchange-rate arrangement.

Second, the international political economy literature examines the question of exchange-rate regime choice. The literature has traditionally focused on the presence (or absence) of an international hegemon to explain developments in the international monetary system. According to this view, a major power is necessary to provide credible backing to the world's currency and act as a lender of last resort.⁵ Subsequent work examines the classical gold standard, the interwar period, and the Bretton Woods regime.⁶ Since the breakup of Bretton Woods, however, states have been able to choose from a variety of exchange-rate arrangements. Under this permissive international monetary system, an emphasis on hegemonic power cannot explain the specific variation of exchange-rate arrangements across states.

More recent literature examines both systemic and domestic determinants of the international monetary behavior of a state.⁷ Substantively, much of this literature focuses on the development of alternative exchange-rate arrangements in Europe, including the Snake, the European Monetary System (EMS), and the planned transition to a single currency.⁸ These accounts of European monetary cooperation emphasize the policy goals of insulating European economies from the fluctuations of the U.S. dollar, enhancing intra-EC trade, and controlling inflation by "importing" Germany's anti-inflation credibility.

Political economists have also developed a variety of domestic-level explanations for macroeconomic policy and exchange-rate choice.⁹ One set of explanations focuses on the demanders of exchange-rate policies, including economic sectors or specific interest groups.¹⁰ The policy demands of these actors are assumed to reflect their position in the global economy.¹¹ These explanations, however, tend to underplay the role of politicians in the choice of exchange-rate arrangement. Although politicians are responsive to societal interests, they often have incentives and policy preferences independent of societal actors.

Political economists have also investigated the relationship between domestic political institutions and exchange-rate decisions. Three types of arguments—based on welfare gains, policymaking capabilities, and credible commitments—potentially link

- 4. See Aghevli, Khan, and Montiel 1991; and Melvin 1985.
- 5. Kindleberger 1973.

6. On the gold standard, see Eichengreen 1989; and Gallarotti 1993. On the interwar period, see Eichengreen 1992b; and Simmons 1994. On the Bretton Woods regime, see Eichengreen 1996; Gowa 1983; and Keohane 1984.

7. Cohen 1996.

8. For example, Eichengreen 1992a; Eichengreen and Frieden 1994; Loriaux 1991; Ludlow 1982; McNamara 1995; Oatley 1994; and Sandholtz 1993.

9. See Frieden 1991 and 1994; and Simmons 1994.

10. See Frieden 1991; and Gowa 1983.

11. See Frieden 1991; and Keohane and Milner 1996.

the electoral system to exchange-rate commitments. This link, however, is less clear, reflecting a lack of theoretical consensus among scholars.

First, recent literature argues that exchange-rate commitments can help stabilize the macroeconomy, providing an external source of policy discipline.¹² A fixed exchange rate, therefore, would provide greater social welfare gains where politicians are unable to pursue responsible monetary and fiscal policies. This argument implies that countries with weak and unstable governments will be more likely to adopt fixed exchange rates, since these governments are often unable to agree on stabilization programs. Given that proportional representation systems produce weaker, less durable governments more often than majoritarian systems, this argument suggests that countries with proportional representation electoral systems will be more likely to adopt fixed exchange rates than those with majoritarian systems.

A second set of arguments focuses on the policymaking capabilities of the government to explain exchange-rate commitments. Weak or unstable governments lack the ability to implement the difficult domestic adjustments often necessary to sustain a fixed exchange rate.¹³ Strong, durable governments are able to pursue the policies required to maintain the fixed exchange rate. In contrast to the argument based on welfare gains, this argument implies that countries with majoritarian electoral systems will be more likely to fix the exchange rate than countries with a proportional representation system. Majoritarian electoral systems usually produce single-party majority governments capable of decisive policy action. Proportional representation systems, on the other hand, typically produce coalition governments. These governments may have difficulty shifting domestic policies to maintain the fixed exchange rate due to the bargaining and negotiation that must occur between the coalition parties.¹⁴ Consequently, they will be less able to sustain an exchange-rate commitment.

Third, some political economists argue that exchange-rate commitments can serve to constrain the policy options of future governments. The "tying the hands" argument suggests that a government will fix the exchange rate if subsequent governments are likely to possess different policy priorities. In systems where policy change is incremental across governments, politicians have fewer incentives to make an institutional commitment, since they can trust subsequent governments to pursue similar policies. Sharp policy breaks between governments are more likely in majoritarian systems than in proportional representation systems.¹⁵ Consequently, the "tying the hands" argument implies that politicians in majoritarian systems will be more likely to fix the exchange rate than politicians in proportional representation systems.

Given the variety of predictions, it is unsurprising that the empirical work on the relationship between electoral institutions and exchange-rate commitments has also been inconclusive. Eichengreen, for instance, examines the influence of electoral

- 14. Roubini and Sachs 1989.
- 15. Rogowski 1987.

^{12.} See Flood and Isard 1989; Giavazzi and Pagano 1988; and Rogoff 1985.

^{13.} See Eichengreen 1992b; and Simmons 1994.

institutions on exchange-rate commitments during the interwar period.¹⁶ He finds no systematic relationship between proportional representational systems and exchange-rate regime choice. Instead, the severity of societal cleavages affected the ability of the state to maintain its commitment to the gold standard.

One reason that the relationship between domestic political institutions and exchange-rate commitments is unclear stems from the fact that these arguments do not focus explicitly on politicians' incentives. Politicians and parties face political incentives—in particular, reelection—that condition their choice of exchange-rate arrangement. These political incentives, in turn, reflect the configuration of domestic political institutions. Domestic electoral and legislative institutions strongly influence how politicians balance their own needs with the demands of economic and societal actors in the choice of exchange-rate regime. Consequently, we predict a relationship between the configuration of domestic political institutions and the choice of exchange-rate arrangement, even after controlling for international systemic and economic influences.

Domestic Political Institutions and Exchange-rate Arrangements

We argue that domestic political institutions influence politicians' incentives over the choice of an exchange-rate regime. We begin with the assumption that politicians in the governing party(ies) have an interest in maintaining their position in office. By serving in office, the governing party(ies) have the ability to control both public policy and particularistic policies, which, in turn, enhance their reelection fortunes.

An exchange-rate commitment, although it may help stabilize the external trading environment or achieve certain macroeconomic policy goals, limits politicians' discretion over monetary policy, especially in an era of capital mobility. The configuration of domestic political institutions affects the willingness of governing party(ies) to give up discretion over macroeconomic policy. In particular, we argue that the electoral system and legislative institutions condition the choice of exchange-rate regime.

