4 The Evolution of the International Monetary System

Chapters 4 and 5 discuss the political economy of international money and finance. In chapter 2 we discussed the reasons for the evolution of the international trade system toward institutionalized multilateralism. Similarly, in this chapter we consider how the literature in political economy has tried to explain the evolution of the international monetary system. As for international trade, the international monetary system also became characterized by institutionalized multilateralism by the mid-twentieth century, for a similar combination of material and ideational reasons. In contrast to trade, however, multilateralism in international monetary arrangements peaked in the 1960s and has been in retreat since then. We emphasize the rise of private financial markets and associated political changes in explaining this trend.

Although international monetary arrangements in the nineteenth century were much less politicized at the domestic level than were those for international trade, over the course of the twentieth century this became less true. And at the international level, international monetary arrangements have always been politically controversial. This has much to do with the strong tendencies toward hierarchy in global monetary and financial markets and the asymmetric consequences this has for the distribution of costs and benefits across countries. The conflict between national macroeconomic stabilization policies and international monetary commitments has become more acute with the reemergence of open financial markets since the 1970s. We postpone to chapter 5 a discussion of the consequences of this conflict.

In order to address the question of how to explain international monetary evolution, we must first consider some preliminary issues concerning the balance between adjustment and financing in international monetary organization. After this, we go on to argue that the rise of domestic macroeconomic management in the twentieth century, itself the result of new ideas and of democratization, has had profound effects on this balance and on the international monetary system in general. These effects include the growing politicization of international monetary and financial arrangements compared to the nineteenth century, the gradual undermining of an anchor role for gold, and a shift toward greater exchange rate flexibility and from public to private international finance.

FINANCING AND ADJUSTMENT IN THE BALANCE OF PAYMENTS

The central organizational problem for any international monetary system concerns the mechanism of adjustment to balance-of-payments disequilibria between countries.[1] The fundamental issue from the perspective of political economy is that the costs of adjustment to disequilibria are typically distributed asymmetrically across countries and across different groups within countries. International financing mechanisms are a means of sustaining balance-of-payments deficits and thereby avoiding (at least temporarily) such adjustment pressures. Thus, the nature of the international adjustment mechanism(s), and the balance between financing and adjustment, constitutes the core of the politics of international monetary arrangements.

To see this more clearly we need to understand the balance of payments (BoP). This measures a country's transactions with nonresidents over a given period of time (e.g., monthly, quarterly, or yearly). It categorizes different kinds of cross-border "flow," and it balances by defini-

[1] Standard analyses emphasize the three interrelated problems of adjustment, liquidity, and confidence, but the second two are largely derivative of the first. The first two are addressed below; the "confidence problem" relates to the confidence of private and public actors in the adjustment rules and in the liquidity mechanism, notably the assets that play the role of international mone-

tion. The sum of the balances on current, capital, and financial accounts, the "overall balance" (line 5 in table 4.1), must equal the change in reserve assets (which consist of a country's monetary reserves and its credit balance at the International Monetary Fund, or IMF).[2] Unless otherwise specified, when referring to a BoP deficit or surplus, we mean the overall balance.

Although one country's balance-of-payments deficit is matched by foreign surpluses, in practice there is often more pressure on deficit countries to adopt adjustment measures. This is because deficit countries must either "adjust" to eliminate their deficit, or sell assets to foreigners or accumulate liabilities to foreigners to "finance" ongoing deficits. Both strategies, as we will see, are costly. By contrast, surplus countries can sometimes simply accumulate net claims on foreigners (including official reserves).[3] The limits to deficit-financing mechanisms vary greatly by country. The sale of assets to foreign residents often hits political limits earlier than economic limits: witness the political controversy in the United States in the 1980s over Japanese investments in the United States and more recently over Chinese investments. Financing deficits by borrowing abroad can also be costly, and these costs often rise as more is borrowed. Some foreign creditors may also impose preconditions on the borrower that are politically or economi-

tary reserves. See Benjamin J. Cohen, *Organizing the World's Money* (New York: Basic Books, 1977), 37–38.

[2] Notice that in line 6a of table 4.1, an increase in monetary reserves takes a negative sign. Note also that the overall balance includes "errors and omissions," a balancing item. The definitions employed here follow the new IMF format, agreed on in 1996. In this new format, what was formerly the current account is split into two, the (new) current account and the (new) capital account, while the old capital account becomes the "financial account." The main change involves moving unilateral transfers (including debt forgiveness) from the old current account to the new capital account. See Christopher Bach, "U.S. International Transactions, Revised Estimates for 1982–98," *Survey of Current Business* (US Department of Commerce, Bureau of Economic Analysis), 79, July 1999, 60–74, and IMF, *Balance of Payments Textbook* (Washington, D.C.: IMF, 1996), available at http://www.imf.org/external/np/sta/bop/BOPtex.pdf. However, since the literature continues to refer to the "capital" account rather than the financial account, we use these terms interchangeably later in this chapter.

[3] The main cost of doing so is reduced consumption and investment compared to potential, but these costs are more hidden than those that accrue to deficit countries. However, as we will see, large surplus countries (Germany and Japan since the 1960s and 1970s, and China more recently) can come under heavy pressure to adjust from deficit countries, especially the United States.

TABLE 4.1
South Korean Balance of Payments, 1996 to 1999:1, by Quarter (US$ millions)

	1996				*1997*				*1998*				*1999*
	I	*II*	*III*	*IV*	*I*	*II*	*III*	*IV*	*I*	*II*	*III*	*IV*	*I*
1. Current account	−4,358	−5,127	−7,249	−6,272	−7,353	−2,723	−2,053	3,962	10,919	11,118	9,823	8,692	6,193
A. Goods and services	−4,020	−4,455	−7,007	−5,662	−6,837	−1,879	−1,402	3,739	10,339	11,625	10,410	9,881	6,658
a. Goods	−2,383	−3,125	−5,526	−3,931	−5,401	−806	−27	3,056	9,717	11,458	10,596	9,856	6,779
Exports	31,948	32,918	30,110	34,992	31,058	35,960	34,864	36,739	32,675	34,406	31,428	33,613	31,477
Imports	−34,331	−36,043	−35,636	−38,923	−36,459	−36,766	−34,891	−33,683	−22,958	−22,948	−20,832	−23,757	−24,698
b. Services	−1,637	−1,329	−1,482	−1,731	−1,435	−1,073	−1,374	683	622	167	−185	25	−121
Services receipts	5,486	5,933	5,990	6,004	6,016	6,547	6,696	7,043	5,856	6,002	6,069	6,653	5,949
Services payments	−7,123	−7,262	−7,472	−7,735	−7,451	−7,620	−8,070	−6,360	−5,234	−5,835	−6,254	−6,628	−6,070
B. Income	−362	−648	−227	−579	−417	−796	−566	−677	−705	−1,266	−1,114	−1,969	−1,019
Income receipts	860	843	952	1,011	1,002	911	893	1,072	992	834	725	720	886
Income payments	−1,222	−1,491	−1,179	−1,590	−1,419	−1,707	−1,459	−1,749	−1,697	−2,100	−1,839	−2,689	−1,905
C. Current transfers	24	−24	−15	−30	−99	−47	−85	899	1,285	760	527	780	555
2. Capital account	−127	−181	−136	−153	−178	−155	−145	−131	−50	350	−65	−64	−84
Capital account credit	4	4	6	5	4	4	5	3	2	432	23	7	3
Capital account debit	−131	−185	−142	−158	−182	−159	−150	−134	−52	−82	−88	−71	−87
3. Financial account	5,378	9,847	2,103	6,593	4,215	6,728	763	−20,901	−5,687	147	−3,922	1,025	3,191
A. Direct investment	−1,181	−396	−590	−178	−507	−225	−661	−212	−334	347	491	114	618
Direct investment abroad	−1,586	−1,076	−846	−1,163	−1,131	−1,016	−1,272	−1,031	−839	−821	−1,671	−1,468	−789
Inward direct investment	405	680	256	985	624	791	611	819	505	1,168	2,162	1,582	1,407
B. Portfolio investment	2,139	5,759	3,252	4,034	2,594	5,829	5,444	428	3,806	568	−3,878	−2,374	952
a. Equity securities	760	2,458	879	1,204	536	2,543	505	−1,380	2,890	−17	−224	1,248	2,805
Assets	−80	−170	−185	−218	−150	47	−249	31	136	−2	−28	−65	43
Liabilities	840	2,628	1,064	1,422	686	2,496	754	−1,411	2,754	−15	−196	1,313	2,762
b. Debt securities	1,379	3,301	2,373	2,830	2,058	3,286	4,939	1,808	916	585	−3,654	−3,622	−1,853
Assets	−829	−645	−1,726	−2,146	−159	−325	329	2,483	1,078	−1,164	−57	−1,485	−170
Liabilities	2,208	3,946	4,099	4,976	2,217	3,611	4,610	−675	−162	1,749	−3,597	−2,137	−1,683

Source: IMF, *International Financial Statistics*, February 2000.

TABLE 4.1 (*cont'd*)
South Korean Balance of Payments, 1996 to 1999:1, by Quarter (US$ millions)

	1996				*1997*				*1998*				*1999*
	I	*II*	*III*	*IV*	*I*	*II*	*III*	*IV*	*I*	*II*	*III*	*IV*	*I*
C. Other private investment	4,623	4,697	−333	3,162	2,236	1,220	−3,961	−25,838	−12,265	−902	−544	1,964	1,130
a. Banks	570	1,470	391	−654	806	422	−1,734	−17,615	−3,517	1,775	463	2,015	1,329
Assets	−1,534	−688	−2,373	−3,579	−414	−1,242	−555	−6,125	−139	2,220	2,693	2,196	382
Liabilities	2,104	2,158	2,764	2,925	1,220	1,664	−1,179	−11,490	−3,378	−445	−2,230	−181	947
b. Other sectors	4,053	3,227	−724	3,816	1,430	798	−2,227	−8,223	−8,748	−2,677	−1,007	−51	−199
Assets	−1,505	−1,443	−852	−970	−966	−1,609	−1,337	−1,084	−1,030	−749	383	1,202	933
Liabilities	5,558	4,670	128	4,786	2,396	2,407	−890	−7,139	−7,718	−1,928	−1,390	−1,253	−1,132
D. Other public investment	−203	−213	−226	−425	−108	−96	−59	4,721	3,106	134	9	1,321	491
a. Monetary authorities	−19	−1	−10	0	−41	−1	−3	−18	−2	−1	−6	−3	−2
b. General government	−184	−212	−216	−425	−67	−95	−56	4,739	3,108	135	15	1,324	493
4. Net errors and omissions	207	−1,173	1,601	462	6	143	−1,151	−4,006	135	−2,226	−1,282	−2,983	−890
5. Overall balance	1,100	3,366	−3,681	630	−3,310	3,993	−2,586	−21,076	5,317	9,389	4,554	6,670	8,410
6. Reserves and related items	−1,100	−3,366	3,681	−630	3,310	−3,993	2,586	21,076	−5,317	−9,389	−4,554	−6,670	−8,410
a. Reserve assets	−1,100	−3,366	3,681	−630	3,310	−3,993	2,586	9,972	−9,357	−11,265	−5,534	−4,812	−6,321
b. Use of IMF credit and loans								11,104	4,040	1,876	980	−1,858	−2,089

Source: IMF, *International Financial Statistics*, February 2000.

cally costly. Foreign borrowing can also be risky, since the willingness of foreign creditors to extend finance can be volatile. Nevertheless, because borrowing does not normally transfer ownership of national assets to foreigners, deficit countries often rely heavily on this form of financing over long periods of time.

