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Decisions about whether to dollarize Latin American currencies will be made by politicians and depend on domestic and international political constraints. The trade-offs politicians confront vary across countries, and their valuation varies among individuals and groups. Those who would try to analyze the decision to dollarize need to understand the politics of the trade-offs, and of their weighting in the political process.

Most discussions of the issue are, however, of little use in analyzing the likelihood of dollarization. They typically focus on whether dollarization is a good or bad idea, in general or for a particular country. These normative economic arguments about the welfare effects of dollarization are in and of themselves almost certainly irrelevant to explaining actual policy choices—the social welfare implications of economic policies are notoriously poor predictors of the probability of their adoption. Also, most of the literature evaluates the welfare implications (hence desirability) of dollarization on the basis of its impact on the anti-inflationary credibility of the authorities. This focus on macroeconomic credibility may resonate with some strains of the scholarly literature—especially that which rejects any lasting real effects of nominal variables. However, it is of little relevance to the majority of exchange rate policy choices, which are typically driven by concerns about the impact of currency policy on the relative price of foreign and domestic products, and on cross-border trade, investment, and financial flows.

In this chapter, I focus on these two, generally neglected, dimensions of dollarization. My first purpose is to help *explain* potential policy choice, rather than comment on its wisdom. I do so largely by drawing on the small existing literature on the political economy of exchange rate regime choice, under the assumption that the reasons

for dollarizing are related to the reasons for adopting a fixed exchange rate. My second purpose is to emphasize the importance of concern for real factors—especially policy preferences with regard to relative prices and to international trade and investment—for exchange rate regime choice. I draw upon the experience of Latin America, with a few references to monetary integration in Europe, but the implications of the analysis are of relevance in other settings.

Within their national political economies, there are typically two powerful countervailing pressures on politicians in the making of currency policy. The first is the desire for monetary stability, especially reduced exchange rate volatility. The second is the desire for flexibility to allow policymakers to affect the competitiveness of locally produced tradables. The empirical evidence is, for example, that governments in very open economies with powerful private interests in cross-border economic activity are likely to face stronger pressures to fix, hence dollarize; whereas for policymakers in relatively more closed economies with powerful import-competing interests, such pressures are likely to be weaker.

Analysis of international constraints on dollarization is more difficult, due especially to the lack of pertinent comparisons. One experience that may have some relevance is that of European monetary integration. This, and general principles, suggest the importance of two sets of relationships of the dollarizing country. The first is with other nations in the region, especially if it is part of a preferential trade or other integration agreement. In this context, movement toward dollarization may be linked to broader integration initiatives, so the likelihood of dollarization will be tied to developments in regional integration. The second is with the United States. Although there is no explicit connection between adoption of the U.S. dollar and other policy initiatives, it is possible that dollarization could benefit the United States and that the United States could offer concessions on other dimensions to dollarizing countries. In addition, dollarizing countries are likely to come under pressure to harmonize their financial regulations with those of the United States. This might be a barrier to dollarization, and at a minimum it implies that consultations with the United States will be important.

I start by defining terms and evincing a few first principles. Then I summarize the state of our theoretical and empirical knowledge about the domestic political economy of fixing exchange rates. Although the choice of a fixed exchange rate is not identical to the

choice of dollarization, it is the closest empirical and theoretical referent we have and provides some insights into the constraints and opportunities associated with dollarization. I also consider the difference between dollarization in a country that has a floating currency, and dollarization in a country that has a long-standing and credible peg already in place. I then consider the international political economy factors that might be important.

### 8.1 Definitions and First Principles

I consider dollarization the endpoint of a continuum of exchange rate policies that runs from a free float, through various forms of managed floating, to different sorts of fixed exchange rates. Dollarization may well be the most binding commitment to a fixed rate, for it is probably more difficult to unwind dollarization than to leave a peg or currency board, but leaving any of these arrangements is conceivable, at some political price. The value of regarding dollarization as one form of peg is that it allows us to analyze pressures for and against dollarization on the basis, more generally, of the theoretical and empirical literature on the political economy of exchange rate regime choice, and, specifically, on the basis of the choice of fixing exchange rates or of forming a monetary union. To be sure, there are differences among all these regimes, but the similarities are great—and considering them together allows us to draw lessons from a variety of previous experiences.

The assertion that dollarization is functionally equivalent to a particularly credible peg is reasonable for countries that are contemplating dollarizing from a starting point at which the currency is formally or informally, fully or partially, flexible. Where, however, the starting point is a long-standing fixed exchange rate, one that has acquired substantial credibility, then the comparison is far less relevant. I return to this special case later, but here focus on the more common instances in which dollarization is considered for a country with a flexible currency.

Another preliminary issue is worth mentioning. Most economic analyses of exchange rate regime choice focus on the steady state, comparing the welfare or distributional effects of one regime (such as dollarization) against another. This is important, but to understand the *politics* of this policy, a shorter time horizon is appropriate. Policymakers have to worry about the impact of the *transition* to a

new exchange rate regime as well as its longer-term effects. This is likely to be as true of dollarization as it was, for example, with Europe's Economic and Monetary Union (EMU), in which many of the reservations about the process had to do not with its goal but with the transitional difficulties of achieving monetary convergence. Analyzing the political economy of dollarization requires taking into account both the transition and the steady state.<sup>1</sup>

With these preliminaries out of the way, we can turn to our central question: given the general and historical importance of the exchange rate in Latin America, what circumstances will affect the propensity of economic policymakers to give up such a powerful weapon of economic policy? Both the expected costs and the expected benefits of dollarization have important domestic and international aspects, to which the discussion now turns.

## 8.2 The Domestic Political Economy of Dollarization

National policymakers are responsive first and foremost to national political constituents. Decisions on dollarization, as on all national economic policies, are thus a function of real or potential support for and opposition to the proposed policy and of the institutional environment within which policy evolves. I do not attempt a complete survey of the political economy factors that affect dollarization but rather emphasize those expected to be central. The principal supporters of dollarization are likely to be found in those segments of the population most strongly involved in international trade and payments, for whom currency stability is especially important. Dollarization's principal opponents are likely to be among those especially concerned about the potential loss of an active exchange rate policy that has served to improve their ability to compete with foreign products at home or abroad.