First, the decisiveness of the electoral system influences the need of the governing party(ies) to maintain discretion over macroeconomic policy. Majoritarian electoral systems tend to "manufacture" single-party majority governments.¹⁷ In these systems changes in a relatively small number of votes can actually lead to large swings in the distribution of legislative seats and, potentially, a change in the governing party. Consequently, politicians in the governing party(ies) will wish to maintain full control over any policy instrument that may help to secure their electoral majority. In particular they want to retain the ability to manipulate monetary policy in the run-up to an election or to appeal to key swing constituents. Since an exchange-rate commit-

^{16.} Eichengreen 1992b.

^{17.} Lijphart 1984.

ment limits their policy discretion, potentially hurting their ability to retain office, politicians in a majoritarian system will prefer to let the currency float.

In contrast, elections in proportional representation systems usually do not result in single-party majority governments. Instead, bargaining between parties determines the composition of the government. Consequently, a party may lose a few votes in an election but retain the possibility of participating in the government. Since small vote swings do not necessarily have dramatic consequences for the composition of the government, politicians in these systems may be less reticent to relinquish discretionary control over monetary policy by fixing the exchange rate. Moreover, a fixed exchange rate might actually help in coalition bargaining by providing a focal point for parties with diverse interests over monetary and economic policy. A pegged exchange rate is a "transparent" policy rule-that is, it can be observed at any time and is not subject to the long lags inherent in obtaining inflation and money supply data from the government.¹⁸ Parties in a coalition government might agree on a fixed exchange-rate focal point simply as a way to settle conflicts about policy. Additionally, a fixed exchange rate allows parties in the coalition government to monitor the policy activities of the party that holds the ministry of finance.¹⁹ In proportional representation systems where coalition or minority governments are common, therefore, politicians are more likely to fix their exchange rate.

Second, the costs of serving in the opposition affect the incentives of the governing party(ies) over the exchange-rate regime. In some systems opposition parties are excluded from the legislative policy process. Legislative committees may lack the resources to formulate policy or oversee the policy implementation.²⁰ The governing party(ies) may also dominate committee membership or leadership positions, limiting the possibility of challenges to the government.²¹ Finally, the government may possess strict control over the legislative agenda, preventing committees from bringing issues to the legislative floor. In these systems, opposition legislators lack the ability to influence policy or to distribute particularistic policies to their constituents. Politicians in the governing party(ies), therefore, have strong incentives not to risk their position in office. Consequently, they will not want to limit their policy discretion with a fixed exchange-rate arrangement.

In other systems opposition parties play a larger role in the policy process. Legislative committee membership and leadership positions, rather than being dominated by the governing party(ies), are distributed across parties in proportion to their strength

21. Strom 1990a.

^{18.} See Aghevli, Khan, and Montiel 1991; and Bernhard 1997.

^{19.} Parties in a coalition government bargain over both policy and the distribution of cabinet portfolios. See Laver and Schofield 1990; and Laver and Shepsle 1996. Although constrained by the coalition agreement, the party that controls the ministry of finance possesses institutional and informational advantages in the development and implementation of macroeconomic policy—advantages that the party could exploit to enhance its own fortunes at the expense of its coalition partners. Bernhard 1998. A fixed exchange-rate commitment can help limit this potential for abuse by providing coalition partners with a clear standard to monitor and evaluate the macroeconomic policy choices made by the party holding the finance portfolio.

^{20.} See Krehbiel 1991; and Lupia and McCubbins 1994.

in the legislature. Committees have the resources, including research capabilities and access to the legislative agenda, to offer alternatives to the government's proposals and to monitor the government's policy choices. Since politicians can influence policy even while serving in opposition, politicians in the governing party(ies) will be less unwilling to lose some policy discretion with a fixed exchange rate.

To test the role of electoral decisiveness and opposition influence over policy, we classify systems based on their electoral and committee systems.²² For the electoral system, we distinguish between majoritarian or proportional systems based on the work of Arend Lijphart.²³ To examine opposition influence over policy, we classify systems according to the "strength" and "inclusiveness" of legislative committees, using a classification developed by G. Bingham Powell and Guy Whitten and Kaare Strom.²⁴ The presence of a strong and inclusive committee system indicates that opposition parties have the ability to influence policy. Strong committee systems possess at least two of the three following characteristics: more than ten committees, specialization to match the government bureaucracy, and limitations in the number of committee chairmanships be distributed proportionally among all parties, regardless of their participation in government.

We combined these two measures to characterize different systems: majoritarian– low opposition influence, proportional–low opposition influence, and proportional– high opposition influence.²⁵ (There were no cases of majoritarian–high opposition influence.)²⁶ We then included dummy variables for majoritarian–low opposition systems and proportional–low opposition systems in our analysis. We expect that the majoritarian–low opposition influence systems will be least likely to participate in a fixed exchange-rate regime, that proportional–low opposition influence systems will be somewhat more likely to fix the exchange rate, and that proportional–high opposition influence systems will be most likely to participate in a fixed exchange-rate regime.

We contend that another feature of electoral systems also affects the incentives of the governing party(ies) over the exchange-rate regime: the exogeneity of electoral timing. In most parliamentary systems the governing parties have the discretion to call for an election at any time, up to a specified maximum term. The government

- 22. See Powell 1989; and Strom 1990b.
- 23. Lijphart 1984.
- 24. See Powell and Whitten 1993; and Strom 1990a.

25. Majoritarian–low opposition influence systems include Australia, Canada, France, New Zealand, the United Kingdom, and the United States. Proportional–low opposition influence systems include Ireland, Israel, Italy, Japan, and Spain. Proportional–high opposition influence systems include Austria, Belgium, Denmark, Finland, Germany, Netherlands, Norway, Sweden, and Switzerland.

26. It could be argued that the United States should be classified as a majoritarian-high opposition influence system. Congressional committees are relatively strong vis-à-vis the executive, but since the majority party dominates leadership posts, they fail to meet Powell and Whitten's inclusiveness criteria. The possibility of divided government, however, means that the party that controls the presidency (that is, the government) does not necessarily hold leadership positions in the committee system. As a check on the influence of the U.S. case, we reran our analysis without the United States in the majoritarian-low opposition influence category. Dropping the U.S. case from this category did not substantially affect the results.

will often attempt to optimize the timing of the election based on its standing in the polls, economic conditions, and so on—that is, electoral timing is endogenous to the government's political calculations. In these systems politicians do not need to manipulate monetary policy to insure an economic boom at a prespecified election time. Instead, politicians may manipulate the timing of the election to coincide with opportune economic conditions. In these systems politicians in the governing parties will be less opposed to a fixed exchange rate.

In other systems electoral timing is exogenous. Politicians stand for election at a predetermined time, regardless of political and economic conditions. In these systems politicians in the governing parties have more incentive to manipulate policy to produce good economic conditions for the election period. A fixed exchange rate not only limits their discretion over policy but also makes domestic economic conditions (and their electoral consequences) vulnerable to external shocks. Consequently, politicians in systems with exogenous timing will prefer a floating exchange.