This fact also suggests that adjustment policies sufficient to eliminate deficits are often even more costly for governments. Adjustment measures work primarily by reducing domestic consumption, investment, and growth in the short term. To illustrate, consider South Korea's BoP from 1996 to early 1999 (table 4.1).

To simplify the discussion, we leave aside the relatively insignificant (at least for Korea) capital account. In the absence of adjustment measures, to avoid running down monetary reserves, any deficit on current account must be financed by a corresponding surplus on financial account. Korea's current account deficit meant it was spending considerably in excess of its national income through foreign borrowing. Over 1996, Korea achieved this by selling equities to foreigners and by borrowing heavily from international banks. As is now well known, this financing choice proved unsustainable once private foreign creditors drew down or sold their Korean assets. In 1996, before the crisis hit, the Korean economy was growing rapidly, though its exports were not, resulting in a rising current account deficit (5.9% of GDP). The financing problem was greater than this, as Korean firms were investing heavily abroad, while foreign firms had found it difficult to invest in many sectors in Korea (line 3A, table 4.1). For 1996 as a whole, foreign financing included net portfolio (equity and debt) inflows of $15.2 billion, net corporate (nonbank) borrowing of $10.4 billion, and net bank borrowing of $1.8 billion.

When these financial inflows reversed in the wake of the Thai crisis of July 1997, reserves fell quickly and the economy was plunged into a BoP and financial crisis, necessitating rapid, deep, and politically costly adjustment measures in return for IMF assistance. Over 1998, GDP fell by 7%, unemployment rose, and many firms and banks went into bankruptcy. The adjustment costs are apparent in the current account change, from a large deficit to an unprecedented surplus of 9% of GDP in 1998. As table 4.1 shows (lines 1Aa), export receipts continued to stagnate despite the large fall in the value of the currency. The burden

of adjustment fell on imports, which fell by one-third from late 1997 to early 1998, indicative of the collapse in domestic consumption and investment. Nevertheless, the large current account surpluses this deep adjustment produced allowed Korea to rebuild its reserves rapidly over 1998–99 (line 6a, table 4.1) and to repay its IMF borrowings early.

The role of official reserves also emerges clearly from this story. These enable countries to finance temporary deficits without more borrowing or adopting costly adjustment measures. Stocks of reserves are accumulated over time, so that past economic performance and policies affect a country's ability to draw on them in times of difficulty. The accumulation of large stocks of monetary reserves is itself costly in terms of forgone consumption and investment, and after some point governments will prefer to finance BoP deficits by inducing private capital inflows or by borrowing from foreigners. The availability of such private and official finance, and a country's desire for political autonomy from foreign creditors, will be crucial factors in national decisions about how large monetary reserves need to be. Since the crisis, Korea, along with many other developing countries, decided that its precrisis reserves ($34 billion in June 1997) were insufficient given the demonstrated vulnerability of the country to large and rapid shifts in private capital flows. This has led to an unprecedented accumulation of foreign exchange reserves since the mid-1990s—essentially a form of insurance against future crises. As figure 4.1 shows, developing countries (in marked contrast to developed countries) on average have recently accumulated reserves well in excess of the traditional rule of thumb of three months' import coverage.

Adjustment in Theory and Practice

Economics textbooks often outline how, in principle, both perfectly fixed and perfectly flexible exchange rate systems[4] can facilitate automatic adjustment processes that eliminate BoP imbalances. In both

[4] "Fixed" and "pegged" exchange rates are interchangeable terms. In practice, the government commits to maintain the nominal "peg" value against another currency (or "basket" of currencies) within a limited fluctuation band. "Flexible" exchange rates describe the situation in which the government allows the foreign exchange market to determine the nominal exchange rate against

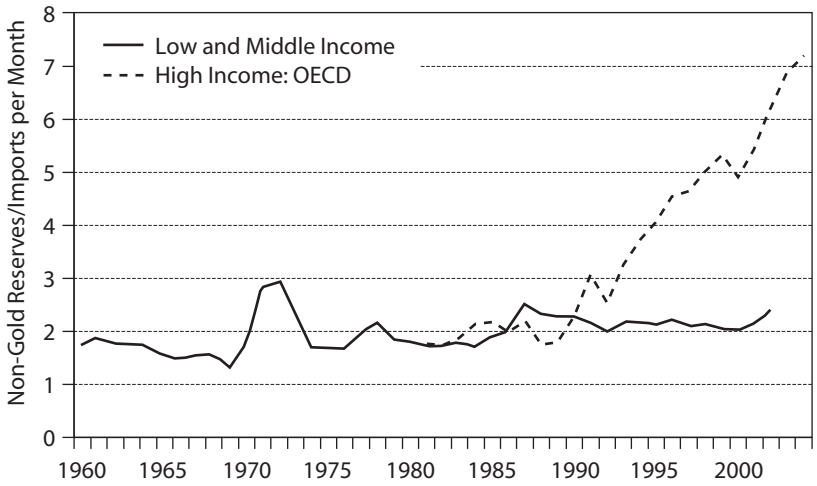

FIGURE 4.1. Monetary Reserves as a Multiple of Monthly Imports, High- and Low/Middle-Income Countries, 1960–2004
Source: World Bank, *World Development Indicators* database.

models, the real exchange rate adjusts to remove either external surpluses or deficits.[5] Assuming Korea needed a real depreciation of the won (the Korean currency) before the crisis to promote net exports, how might this have occurred?

In the case of a fixed nominal exchange rate and a current account deficit, stagnating exports and rising unemployment in Korea's export sector could reduce real wages, eventually reducing domestic prices to the point where international competitiveness would be restored.[6] A second "semiautomatic" adjustment mechanism may operate if Korean residents sell won for foreign currencies because they expect a won devaluation, obliging Korea's central bank to sell its foreign exchange reserves to buy won in the foreign exchange markets. This would reduce

other currencies. In practice, actual exchange rate policies fall between perfectly fixed and perfectly flexible exchange rates.

[5] The real exchange rate is the real "price" for which a currency exchanges for other currencies, and is different from its observable "nominal" exchange rate. A country's real exchange rate R is equal to $S\ (P^* / P)$, where S is the nominal "spot" exchange rate, P the average domestic price level, and P^* the average foreign price level. Note that a *lower* value of R implies a higher real exchange rate, making the country's exports *less* competitive.

[6] Note these effects depend on the level of intersectoral factor mobility, an issue discussed in chapter 3.

the domestic money supply, reducing total expenditure and pushing down prices, helping to restore competitiveness.[7] These two mechanisms supposedly operated in the ideal world of the gold standard.[8] In the real world of the 1990s, prices and wages in Korea were not flexible downward (in part because of its labor unions), so that adjustment was insufficiently rapid, or Korea's reserves were inadequate.

The obvious alternative for Korea was simply to float its currency, allowing the *nominal* exchange rate of the won to depreciate against other major currencies, restoring competitiveness. Economists such as Milton Friedman claimed flexible exchange rates could automatically eliminate external deficits in this way.[9] It had the great advantage of bypassing the two mechanisms previously mentioned and could obviate the need for domestic price and wage flexibility altogether. In practice, flexible exchange rates rarely work in this stabilizing manner. In fact, the real value of the won was sustained by continued large capital inflows from abroad before 1997. Even with exchange rate depreciation, total export values may take a long time to recover to close the external deficit.[10]

Since automatic adjustment is often not forthcoming, governments wishing to undertake active adjustment measures have three main options: trade protection, "expenditure-reducing," and "expenditure-switching" policies. Higher tariffs or quotas on imports increase the relative price of imported goods, but these measures are generally disparaged by economists. Increased trade protection would also have been incompatible with Korea's GATT membership and its relations with major countries like the United States and Japan.

Expenditure-reducing policies include restrictive monetary and fiscal policies, but growing capital mobility means that which of them is

[7] This is the case of "unsterilized" foreign exchange market intervention, in which the central bank does not offset the expansionary impact on the domestic money supply by selling bonds to the financial sector.

[8] A pure "currency board" leads to an equivalent outcome, since all exchange market interventions by the currency board are also unsterilized.

[9] Milton Friedman, "The Case for Flexible Exchange Rates," in his *Essays in Positive Economics* (Chicago: University of Chicago Press, 1953), 157–203.

[10] Because of "J-curve" or "hysterisis" effects: see Paul R. Krugman and Maurice Obstfeld, *International Economics: Theory and Policy* (Reading, Mass.: Addison-Wesley, 5th ed., 2000), 466–68.

effective depends on a country's exchange rate policy. This was outlined in the standard Mundell-Fleming (MF) model of the early 1960s.[11] *Under fixed exchange rates*, monetary policy contraction raises the domestic interest rate, attracting speculative capital from abroad. The central bank must resist currency appreciation by selling domestic for foreign currency, reversing the initial decrease in the money supply and rendering monetary policy powerless to affect prices or output. This result has been termed the "impossible" or "unholy" trinity, since it implies that a government must choose only two of the following three things: a fixed exchange rate, monetary policy autonomy, and capital account openness.[12] The power of fiscal policy, however, remains intact and is even enhanced under fixed rates. Fiscal contraction reduces domestic output and interest rates (by reducing government borrowing). Lower interest rates threaten currency depreciation, requiring monetary contraction by the central bank, thus enhancing the effect of fiscal contraction.[13]

Expenditure-switching policies are simply another term for exchange rate changes. Real currency devaluation "switches" domestic expenditure away from imported goods toward domestic production by altering relative prices. As we discuss later, concerns about policy credibility and costs to domestic consumers often deter governments from devaluing.

One major problem with macroeconomic policymaking is that governments have multiple policy targets but possess limited policy instruments. In practice, a combination of macroeconomic policy adjustment

[11] The MF model relied on then-standard Keynesian assumptions. See Robert Mundell, "The Monetary Dynamics of International Adjustment under Fixed and Floating Exchange Rates," *Quarterly Journal of Economics* 74:2, 1960, 227–57, and "Capital Mobility and Stabilization Policy under Fixed and Flexible Exchange Rates," *Canadian Journal of Economics and Political Science* 29, 1963, 475–85; J. Marcus Fleming, "Domestic Financial Policies under Fixed and Floating Exchange Rates," *IMF Staff Papers*, 9, November 1962; Jacob Frenkel and Assaf Razin, "The Mundell-Fleming Model a Quarter Century Later: A Unified Exposition," *IMF Staff Papers*, 34, December 1987.

[12] Benjamin J. Cohen, "The Triad and the Unholy Trinity: Problems of International Monetary Cooperation," in Richard Higgott, Richard Leaver, and John Ravenhill, eds., *Pacific Economic Relations in the 1990s: Cooperation or Conflict?* (London: Allen and Unwin, 1993), 133–58.