Most discussions of dollarization, and of fixed rates generally, emphasize the value of a fixed rate for anti-inflationary credibility, and the countervailing value of a flexible rate in allowing monetary policy to respond to exogenous shocks.<sup>2</sup> Both considerations are reasonable and almost certainly operate at some level. But evidence of their empirical importance is very spotty and in the case of the latter—and other factors associated with the literature on optimal currency areas—almost nonexistent. This is not surprising. Responsiveness to exogenous shocks is a very diffuse concern, and it is hard

to see by what channel it would have politically relevant effects. Inflation is of more immediate political relevance, but its impact on exchange rate choice is ambiguous. On the one hand, a relatively high inflation rate increases the desirability of reducing it, but on the other hand, fixing the exchange rate with a high initial rate of inflation is almost certain to lead to a substantial real appreciation with disastrous effects for local producers of tradables. Hyperinflation increases the likelihood of fixing, but there are no hyperinflationary countries left in Latin America.

In fact, the available empirical evidence implies that the trade-off between exchange rate stability and currency flexibility is of relevance primarily because of its expected impact on the cost of cross-border trade and investment and on the "competitiveness" of local producers. By definition, dollarization effectively eliminates exchange rate volatility, stabilizing the currency risk inherent in most cross-border transactions. However, the loss of the exchange rate as a policy instrument makes it impossible for governments to use currency movements to affect the competitive position of national tradables producers. It is this dilemma that is at the core of the *political economy* of dollarization, for it implicates different *distributional* interests and pressures. Issues related to credibility and monetary autonomy may be relevant for evaluating the aggregate social welfare effects of different exchange rate policies but have little direct impact on their politics—or, by extension, on the likelihood of their being adopted by policymakers.<sup>3</sup>

So I expect the principal determinant of the propensity to dollarize to be the relative socioeconomic and political importance of those interested in stabilizing currency values to facilitate cross-border economic activity, on the one hand, and those anxious about the impact of the currency's value on the relative price of their products. This determinant implies that the more open a national economy is to flows of goods and capital (especially to and from the United States, in the case of dollarization), the stronger the political incentives to act to reduce currency fluctuations.<sup>4</sup> To the extent that substantial segments of the population have extensive cross-border commitments, this relationship is especially the case.<sup>5</sup> Groups with important cross-border interests tend to want stable exchange rates and typically are more sympathetic to fixing.

Although economists tend to see few major direct effects from the elimination of currency volatility, there is strong evidence that

elements of the private sector have powerful interests in reducing exchange rate fluctuations.<sup>6</sup> This is especially true of those with nominal foreign currency contractual or quasi-contractual obligations. This category might include cross-border investors and debtors, and exporters (or consumers) of differentiated manufactured products. For example, there is substantial anecdotal evidence that for more than twenty years, concerns about exchange rate movements on the part of private agents with large dollar debts have played a major part in the politics of exchange rates in Latin America. For all these groups, currency fluctuations can have a powerful impact on profitability. These sectors of the economy can be expected to support the stabilization of nominal currency values, including dollarization. And in fact some of the more prominent private sector supporters of fixing exchange rates in Latin America have been multinational corporations, international banks, local firms tied to international financial markets, and those with large outstanding foreign currency liabilities.<sup>7</sup> In some instances, financial institutions may be torn, as dollarization takes away most of their foreign exchange trading profits and may expose them to additional competition from foreign banks; but (as in Europe) the general expectation is that the large increase in the volume of financial intermediation will substantially outweigh the negative impact of increased competition.

On the other hand, producers of tradables tend to want a relatively weak (depreciated) exchange rate and typically are more sympathetic to floating. For them, there is bound to be concern about a fixed rate's elimination of the ability to use the exchange rate to affect the competitiveness of local products in domestic and foreign markets. Exporters may be conflicted about this, inasmuch as fixing might increase the level of trade but risk a real appreciation; which effect dominates presumably depends on the industry and the macroeconomic context. Import-competing firms and sectors have little to gain, and much to lose, from a policy that removes depreciation from the government's arsenal of policy instruments.

A more general, related, point is that inasmuch as dollarization increases the level of international trade and investment, firms and industries that anticipate gaining from this greater integration of markets will support dollarization. Andrew Rose (2000) estimates that sharing a currency roughly triples the level of trade between

two countries; in this context, dollarization should be supported by those who expect to do well as their market is more tightly integrated with that of the United States and opposed by those worried about greater competition from abroad. This point simply reinforces the previous ones. The conclusion from all this is that more internationally oriented firms and sectors are likely to support dollarization, whereas those competing with imports are likely to oppose it.

Other factors have an impact on the political economy of exchange rate regime choice. As mentioned earlier, the effect of inflation is unlikely to be simple. If the political benefits of fighting inflation rise with inflation, governments will be more likely to fix currencies in conditions of very high or hyperinflation. A related point is that where a large proportion of private contracts have come to be written in or indexed to dollars—typically in countries with a long history of high and variable inflation—the costs of moving to full legal dollarization are lower than otherwise. It may also be the case that in conditions of hyperinflation the difficulties of adjusting to a new monetary regime are less severe, as universal indexation and great nominal wage and price flexibility allow for a rapid change to a low-inflation regime. But countries with moderate levels of inflation are less likely to fix their exchange rates—the benefits of inflation reduction are low, and the costs of the anticipated real appreciation are high. For countries with very low inflation, monetary conditions are probably neutral: fixing the currency does not risk real appreciation, but it also does not improve macroeconomic performance. The result is the expectation that the probability of fixing might follow a U in relationship to inflation: it declines as inflation rises to moderate levels, then rises as it reaches hyperinflationary levels.<sup>8</sup>

Features of national political systems may also affect decisions about exchange rates, inasmuch as they are made by incumbent politicians and are subject to the incentives faced by these politicians. Probably the most important electoral consideration is the impact of government weakness on the willingness and ability to implement a policy of fixing the exchange rate. A strong government will be better able to sustain the policies necessary to maintain the fixed rate. It is possible to imagine this going in the opposite direction, for a weak government may be more desperately in need of the “imported” credibility the peg brings. However, as a currency peg is

no magic potion, the former effect is likely to dominate: politically strong governments will be more capable of sustaining a commitment to a fixed exchange rate or dollarization.<sup>9</sup>

In summary, I anticipate that the probability of dollarization will rise with the relative influence of groups with cross-border economic interests and decline with the influence of tradables producers concerned about the impact of currency values on "competitiveness." I also anticipate the dollarization will be more likely in conditions of hyperinflation, and with relatively strong governments.