In our empirical analysis we include a dummy variable for countries with exogenous electoral timing: Israel, Norway, Sweden, Switzerland, and the United States. We expect these countries to be more likely to adopt a floating exchange arrangement, even after other factors are taken into account.

International and Domestic Influences on Exchange-rate Choice

In addition to domestic political institutions, other factors have an important influence on the choice of exchange-rate arrangement. This section identifies four sets of variables that affect this choice: international systemic factors, domestic macroeconomic conditions, domestic political factors, and policy inertia.

International Systemic Variables

According to the optimal exchange-rate literature, a country's structural position in the world economy strongly influences the decision to fix or float. The literature emphasizes three systemic factors: trade dependence, vulnerability to macroeconomic shocks, and capital mobility.

Trade Dependence

The literature on optimal currency areas argues that a country's dependence on external trade strongly affects the choice of exchange-rate arrangement. Countries that rely heavily on trade are more likely to fix the exchange rate. A fixed exchange rate decreases exchange-rate risk. With a predictable external environment, trading agents will have more stable expectations, and, as a consequence, cross-border trade and investment will increase.²⁷ Floating exchange rates, according to these arguments, lead to higher exchange-rate variability and, hence, to greater uncertainty and risk. In countries that are less dependent on trade, stabilizing the exchange rate will not be a priority. Instead, governments will want to use macroeconomic policy for domestic policy objectives.

We measure a country's dependence on trade with an openness variable composed of imports plus exports as a percentage of GDP. Countries with higher levels of openness—that is, higher dependence on trade—will be more likely to fix their exchange rates. In alternative specifications we disaggregated the openness variable into its component parts: imports as a percentage of gross domestic product (GDP), exports as a percentage of GDP, and the trade deficit as a percentage of GDP. The alternative measures did not substantially alter the results.²⁸

Vulnerability to Shocks

Recent research in economics argues that a country's vulnerability to macroeconomic shocks conditions the optimal exchange-rate arrangement. The theoretical and empirical literatures conclude that a country faced with adverse shocks emanating from the real (that is, tradable) sector will be better able to insulate the domestic economy by adopting a floating exchange arrangement.²⁹ A fixed exchange arrangement, on the other hand, is more desirable if the country experiences domestic (nominal) disturbances.

Following Michael Melvin and Andreas Savvides, we operationalize a country's vulnerability to shocks in several ways.³⁰ The first variable, designed to capture domestic shocks, measures the variability in the growth rate of domestic credit over the course of a year, again based on quarterly data. Greater variability in the monetary sector makes a fixed exchange-rate arrangement more likely. To measure real shocks we include a measure of trade openness (discussed earlier) and a measure of the yearly rate of economic growth (discussed later).³¹

27. Frankel and Rose argue that, even where exchange-rate variability has been high, its effect on trade has been low. Frankel and Rose 1996. They suggest, however, that the exchange-rate variability argument "still carries some weight. It looms large in the minds of European policy-makers and business-people. Promoting trade and investment in Europe was certainly a prime motivation for the European Monetary System and for the planned E.M.U."

28. Including either exports or imports led to very similar empirical results—with the exception of the sign change. Including both indicators at the same time caused both variables to be statistically insignificant because the correlation between imports and exports in our sample is 0.96.

^{29.} For example, Fischer 1977; Melvin 1985; and Savvides 1990.

^{30.} See Melvin 1985; and Savvides 1990.

^{31.} In alternative specifications, we also included a measure of a country's economic size, based on its GDP in constant dollars, as a proxy of a country's vulnerability to shocks. Presumably, larger countries will be less vulnerable to exogenous shocks and, consequently, more likely to choose a floating exchangerate arrangement. The economic size variable, however, was collinear with measures of openness and international capital mobility.

Capital Mobility

Both the optimal currency and the political economy literatures draw on the model of a small open economy popularized by Mundell and Fleming. According to the Mundell-Fleming model, countries can attain only two of the three following conditions: capital mobility, fixed exchange rates, or national policy autonomy.³² Robert A. Mundell and J. Marcus Fleming demonstrated that, under conditions of financial market integration and a fixed exchange rate, domestic and foreign interest rates tend to equalize. The result is that domestic monetary policy (for example, monetary expansion) will have no real effect. A floating exchange arrangement, on the other hand, allows domestic monetary autonomy and external adjustment. Confronted with a disturbance, monetary policy is free to respond through monetary expansion and currency depreciation.

We test the influence of capital mobility on exchange-rate arrangements in two ways. First, we include a capital controls variable indicating whether a government has adopted controls on cross-border capital movements. The variable is coded 1 if capital controls are in place and 0 otherwise. Governments will often adopt capital controls in order to maintain a fixed exchange rate and domestic monetary policy autonomy.³³ Consequently, we expect countries with capital controls to be more likely to fix their currency.

Second, we include a variable to capture the increasing volume of international capital movements over the past two decades. During the 1970s and 1980s, both technological advances and regulatory liberalization of the international financial sector dramatically increased the volume of international capital movement. As the mobility of capital has increased, maintaining a fixed exchange rate has become more difficult for governments. Indeed, some political economists have argued that international and domestic capital markets have become so integrated that capital mobility should be considered a structural component of the international system.³⁴ The growing ability of international exchange markets to constrain the policies of EMS member states was one rationale for a single currency in Europe. We include a proxy variable for capital mobility that measures yearly totals in international borrowing composed of international bond and loan issues.³⁵ We expect that, as international capital mobility increases, countries will be less likely to fix their exchange rates.

Domestic Macroeconomic Conditions

Much of the recent literature argues that an exchange-rate commitment can help governments achieve macroeconomic goals, particularly a reduction in inflation. With

^{32.} See Mundell 1961; and Fleming 1962.

^{33.} See Alesina, Grilli, and Milesi-Feretti 1994; Goodman and Pauly 1993; and Leblang 1997.

^{34.} Andrews 1994.