[13] Conversely, under *floating* exchange rates, only monetary policy is powerful (because fiscal contraction results in currency depreciation). Later we address the problem that MF analysis exaggerated the power of activist fiscal and monetary policy even under these conditions.

and exchange rate changes is often necessary. For example, if a country is suffering from both high unemployment and an excessively large external deficit, under an open capital account and a pegged exchange rate, fiscal expansion is the only available macroeconomic policy option to reduce unemployment. Fiscal expansion by itself would also worsen the external deficit, so the government would need to combine it with exchange rate devaluation to restore both external and internal equilibrium.[14] Further complications and policy dilemmas often arise. For example, unions in sectors sheltered from international trade competition may have little concern for the competitiveness of industries in the traded goods sector. If they dominate national wage-setting and respond to devaluation with increased wage demands, unemployment might coexist with both "cost-push" inflation and an external deficit.[15]

Note also that when governments have multiple objectives, a "credibility problem" can emerge. It can arise, for example, from a contradiction between an exchange rate commitment and an internal inflation or unemployment objective. Italy in the early 1990s suffered from high unemployment and large external deficits. As noted above, devaluation was part of the textbook solution to this problem (fiscal expansion was made difficult by Italy's existing high levels of fiscal deficit and public debt). However, the government had made a public commitment not to devalue the lira against other currencies in the European Monetary System (EMS). For this promise to be credible to the private actors in the foreign exchange markets, they would have had to believe that the government was willing to tolerate persistently high levels of unemployment (given the inflexibility of the labor market). Market actors were right to judge that as unemployment grew, the exchange rate commitment became increasingly incredible because the democratically elected government was highly sensitive to unemployment. This is an example of what is often termed a "time inconsistency" problem, in which the credibility of a particular policy commitment declines when policymakers face changed circumstances. The problem arises when a policymaker commits *ex ante* to following a certain policy rule (such as a

[14] The correct policy combination depends entirely on the nature of the initial disequilibrium.

[15] See Wendy Carlin and David Soskice, *Macroeconomics and the Wage Bargain* (Oxford: Oxford University Press, 1990).

given exchange rate peg) in the future, but has an *ex post* incentive to defect from the rule.[16]

Note that if the authorities can credibly signal to private market actors that they possess no internal objective and only desire a stable exchange rate, no doubt about their credibility arises. This may approximately describe the situation enjoyed by governments and monetary authorities in the classical era of the gold standard in the late nineteenth century. Since then, many factors have eroded the credibility of exchange rate commitments for most countries. The trend toward democratization, the growth of unions, and new understandings about the power of macroeconomic policy and associated expectations of government have all caused foreign exchange markets to become more skeptical of government promises to maintain "fixed" exchange rates.[17] These factors also alter the credibility of exchange rate commitments in an asymmetric way. Countries with low unemployment and current account surpluses, such as Germany enjoyed for many years after 1950, are less vulnerable to collapses of market confidence than countries with high unemployment and external deficits. Developing countries can also exhibit weak taxation bases, fiscal subsidies for basic commodities, and weak social safety nets, making it difficult to undertake policy adjustments in response to changed circumstances, further undermining the credibility of their exchange rate commitments.

International Interdependence and Adjustment

So far, we have considered the adjustment problem from an individual country's perspective. Since economic policies, especially those of large countries, affect other economies, we also need to consider adjustment from a systemic perspective. This is obviously true when a country undertakes exchange rate adjustment, which creates a potential for in-

[16] Finn Kydland and Edward S. Prescott, "Rules Rather Than Discretion: The Inconsistency of Optimal Plans," *Journal of Political Economy* 85:3, 1977, 473–92.

[17] Barry J. Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression, 1919–1939* (New York: Oxford University Press, 1992); and Beth A. Simmons, *Who Adjusts? Domestic Sources of Foreign Economic Policy during the Interwar Years* (Princeton, N.J.: Princeton University Press, 1994).

ternational conflict.[18] When all governments have domestic policy objectives, the problem can become acute. How far can or should policy coordination go under a fixed exchange rate system? At a minimum, given free movement of capital between two countries A and B, the maintenance of a fixed exchange rate between them requires the same level of real interest rates in both countries, and hence perfectly coordinated monetary policies. This is because if market actors expected currency B to depreciate against A in the future, they would require an interest rate premium over and above what they could obtain by holding assets in currency A, equal to the amount of *expected* depreciation of currency B over the period (the "interest parity theorem").

If the world economy only consisted of A and B, a payments imbalance between them raises the question of who will adjust first, the deficit or the creditor country. Since the loss of monetary reserves is more difficult to sustain than is acquiring reserves, deficit countries often come under market pressure to adjust first. If A is the deficit country and the threat of reserve depletion forces it to devalue, this raises the price of imported goods from B and reduces standards of living in A (at least in the nontraded sector). This does not mean that B escapes adjustment costs, since A's devaluation amounts to a currency revaluation for B, which could hurt its export sector. In a more realistic world in which there are many countries, most of the costs of adjustment may fall on the devaluing country.

In a world economy in which all countries peg their exchange rates, there will be n - 1 exchange rates (where n is the number of countries). For the system to be stable, there can only be n - 1 exchange rate policies: the nth country *must* adopt a passive attitude toward its exchange rate. This can create an additional deep asymmetry within a pegged exchange rate system, since the nth country is in the position of being able to focus on internal economic objectives. The classic example is the Bretton Woods exchange rate system in which other countries pegged to the US dollar, allowing the American authorities to concentrate on domestic (and foreign policy) objectives. For many years, this asymmetrical bargain worked reasonably well, providing the basis for the expan-

[18] Paul De Grauwe, *International Money* (Oxford: Oxford University Press, 2nd ed., 1996), chap. 3.

sion of trade and security for the Western alliance. From 1966, the Johnson administration's simultaneous pursuit of the Vietnam War abroad and the extension of social welfare at home led to growing fiscal and current account deficits. This prompted exchange market speculation against the dollar and in favor of the German mark, given Germany's growing current account surplus. Germany's partial controls on short-term capital inflows and the Bundesbank's sterilization of the effects of its purchases of foreign currency provided some relief from the inflationary effects of these inflows, but these ultimately proved insufficient to maintain the exchange rate peg.[19] Since it was evident that the US government would not substantially reduce the fiscal deficit, from 1968, the German government reluctantly accepted a series of mark revaluations; ultimately, it allowed the mark to float temporarily in 1971 and permanently after March 1973. Currency revaluations were politically costly because of resistance from the important financial and export sectors in West Germany.[20] The ability of the United States to shift the costs of adjustment onto others, including the most important payments surplus country, stemmed from the position of the dollar in the international monetary system and America's relatively low dependence on trade.

This kind of leader-follower relationship, where n - 1 countries accept the nth country as the monetary standard-setter, will only work if the leader's market is dominant in global trade and if its policies provide reasonable stability. Such stability usually means that the center country pursues a relatively low inflation monetary policy. The United States acted in this stabilizing manner from about 1950 until the mid-1960s, and West Germany did the same in the EMS until 1990. In both cases, however, these center countries eventually exploited their dominant systemic position to pursue destabilizing policies that shifted the costs of adjustment onto other countries.[21]

[19] The Bundesbank sterilized the expansionary effects of these purchases on the money supply by selling government bonds to the banking sector. There are limits to sterilization policies, as selling more bonds will eventually require higher yields, which encourages more capital inflows.

[20] C. Randall Henning, *Currencies and Politics in the United States, Germany, and Japan* (Washington, D.C.: Institute for International Economics, 1994), 182–83.

[21] Andrew Walter, "Leadership Begins at Home: Domestic Sources of International Monetary Power," in David M. Andrews, ed., *International Monetary Power* (Ithaca, N.Y.: Cornell University Press, 2006), 51–71.

One might conclude that the obvious solution is to abandon pegged exchange rates altogether for floating rates, as West Germany did in 1973. However, for many reasons countries are reluctant to adopt fully floating exchange rates, including high levels of trade openness, commodity export dependence, foreign indebtedness, low internal inflation-fighting credibility, and regional integration objectives.[22] Nor do flexible exchange rate policies remove the dilemmas that interdependence creates; they merely alter their form. For example, in a floating rate system, national monetary expansion stimulates demand via lower interest rates and exchange rate depreciation, but it can also worsen the bilateral trade balance of other countries with the devaluing country. This could induce competitive devaluations or protectionist retaliation. The negative foreign impact is lower if national monetary expansion raises the rate of growth, or (in the case of a large country) if it lowers *world* interest rates. Expansionary fiscal policy, though less powerful for the home country under floating rates, may affect foreign output positively via exchange rate and output effects, and negatively by raising world interest rates. Hence, the demand from small open economies for policy coordination in a floating rate regime could be higher than under fixed rates. The political problem is that large countries, whose policies have most impact on the rest of the world, have fewer incentives to coordinate macroeconomic policies. Others may simply have to bear the costs of adjustment that emanate from large countries' policies.

INTERNATIONAL FINANCE AND RISK

We noted above that a key determinant of the pressure for adjustment on individual countries is the structure and availability of international finance (often called *liquidity*). The first line of defense for a deficit country is national monetary reserves, though given the size of today's foreign exchange markets these are often inadequate in the face of a concerted market attack. Today, monetary reserves are mainly held in the form of highly liquid government debt denominated in only a few

[22] Guillermo A. Calvo and Carmen M. Reinhart, "Fear of Floating," *Quarterly Journal of Economics* 117:2, 2002, 379–408.

currencies, above all the US dollar.[23] The emergence of such "key currencies" creates a basic asymmetry in the system between key currency countries and the rest, since it can give the former considerable influence over the supply and price of international finance.

There are three main sources of international finance: private international capital markets, key country external deficits, and public international finance provided by bilateral lenders or by international financial institutions (IFIs). The relative sizes of these sources of finance matters greatly, as does the willingness to lend of those who control them.

Before we discuss in more detail the different sources of international finance, it is helpful to consider the different forms of risk that arise in international borrowing, though note that risk categories can overlap and are often interdependent. For borrowers, maturity and currency risk are often emphasized, though we also emphasize here "reversal risk" and "sovereignty risk." Maturity risk occurs when the timing of repayments of interest or principal on financial obligations differs from the timing of cash receipts by the borrower. For example, if a borrower uses the receipts from a loan that must be repaid within three months to invest in assets that will not generate positive cash receipts for some years, the borrower is accepting a maturity mismatch risk ("borrowing short and investing long").[24] Banks specialize in managing this kind of risk. Currency risk arises when the borrower borrows in foreign currency to finance investment in assets (or current consumption) that produce cash receipts denominated in another currency (usually domestic currency).

Reversal risk arises when a borrower is dependent on flows of new external finance that can be stopped or reversed, potentially provoking a recession or even a debt crisis. Such stops and reversals may result

[23] In the late nineteenth century, countries came to hold these key currencies, or foreign exchange reserves, in addition to gold—mainly consisting of sterling balances, or deposits held in London (Peter H. Lindert, "Key Currencies and Gold, 1900–1913," *Princeton Studies in International Finance*, 24, 1969). Today, liquid assets (usually in the form of government bonds) denominated in key currencies such as the US dollar, Euro, and yen have come to dominate all other forms of official international reserves, though many countries continue to hold gold reserves.

[24] This risk may be offset by other maturity mismatches in the borrower's portfolio of assets and liabilities, which is why maturity risk is usually applied to whole portfolios rather than individual assets and liabilities.

from policies adopted by foreign creditor governments or multilateral institutions, or from changing attitudes to risk in private financial markets (such as so-called capital strikes and investor panics resulting in "capital flight"). Finally, sovereignty risk occurs when a country obtains finance from an external lender who requires the government to adopt policies it would not otherwise choose ("conditionality"), or when foreign financing reduces national control over important assets, technology, resources, and sources of employment.