### 8.2.1 The Exception: Dollarization from a Credible Peg

The discussion so far has assumed that the government's starting point is a more or less flexible exchange rate and that movement toward dollarization is analogous to fixing the currency in a particularly visible and credible way. But for some of the countries considering dollarization, the starting point is instead a currency peg of long standing, with a high degree of credibility. Many of the small island nations of the Caribbean share this sort of starting point. In these circumstances, the issues are quite different.

Where the initial policy condition is a moderately to highly credible fixed rate, the issue is whether the costs of dollarizing are worth the increment in the credibility of the currency peg. This means that movement to dollarization is likely to involve much more marginal calculations than movement from a float, where the question is not whether to make the peg more credible but whether a peg is in and of itself desirable. In these conditions, the benefits of dollarizing are much smaller, as inflation is already low and the exchange rate is stable. And the costs of dollarizing are also smaller, as most of the monetary adjustment has already been accomplished. I expect pressure for and against dollarization to come from roughly similar quarters to the ones discussed earlier but at a much lower level of intensity. It would normally take some significant shock to lead to much open acrimony over the issue, such as a serious recession or severe trade difficulties (as, to some extent, Brazil's 1999 devaluation led to pressures on the Argentine currency board).

Many of the tools described here are relevant to debates over dollarization in countries that already have a credibly fixed currency. But the analogy to the choice between floating and fixing is flawed,



or at least vastly overdrawn, and attention will focus primarily on the costs and benefits of increased credibility for the existing fixed rate. This in itself is an important issue, but it is much less likely to respond to the factors discussed here in so striking a way.

### 8.2.2 Empirical Findings and Implications

We can assess this array of factors on the basis of the small but growing empirical literature that attempts to explain exchange rate policy choice.<sup>10</sup> In what follows, for consistency, I rely primarily upon work done by myself and coauthors, along with a bit of other empirical work of relevance. The following summary is an undoubtedly biased and incomplete one but may help fix ideas. The empirical work is typically cast in terms of fixing or floating the currency; I recast it in terms of dollarization for current purposes.

The results used are based on the analysis of data about virtually all Latin American countries from 1960 to 1994 (Frieden, Ghezzi, and Stein 2001). The data include a finely differentiated definition of the currency regime in place and a wide array of socioeconomic and political variables. Rather than present full results and an explanation of them, for which the interested reader can consult the original study, I use them to illustrate the likelihood of dollarization.

Table 8.1 presents estimates of the impact of the significant explanatory variables on the probability that a government will fix its currency. As the original empirical work is an ordered logistic regression, these estimates are only illustrative: they demonstrate the impact of each variable, holding all others constant at their means. Some of the variables are dummies, for which table 8.1 shows the difference between 0 and 1; for others, the table shows the impact of moving one standard deviation away from the variable's mean. From the table, it can be seen that inflation has no appreciable impact on exchange rate regime choice (in fact, it is not statistically significant), whereas hyperinflation increases the likelihood of fixing by over 20 percent. As indicated, openness has a powerful impact: a one standard deviation increase in trade as a share of GDP increases the likelihood of a peg by 25 percent. The impact of tradable producers can also be seen: a one standard deviation increase in the size of the manufacturing sector is associated with an 11 percent decline in the probability of fixing. These are the aforementioned interest-group-based considerations.

Table 8.1  
Change in the probability of a fixed exchange rate regime in response to changes in explanatory variables

	Log inflation	Hyper- inflation	Openness (X + M)/GDP	Mfg./GDP	Political instability	Govt. seat share	Effective no. of parties
Mean of variable	0.3363	0.0254	0.6650	0.1857	0.1503	0.595	2.4429
Change in variable <sup>1</sup>	0.6299	1	0.3968	0.0553	1	0.2009	1.3122
$\Delta p$ (fixed)	0.0012	0.2076**	0.2503***	-0.1129***	0.1928**	0.0695*	0.0632*

Source: Adapted from Frieden, Ghezzi, and Stein (2001).

<sup>1</sup> The magnitude of the change in the explanatory variable is one standard deviation around the mean, in the case of the nondummy variables, and one in the case of dummy variables.

Estimates are derived from regression coefficients whose significance (see Frieden, Ghezzi, and Stein 2001) is as follows:

\* = significant at .05 level.

\*\* = significant at .01 level.

\*\*\* significant at .001 level.

Purely political factors also appear to matter. Political instability is a dummy that takes a value of one if a country has gone through three or more government changes in the previous five years, or if it has gone through two or more government changes in the previous three years. It also takes a value of one in years in which there were successful coups and in the first year following a successful coup. It appears to increase the likelihood of a peg substantially, by 19 percent. The last two columns measure the government's strength: the higher the government's seat share, the more likely a fixed rate, and similarly the more fragmented the opposition, the more likely a peg.<sup>11</sup> Both effects are relatively small.

As another exercise, I use these results and more recent data to predict the likelihood that Latin American countries will have fixed rates as of the year 2000. Table 8.2 presents 1995–1999 country averages for all the variables just discussed, apart from the electoral variables, whose impact is relatively small. It can be seen that no country has recently experienced hyperinflation, and political instability is currently rare (only Ecuador, Guyana, and Paraguay have experienced it recently); recall that the estimated impact of inflation is very small. That leaves openness and the size of the manufacturing sector as major determinants of the propensity to fix, hence dollarize.