^{35.} The bond total is the sum of international bond issues, traditional bond issues, and special placements. The loan total is the sum of international medium- to long-term bank loans, foreign medium- to long-term loans, and other international medium- to long-term facilities. More detailed definitions can be found in the OECD's "Methodological Supplement to Monthly Financial Statistics." Thanks to Andrew Sobel for providing this data.

capital mobility, a fixed exchange rate forces the government to follow the low inflation policies of a disciplined foreign government. The decision to peg an exchange rate provides a valuable source of anti-inflationary credibility with the private sector. (Of course, pegged exchange rates are not a panacea: there is always a chance that a government will have to renege on its exchange-rate commitment by either devaluing the currency or allowing the currency to float.)³⁶

Many of these arguments reflect the anti-inflationary success of the EMS and exchange-rate commitments in the developing world.³⁷ The macroeconomic consequences of an exchange-rate commitment, however, depend on the policies of the country to which the currency is pegged. Pegging to a low-inflation currency will place disinflationary pressure on the economy. On the other hand, pegging to a high-inflation currency will exacerbate inflationary pressures in the domestic economy. Indeed, much of the initial enthusiasm for flexible exchange rates in the early 1970s stemmed from the fact that the commitment to a fixed exchange rate with the United States in the 1960s had forced countries to "import" inflationary policies from the United States. A floating exchange regime promised greater monetary policy autonomy to countries (notably Germany), allowing them to pursue domestic price stability.

Domestic macroeconomic conditions may influence the choice to fix or to float. The current wisdom suggests that countries will float in times of economic recession, seeking to liberate macroeconomic policy from the stricture of a fixed exchange-rate commitment. On the other hand, countries will be more likely to fix when the economy is overheating as a way to counter inflationary pressures in the economy. To test the influence of macroeconomic conditions on the choice of exchange-rate arrangement, we included a growth variable composed of the annual change in per capita GDP in constant dollars.

Domestic Political Factors

We identify two domestic political factors that may have an influence on the choice of exchange-rate arrangement: partisanship and the electoral cycle.

Partisanship

Government partisanship might influence the choice of exchange-rate regime. Unfortunately, the literature offers no clear expectation concerning the relationship between partisanship and exchange-rate regime. The partisanship literature assumes

^{36.} Leblang and Tarry 1996.

^{37.} For example, Aghevli, Khan, and Montiel 1991. Although many argue that the EMS contributed to the anti-inflationary success of member states (DeGrauwe 1992; and Gros and Thygesen 1992), the role of the EMS remains controversial. A number of political economists argue, not that the EMS caused the disinflationary success of its member states, but rather that the disinflationary policies of EMS member states allowed the system to function (Eichengreen 1992a; Fratianni and von Hagen 1992; and Woolley 1992). These political economists point to the disinflationary success of non-EMS member states over the same time period as evidence that the exchange-rate system exhibited little independent influence on member state monetary policies.

that Right parties are traditionally more concerned with controlling inflation, whereas Left parties place more emphasis on employment and wealth redistribution.³⁸ The macroeconomic consequences of an exchange-rate peg, therefore, should determine party positions over the choice.

The consequences of an exchange-rate peg, however, vary. Toward the end of the Bretton Woods system, a fixed exchange rate implied domestic inflation, since the United States attempted to "export" the inflationary consequences of its expansionary policies. Right parties might be more opposed to maintaining this type of exchange-rate commitment. More recently, however, a fixed exchange rate is usually seen as a way to provide discipline to the economy. In Europe during the 1980s, for example, countries pegged to the low-inflation deutsche mark as a way to "import" the policy credibility of the Bundesbank. In this situation Right parties might favor a fixed exchange rate, whereas Left parties would prefer a floating exchange rate, which allows them to manipulate monetary policy to enhance growth and employment.

In contrast Geoffrey Garrett suggests that Left parties might favor a fixed exchange rate as a way to demonstrate their commitment to responsible economic policies.³⁹ Left parties recognize that they possess little anti-inflation credibility with financial and capital markets, contributing to higher risk premia and the possibility of capital flight. By committing to a fixed exchange rate, Left parties hope to increase their policy credibility by limiting their ability to manipulate policy. Right parties have more credibility with the markets and, consequently, less incentive to fix their exchange rate.

Further, partisanship arguments concerning the choice of exchange-rate regime imply that new governments will reevaluate exchange-rate policy to suit their economic policy goals. Consequently, one would expect a correlation between changes in government partisanship and changes in exchange-rate commitments. The evidence, however, does not support this hypothesis. During the 1980s, for example, governments of different partisanship maintained their commitments to the EMS.

To examine the relationship between partisanship and exchange-rate regime, we created a measure of Left government strength based on the work of David Cameron.⁴⁰ The measure multiplies the percentage of cabinet seats held by Left parties by the percentage of a legislative majority held by Left parties in the legislature for each year in each country. Higher values indicate increased Left party influence. Given the lack of consensus among scholars, we have no clear expectation for the effect of this variable on the choice of exchange-rate arrangement.

Electoral Cycle

The political business-cycle literature argues that politicians in the governing party(ies) will manipulate macroeconomic policy in order to produce an economic boom coincident with the next election, helping to win election.⁴¹ The inflationary conse-

- 39. Garrett 1995.
- 40. Cameron 1984.
- 41. See Nordhaus 1975 and 1989; Alesina and Rosenthal 1995; and Keech 1995.

^{38.} See Alesina 1989; Alesina and Sachs 1988; Hibbs 1987; and Havrilesky 1987.

quences of such policy manipulation do not occur until after the election, after incumbent parties have already enjoyed the electoral benefits of increasing employment.

Politicians in the governing party(ies) might also be tempted to manipulate the exchange-rate arrangement in a similar fashion. In the run-up to an election, politicians might float the currency, giving themselves more room to manipulate monetary policy for short-term electoral gain. Floating the currency may also act to spur short-term economic growth. After the election, politicians would fix the exchange rate as a way to impose discipline on the economy, helping to prevent an inflationary spiral.

This argument implies a pattern to exchange-rate commitments. Countries should float just prior to an election and fix just after an election. A casual inspection of the evidence does not support this pattern.⁴² Nevertheless, we included a dummy variable, coded 1 for years in which an election occurred and 0 otherwise. We do not expect this electoral variable to affect the choice of exchange-rate arrangement.

Policy Inertia

The choice of exchange-rate arrangement at time t is likely to be conditioned by the exchange-rate arrangement that existed at time t-1. That is, there is likely to be some inertia in the choice of exchange-rate regimes. It is standard practice in time-series modeling to capture this inertia through the inclusion of a lagged endogenous variable. The inclusion of lagged endogenous variables also provides a check against both serial correlation and omitted variable bias.

Table 1 summarizes our independent variables, their operationalization,⁴³ their sources, and their hypothesized effect on the choice of exchange-rate arrangement. Table 2 contains descriptive statistics.

Empirical Analysis

We analyze the exchange-rate regime choice of twenty industrial democracies from 1974 through 1995.⁴⁴ This section discusses the variables, measures, and statistical

42. We compared the number and direction of changes in exchange-rate commitments in the years surrounding an election (that is, the year prior to an election, the election year, and the year following an election) with nonelection years. If electoral timing were important, we would expect a higher proportion of changes in the years surrounding an election. The data do not bear this out. The likelihood of changing an exchange-rate commitment does not differ between the election years and the nonelection years. Additionally, there is no clear direction to the changes in the years prior to, including, and after an election.