From the perspective of lenders, maturity and currency risks also exist and must be managed. For example, investors bear currency risk in the form of the possibility that the exchange rate between the currencies in which the assets are denominated changes relative to the investor's base currency. Additional sources of risk for lenders/investors include credit risk (the risk of borrower default), market risk (the risk that the market value of the assets in their portfolio are uncertain and can fluctuate), liquidity risk (the risk that it may be difficult to sell an asset in the future for cash without accepting a large discount on its original purchase price), legal risk (the risk that the interpretation or application of legal contracts is uncertain), and political risk (the risk that asset values are affected by changes in a country's government or its policies). Note that when lenders take measures to reduce some forms of risk, they may increase risk for borrowers, such as when lenders shift currency risk to borrowers, or if they use conditionality to limit political risk. Moreover, attempts to limit some forms of risk may increase other risks, such as when lenders use conditionality to limit the risk of policy change, but their doing so increases the risk of a change in government and overall credit risk.

Private International Finance

Private lenders lend voluntarily to foreign borrowers only if they expect to be repaid with a profit, which is often seen as the reward for assuming one or more of the risks we have identified. Such lenders include banks making loans, bond and equity investors, and foreign direct investors.[25]

[25] Remittances from foreign residents, which are recorded as credits on current account, can also be an important additional source of finance for developing countries.

The borrower may be a foreign government or monetary authority or individual firms or banks, though in aggregate this can allow a country to run a current account deficit. From the perspective of borrowers, the maturity risks of these various forms of capital inflow differ considerably. Long-term debt finance (loans or bonds) and FDI can be more stable than short-term debt or equity inflows (i.e., less subject to sudden stops or reversals).[26] Debt finance also generally requires fixed contractual repayments at specified intervals, whereas the dividends and profits paid to foreign investors on equity inflows and FDI usually involve no such legal guarantees of size or timing. FDI and foreign purchases of shares in domestic listed companies (equities) usually also require foreign investors to bear the currency risk.

By contrast, until very recently most borrowing in the form of bank loans and bonds by developing countries has been denominated in convertible foreign currencies, so that the borrower has borne the currency risk. Why this is so is a matter of debate, since governments of developed countries usually do not find it difficult to borrow from international lenders in their domestic currency. For example, nonresidents held on average 16% of UK sterling-denominated government debt over the period 1990–2002 (of this, 6% was held by foreign central banks and 10% by others, mainly private investors).[27] The comparative historical difficulty that most countries have had in borrowing in their own currency is commonly referred to as the problem of "original sin"—though note that the incidence of own currency borrowing has increased since this became a matter of academic interest.[28] The historical phenomenon may be due to investors' perception of greater currency, political, and liquidity risk in developing countries because of relatively weak domestic institutions, as well as investors' desire to limit

[26] As table 4.1 shows, equity flows proved more stable for Korea than did short-term debt issued to Korea's banks and firms.

[27] Calculated from the Bank of England's Monetary and Financial Statistics Tables, http://213.225.136.206/mfsd/iadb/BankStats.asp?Travel=NIx, accessed September 24, 2007.

[28] Barry J. Eichengreen, Ricardo Hausmann, and Ugo Panizza, "Currency Mismatches, Debt Intolerance and Original Sin: Why They Are Not the Same and Why It Matters," NBER Working Paper, 10036, October 2003; Morris Goldstein and Philip Turner, *Controlling Currency Mismatches in Emerging Markets* (Washington, D.C.: Institute for International Economics, 2004).

their portfolio diversification by holding assets in a limited number of currencies. It is too soon to tell whether the recent ability of some developing countries to borrow from foreign investors in their own currencies is a temporary phenomenon or whether the permanent redemption of original sin is possible after all.

Whatever its origins, currency risk can be very costly for borrowing countries because depreciation vis-à-vis the debt denomination currency increases the real external debt burden. At the end of 1997, Korea's liabilities to international banks *maturing within one year* totaled $59 billion, almost three times its monetary reserves of $20 billion.[29] Much more than the problems of competitiveness discussed earlier, it was the growing reluctance of international banks to refinance this short-term debt that precipitated the crisis of late 1997. As the Korean currency collapsed in December 1997 from 1,100 to (at worst) 1,960 won per dollar, the implied won value of Korea's external debt soared. As many of the Korean banks and corporations who had borrowed from international banks were now unable to repay, the currency crisis soon became a corporate and banking crisis as well.[30] The story in Thailand and Indonesia was very similar.

Bonds were historically important in private international financing in the nineteenth century and have become important again since the 1990s. International securities often have deeper secondary markets than bank debt and so can reduce liquidity risk for investors. But sudden reversals of bond investor sentiment can produce payments crises, such as that which followed the panic in the Russian ruble-denominated government debt ("GKO") market in 1998. A similar crisis had occurred in Mexico in 1994, after the Mexican government had tried to reassure investors who had previously purchased peso-denominated short-term government bonds (*cetes*) by issuing US dollar-denominated bonds in their place (*tesobonos*). Once the rising stock of *teso-*

[29] These and other figures are taken from the joint BIS-IMF-OECD–World Bank statistics on external debt, available at http://www1.oecd.org/dac/debt/htm/debto.htm, accessed February 27, 2004. The database now includes historical debt statistics from 1990 for many developing countries.

[30] The resolution of the Korean crisis was thus crucially dependent on the willingness of international banks to restructure about $100 billion in Korean debt, which they did in January 1998.

bonos had become larger than Mexican dollar reserves, investors panicked anyway, leading to a severe currency and debt crisis. Mexico's assumption of the currency risk had increased the *credit* risk for investors. The same was true in the more recent case of Argentina, which issued large amounts of dollar-denominated public bonds in the 1990s. The credit risk for investors initially appeared to be limited because of Argentina's currency board system and "hard" peg to the US dollar. When rising indebtedness and recession eventually led to currency crisis, peso depreciation resulted in Argentinean default. Hence, in lending to developing countries there can be a trade-off for creditors between currency risk and credit risk.

As we have noted, portfolio equity inflows or FDI both allow the borrowing country to avoid currency risk and a substantial amount of cash-flow/credit risk (since there are usually no fixed payments liabilities attached to such borrowing).[31] The relative stability of FDI may derive from the illiquidity of the assets compared to relatively small holdings of equity or debt securities, and the possibility that FDI investors take a longer term view compared to bond investors. In the event of currency depreciation, the value of local FDI or equity stakes may even increase if the assets are in the traded goods sector.

These advantages of FDI and (to a lesser extent) portfolio equity inflows have often been outweighed for developing countries by the perceived disadvantages of foreign ownership and control. In Latin America in the 1970s, and Korea in the 1990s, bank debt as a form of deficit financing was generally preferred because it did not entail loss of control over important corporate assets, technology, resources, and sources of employment (see chapter 6). The vulnerability this borrowing created was thus in part the result of these countries' restrictive policies toward inward equity flows and FDI, stemming from their desire to prioritize the reduction of perceived sovereignty risk.[32]

[31] Portfolio equity and FDI are often difficult to distinguish in practice, though in theory the difference is that only the latter involves effective control over the corporation and assets acquired. Most countries use 10% ownership of total shares of a given entity as the cutoff point between portfolio investment and FDI.

[32] In the Latin American case, borrowing from foreign banks suffered from an additional source of risk in the form of interest rate risk because the debt was contracted at floating (variable) interest rates.

Key Country External Deficits

To the extent that key currency countries run large overall payments deficits and allow other countries to accumulate their debt as monetary reserve assets, this can provide another source of international finance. Countries that accumulate key currency reserves can use these reserves as a source of emergency finance in the future if their payments position deteriorates, or to pay off existing debts. Triffin pointed out that overall US payments deficits became the most important source of new international liquidity in the international monetary system from the late 1950s.[33] He argued that if the United States were to undertake adjustment measures to reduce its external deficit, this would prompt offsetting policy adjustments by other countries and result in a global recession.

There has been debate over the stability of this form of international finance, since center country deficits can become excessive, resulting in global inflation and exchange rate instability. Foreign exchange reserves are subject to substantial currency risk, as holders of sterling reserves discovered in the early 1930s and holders of dollar reserves have discovered since 1971. When particular countries accumulate large amounts of such reserves predominantly in one currency (usually US dollars), attempts to reduce such currency risk through diversification may backfire if they prompt others to sell dollars. China and other large holders of dollar reserves are in this situation today, as were Japan and Germany in the 1980s. In addition, there is some reversal risk inherent in holdings of dollar reserves, since the center country could conceivably freeze existing foreign asset holdings to render them unusable or even repudiate its outstanding debts.

The strong incentives for other countries to hold key currency monetary reserves can also be a means by which the key currency country can finance its own *current* overall payments deficits. Again, the best-known example is the United States since the 1960s. Other countries' willingness to hold additional US government liabilities (Treasury bills and bonds) as monetary reserves allowed the United States to run con-

[33] Robert Triffin, *Gold and the Dollar Crisis: The Future of Convertibility* (New Haven: Yale University Press, 1961).

tinuously large overall payments deficits with apparently little consequence other than rising external liabilities. Although interest is paid to holders of Treasury debt securities, the real return on such debt has historically been very low, suggesting that this source of finance for the United States has been unusually cheap and highly profitable.[34] President de Gaulle of France termed this America's "exorbitant privilege," although his analysis played down the important role of US payments deficits as a source of finance to the system as a whole.

Public International Finance

For the many developing countries that receive low net private capital inflows, outright grants (aid), debt forgiveness, and new loans from foreign governments or international organizations can be important sources of international finance.[35] Occasionally, in the late nineteenth century, central banks in the major countries provided short-term emergency loans to their foreign counterparts, such as when the French and Russian central banks provided emergency loans to the Bank of England in the 1890 and 1907 crises.[36] Balance-of-payments loans were also made by the League of Nations in the 1920s.[37] However, as we argue later, the idea and the bulk of the practice of public international finance is closely connected with the rise of macroeconomic stabilization and welfare objectives in the mid-twentieth century.

In all cases, public international finance is premised on some form of market failure. Today, the IMF is the main international financial institution (IFI) that provides short-term international finance to

[34] Pierre-Olivier Gourinchas and Hélène Rey, "From World Banker to World Venture Capitalist: US External Adjustment and the Exorbitant Privilege," NBER Working Paper, 11563, 2005.

[35] Grant aid transfers usually show up as credits in the current account. Debt forgiveness shows up as a credit in the capital account. New loans from other governments or international agencies show up as credits in the financial account. For official financial assistance to classify as aid, it must involve a grant element (for example, a loan at below-market interest rates).

[36] J. Lawrence Broz, "The Domestic Politics of International Monetary Order: The Gold Standard," in David Skidmore, ed., *Contested Social Orders and International Politics* (Nashville, Tenn.: Vanderbilt University Press, 1997), 53–91.

[37] Louis B. Pauly, *Who Elected the Bankers? Surveillance and Control in the World Economy* (Ithaca, N.Y.: Cornell University Press, 1997).

countries suffering payments problems. The IMF's role is often justified by the instability of private sector finance. It was originally seen as a means of maintaining the pegged exchange rate system in the face of potentially unstable market speculation. One aspect of this was the policy surveillance function of the IMF, intended to ensure that national economic policies were compatible with systemic exchange rate stability. Another aspect was the IMF's role as provider of short-term public international finance to countries suffering temporary balance-of-payments deficits. Keynes saw this public international finance as a means of avoiding costly deflationary adjustment policies of the kind that occurred in the early 1930s. The justification for long-term public international financial assistance, through international institutions like the World Bank and bilateral aid programs, has also been based on the assumption that private long-term financing will be insufficient to promote economic development in the poorest countries.