Table 8.3 presents estimates of the predicted probabilities that each Latin American country will fix its exchange rate, given the actual values of the explanatory variables between 1995 and 1999. The official exchange rate regime column presents the actual exchange rate regime in place at the beginning of the year 2000, as reported by the IMF in its *Exchange Arrangements and Exchange Restrictions*. The next two columns present numerical codings of regimes. The de facto exchange rate regime column uses a three-point de facto definition of the exchange rate regime constructed by Levy Yeyati and Sturzenegger (2000), where a higher number is a more fixed rate; the regime reported is the average for 1997–1999. The fix/float column presents the IMF coding, where a 0 is a fixed rate and a 1 is floating. The final column reports the actual movements of nominal exchange rates between 1995 and 1999, expressed as the standard deviation of monthly currency changes. It can be seen that there are differences among regime measures.

The point of this exercise is not to evaluate the out-of-sample predictions of earlier work, for there is no necessary expectation that the

Table 8.2  
Country averages, Latin America, 1995-1999

Country	Inflation	Log inflation	Hyper-inflation	Openness [(X + M)/GDP]	Manufacturing (% GDP)	Political instability	Dictatorship
Argentina	0.76	-0.12	0.00	22.24	16.58	0.00	0.00
Bahamas	1.32	0.12	0.00	110.95	2.72	0.00	0.00
Barbados	2.45	0.39	0.00	130.45	6.28	0.00	0.00
Belize	1.65	0.22	0.00	102.52	13.50	0.00	0.00
Bolivia	7.43	0.87	0.00	48.77	17.74	0.00	0.00
Brazil	19.35	1.29	0.00	17.26	22.39	0.00	0.00
Chile	6.04	0.78	0.00	57.33	21.24	0.00	0.00
Colombia	18.33	1.26	0.00	33.84	13.31	0.00	0.00
Costa Rica	15.13	1.18	0.00	94.36	22.08	0.00	0.00
Dominican Republic	7.44	0.87	0.00	67.86	21.87	0.00	0.00
Ecuador	33.25	1.52	0.00	59.13	21.48	1.00	0.00
El Salvador	5.47	0.74	0.00	58.89	21.46	0.00	0.00
Guatemala	8.11	0.91	0.00	43.72	5.73	0.00	0.00
Guyana	7.00	0.84	0.00	207.71	11.10	1.00	0.00
Haiti	17.61	1.25	0.00	37.48	6.72	0.00	0.00
Honduras	19.77	1.30	0.00	97.23	18.40	0.00	0.00
Jamaica	14.11	1.15	0.00	118.97	14.70	0.00	0.00
Mexico	24.50	1.39	0.00	62.02	21.08	0.00	0.00
Nicaragua	11.21	1.05	0.00	108.55	15.38	0.00	0.00
Panama	1.09	0.04	0.00	78.32	8.56	0.00	0.00
Paraguay	9.70	0.99	0.00	98.96	15.34	1.00	0.00
Peru	8.39	0.92	0.00	28.58	14.98	0.00	0.00
Suriname	71.98	1.86	0.00	149.02	12.06	0.00	0.00
Trinidad and Tobago	4.25	0.63	0.00	98.68	15.06	0.00	0.00
Uruguay	21.38	1.33	0.00	43.47	18.70	0.00	0.00
Venezuela	21.38	1.33	0.00	47.07	15.72	0.00	0.00
All Countries	13.81	0.93	0.00	77.82	15.16	0.12	0.00

**Table 8.3**  
 Predicted, official, and de facto exchange rate regimes in Latin America, 1995–1999

Country	Predicted probability of fixing	Official exchange rate regime*	De facto exchange rate regime**	Fix/float (0 = fix)*	Exchange rate variability***
Bahamas	1.000	Peg to dollar	3.00	0	0.000
Barbados	1.000	Peg to dollar	3.00	0	0.000
Guyana	1.000	Float	2.00	1	0.050
Suriname	1.000	Managed float		1	0.118
Panama	.998	Dollarization		0	0.000
Guatemala	.997	Managed float	1.33	1	0.012
Jamaica	.997	Managed float	2.00	1	0.018
Belize	.996	Peg to dollar		0	0.000
Nicaragua	.994	Crawling peg	2.67	1	0.001
Trinidad and Tobago	.992	Peg to dollar		0	0.010
Paraguay	.991	Managed float	1.33	1	0.018
Haiti	.975	Float	1.00	1	0.028
Honduras	.956	Crawling band	2.33	1	0.010
Costa Rica	.861	Crawling band	2.00	1	0.002
Dominican Republic	.532	Managed float	1.33	1	0.019
Venezuela	.506	Crawling band	2.67	1	0.119
Mexico	.478	Float	1.00	1	0.043
Ecuador	.411	Float	1.67	1	0.068
Bolivia	.407	Crawling peg	2.00	1	0.003
El Salvador	.400	Peg to dollar		0	0.000
Chile	.386	Float	1.00	1	0.018
Colombia	.354	Float	1.00	1	0.028
Uruguay	.277	Crawling band	1.00	1	0.008
Peru	.156	Float	1.33	1	0.013
Argentina	.038	Dollarization	3.00	0	0.000
Brazil	.005	Float	2.33	1	0.088

\* As reported in *IMF Exchange Arrangements and Exchange Restrictions*, various years.

\*\* 1 = float; 2 = intermediate; 3 = fix—data taken from Levy Yeyati and Sturzenegger 2000.