43. In alternative models, we also included two other control variables not discussed in the text: central bank independence and inflation. Since both variables present serious econometric issues, including colinearity and endogeneity problems, we did not include them in our final model.

44. Although the United States closed the gold window in 1971, the inclusion of lagged variables in our model necessitates that we drop 1973 from the analysis. The sample of countries includes Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Spain (post-1976), Sweden, Switzerland, the United Kingdom, and the United States. Spain is excluded prior to its adoption of democratic institutions in 1976.

Variable Operationalization		Prediction (probability of fixing)	
Domestic political institutions			
Majoritarian—low opposition influence ^a	Dummy variable	_	
Proportional—low opposition influence ^a	Dummy variable	_	
Proportional—high opposition influence ^a	Dummy variable	+	
Exogenous electoral timing ^b	Dummy variable	_	
Economic openness			
Trade dependence ^c	(Imports + exports)/GDP	+	
Vulnerability to shocks	(importa + enporta), ezri	·	
Real effective exchange rate ^c	SD of real effective exchange rate	_	
Variability of domestic credit ^c	CV of domestic credit growth	+	
Economic size ^c	GDP (log)	_	
Capital mobility			
Capital controls ^d	Dummy variable	+	
International capital mobility ^e	International borrowing	_	
Domestic macroeconomic conditions	6		
Growth (logged) ^c	Annual percentage change in GDP/POP	_	
Inflation ^c	Annual inflation rate	+	
Political variables			
Partisanship ^f	Left party strength	0	
Elections ^g	Dummy variable for election years	0	
Central bank independenceh	Legal independence	0	
Europe	In Europe, but not in EC	+	
EC membership ⁱ	Dummy variable	+	

TABLE 1. Summary of independent variables

Note: SD is standard deviation; CV is coefficient of variation.

^aConstructed by authors, based on Lijphart 1984; and Powell and Whitten 1993. Supplemental data from Inter-Parliamentary Union 1986.

^bGorvin 1989.

^cInternational Monetary Fund, *International Financial Statistics* (Washington, D.C.: IMF, various years).

^dInternational Monetary Fund, *Exchange Arrangements and Exchange Restrictions Annual Report* (Washington, D.C.: IMF, various years).

^cOECD, *Methodological Supplement to Monthly Financial Statistics* (Paris: OECD, various years). ^fBased on Cameron 1984, supplemented with data from the *European Journal of Political Research*, annual political data issue, various years.

^gConstructed by authors using data from the *European Journal of Political Research*, annual political data issue, various years.

^hCukierman 1992. ⁱNugent 1994.

techniques employed to investigate the empirical significance of domestic political institutions on exchange-rate regime choice.

The Dependent Variable

Although policymakers have a number of choices regarding the exchange-rate arrangement, we narrow the focus to a choice between fixing, floating, or participating in a

Variable	Mean	SD	Minimum	Maximum
Exchange-rate regime (time <i>t</i>)	1.21	0.79	0	2
Exchange-rate regime (time $t-1$)	1.16	0.81	0	2
Majoritarian—low opposition influence	0.30	0.46	0	1
Proportional—low opposition influence	0.20	0.40	0	1
Proportional—high opposition influence	0.50	0.50	0	1
Electoral timing	0.25	0.44	0	1
Openness	0.64	0.29	0.16	1.55
Domestic credit shock	-0.28	81.08	-1657	228.80
Capital controls	0.53	0.50	0	1
International capital mobility (millions)	294,091	161,286	22,731	521,458
Economic growth (logged)	0.004	0.0067	-0.003	0.077
Partisanship	0.34	0.42	0	1.34
Election year	0.30	0.46	0	1
Europe	0.30	0.46	0	1
EC membership	0.42	0.49	0	1

TABLE 2. Descriptive statistics (N = 433)

multilateral currency arrangement.⁴⁵ In our analysis this last option represents a decision to participate in either the European Exchange Arrangement, commonly called the Snake, or in the EMS. We code countries as floating if they have either a free or a managed floating exchange arrangement. Countries are classified as participating in a multilateral currency agreement (MCA) if they participated in either the Snake or the exchange-rate mechanism of the EMS. All others are coded as having a fixed exchange rate.⁴⁶ Data are from the "Exchange Arrangements and Exchange Restrictions Annual Report" (various issues) of the International Monetary Fund.

Over half the countries in our sample switched between a fixed rate (that is, either a unilateral peg or participation in an MCA) and a floating exchange rate at least once between 1974 and 1995. The other countries chose not to alter their exchange-rate regime during the period.⁴⁷ Although we are interested in analyzing why policymak-

45. The International Monetary Fund identifies at least seven different types of exchange arrangements, classifying them according to their flexibility. Less flexible arrangements include fixing to a major currency (for example, the U.S. dollar or the French franc), or fixing to a composite currency (for example, the SDR or the ECU). Arrangements with limited flexibility include those where a currency fluctuates within certain bands around the target currency. Included in this category are cooperative currency arrangements such as the EMS and other systems where the exchange rate is adjusted according to a predetermined set of indicators (for example, a crawling peg). The most flexible arrangements are managed floating, where the central bank actively intervenes in foreign exchange markets to maintain the value of the currency, and freely floating arrangements, where interventions are aimed at moderating the rate of change of the exchange rate.

46. Our sample contains only one country that selected anything other than these three basic arrangements. Israel adopted a crawling peg for three years in the late 1980s. Because a crawling peg is visible and nondiscretionary, we code it as a fixed arrangement.

47. Countries in our sample that switched between a fixed rate (that is, either independent peg or participation in an MCA) and a floating exchange rate include Australia, Finland, France, Ireland, Israel, Italy, New Zealand, Norway, Spain, Sweden, and the United Kingdom. Countries that always floated are Canada, Japan, Switzerland, and the United States. Finally, Austria, Belgium, Denmark, Germany, and the Netherlands either had a unilateral peg or participated in the MCA during the entire period.

ers change their existing exchange arrangements, we also believe this policy stability warrants explanation, especially given changes in the international economy, domestic macroeconomy, and government partisanship during the period.

Our trichotomous dependent variable raises two important issues. First, it is problematic to include a nominal lagged endogenous variable in a multinomial analysis. Instead, we include two dummy variables to capture the policy inertia present in the choice of exchange-rate regime. The first dummy variable, PEG_{t-1} , is coded 1 if the country had participated in a (unilateral) fixed exchange rate in the previous period and 0 otherwise. The second dummy variable, MCA_{t-1} , is coded 1 if the country had participated in a multilateral currency arrangement in the previous period and 0 otherwise.