In practice, IFI lending, especially in the case of the IMF, has become associated with restrictive policies rather than the maintenance of high levels of domestic demand and employment. This is because of the macroeconomic policy requirements for borrowing countries that are standard preconditions of such loans, commonly referred to as *policy conditionality*. One likely reason for such policy conditionality is that the IMF's resources only consist of the limited pooled contributions of member states, and the major countries have had strong incentives to ensure that borrowers repay the Fund. In addition, there is evidence that IMF staff recruitment and promotion has been biased in recent years toward individuals with non-Keynesian, neoclassical views.[38] We return to this issue later, but it is clear that the governance of the IFIs is of central importance in determining the policy conditionality faced by sovereign borrowers. This can dramatically affect the level of sovereignty risk for borrowing countries and the preferred balance between international financing and adjustment. There is also some reversal risk in borrowing from the IFIs (e.g., in the event of borrower noncompliance with core policy conditionalities), and currency risk (since the IFIs lend in hard currencies).

[38] Jeffrey M. Chwieroth, "Testing and Measuring the Role of Ideas: The Case of Neoliberalism in the International Monetary Fund," *International Studies Quarterly* 51:1, 2007, 5–30.

NATIONAL STABILIZATION POLICY AND INTERNATIONAL MONETARY ORGANIZATION

We have argued that the balance between adjustment and financing in international monetary organization is greatly complicated when countries adopt domestic stabilization objectives. In this section, we argue that the evolution of international monetary organization over the past century can be seen as an uneven process of adaptation to a dramatic shift in *domestic* monetary organization and economic policy. We postpone the question of "feedback" from the international monetary and financial system to national monetary organization and policy to the next chapter.

The Development of National Money

National monetary systems of the kind assumed in standard modern macroeconomics are a relatively recent historical phenomenon, though the gap between theory and practice has always been considerable.[39] The growing centralization of national monetary organization is strongly associated with the development of the modern state, though only in the twentieth century was the "nationalization" of paper money generally established. The institutions associated with national monetary organization are also of recent vintage. By 1900, only 18 countries had central banks, and all but two (Sweden's and England's) were less than 100 years old.[40] The rise of paper ("fiduciary") money issued by central banks eventually laid the institutional foundations for national monetary management, but this also took some time (and the acceptability of such money initially depended on it being backed by reserves of gold or silver).

The possibilities of "monetary policy" were also limited by intellectual constraints that were only gradually overcome in the early part of the twentieth century. The Bank of England's suspension of gold

[39] On the prevalence of within- and between-country competition over currencies in history, see Benjamin J. Cohen, *The Geography of Money* (Ithaca, N.Y.: Cornell University Press, 1998).

[40] Forrest Capie, Charles Goodhart, and Norbert Schnadt, "The Development of Central Banking," in Forrest Capie et al., *The Future of Central Banking: The Tercentenary Symposium of the*

convertibility from 1797 until 1821 mobilized the defenders of orthodox finance, including Ricardo and the "Currency School," who saw in the emergence of a domestic paper money standard the road to financial ruin.[41] The restoration of the fixed gold convertibility of sterling was seen as a crucial constraint against inflation. Another was the legal restriction of the quantity of Bank of England note issuance, notably in the Bank Act of 1844. But politics pushed in the other direction: the 1844 act also consolidated the emerging monopoly position of Bank of England notes.[42] The legal and political dependence of central banks on governments generally rendered them subject to periodic pressure to provide cheap deficit financing, particularly during national emergencies or when their charters were up for renewal. The issuance of new notes, the production cost of which was minimal, allowed the state or central bank to expropriate real private resources ("seigniorage").[43]

The emerging national monetary hierarchy, with central bank notes becoming "as good as gold," was reinforced by restrictions on the circulation of foreign currencies and the suspension of convertibility for foreign coins at national mints. Commercial banks increasingly held their reserves at the central bank. This enabled the central bank to act as a "lender of last resort" (LLR) when panic spread through the banking system, although in most countries such LLR responsibilities were accepted only after the 1930s.[44]

The International Gold Standard

The pre-1914 international gold standard was not a product of collective international design of the kind achieved at Bretton Woods in 1944. There was a clear but gradual trend toward the gold standard in Europe

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Bank of England: The Tercentenary Symposium of the Bank of England (Cambridge: Cambridge University Press, 1994), 4–9.

[41] Frank W. Fetter, *Development of British Monetary Orthodoxy 1797–1875* (Cambridge: Harvard University Press, 1965).

[42] Lawrence H. White, *The Theory of Monetary Institutions* (Malden, Mass.: Blackwell, 1999), 82.

[43] While monetary debasement is as old as coinage itself, the emergence of central bank money provided an opportunity for the technique's more extensive exploitation by the state.

[44] White, *Theory of Monetary Institutions*, 19.

from 1873, led by Germany, the Netherlands, and Scandinavia.[45] Britain's adherence to a gold standard entrenched a growing international role for sterling, with other countries using bills issued by London finance houses to finance international commercial transactions. As both foreign private and public actors accumulated sterling assets for financial purposes, this benefited the City of London, which naturally favored the gold standard.

In theory, there was no room for autonomous monetary policy in the gold standard. The so-called rules of the game (or more accurately, behavioral norms) included the commitment to buy and sell national currency for gold without limit at a fixed price and to allow the free cross-border flow of gold. In practice, central banks diverged in various ways from these norms. The Bank of England relied heavily on the manipulation of its discount rate because of its slim gold reserves; sometimes it even took account of the domestic "state of trade" in setting its level.[46] In France and Germany, central banks used various devices to limit gold convertibility so as to achieve a degree of national monetary autonomy.[47]

Nevertheless, before 1914 there was little pressure for outright inflation in the major countries, allowing their central banks to maintain effective independence in practice. Crucially, in Britain, the external commitment to fixed gold convertibility had priority. The limited appreciation of how interest rates affected the real economy and the limited political influence of Britain's working classes also helped to insulate the central bank from pressure that might have compromised this commitment. The political dominance of the financial bourgeoisie and landed interests, which held a substantial proportion of their financial assets in fixed-income domestic and foreign bonds, reinforced the polit-

[45] Capie, Goodhart, and Schnadt, "Development of Central Banking," 10–11; Jeffry A. Frieden, "The Dynamics of International Monetary Systems: International and Domestic Factors in the Rise, Reign, and Demise of the Classical Gold Standard," in Barry J. Eichengreen and Marc Flandreau, eds., *The Gold Standard in Theory and History* (New York: Routledge, 1997), 206–27.

[46] Arthur I. Bloomfield, *Monetary Policy under the Gold Standard, 1880–1914* (New York: Federal Reserve Bank of New York, 1959); Richard S. Sayers, *Bank of England Operations, 1890–1914* (London: King, 1936).

[47] Broz, "Domestic Politics."

ical preference for low inflation and fixed exchange rates.[48] By contrast, in some peripheral countries in Europe and the Americas, persistent fiscal deficits and political instability produced inflation and undermined attempts to peg to gold.[49]

World War I brought similar levels of political and monetary instability to the heart of the European-dominated international monetary system. The gold standard was suspended in the main belligerent countries at the outbreak of the war. After 1918, the widening of the electoral franchise in Britain and other countries and rising political demands from the working classes everywhere undermined the domestic political foundations of the gold standard. However, the postwar monetary turmoil in Europe ensured that political and economic elites looked back to the prewar gold standard as a beacon of economic and political stability. This set the stage for growing political conflict over national and international monetary arrangements in Europe.

A fundamental problem for all the major European countries was the enormous stock of public debt caused by heavy wartime reliance on government borrowing.[50] To make matters worse, in some countries most of this debt was short term. Reducing the level of national debt to sustainable levels required either more tax increases or refinancing the debt at longer maturities and lower interest rates.[51] The distributive implications of these alternatives provoked intense social conflict, hampering the process of monetary and currency stabilization. Debtors (including the state and corporate sector) had an interest in inflation. The working classes, which had made enormous sacrifices during the war and which had few assets, also demanded increased government expenditure on social welfare. Creditors, including savers and the financial sector in particular, had most to lose from inflation and lobbied

[48] Broz, "Domestic Politics"; Giulio M. Gallarotti, *The Anatomy of an International Monetary Regime: The Classical Gold Standard, 1880–1914* (Oxford: Oxford University Press, 1995), 151–58.

[49] Marc Flandreau, Jacques Le Cacheux, and Frédéric Zumer, "Stability without a Pact? Lessons from the European Gold Standard, 1880–1914," *Economic Policy* 13:26, 1998, 117–62.

[50] Eichengreen, *Golden Fetters*, 74–75.

[51] For example, in France in 1920, the ratio of short-term public debt to GDP was 65%. The difficulty of refinancing it was a much more serious threat to monetary control than the fiscal deficit of 13% of GDP (Eichengreen, *Golden Fetters*, 81).

strongly for a return to the gold standard, as well as cuts in public expenditures and taxes.

The years of inflationary chaos in the early 1920s strengthened the postwar creditor backlash and bolstered the ideological appeal of the gold standard. This facilitated a general movement back onto the gold standard, the most notable example being Britain's decision to return to gold in 1925.[52] More direct international pressure, particularly from the United States and Britain, was also important in some cases, such as the international stabilization schemes sponsored by the League of Nations in countries like Austria and Hungary. These schemes included new central banking statutes designed to promote monetary orthodoxy.[53] The 1924 Dawes loan, which enabled Germany to return to the gold standard, also included a proviso for the Reichsbank to be formally independent of the government. For a few short years this restored gold standard appeared to be working reasonably well, but by the early 1930s, it lay in ruins. Britain's departure from gold in the crisis of late summer 1931 marked the end of the system, though it was not until 1933 and 1936 that the United States and France, respectively, left gold. Why did this restoration experiment fail?

One argument is that the gold standard was ultimately incompatible with postwar governments' new short-term domestic macroeconomic objectives. These objectives lowered the credibility of the commitment to a fixed exchange rate and raised the cost of maintaining it.[54] In this view, wider enfranchisement and growing political influence of the working classes increased demands on governments to make priorities of domestic output and employment objectives rather than the exchange rate and low inflation. Eventually, domestic politics demanded a choice in favor of these incipient "Keynesian" domestic policy objectives, and the gold standard was abandoned.

[52] Dennis E. Moggridge, *The Return to Gold, 1925: The Formulation of Economic Policy and Its Critics* (New York: Cambridge University Press, 1969).

[53] Governor Norman of the Bank of England adopted the rather extreme personal policy of refusing to visit countries without central banks and refusing all contact with foreign ministers of finance and their officials. The Bank of England was also reluctant to extend financial support to countries with politically subordinate central banks (Richard S. Sayers, *The Bank of England, 1891–1944* [Cambridge: Cambridge University Press, 1976], 160–61, 193–94).

[54] Eichengreen, *Golden Fetters*, 391; Simmons, *Who Adjusts?* 61.

The claim about the impact of the widening of the electoral franchise is more consistent with the British case than with other countries' experiences. A number of European countries had adopted nearly universal male suffrage before the era of the gold standard, with apparently limited cost in terms of monetary credibility and stability (in 1848 in France, and 1871 in Germany). Conversely, restricted franchises in Russia, Austria-Hungary, and Italy coincided with high national debts and long-term interest rates and exchange rate instability.[55] Still, Eichengreen and Simmons are correct to suggest that in many countries leftist political parties were more likely to gain political power after the war than before.