\*\*\* Standard deviation of monthly percent changes in nominal exchange rate, 1995–1999.

expected regime choice will be immediately implemented.<sup>12</sup> Rather, it is to indicate the general implications of existing empirical work for the choice of exchange rate regime—and, most centrally, the near irrelevance of credibility-related factors and the overwhelming importance of trade. Table 8.3 demonstrates the centrality of openness to these results: all the very small, very open economies in and around the Caribbean basin have probabilities of fixing over .85, as does Paraguay. Of the thirteen countries on the top half of the table, predicted to be more likely to fix, seven have done so or are on this path: five are on fixed rates or dollarized (Bahamas, Barbados, Belize, Panama, and Trinidad and Tobago), and two (Guatemala and Haiti) are “semiofficially dollarized,” meaning that the U.S. dollar circulates freely and legally as an alternative to the local currency. Of the thirteen countries on the bottom half of the table, predicted to be less likely to fix, only three have done so or are doing so: Argentina, Ecuador, and El Salvador. The remaining countries expected to tend to fix are Nicaragua, Honduras, and Costa Rica; Jamaica, Guyana, and Suriname; and Paraguay. If economic openness is, as these results indicate, the single most powerful predictor of dollarization, this seems a reasonable candidate list (although Paraguay’s membership in Mercosur is a complicating factor, to be discussed further). Ecuador and El Salvador, both recently dollarized or on this path, were predicted to have about .4 probability of doing so.<sup>13</sup>

The most obvious error in prediction is Argentina, with .04 probability of fixing despite more than ten years of a currency board. This reinforces the earlier point made that the Argentine experience is very unusual and unlikely to have many lessons for other potential dollarizers in the region. Argentina fixed in the context of a roaring hyperinflation, a problem no longer relevant to the region; severe political instability, now unusual; and after a raft of unsuccessful stabilization programs. Although the Argentine experience holds substantial scholarly and general interest for a whole host of reasons, it has virtually no relevance to the future of fixed exchange rates, or dollarization, in Latin America. Not surprisingly, Argentina abandoned its fixed exchange rate commitment in early 2002 after the writing of the first draft of this chapter.

A complementary approach is that of Jeffrey Frankel and Andrew Rose (2001). They use previous work by Rose to argue that dollarization will increase trade with the United States threefold, and they assume also that a percentage point increase in trade as a share

**Table 8.4**  
Frankel-Rose estimated effects of dollarization on trade and output

	Actual data		Estimated effects	
	Openness (% GDP)	Trade with dollar zone (%)	Estimated openness after dollarization (% GDP)	Estimated impact of dollarization on GDP (% GDP)
Belize	103	44	194	30
Brazil	15	23	22	2
Chile	55	21	78	8
Colombia	36	38	63	9
Costa Rica	86	53	177	30
Dominican Republic	63	76	159	32
Ecuador	58	45	110	17
El Salvador	59	50	118	19
Guatemala	45	44	85	13
Guyana	211	28	329	39
Haiti	36	67	84	16
Honduras	91	52	186	31
Jamaica	136	53	280	48
Mexico	59	79	152	31
Nicaragua	91	38	160	23
Paraguay	48	19	66	6
Peru	28	24	41	4
Trinidad and Tobago	97	42	178	27
Uruguay	38	9	45	2
Venezuela	48	50	96	16

Source: Frankel and Rose (2001).

Note: Based on 1995 trade data. Assumptions: currency union triples trade; .33 effect of openness on GDP.

of GDP increases GDP by 0.33. The results for the Latin American countries for which they have data are reported in table 8.4 (note that the countries already on very fixed rates are excluded, because their goal is to *predict* effects from adoption of a regime not in existence). It can be seen that the countries that they expect to have the largest gain in output are similar to those predicted to be most likely to dollarize in the preceding discussion. This correspondence is due to the fact that their emphasis is on the effects of dollarization on cross-border trade, as opposed to the more common presumption that its impact will primarily be on credibility.

A final illustration of the argument made here is the parallel with the process of monetary integration in the European Union. Again, I rely on previous work of my own to demonstrate the powerful impact of cross-border trade interests on the propensity to peg currencies or, at the limit, join a currency union. Table 8.5 presents some simple data to this effect, for all current EU member states plus Norway and except Luxembourg (more systematic empirical work is available in Frieden 1996 and Frieden 2001). The table shows the relationship between a country's trade patterns and its propensity to fix its exchange rate to the deutsche mark (DM). The first four columns (starting with EU exports, 1970–1973) show how important manufactured exports were to each country's GDP in the early 1970s; first with a share of GDP, then by ranking them. The EU exports column and the one following it refer to exports to all current EU members; the DM-zone exports column and the following one refer to exports to Germany plus Benelux—Belgium, the Netherlands, and Luxembourg (the "DM zone"). Agricultural exports are excluded, as they are almost entirely covered by the EU's Common Agricultural Program, which does not use market exchange rates. The idea is that inasmuch as those heavily involved in cross-border trade prefer to stabilize nominal exchange rates, countries with more trade with the EU or with its DM core are more likely to fix their currencies against the DM, so countries trading more have more stable exchange rates. The last four columns, then, provide some measures of exchange rate variability from 1973 to 1993. The average annual depreciation and following country rank columns refer simply to the average annual depreciation rate against the DM, and relevant rankings; the last two columns refer to the coefficient of variation (standard deviation divided by the mean, in this case multiplied by 100 for ease of presentation), and relevant rankings. The use of pre-1973 trade data and 1973–1993 exchange rate data should eliminate most concerns about simultaneity.

The measures used in table 8.5 are crude but expressive. The relationship between a country's trade in the early 1970s and its exchange rate policies over the subsequent *twenty years* is extremely strong; the correlation among the various measures is about .4, depending on the measures used, while the correlation among the rankings is about .6. It may also be noted that this association holds at a more disaggregated level: trade in 1970–1973 is a strong predictor of exchange rate movements in 1973–1978, trade in 1979–1982



Table 8.5  
Trade and monetary integration in the European Union, 1970-1993

Country	EU exports, 1970-1973 (% GDP)		DM-zone exports, 1970-1973 (% GDP)		Average annual depreciation, 1973-1993		Coefficient of variation, 1973-1993	
	Country rank	(% GDP)	Country rank	(% GDP)	Country rank	Country rank	Country rank	Country rank
Belgium	1	30.77	1	17.81	2.02	3	13.71	4
Netherlands	2	21.46	2	13.52	0.26	2	3.13	2
Ireland	3	15.78	11	1.74	3.14	8	7.49	3
Norway	4	11.06	9	2.30	3.13	7	22.92	8
Sweden	5	10.33	7	3.23	5.00	10	29.69	10
Finland	6	9.74	6	3.95	3.18	9	22.14	6
Austria	7	8.84	3	4.63	-0.26	1	1.40	1
Denmark	8	7.86	8	2.37	2.43	4	18.05	5
Italy	9	7.32	5	4.05	5.34	12	34.78	12
France	10	6.70	4	4.20	2.77	6	22.76	7
Portugal	11	6.45	12	1.58	9.71	13	63.21	13
United Kingdom	12	4.85	10	2.08	2.69	5	24.24	9
Spain	13	2.62	14	0.99	5.30	11	34.57	11
Greece	14	2.48	13	1.36	14.18	14	77.08	14