Second, the presence of multilateral currency arrangements in our sample presents some interesting theoretical and methodological questions. Membership in the Snake was limited to countries in Europe, although none were required to join. France, for example, left the Snake in January 1974, only to rejoin the following year—and then exit a second time in 1976. Participation in the EMS was further restricted to member states of the European Community (EC), although, again, member states were not required to join. Indeed, the United Kingdom chose not to participate in the EMS until 1990 and then withdrew in 1992. Spain also did not participate in the EMS for a few years after it joined the EC. To capture these restrictions, we include two dummy variables in our model. The first variable, Europe, indicates whether a country is in Europe, but not a member of the EC. The second, EC, indicates whether a country is a member of the EC.⁴⁸

A question for our analysis, however, is whether geographic location or EC membership has an independent influence on the decision of individual member states to fix or float their currencies; that is, the influence of these variables on a country's exchange-rate arrangement may be interpreted in two ways. One interpretation holds that these variables directly influenced the choice of exchange-rate arrangement. European countries chose to participate in the Snake because of political pressure from key trading partners. EC member states were more likely to participate in the EMS simply because, as EC members, most had little choice but to accept the arrangement. According to this perspective, if an MCA had not existed, member states would have unilaterally pursued a variety of exchange-rate arrangements. Some would have unilaterally pegged their currencies (probably to the deutsche mark), whereas others would have continued to float.

On the other hand, one could argue that individual states participating in an MCA made a decision about their exchange-rate arrangements based on the political and economic criteria outlined earlier. These criteria suggest that most European countries—small, open economies with "proportional-high opposition influence" political systems—are likely to opt for a fixed exchange-rate arrangement. The geographi-

^{48.} In alternative specifications, we included a dummy variable for all European countries in the sample, regardless of whether they were members of the EC. Including this variable with the EC dummy variable, however, created statistical problems, due to the collinearity of the variables.

cal proximity and extensive trade relations of countries in Europe and the institutionalized cooperation of the EC, however, gave them an option beyond a unilateral peg. They could build on these factors to create a multilateral arrangement. According to this interpretation, location in Europe or EC membership did not influence the decision to fix or float, but rather it conditioned the institutional form the fixed exchange-rate arrangement would take: unilateral or multilateral. This interpretation implies the following counterfactual: if the MCAs had not existed, MCA participants would have chosen to fix their currencies anyway.

Given that countries could (and did) opt out of both the Snake and the EMS, we prefer this second interpretation. Although participation in the Snake and the EMS was restricted, neither geographic location or EC membership committed a country to join the arrangements; that is, countries were not forced to participate. Rather, most faced incentives that would have led them to choose some type of fixed exchangerate arrangement. Their geographic location or membership in the EC simply created the possibility of a multilateral arrangement. This interpretation, however, presents some methodological challenges.

Methodology

We employ two techniques to test the argument: constrained multinomial logit and binomial logit. Unconstrained multinomial logit allows for multiple nonordered choices, but it operates under the assumption that the independent variables have an unconstrained influence on each choice.⁴⁹ That is, multinomial logit produces comparisons between (fix versus MCA), (fix versus float), and (MCA versus float). But we argue that the independent variables have a similar effect on the latter two decisions.⁵⁰ Unconstrained multinomial logit does not permit us to test our theoretical argument.

In contrast, the constrained multinomial technique allows us to (1) use one set of variables to distinguish between the decision to float and pursue some sort of alternative arrangement and (2) use another set of variables to distinguish between which of these alternative arrangements was chosen (that is, unilateral peg or MCA). In other words, constrained multinomial logit allows us to model the choice: (fix, MCA) and float. With this technique, we can require that the parameter estimates affecting the choice of (fix versus float) and (MCA versus float) be the same for all independent variables except one. We simultaneously estimate the influence of a second set of variables on the probability of fixing versus participating in an MCA (fix versus MCA). All else equal, we argue that location in Europe, EC membership, and the

49. Greene 1993.

^{50.} This a priori assumption determines our choice of methodology. If the decisions were nested, we could have used nested multinomial logit or generalized extreme value models. McFadden 1983. The constrained multinomial model is implemented using STATA statistical software. The code used for estimation as well as the data used in the analysis are available on request.

country's prior exchange-rate arrangement are the only independent variables that affect the choice between fixing and joining an MCA.⁵¹

The use of pooled cross-sectional time series data with a nonordered outcome raises the possibility of serial correlation. Although the inclusion of the lagged dummy variables helps with this issue, it does not guarantee unbiased and efficient parameter estimates. G. S. Maddala and Nathaniel Beck, Jonathan Katz, and Richard Tucker argue that, with a logit specification, serial correlation can be accounted for through the inclusion of a set of t-1 period dummy variables.⁵² Since multinomial logit can be conceptualized as the simultaneous estimation of two (or more) binary logit equations, we adopt this technique.⁵³

We also estimated the model using binomial logit. In this model, the dependent variable is dichotomous: either countries float or they choose not to float. The "not float" category includes a variety of possible arrangements, including a unilateral peg or a multilateral currency arrangement (that is, Snake or EMS). This model does not allow us to test our interpretation of the role of geographic location or EC membership. Instead, the technique implies that location in Europe and EC membership directly influence the choice of fixing or floating the currency. Nevertheless, this technique serves as an important robustness check on our main variables of interest. As with the constrained multinomial logit model, we include a set of t-1 period dummy variables to account for temporal dependence.⁵⁴ We also include a simple lagged endogenous variable. The use of the binomial logit technique allows us to perform other robustness checks, including (1) running the analysis only on the post-EMS period (that is, after 1979) and (2) excluding countries that had a constant exchange-rate regime (that is, always floated or always fixed) during 1974–95.

Multinomial Results

The results from the constrained multinomial logit are presented in Table 3. Overall, the model is statistically significantly different from zero. The log-likelihood ratio

51. We tested this argument by running an unconstrained multinomial logit model on our trichotomous dependent variable. None of the independent variables, except Europe, EC, PEG_{t-1} , and MCA_{t-1} , have a statistically significant effect on the choice between fixing the exchange rate and joining an MCA.

52. See Maddala 1987; and Beck, Katz, and Tucker 1997. Beck, Katz, and Tucker point out that "the logit model can be extended to the multinomial logit to handle multiple types of failures . . . so long as the outcomes satisfy the independent risks assumption underlying the 'competing risks' model." Beck, Katz, and Tucker 1997, n25, 27. Given that the categories on the dependent variable are mutually exclusive—that is, a country cannot have both a fixed and a floating exchange-rate regime or have a floating currency and be a member of a multilateral exchange agreement—this assumption is met.