Since Eichengreen and Simmons are also correct that financial markets judged many governments' gold standard commitments as lacking credibility in the interwar years, what was the source of the problem? Although financial markets in the 1920s had no modern economic models to deduce a policy contradiction between employment and exchange rate objectives (the Mundell-Fleming model was developed in the 1960s), it is possible that they possessed inductive knowledge of this contradiction. Another possibility is that financial markets were simply concerned that governments would be tempted to inflate their way out of their fiscal and debt overhang problems (as some had tried in the early 1920s). More research is required to decide between these two explanations, since both are consistent with the fact that financial markets reacted negatively to evidence of fiscal and monetary laxity and departures from gold standard rules.

Both arguments are compatible with the general claim that the process of democratization, reflected in the growing importance of mass politics, was of central importance in undermining the credibility of the commitment to a "hard" exchange rate peg. Central bank independence (CBI) from government could sometimes partially offset this trend: countries like France with highly independent central banks made a more credible commitment to gold despite mounting unemployment, in contrast to countries with more subordinate central banks, such as Britain, Sweden, and Japan.[56] In the years that preceded

[55] Flandreau, Le Cacheux, and Zumer, "Stability without a Pact?" 130.

[56] Beth A. Simmons, "Central Bank Independence between the World Wars," *International Organization* 50:3, 1996, 407–44.

the Keynesian revolution in economic theory, the absence of a clear intellectual alternative to the gold standard reinforced elite attachment to a system that eventually produced outcomes dysfunctional from most points of view.[57] From 1932, British policymakers began very tentatively to experiment with cheap money policies that promoted higher levels of employment.

These arguments about the importance of domestic political change in the major European countries in undermining the gold standard are at odds with the standard argument about the absence of hegemony as the prime cause of interwar monetary instability. In this view, British decline and a newly preponderant America's unwillingness to assume the burden of leadership undermined the international gold standard. As Kindleberger famously put it:

> The world economic system was unstable unless some country stabilized it, as Britain had done in the nineteenth century and up to 1913. In 1929, the British couldn't and the United States wouldn't.[58]

This argument has some merits in focusing attention on the shortcomings of international monetary cooperation in the late 1920s and early 1930s, but it has been criticized on many other grounds. It underplays the attempts by Britain and the United States to restore the international gold standard in the 1920s, the role of policy mistakes in Britain and elsewhere, and the destabilizing effects of the war and postwar settlement. It also ignores the domestic political conflict that arose from the financial and economic legacy of the Great War, and the rising importance of socialist politics in undermining the commitment to gold.[59]

A New International Monetary System: Bretton Woods

The Bretton Woods agreement of 1944 was a true watershed, representing an attempt to found a new kind of international monetary order

[57] Barry J. Eichengreen and Peter Temin, "The Gold Standard and the Great Depression," NBER Working Paper, 6060, 1997.

[58] Kindleberger, *World in Depression*, 292.

[59] Ruggie, "International Regimes"; Walter, *World Power*, chap. 5.

on the explicit acceptance of new domestic macroeconomic objectives.[60] The establishment of two new international institutions, the IMF and World Bank, introduced a greater element of collective management of international money and finance than in the past. Even so, elements of historical continuity included a pegged exchange rate system, a monetary anchor role for gold, and a reserve role for both gold and major key currencies.

Much IPE literature initially emphasized the importance of US hegemony in the construction of the Bretton Woods system.[61] Although US leadership was indeed crucial to the outcome, hegemony theory does not explain the details of the Bretton Woods system. "Social" democracy and associated new Keynesian thinking about policy combined to ensure that many governments in Europe saw high-employment policies as an essential ingredient of postwar political reconstruction.[62] National demand-management policies and in many cases state-directed industrial policy were seen as the means to achieve these goals. In developing countries, similar policies were pursued for nationalist and developmental reasons even in the absence of democracy. Almost everywhere, national fiat money systems were entrenched and central banks placed under government control. In the Bretton Woods agreement it was accepted that governments would and should use national stabilization policy to manage domestic output, employment, and price objectives. Keynesian ideas were not fully victorious, particularly in the United States, but classical monetary orthodoxy had collapsed almost everywhere, and financial interests were often seriously weakened by the Great Depression and war.[63]

The Great Depression had delegitimized the gold standard because of its association with deflation and mass unemployment. Keynes had

[60] Richard N. Gardner, *Sterling-Dollar Diplomacy in Current Perspective* (New York: Columbia University Press, 1980); Harold James, *International Monetary Cooperation since Bretton Woods* (Washington, D.C.: IMF; New York: Oxford University Press, 1996); Armand Van Dormael, *Bretton Woods: Birth of a Monetary System* (London: Macmillan, 1978).

[61] For a discussion, see Walter, *World Power*, chap. 6.

[62] Ruggie, "International Regimes."

[63] On Keynesian ideas, see Hall, *Political Power of Economic Ideas*, especially chapters 2 and 3; and G. John Ikenberry, "A World Economy Restored: Expert Consensus and the Anglo-American Postwar Settlement," *International Organization* 46:1, 1992, 289–321.

famously described the gold standard as a "barbarous relic" and declared its incompatibility with active demand-management policy. Yet the United States, which by the 1940s held most of the world's gold reserves, insisted that gold be retained alongside convertible currencies as a monetary reserve asset and as an anchor for the exchange rate system. The Bretton Woods conference therefore agreed to adopt a more flexible "gold-exchange standard." Since domestic monetary policy autonomy was prioritized, capital controls were allowed (IMF Article VI.3).[64] All currencies would be pegged to gold *or* to the US dollar (IMF Article IV.1.a), but no country would be required to defend an exchange rate that produced a "fundamental disequilibrium" in the balance of payments (IMF Article IV.5). This meant that pegs could be adjusted in such circumstances, though in principle adjustments required consultation with other countries through the IMF to prevent competitive devaluation. The concept of fundamental disequilibrium was left undefined, but the general understanding was that persistent overall payments imbalances would require exchange rate adjustment. These and other ambiguities in the Bretton Woods system played a constructive role in facilitating agreement and in providing for subsequent flexibility.[65]

The postwar international monetary system soon evolved into a gold-dollar system, whereby the United States maintained dollar convertibility into gold at the fixed (1934) price of $35 per ounce. Other countries could freely hold dollar reserves and could, if they wished, sell these reserves for gold at the official price, either in the private gold market, or by presenting them for conversion at the "gold window" of the US Treasury. The emerging Cold War also resolved the decades-long problem of persistently large US payments surpluses by facilitating US acquiescence to large European devaluations over 1948–49 and costly American aid and troop deployments in Europe and Asia. These helped to produce the large US payments deficits from the early 1950s that later became associated with the Bretton Woods system and which provided a large proportion of the new liquidity in the postwar international monetary system.

[64] Capital controls are policy measures that restrict cross-border transactions in financial assets.

[65] Jacqueline Best, *The Limits of Transparency: Ambiguity and the History of International Finance* (Ithaca, N.Y.: Cornell University Press, 2005).

The room allowed in the Bretton Woods agreement for domestic macroeconomic activism and the potentially adjustable character of the exchange rate pegs arguably reduced their credibility. As a result, timely changes to currency pegs were encouraged. Furthermore, the IMF was authorized to use its pool of member contributions to make short term loans to members who needed to defend their exchange rate. National quotas were to be comprised of 25% gold and 75% national currency, but countries could borrow up to 125% of this quota (with successive "tranches" having more conditions attached), repayable within three to five years. From the Keynesian perspective, a temporary deterioration in a country's payments position should be financed to counteract the "deflationary bias" in the system that derived from the special vulnerability of deficit countries. As Article 1(v) of the Bretton Woods agreement stated, a key objective was

> To give confidence to members by making the Fund's resources available to them under adequate safeguards, thus providing them with an opportunity to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity.

By late 1947 it had become clear that the IMF's total resources were wholly inadequate to achieve this objective, but the Cold War intervened and the United States provided bilateral financial aid to western Europe in the form of the Marshall Plan. IMF quotas have been increased periodically since 1944, but the Fund's resources have not kept pace with the growth of the world economy. Later, as capital mobility and pressures on the exchange rate system increased, the major industrial countries supplemented these limited facilities in the 1960s with the Gold Pool (1961), swap facilities (1962), the General Arrangements to Borrow (GAB) (1962), and SDR allocations (from 1969).[66] These new financing arrangements largely benefited the industrial countries. The shortage of IMF liquidity ensured that in practice most adjustment pressure remained on deficit countries, especially those in the developing world.

The Cold War had another effect on the balance between financing and adjustment. Although IFI lending and associated policy conditionality was meant to be based on politically neutral criteria, the rise of

[66] James, *International Monetary Cooperation*, chap. 6.

the Cold War seriously strained the credibility of this neutrality for both the IMF and the World Bank.[67] This was compounded by the fact that voting power in the Executive Boards of the Fund and Bank were weighted according to country contributions, with the United States possessing the largest (and wielding effective veto power over important decisions). After the withdrawal of the USSR and mainland China from the Bretton Woods institutions, the United States and its European allies dominated both IFIs. Other countries aligned with the dominant Western powers tended to get better financing deals and very weak enforcement of policy conditionality.[68]

FROM BRETTON WOODS TO GLOBAL FINANCIAL INTEGRATION

By the early 1960s, the Bretton Woods system had evolved in directions unforeseen in 1944 and was in serious difficulty. It limped on until the early 1970s only through US unilateral actions and America's ability to obtain the support of most of its political and military allies. The growing political demands for domestic stabilization policies contributed to the further marginalization of gold in the international monetary system and the emergence of a "dollar standard." Another major long-term development was the reemergence of private international financial markets in the 1960s. Together, these processes undermined the pegged exchange rate system and increasingly marginalized the institutions of public international finance established at Bretton Woods.

From Gold-Exchange Standard to Dollar Standard

It was already clear by the late 1950s that the gold-exchange standard was in difficulty. In the late 1950s, US gold losses accelerated as large

[67] The World Bank, intended to provide longer-term public finance to war-torn and developing countries, operated on a different model. With $10 billion in initial capital commitments from member states, the Bank would borrow at low rates in private international capital markets and lend the proceeds to member countries.

[68] Strom C. Thacker, "The High Politics of IMF Lending," *World Politics* 52:1, 1999, 38–75.

overall US payments deficits were financed by the accumulation of dollar reserves by central banks in Europe and elsewhere. At the same time, steady wartime and postwar inflation had eroded the real price of gold (given its fixed nominal price of $35 per ounce), making it less profitable to mine and encouraging excess private demand. The growing shortage of gold's supply relative to dollars led to growing speculation against the dollar.[69]

Triffin argued that these developments showed that the gold-exchange standard was "inherent unstable" and was bound to collapse.[70] The sustained expansion of international trade, he argued, increasingly depended on new liquidity provided by US payments deficits, but the growing relative shortage of gold compared to dollars would undermine the fixed-price relationship between the dollar and gold. If the United States tried to maintain the dollar price of gold by reducing its overall payments deficits, a global liquidity crisis and recession would result. Fearing the latter outcome, Triffin argued for replacing both gold and key currencies with a new international fiduciary money that could be created and managed by the IMF (reviving Keynes's "bancor" proposal of the early 1940s).