Source: Frieden (1996).

is a strong predictor of exchange rate movements in 1979–1989, and trade in 1987–1989 is a strong predictor of exchange rate movements in 1990–1993. The relationship is confirmed in more systematic empirical work (especially Frieden 2001), which uses annual data, a wide range of economic and political controls, and more reliable statistical methods. None of the variables associated with monetary policy credibility has any statistically significant effects. The single best predictor of a nation's currency policy in Western Europe over the course of the 1970s, 1980s, and 1990s was the importance of its trade with the EU, especially with the DM zone.

Although parallels between European monetary integration and dollarization should not be overdrawn, again the very strong indication is that national policy choices were largely a function of national patterns of cross-border trade (and investment, for which data are much harder to obtain). Various interpretations of this fact are possible, especially in light of some recent work that does in fact find welfare effects of exchange rate regimes by way of the regime's impact on trade and investment (Rose 2000; Engel forthcoming and 2000). The interpretation I find most convincing, and for which there is the largest extant literature, is one that associates patterns of trade and investment with the policy preferences of special interest groups. The evidence presented here calls into question much of the scholarly attention to monetary policy credibility as a principal reason for the choice of a currency peg (or currency union, in Europe). This is not to say that credibility considerations have never mattered—they almost certainly did for some European countries, some of the time—but that, especially in current conditions, they are unlikely to dominate the choice problems associated with the political economy of dollarization in the foreseeable future.

This discussion of the domestic political economy of dollarization highlights the distributional, rather than aggregate welfare, effects of adopting the U.S. dollar. It suggests that the issue will be joined largely as a battle between those with strong interests in stabilizing currency volatility that can impede cross-border economic activity, on the one hand, and those concerned about losing the "competitive edge" that currency depreciations can bring, on the other hand. It also suggests that dollarization is most likely in the small, very open nations in and around the Caribbean. Of course, dollarization of all of Central America and the Caribbean could in turn affect the attractiveness of choices open to such neighboring countries as Mexico

and Colombia. More generally, there are substantial international political dimensions to dollarization. It is to this set of considerations that I now turn.

### 8.3 The International Political Economy of Dollarization

There are two international dimensions, broadly understood, to dollarization. The first has to do with relations *among* Latin American countries considering dollarization, the second with relations with the United States. I take these up in turn. In both instances, I use the European experience as something of a guide to discussion of the Latin American prospects, for EMU is close to the only relevant parallel available to us.

#### 8.3.1 Relations among Latin American Nations

One powerful lesson of European monetary integration is that its success depended upon the degree to which it was linked to European integration more broadly.<sup>14</sup> Countries that would not otherwise have been particularly interested in fixing their currencies against the deutsche mark, or in creating a single currency, ended up doing so once it became clear that being out of the eventual EMU might mean relegation to second-class citizenship within the EU more generally. The idea that participation in monetary integration was a prerequisite of "a seat at the table" for other important European decisions was almost certainly essential to the breadth and depth of the success of EMU.<sup>15</sup>

The most direct effect of European regional integration on European monetary integration was between trade and exchange rates, often expressed by participants and observers with the idea that the single European market made the single European currency inevitable. The logic here is based not on economics but on political economy. With no trade barriers among member states of the European Union, exchange rate fluctuations gave rise to protectionist pressures and to charges that devaluing countries were not playing by the rules of the game. Giving up an active trade policy was meaningless, the argument went, if countries simply replaced it with an active exchange rate policy—and the latter might even drive the EU into a spiral of "competitive devaluations." These political pressures were particularly strong after the devaluations of 1992–1994, as producers

in Northern Europe insisted that Southern European nations be locked into EMU. The single European market was not politically sustainable without a single European currency, for competitive depreciations brought forth demands to reinstate trade barriers.

Although trade integration efforts in Latin America are far from European levels, these sorts of arguments are still relevant, and indeed there is mounting evidence for a political economy connection between trade agreements and currency conflicts. Mercosur, NAFTA, the Andean Pact, the Central American Common Market, and other such ventures have had increasing success of late. They do not involve the sort of thorough-going integration we associate with the EU, as they are limited primarily to trade. The Eastern Caribbean Currency Area, linked as it is to the Caricom (Caribbean Community and Common Market) trading area and to other forms of cooperation among the small island nations that make up the currency union, is similar to the EU on these dimensions, but it is quite a special case in the Latin American context.<sup>16</sup> Nonetheless, the regional preferential trade agreements (PTAs) that have been developing in the region may in fact have an impact on the incentives to dollarize, in ways analogous to the European exemplar.

Latin American countries that have agreed to reduce or eliminate trade barriers among themselves are no less favorable about devaluation by other members than were Europeans. Even if the weakening of the currency is argued to be "necessary," other members of the PTA may feel that this gives the devaluing country's producers an unfair competitive advantage.<sup>17</sup> So devaluation, or chronic currency weakness, on the part of one member of a PTA may in fact threaten the PTA more generally. The recent experience of Brazil within Mercosur is illustrative of this fact, as the depreciation of the real led many Argentine producers who compete with Brazilian firms to cry "foul" and even question the trend toward Mercosur liberalization. It is in fact notable that American concern about Mexican competition within NAFTA heated up substantially after the 1994-1995 devaluation of the peso.

In this way, regional trade integration creates pressures on governments to forgo the devaluation option, thus making a floating rate less attractive. In addition, to the extent that PTAs increase intraregional trade and investment, they will (per our previous discussion) increase pressures to stabilize exchange rates. And in a PTA there may be resistance to using any one member nation's currency

as the regional anchor, as in fact there was in the EU. In this context, dollarization by some or all of the members of the PTA might appear to be a reasonable alternative.