53. Long 1997.

54. We also reestimated the binomial logit using the general estimating equation procedure, which is an extension of general linear modeling. This procedure allows us to specify the within-group correlation structure. The procedure also estimates standard errors that are robust to heteroscedasticity and autocorrelated disturbances. Using this technique, we estimated the model with both an independent and an AR(1) error structure. In each case, the results on the variables of interest are significant, in the predicted direction, and with the predicted relative magnitudes.

Independent variable	<i>Coeff</i> _i cient ^a	SE	Marginal effect (Fix)	Marginal effect (MCA)	Marginal effect ^b (float)
Majoritarian—low opposition influence	-4.65**	2.35	-0.32	-0.50	0.82
Proportional—low opposition influence	-4.54*	2.41	-0.31	-0.48	0.79
Electoral timing	-6.75**	2.39	-0.36	-0.56	0.91
Openness	9.13**	2.94	0.20	0.31	-0.51
Domestic credit shock	-0.01	0.01	-0.03	-0.05	0.08
Capital controls	4.84**	1.74	0.33	0.50	-0.83
International capital mobility	-6.40e-07	6.46e-06	-0.01	-0.01	0.02
Economic growth	-156.13	96.98	-0.09	-0.13	0.22
Partisanship	-0.08	1.00	-0.01	-0.01	0.01
Election year	0.01	0.73	0.01	0.01	-0.02
Pegged exchange rate $(t-1)^c$	-3.63**	1.25	0.82	-0.23	-0.59
Member of MCA $(t-1)^c$	1.96	1.43	0.09	0.81	-0.90
Europe ^c	0.40	1.62	0.05	0.23	-0.30
EC membership ^c	4.31**	1.59	-0.52	0.63	-0.12
Actual number of fixed	100				
Predicted number of fixed	95				
Actual number of MCA	143				
Predicted number of MCA	131				
Actual number of floats	190				
Predicted number of floats	184				
Final log likelihood χ^2	-61.73***				
Probability	0.0000				
Temporal dummy variables					
Log likelihood χ^2	41.13***				
Probability	0.0036				

TABLE 3. Constrained multinomial logit: Floating versus (Fix/MCA)

^aCoefficients are multinomial logit estimates of the probability of (Fix/MCA) versus float. The model is estimated with a set of twenty temporal dummy variables not shown.

^bFor a dummy variable, the marginal effect is calculated for a discrete change in the variable. For a continuous variable, the marginal effect is calculated for a change in one-half of one standard deviation. ^cVariables are unconstrained. For ease of presentation, we report coefficients for the choice between pegging and joining a multilateral exchanging agreement.

***p < .05, χ^2 -test. **p < .05, two-tailed *z*-test. *p < .10, two-tailed *z*-test.

test rejects the null hypothesis that, taken together, none of the independent variables is systematically related to exchange-rate regime choice. Further, the model correctly classifies over 85 percent of the observations, although it tends to overestimate participation in an MCA and underestimate the probability of fixing unilaterally. The explanatory power of the model does not drop off substantially if we exclude either the lagged dummy variables—PEG_{*t*-1} and MCA_{*t*-1}—the period dummies, or both.⁵⁵

Table 3 reports the parameter estimates, associated standard errors, and three sets of marginal effects for the independent variables.⁵⁶ The coefficients in Table 3 can be interpreted as comparisons between fix–MCA and float. Floating is the omitted category. Although we constrain the independent variables to have the same effect on fixing and joining a multilateral currency agreement, the marginal effects of the independent variables are different, since maximum likelihood estimates for multinomial logit correspond to nonlinear relationships between the independent and dependent variables.⁵⁷ In other words, although the coefficients for {(fix, MCA) versus float} are identical, the marginal effects will differ because we do not constrain the Europe, EC, or lagged variables when comparing fixing and joining an MCA.

The domestic political institutional variables are both statistically significant and correctly signed. The coefficients indicate that proportional-high opposition influence systems are the most likely to fix their exchange rate, whereas majoritarianlow opposition influence systems are the least likely to fix their exchange rate. Proportional-low opposition influence systems fall in between. The marginal effects show that, holding the other independent variables at their means, politicians in a majoritarian-low opposition influence system are 82 percent more likely to adopt a floating exchange rate than politicians in a proportional-high opposition influence system. Additionally, they are 32 percent less likely to fix their exchange rate and 50 percent less likely to join an MCA. In contrast, politicians in a proportional-low opposition influence system are 31 percent less likely to fix their exchange rate and 48 percent less likely to join an MCA than politicians in a proportional-high opposition influence system. Politicians in a majoritarian-low opposition influence system are, therefore, more likely to float than those in a proportional-low opposition influence system. Clearly, exchange-rate arrangements reflect politicians' need to maintain policy discretion, as shaped by the configuration of electoral and legislative institutions.

Additionally, countries with exogenous electoral timing are more likely to allow their exchange rates to float. The marginal effects indicate that systems with exogenous electoral timing are 91 percent more likely to pursue a floating exchange-rate arrangement. Because politicians cannot manipulate electoral timing in these systems, they will not want to limit their policy discretion with a fixed exchange rate.⁵⁸

We included three sets of control variables, reflecting the country's position in the world economy, domestic macroeconomic conditions, and political variables. First, consider the systemic variables. Openness is statistically significant and positive, indicating that increased trade dependence increases the likelihood of adopting a

^{56.} For a dummy variable, the marginal effect is calculated for a discrete change in the variable. For a continuous variable, the marginal effect is calculated for a change in one-half of one standard deviation.

^{57.} Long discusses the nonlinear relationship between independent and dependent variables in maximum likelihood models. Long 1977.

^{58.} A likelihood ratio test indicates that, taken together, these three domestic political variables (majoritarian–low opposition influence, proportional–low opposition influence, and exogenous electoral timing) are significantly different from zero.

fixed exchange-rate arrangement. This supports arguments found in the literature. The domestic credit variability measure, however, is statistically indistinguishable from zero.

We also included two variables to measure capital mobility. The first variable, a dummy variable for years in which a country had adopted capital controls, is statistically significant and positive. Countries with capital controls are likely to adopt a fixed exchange rate. The logic of the Mundell-Fleming model suggests that countries are likely to adopt capital controls with a fixed exchange rate so that they can maintain domestic monetary policy autonomy. The international capital mobility variable, on the other hand, is not significant. No relationship appears to exist between increases in the volume of international capital mobility and the adoption of particular exchange-rate arrangements.⁵⁹

We also included variables designed to capture domestic macroeconomic and political conditions. The growth variable is negative but statistically insignificant. In addition, the partisanship variable is not statistically significant, indicating that the ideology of the governing party does not influence the choice of exchange-rate regime. The electoral cycle variable is also not statistically significant.

Unsurprisingly, the two lagged dummy variables are statistically significant.⁶⁰ The marginal effects indicate that countries are very likely to maintain the exchange-rate regime that is already in place.