Triffin's diagnosis of the weaknesses of the Bretton Woods system was perceptive, but his political economy analysis was less strong. First, to expect the United States to reduce its external deficit was naive, given the growing domestic pressure for welfare spending and job creation in the United States and the large contribution of FDI, military, and aid outflows to America's external deficits. Second, Triffin's supranational solution was utopian and at odds with domestic political considerations in the United States and elsewhere. In reality, there were only three plausible solutions to the gold-dollar problem. One solution, eventually adopted, was to break the link with gold permanently and to move to a dollar standard.[71] A second solution was to maintain the gold-dollar

[69] This is an example of "Gresham's Law," the claim that "bad [depreciating] money drives out good" (i.e., appreciating money is hoarded rather than spent). It suggests that dual monetary standards are prone to instability.

[70] Triffin, *Gold and the Dollar Crisis*.

[71] Emile Despres, Charles P. Kindleberger, and Walter S. Salant, "The Dollar and World Liquidity—a Minority View," *The Economist*, February 5, 1966, 526–29; Ronald I. McKinnon, *Money in International Exchange: The Convertible Currency System* (New York: Oxford University Press, 1979).

standard by periodically revaluing gold against all currencies in the system, including the dollar.[72] A third, which was adopted after the collapse of the short-lived dollar standard, was to allow the major currencies to float against each other.

Politics initially strongly favored the dollar standard over the second and third solutions. The gold revaluation proposal was politically unappealing for a number of reasons. First, it overlooked that continuous postwar inflation in the major countries rendered an anchor role for gold increasingly untenable: periodic gold revaluations would have been tantamount to accommodating this inflation, undermining the core rationale for a commodity price anchor. Second, the United States was increasingly unwilling to accept the constraint on its own macroeconomic policy flexibility that gold convertibility implied.[73] Third, loyal allies of the United States like West Germany and Japan were willing to hold dollar reserves even if they were not convertible into gold. Only France under de Gaulle, chafing under American preponderance, felt sufficiently autonomous of Washington both to withdraw from NATO's military structure and to sell its dollar reserves. Vocal French demands for a return to a "politically neutral" gold standard also hardened US political opinion against gold revaluation, already resisted out of concern that it would favor the "gold bugs" (speculators) and unsavory gold-producing countries like the USSR and South Africa.

If a reinvigorated gold exchange standard was politically unappealing, the flexible exchange rate proposal also enjoyed very little support in the late 1960s except among a few maverick economists (we discuss this further in the next chapter). This left the dollar standard as the only alternative that was acceptable to the United States and its major allies. The "Two-Tier" agreement of 1968 ended official attempts to maintain the fixed price of gold in the private gold market, though the $35 per ounce price was retained for transactions between central banks. This was the first formal step toward the demonetization of gold in the international monetary system, though it did little to relieve the pressure on the dollar and continuing losses of US gold reserves. In August 1971,

[72] Milton Gilbert, *Quest for World Monetary Order*, ed. Peter Oppenheimer and Michael Dealtry (New York: Wiley, 1980).

[73] Gowa, *Closing the Gold Window*.

President Nixon unilaterally decided to close the gold window and in December that year obtained the agreement of other major countries to a formal dollar standard, in which other currencies were pegged to a gold-inconvertible US dollar. As we discuss in chapter 5, the dollar standard proved even more unstable than the gold-dollar standard, but the position of key currencies as reserve assets in the international monetary system has become ever more entrenched since then.

The Reemergence of Financial Integration

The second major change in the international monetary system over the course of the 1960s and 1970s was the reemergence of private international capital markets. There is a large literature describing the dramatic increase in short-term capital mobility and longer-term international financial flows since the 1960s that need not be repeated here.[74] One indication of the importance of international capital flows is the very high level of *daily* global turnover in foreign exchange markets, which reached $1,900 billion in April 2004, compared to $620 billion in 1989.[75] Another indication is the increase in the stock of financial assets owned by foreigners. According to McKinsey, by 2005, "foreigners [held] 12 percent of US equities, 25 percent of US corporate bonds, and 44 percent of Treasury securities, up from 4 percent, 1 percent and 20 percent, respectively, in 1975."[76] Although there is general agreement about the rapidity of the growth in financial integration, there is debate and some skepticism concerning its absolute level.[77] As figure 4.2 shows, although most regions have seen an increase in levels of capital account

[74] For a recent assessment of the scope and depth of global financial integration, see McKinsey Global Institute, *Mapping the Global Capital Market: Third Annual Report* (San Francisco: McKinsey & Co., January 2007). For political economy assessments, see Eric Helleiner, *States and the Re-emergence of Global Finance* (Ithaca, N.Y.: Cornell University Press, 1994); and Benjamin J. Cohen, "Phoenix Risen: The Resurrection of Global Finance," *World Politics* 48:2, 1996, 268–96.

[75] Bank for International Settlements data, available at http://www.bis.org/publ/rpfx05.htm, accessed December 9, 2005.

[76] McKinsey Global Institute, *118 Trillion and Counting: Taking Stock of the World's Capital Markets* (San Francisco: McKinsey & Co., February 2005), 19.

[77] Philip R. Lane and Gian Maria Milesi-Ferretti, "International Financial Integration," IMF Working Paper, WP/03/86, April 2003.

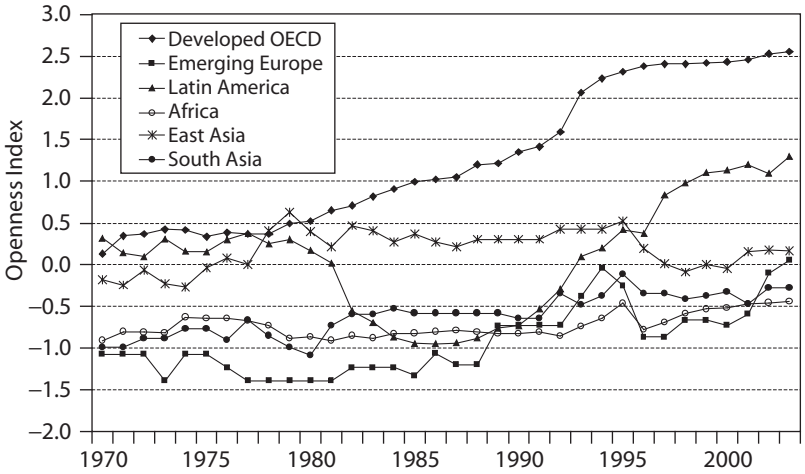

Figure 4.2. Capital Account Openness, Selected Country Groups, 1970–2003
Source: Menzie Chinn and Hiro Ito, KAOPEN database, capital openness indices for 163 countries over 1970–2003, http://web.pdx.edu/~ito/ (accessed December 9, 2005).

openness since 1970, financial openness is higher in developed countries and trends vary considerably by region.

Given the potentially transformative implications of greater financial openness, we must first ask what explains this broad trend and the varying cross-regional and cross-country patterns we observe. Here, we discuss international, domestic, and ideational explanations. We focus on the removal of barriers to short-term or portfolio capital mobility, especially capital controls, but keep in mind that financial liberalization more broadly also encompasses the liberalization of domestic financial markets, including the removal of controls on financial activities and on entry into financial businesses, including by foreign financial firms.

International Explanations

The most general explanation is that international competition between states promotes financial liberalization over time.[78] As we saw in chapter 3, realist accounts of trade policy have claimed that interstate competition tends to promote either unilateral protection or cautious, reciproc-

[78] Philip G. Cerny, "Globalization and the Changing Logic of Collective Action," *International Organization* 49:4, 1995, 595–625; Helleiner, *States and Re-emergence.*

ity-based trade liberalization. What is different about finance, realists have argued, is that unilateral liberalization improves the competitive position of national financial sectors and can attract multinational financial firms.[79] Hence, relatively closed national financial systems such as generally prevailed in the 1950s and 1960s are seen politically unsustainable over time. Evidence for this claim is provided by the evident competition between global financial centers like London and New York, and within regions like Europe and East Asia, which do appear to have promoted unilateral removal of capital controls and of constraints on international financial business and entry by financial MNCs. The "Eurodollar" markets emerged in the 1960s because of the British authorities' willingness to allow London banks to provide wholesale dollar-based financial services to foreign residents, even though capital controls on *sterling* transactions remained in place until the late 1970s. The United States responded at the end of 1973 by removing the remaining capital controls that inhibited Wall Street's international financial role and encouraged American banks to conduct international business in London. A related argument is that such competition can spiral out of control, causing a race to the bottom in financial regulation, taxation, and financial transparency as ever more jurisdictions compete for international financial business. Concerns have focused particularly on "offshore financial centers" (OFCs), which offer low taxes, light financial regulation, and substantial anonymity for individuals, companies and financial institutions.[80]

However, not all governments choose to compete for international financial business. The removal of capital controls has also taken place very unevenly, both over time and across different countries.[81] At the least, we need to explain why the United States and a few other coun-

[79] This claim can be criticized for ignoring the potential for gains in economy-wide competitiveness that may stem from unilateral trade liberalization, as well as the growing practice of unilateral trade liberalization since the 1980s.

[80] E.g., Tax Justice Network, "Tax Us If You Can," Briefing Paper, September 2005. Definitions of OFCs vary, but the IMF identifies dozens, including many microstates (Ahmed Zoromé, "Concept of Offshore Financial Centers: In Search of an Operational Definition," IMF Working Paper, WP/07/87, April 2007; see also Ronan Palan, *The Offshore World: Sovereign Markets, Virtual Places, and Nomad Millionaires* [Ithaca, N.Y.: Cornell University Press, 2006]).

[81] IMF, *Country Experiences with the Use and Liberalization of Capital Controls* (Washington, D.C.: IMF, 2000).

tries (such as Switzerland, Canada, and West Germany) removed capital controls much earlier than others. Helleiner's argument is that the relative political influence of financial interests within these countries helps to explain their decisions, which takes us into domestic politics. Another, compatible explanation is that the IT revolution substantially reduced the costs of international financial transactions, providing increased incentives for governments to engage in competitive liberalization. The related dramatic fall in transactions costs has also unleashed successive waves of innovation in financial markets, which has spurred their growth and further raised the costs of financial protectionism. As we will see in chapter 6, such technological explanations have been applied to growing capital mobility in general.

Others retain an international explanatory focus by arguing that the major Western countries, above all the United States, have actively promoted financial liberalization abroad to enhance their structural power within the global system.[82] Although this argument also has realist origins, it interprets the general trend in more coercive terms. Potential benefits for the United States include greater business opportunities for highly competitive US financial firms, as well as the possible benefits that the United States as a whole may gain from the international use of its currency, and from financial inflows from other countries, including for the purpose of obtaining cheap finance for its fiscal and payments deficits.

There is evidence that the United States and the EU have promoted greater financial openness abroad in recent years through trade and investment negotiations (notably in the WTO financial services agreement of 1997, but increasingly through bilateral deals). Some also argue that the major countries have used the IMF to promote capital account liberalization abroad.[83] But this overlooks the other side of the argument, especially that financial liberalization might benefit indigenous firms and that growing US dependence on foreign finance might di-

[82] Michael Loriaux, "The End of Credit Activism in Interventionist States," in Loriaux, ed., *Capital Ungoverned: Liberalizing Finance in Interventionist States* (Ithaca, N.Y.: Cornell University Press, 1997), 1–16; Leonard Seabrooke, *US Power in International Finance: The Victory of Dividends* (London: Palgrave Macmillan, 2001).