This scenario implies that there may be formal or informal pressures for members of a regional trade agreement to dollarize together. This could, of course, work both ways: just as PTA members that would not otherwise dollarize might do so as part of a concerted effort, so might a member of a PTA that would otherwise be a likely candidate for dollarization be less likely to dollarize on its own if fellow PTA members did not concur—thus Argentine dollarization is to some extent encumbered by its membership in Mercosur. To the extent that these considerations operate, we would expect to see phased dollarization by members of regional trade agreements.<sup>18</sup> It is not implausible, for example, that current movement toward dollarization by El Salvador and, less definitively, by Guatemala, might lead to a common initiative by other Central American Common Market members to dollarize. And the existence of a formal PTA is not essential to this dynamic; it might just as well be the result of analogous pressures flowing from trade relations such that countries are reluctant to lose advantage if one among their number gains what may amount to privileged access to American goods or capital markets. There may well be a tendency for the course and pace of dollarization to track existing or embryonic regional trade and integration associations.

### 8.3.2 Relations with the United States

Another, related, lesson of the European experience with monetary integration was the importance of links between currency policy and other political relations.<sup>19</sup> The most common such instance of “linkage politics” invoked by participants and observers was a geopolitical one between France and Germany. It was often argued that Germany had no inherent desire for EMU but was willing to go along with French demands for currency union in return for French support for German unification. Although the argument is not universally accepted (Moravcsik 1998 is a strong dissent), certainly there is the logical possibility that currency ties could be traded off for noneconomic policy goals. The most obvious parallel with dollarization would be if the United States felt that dollarization was in its interest and encouraged other countries to pursue it in return for

consideration of unrelated political concerns of theirs (say, for foreign aid or diplomatic support).

There may in fact be mild American pressure on countries in Latin America to dollarize, although this seems far less important than in Europe. The European linkage stories relied on France's having a very strong desire for a single currency, and this is hardly the case in the Western Hemisphere. It is nonetheless plausible that the United States will not be completely uninterested, as there has been mild American interest in dollarization in other countries. This support has come primarily from American financial institutions and transnational corporations. Their views reflect their expectation that American firms are likely to realize competitive advantages over third-country investors in dollarized markets. Financial institutions, for example, anticipate receiving greater "denomination rents" as the use of the U.S. dollar expands.<sup>20</sup> The idea behind these rents is that widespread use of a currency increases demand for financial services from firms whose home base is the country of issue, given the deeper financial markets and greater security of the home market. Related denomination rents might accrue to investors, multinational corporations, exporters, and traders. All this is to say that there could be private pressure on the United States government to facilitate dollarization and that this pressure might lead to the sorts of diplomatic horse-trading that characterized some of European monetary integration.

However, the more likely scenario is one in which Latin American countries decide to dollarize, and this decision has follow-on effects for the United States that make its involvement desirable or even necessary.<sup>21</sup> The principal issue associated with dollarization for the United States is the implication of a large dollar currency area not coterminous with the jurisdiction of the American government. This raises, most directly, the question of how to deal with the functions of central banking typically associated with currency issue—such as lender of last resort facilities, prudential control and regulation. Although the dollarization of such small countries as Panama and El Salvador does not raise major issues, if a substantial portion of Latin America were part of a dollar zone, this would almost certainly require consideration of the possible links across countries within the same currency area. The most important such links would be financial, as it would be difficult or impossible to insulate the United

States completely from financial problems in one large part of the dollar zone.

One possibility would be to have the United States extend its financial management to the broader currency area, becoming the de facto financial regulator for the entire dollar zone. The United States might resist taking on substantial responsibility for financial conditions in countries that have chosen to dollarize, and Latin American countries might likewise resist handing over financial regulation to the U.S. government. In addition, asking the U.S. government to implicitly or explicitly regulate and supervise the financial systems of dollarized countries could encourage opportunistic behavior on the part of the relevant Latin American authorities, who might have an incentive to pawn problems off on the United States.

The other possibility would be to keep these functions restricted to one small part of the currency area, the United States. This would require the relevant dollarizing authorities to maintain their own independent financial supervision and regulation. There are two problems here. First, it seems impractical to ask Latin American countries to take full responsibility for their financial systems without giving them any influence over monetary and currency policy. Indeed, this too could be seen as encouraging opportunistic behavior, in this case on the part of the U.S. authorities, who have an incentive to pursue monetary policies without regard to their impact on other countries using the dollar. Second, it is not clear that an American commitment not to "bail out" dollarized financial systems in trouble would be credible, for financial crises in large dollar-based countries would almost certainly have important implications for the United States. It is easy to imagine the U.S. Federal Reserve and Treasury coming under domestic and international pressure to respond to a financial crisis in a dollarized Mexico, either by loosening monetary policy or by bankrolling a financial rescue package.

Europe claimed to have resolved this problem by adopting a new currency for which no national government is responsible and continuing to vest financial regulation and prudential control in national governments. But this has proven not to be stable, for the moral hazard and credibility reasons discussed earlier. The Europeans are clearly moving toward some shared form of EMU LLR facilities, and some harmonized EMU-wide financial supervision and regulation. The problem is that much more immediate in the case of the

adoption of a national currency by other countries, especially when they are as geographically and economically closely linked as much of Latin America is with the United States.

So at the international level, dollarization is likely to raise major questions for the United States. It is conceivable that the questions could be ignored were dollarization confined to a few very small countries (as it is now). Were the number to grow, policymakers would have to confront the issues directly. The most obvious resolution would be for dollarizing countries to adopt regulatory and supervisory institutions consistent with American standards and to cooperate with the American authorities so as to guard against the realization of moral hazard problems. This would be politically complex, especially for countries whose financial systems are very different from that of the United States. However, it has the advantage of requiring little in the way of American policy change.