Finally, we include two variables indicating geographic location and membership in the EC. The Europe variable is not statistically significant, indicating that it does not affect exchange-rate regime choice. The EC variable, on the other hand, is, as expected, positive and significant. EC member states are more likely to fix their exchange rate in an MCA than to fix unilaterally.

Binomial Results

We also estimated the model using binomial logit. In this model, the dependent variable is coded 0 if the country has a floating exchange rate and 1 otherwise (that is, fix or MCA). The results, presented in Table 4, are consistent with those of the constrained multinomial logit for the variables of interest. The majoritarian–low opposition influence and proportional–low opposition influence variables possess parameter estimates similar to their multinomial counterparts. The marginal effects

59. This, however, may be an artifact of the statistical model. The measure of international capital mobility is a trending variable and, consequently, collinear with the set of period dummy variables. When the model is estimated without the period dummies, the international capital mobility variable is statistically significant at the .10 level.

60. We also estimated the model without the lagged dummy variables. A comparison of the models indicates that (1) no variables that were statistically significant became statistically insignificant, (2) no variables that were statistically insignificant became statistically significant, (3) the marginal effects of the political variables all increased, and (4) the number of cases correctly predicted decreased slightly. These results lend additional credence to our argument regarding the importance of the political institutions. Results are available on request.

Independent variable	<i>Coeff</i> _l cient	Robust SE	Marginal effect
Constant	-7.22**	3.08	
Majoritarian-low opposition influence	-3.55**	1.51	-0.70
Proportional-low opposition influence	-3.17**	1.56	-0.65
Electoral timing	-3.93**	1.34	-0.75
Openness	7.44**	2.58	0.36
Domestic credit shock	-0.01	0.01	-0.03
Capital controls	3.13**	0.91	0.57
International capital mobility	-4.47e-06	4.91e-06	-0.13
Economic growth	-182.68**	50.86	-0.21
Partisanship	0.45	0.54	0.03
Election year	-0.01	0.50	-0.01
Lagged dependent variable	8.22**	2.16	0.96
Europe	0.98	0.84	0.16
EC membership	3.52**	1.79	0.50
Actual number of fixed/MCA	190		
Predicted number of fixed/MCA	182		
Actual number of floats	243		
Predicted number of floats	236		
Final log likelihood	-37.72***		
Probability	0.0000		
Temporal dummy variables			
Log likelihood χ^2	36.88***		
Probability	0.0000		

TABLE 4. Binomial logit: Fix versus floating (floating is the omitted category)

Note: Robust standard errors are based on clustering according to country. The model is estimated with a set of twenty temporal dummy variables not shown.

^aFor a dummy variable, the marginal effect is calculated for a discrete change in the variable. For a continuous variable, the marginal effect is calculated for a change in one-half of one standard deviation. ***p < .05, γ^2 -test.

**p < .05, two-tailed *z*-test.

*p < .10, two-tailed *z*-test.

indicate that politicians in a majoritarian-low opposition influence system are 70 percent more likely to choose a floating exchange rate than those in a proportional-high opposition influence system. Politicians in a proportional-low opposition influence system are 65 percent more likely to choose a floating exchange rate than those in a proportional-high opposition influence system. The exogenous electoral-timing variable is, again, significant and in the predicted direction. Politicians in these systems are 75 percent more likely to opt for a floating exchange rate.

The lagged endogenous variable, the Europe variable, and the EC variable have almost identical interpretations as in the constrained multinomial logit model. The lagged endogenous variable is positive and significant, indicating that countries are likely to retain the same exchange-rate arrangement from period to period. The Europe variable is, again, insignificant. The EC dummy variable is, again, positive and significant. EC member states are 50 percent more likely to choose a fixed exchange rate than nonmember states. Most of the parameter estimates for the other control variables are also similar to the estimates in the constrained multinomial model. The lone exception is the growth variable, which is statistically significant in the binomial specification. This suggests that politicians will be more likely to retain monetary policy discretion to smooth output and/or employment as domestic economic uncertainty increases.

We performed two robustness checks using the binomial logit technique. First, we divided the sample longitudinally, running the analysis only after 1979, the year the EMS was founded. The results are similar to the results in Table 4. The variables of interest remain significant, in the predicted direction, and with the same relative magnitudes in the post-EMS period. Second, we divided the sample cross-sectionally. In order to ensure that countries with a constant exchange-rate regime (that is, always floated or always fixed) were not driving the results, we reestimated the model using the eleven countries that had switched between floating and fixed exchange rates at some point during the period. Again, the results on our variables of interest are similar in this subsample.

Conclusion

Politicians' incentives play an important role in the choice of an exchange-rate arrangement. Although a fixed exchange rate provides certainty about the external economic environment, it limits the ability of politicians to use macroeconomic policy for partisan or electoral gain. The configuration of domestic political institutions conditions politicians' need to maintain policy flexibility. In systems where the electoral system decisively determines the composition of government and the cost of electoral defeat is high, politicians will be unwilling to relinquish policy control with a fixed exchange rate. On the other hand, in systems where coalition governments are common and the policy process is open, a fixed exchange rate can provide politicians with a focal point for policy agreement.

The results cast doubt on other explanations of exchange-rate commitments. Arguments based on policy capabilities and credible commitments imply that politicians in majoritarian systems will be more likely to fix their exchange rates than those in proportional representation systems—predictions that directly contradict our results. Among the industrial democracies, the post–Bretton Woods experience does not support these alternative arguments.

Finally, our argument has implications for recent scholarship on the interaction between the international economy and domestic politics. This literature has brought renewed emphasis to the role of the international economy in shaping the policy choices open to governments.⁶¹ Some of this literature suggests that governments have little choice but to kowtow to privileged economic sectors, particularly international capital.⁶² Other political economists argue that the internationalization of prod-

62. Goodman and Pauly 1993.

^{61.} For example, Keohane and Milner 1996.

uct and capital markets has altered the policy demands of economic actors based on their differential exposure to the international economy.⁶³ These developments have eroded traditional social and sectoral alliances and created new constellations of interests over economic policy.

Ultimately, however, it is politicians who must respond to the demands of the international economy and of new economic interests. Our analysis highlights the fact that politicians have interests and incentives independent of economic and societal forces—and that these incentives must be considered in order to completely explain policy choices. The configuration of domestic political institutions not only affects these political interests but also conditions how politicians respond to the pressures of economic internationalization.⁶⁴ Although some electoral and legislative institutions will encourage politicians to respond to the socioeconomic consequences of internationalization, other institutions will insulate politicians from these economic and societal changes. Focusing on politicians and their incentives, therefore, is a necessary complement to explanations centering solely on economic conditions.

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64. Garrett and Lange 1996.

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