In a way, then, the international aspects of dollarization are likely to have their principal impact on the domestic cost-benefit calculations of potential dollarizers in Latin America. A country that wants to dollarize is likely to find itself under concurrent pressure to undertake substantial financial regulatory changes, and so the decision to dollarize might come to implicate a broader suite of financial decisions. Making these decisions would presumably slow down the process, but it would also tend to make policy more thoroughgoing for those countries that decided on pushing forward with dollarization. The result would be a nearly Europe-like tendency for currency integration to be associated with integration of trade in goods and capital (for the reasons already mentioned) and with financial regulatory harmonization.

Both of these international dimensions make it likely that a substantial trend toward dollarization on the part of the region's larger countries would require explicit political agreements among them and with the United States. This consideration says little about the probability of dollarization, for international agreements sometimes make national policies more likely and sometimes less so. It does imply that current regional economic agreements, especially such preferential trade agreements as Mercosur and the Central American Common Market, are more likely to move together than separately. It also implies that explicit negotiations with the United States, especially over the relationship between currency and financial policies, will be required.



## 8.4 Conclusions

There is no need to repeat what has come before. What should be emphasized is the general point: like all economic policies, dollarization is a political decision. It is useful to analyze the welfare effects of dollarization and its expected impact on regional trade and investment. But the eventual decisions about whether countries will dollarize can only be understood in the light of a systematic analysis of the domestic and international political economy of the policy.

The principal domestic factors in dollarization are the economic and political importance of special interests both for and against locking currencies. Those with strong cross-border financial, investment, or commercial interests are likely to be the principal supporters. Local producers of tradable goods will, on the contrary, be opposed to dollarization because it eliminates the ability to devalue to improve their competitive position. Internationally, the European experience indicates that countries joined together in regional trade agreements are likely to make joint dollarization (or nondollarization) decisions. It is also likely that the realities of dollarization will require direct consultation and coordination with the United States before it goes much farther.

Whether these specific conclusions are right or not, certainly it is true that an accurate forecast of exchange rate policies requires much more than the usual normative treatment of dollarization. Expectations of policy outcomes can only be formed accurately by considering both economic, political, and political economy considerations.

## Notes

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1. Here, too, the analogy breaks down for countries contemplating a move from a credible fix to dollarization, for the transitional problems are likely to be much less severe.
2. One exception, in which effects on trade are central, is discussed in Alesina and Barro (2000).
3. The one exception is the occasional use of dollarization (or hard currency pegs) in times of serious crisis, in which the government typically attempts to use the currency as a signal of credibility on a series of dimensions, often not directly related to

monetary policy. Ecuador's recent dollarization is an example. These cases are relatively rare and are not addressed here.

4. The advantages of eliminating currency risk are a function of the size of the country and the depth of its currency's forward market, but for most of Latin America it is safe to assume that forward markets are not well developed.

5. It is also the case that more open economies are less likely to be able to affect the real exchange rate, as a depreciation will be translated quickly into higher prices for imports. Where imports are a very substantial share of consumption, exchange rate movements have less real effect. This runs in the same direction as the interest group factor.

6. It may be that economists focus on welfare effects but that the private sector concerns are simply one side of this—the cost of one firm's hedging is the income of another's. I believe that in fact the standard economic view is only partial and that exchange rate volatility does have a substantial dampening effect on trade and investment. This effect holds true especially in countries with thin currency markets—such as virtually all of Latin America—and in sectors for which longer-term cross-border contracts are most relevant.

7. It is probably not coincidental that some of the most prominent private sector supporters of monetary unification in Europe were very similar to the most prominent private sectors supporters of dollarization, especially among large multinational banks and corporations. See Hefeker (1996) for one argument to this effect.

8. Again, I focus here on circumstances in which policymakers make a considered decision to dollarize, rather than conditions of extreme crisis in which dollarization may be a last-ditch measure.

9. Bernhard and Leblang (1999) argue that fragmented political systems (especially coalition governments) will be *more* likely to opt for a peg, focusing on the inability of politicians in multiparty governments to take party-specific credit for effective policy. This should, they argue, reduce the desire to maintain the policy options associated with floating. While plausible, I find the counterargument more compelling, and the evidence with which I am familiar from Latin America is more consistent with the latter.

10. Among the works surveyed are Blomberg, Frieden, and Stein (2000); Clark and Reichert (1998); Collins (1996); Edison and Melvin (1990); Edwards (1994, 1996); Eichengreen (1995); Frieden (1994, 2001); Frieden, Ghezzi, and Stein (2001); and Klein and Marion (1997). I also have in mind the country studies in Frieden and Stein (2001).

11. The two variables are significant only together, indicating that party fragmentation in itself is not important—a multiparty coalition with many seats is strong.

12. For the record, the correlation coefficients between the estimated probabilities of fixing, on the one hand, and the Levy Yeyati–Sturzenegger and actual variability measures, on the other, are .17 and .3.

13. Ecuador is one of the few countries that have used dollarization or other exchange rate measures in the midst of a serious crisis. As for El Salvador, it is possible that the great importance of emigrants' remittances into the country's economy may have increased the attractiveness of dollarization.

14. Eichengreen and Frieden (2001) surveys the experience.
15. This is not to deny that the linkage arguments might be overblown, only that this is a common view.
16. Cohen (2001) summarizes the Eastern Caribbean Currency Area case and several other analogous examples.
17. This is, again, a political economy argument, not an economic one; from a welfare standpoint, of course, the devaluing country is simply reducing its terms of trade and generously providing its trading partners with cheaper goods. The political realities of the response to increased import competition are otherwise.
18. This is in fact largely already the case with Caricom, whose members have both integrated their trade relations and stabilized currencies, typically against the dollar.
19. For examples of some of the many arguments to this effect, see Garrett (2001) and Martin (2001).
20. For example, see Swoboda (1968, 105-106).
21. This scenario contrasts with the routine official American insistence that dollarization has no implications for the United States. This view is either naive or disingenuous. The obvious point that the United States would realize increased seignorage revenues (at the expense of the dollarizing countries) is of trivial importance on both sides. The amounts involved are small, and it is likely that a simple formula for dividing the revenues could easily be found (although some congressional objections to giving any of the money back to Latin Americans might arise).

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