[83] Robert Wade, "The Coming Fight over Capital Controls," *Foreign Policy* 113, Winter 1998–99, 41–54.

minish rather than enhance America's global leverage.[84] Moreover, international pressures to converge on open capital account policies were not always successful or especially strong. A recent independent review of IMF policy notes that although the IMF did try to persuade governments to liberalize, it lacks the legal authority to require capital account liberalization (a legacy of the Bretton Woods articles of agreement). Generally, it suggests that domestic factors were usually more important in governments' liberalization decisions.[85]

Simmons and Elkins show that capital account liberalization has clustered both temporally and spatially, suggesting that domestic factors alone are insufficient to explain this pattern.[86] One explanation for this is the competitive liberalization process discussed above. Another channel Simmons and Elkins identify is that countries may observe peer group policies for purposes of gaining information in a situation of uncertainty (i.e., a learning effect), an argument for which they find some support. The IFIs may have played a role in promoting this cross-border diffusion of policy trends.

A final international explanation of capital account liberalization is offered by Haggard and Maxfield, who argue that financial crises induce capital-poor developing countries to open their capital accounts to signal that the risk of future closure should not deter potential investors.[87] It is doubtful, however, that any such signals are very credible to investors, since the cost of reintroducing capital controls in the future during a crisis may not be high. Indeed, figure 4.2 suggests that East Asia on average tightened rather than liberalized capital controls after the regional crisis of 1997–98.

[84] For different views concerning the recent debate about the consequences of growing US external indebtedness, see Michael P. Dooley, David Folkerts-Landau and Peter Garber, "An Essay on the Revived Bretton Woods System," NBER Working Paper, 9971, September 2003; Barry J. Eichengreen, *Global Imbalances and the Lessons of Bretton Woods* (Cambridge: MIT Press, 2006); and Maurice Obstfeld and Kenneth Rogoff, "The Unsustainable US Current Account Position Revisited," NBER Working Paper, 10869, November 2004.

[85] IMF, Independent Evaluation Office, *Report on the Evaluation of the IMF's Approach to Capital Account Liberalization* (Washington, D.C.: Independent Evaluation Office, IMF, April 2005).

[86] Beth A. Simmons and Zachary Elkins, "The Globalization of Liberalization: Policy Diffusion in the International Political Economy," *American Political Science Review* 98:1, 2004, 171–89.

[87] Stephan Haggard and Sylvia Maxfield, "The Political Economy of Financial Internationalization in the Developing World," *International Organization*, 50:1, 1996, 35–68.

Domestic Explanations

The comparative political economy literature suggests a range of domestic interest group and institutional factors that help explain the complex pattern of liberalization. Interest-based approaches begin by specifying group preferences, typically using either the Stolper-Samuelson or specific factors models of trade theory. In the former case, in advanced economies capital as the abundant factor gains and labor loses from financial openness (since capital will be exported). In developing economies, labor gains from capital importation and domestic capital loses. Building on this model, Quinn and Inclán predict different labor preferences according to skill levels and test hypotheses about the circumstances under which left-of-center and right-of-center political parties will support or oppose financial openness.[88]

In contrast, Frieden uses the specific factors model to predict that financial industries will gain from financial openness and those with sector-specific assets lose because they will pay higher borrowing costs when capital flows abroad.[89] In developing countries, industries with sector-specific assets win because they will pay lower borrowing costs. MNCs with internationally diversified asset portfolios will gain because of their ability to borrow at low cost and from their ability to make intrafirm financial transfers. Owners of liquid financial assets in developed countries will gain while those in developing countries will lose as interest rates rise in the former and fall in the latter. These predictions are consistent with some aspects of conventional wisdom, such as the apparently broad support for financial openness among firms and workers engaged in the financial sector of major countries since the 1970s, and among the multinational corporate sector in general.

Some difficulties emerge in both of these approaches, though neither has been subject to decisive testing to date. First, some of the predictions are not obviously consistent with the evidence. For example, domestic firms in specific sectors in the advanced countries may not have lost from capital openness, since many firms now enjoy access to a much greater pool of capital than before because of widespread

[88] Dennis P. Quinn and Carla Inclán, "The Origins of Financial Openness: A Study of Current and Capital Account Liberalization," *American Journal of Political Science* 41:3, 1997, 771–813.

[89] Frieden, "Invested Interests."

liberalization across many countries. Indeed, both theories rely for their predictions on the standard neoclassical assumption that financial openness will promote capital exports from developed countries to capital-poor developing countries. It is not commonly recognized in the political economy literature that this crucial assumption is not supported by the evidence, with the United States acting as a net importer of capital from developing countries for many years.[90] Second, it is one thing to attempt to identify those groups who win and lose from financial openness, but this does not mean that such groups will mobilize to lobby policymakers. As for trade policy, institutions matter for financial policy outcomes, including the political parties that Quinn and Inclán consider. However, political parties may represent multiple interest groups who are differently affected by financial opening. More generally, it is not clear how strong and coherent the preferences of interest groups will be, since financial openness raises a range of complex issues. As Frieden notes, financial openness has important implications for the exchange rate, so much may depend on whether specific assets are employed in the traded or non-traded-goods sector (see chapter 5, the section "Financial Integration and Exchange Rate Policies"). Voters possess multiple identities in practice: as savers, as workers or employers, as consumers, and so on, which can result in ambiguous preferences. Banks may have global fund management and international lending divisions that favor financial openness, but their domestic lending departments with corporate clients in the traded goods sector may favor exchange rate stability over capital openness. The majority of the benefits of financial liberalization tend to accrue to particular, often politically influential, groups, including financial firms and MNCs.[91] The potential costs of such liberalization, such as greater exchange rate instability, lower macroeconomic policy autonomy, and financial crises tend to be delayed and more widely distributed among societal groups. Given this asymmetric distribution of costs and benefits and the obstacles to collective action among losers, liberalization is likely to win out in the long run.

[90] This is generally known as the "Lucas paradox" after Robert E. Lucas Jr., "Why Doesn't Capital Flow from Rich to Poor Countries?" *American Economic Review* 80:2, 1990, 92–96.

[91] John B. Goodman and Louis W. Pauly, "The Obsolescence of Capital Controls? Economic Management in an Age of Global Markets," *World Politics* 46:1, 1993, 50–82.

If policymakers have some autonomy from societal interests in this area, what determines their preferences? One possible answer, addressed below, is economic ideas. Another is that the state itself, often the largest debtor within countries, may favor financial openness if this expands its borrowing capacity and lowers its cost of debt (a generalization of Loriaux's argument from the previous section). Governments of countries with low domestic savings or underdeveloped capital markets might be particular beneficiaries. Governments facing highly independent central banks may enjoy little influence over monetary policy with or without capital controls, undermining the rationale for retaining them. Central banks themselves might favor capital mobility either because they are open to capture by the financial sector or because they believe it will constrain the government's propensity to run fiscal deficits.[92] These possibilities remain speculative at present.

Finally, what impact has democratization had on capital account policies? It is difficult to believe that there is a simple linear relationship between democracy and capital account policy. The restriction of the franchise in nineteenth-century Britain and the political dominance of the asset-owning elite may have favored the policy of financial openness under the gold standard until 1914. Ruggie's argument that the "reembedding" of economic liberalism within a social democratic framework made capital controls politically acceptable pushes in the same direction.[93] Others find that more recently, democracy has had a positive effect on financial liberalization in developing countries.[94] Countries in which voters support social democratic welfare policies have moved in recent years toward greater financial openness (notably most of developed western Europe in a relatively coordinated fashion as part of the 1992 Single Market Programme). This might demonstrate that as these voters have become richer over time they have also come to favor financial openness to maximize returns on savings, or it may simply be that they are relatively poorly informed or weakly mobilized. Evidently, this important area is ripe for further research.

[92] However, if the central bank is required to defend a currency peg, it may favor capital controls.

[93] Ruggie, "International Regimes."

[94] Nancy Brune, Geoffrey Garrett, Alexandra Guisinger, and Jason Sorens, "The Political Economy of Capital Account Liberalization," unpublished paper, December 2001, available at http://www.isop.ucla.edu/cms/files/capacct.pdf.

Ideational Explanations

Capital account decisions may be influenced by particular ideas if policymakers have some autonomy from domestic and international interests. In the early post-1945 period, the orthodox (Keynesian) consensus among economists and technocrats was that capital controls were a necessary plank of national macroeconomic stabilization policy. By contrast, most contemporary economists argue that capital controls rarely work for long, create large inefficiencies in the global allocation of capital, and promote corruption.[95] This broad ideational shift is associated with the rise of an anti-Keynesian policy consensus since the 1970s that monetary policy should focus mainly (if not entirely) on inflation stabilization and in favor of floating exchange rates.

The question of how much this new orthodoxy influenced *policy* outcomes is a difficult one. Optimism concerning the net benefits of capital account liberalization probably played a role in a number of decisions by developing countries to liberalize in the early 1990s, though the impact of neoliberal ideas on financial policy varies considerably across countries.[96] Those Latin American governments adhering to the new "Washington consensus" concerning the benefits of neoliberal market reform were most prone to ideological conversion to the capital liberalization cause, Mexico's economist-dominated government being the most notable example.[97] But it is difficult to separate the role of ideas from that of pressure from powerful external actors. The US Treasury and the IMF proselytized in favor of financial liberalization in the 1990s, and the former was associated with proposals in the mid-1990s for an amendment to the IMF's articles of agreement to give the IMF authority to promote capital account liberalization. These proponents

[95] Alberto Alesina, Vittorio Grilli, and Gian Maria Milesi-Ferretti, "The Political Economy of Capital Controls," in Leonardo Leiderman and Assaf Razin, eds., *Capital Mobility: The Impact on Consumption, Investment, and Growth* (New York: Cambridge University Press, 1994), 289–321; Richard J. Sweeney, "The Information Costs of Capital Controls," in C. P. Rios and Richard J. Sweeney, eds., *Capital Controls in Emerging Economies* (Boulder, Colo.: Westview Press, 1996); Sebastian Edwards, "How Effective Are Capital Controls?" *Journal of Economic Perspectives* 13:4, 1999, 65–84.

[96] Jeffrey M. Chwieroth, "Neoliberal Economists and Capital Account Liberalization in Emerging Markets," *International Organization* 61:2, 2007, 443–63.

[97] Sarah Babb, *Managing Mexico: Economists from Nationalism to Neoliberalism* (Princeton, N.J.: Princeton University Press, 2001).

played down the costs of financial openness: though they recognized at the conceptual level that premature capital account liberalization could be risky, in practice little attention was given to these concerns before the Asian crises of the late 1990s.[98] Although key players in the US Treasury and IMF may have been convinced of the intellectual case in favor of financial openness, in both cases material interests arguably pushed in the same direction. Ideational and material factors also interrelate in the impact of the end of the Cold War, which led to a transition toward market democracies in many central and eastern European countries in the early 1990s.

An example of the role of ideas in influencing material outcomes is the effect of financial theory on the way in which financial markets operate. Finance theorists working within the neoclassical tradition on risk and portfolio optimization laid the foundation for modern financial techniques that revolutionized the financial sector. As Bernstein notes, some of these academic theorists went on to work in the financial markets, providing a direct link between academic ideas and financial practice.[99] The rapid growth of the financial sector that this helped to produce increased its political influence, including over the nature and content of financial regulation. This also has made it more difficult for countries with substantial financial sectors to contemplate the reintroduction of controls that inhibit financial innovation and globalization.

In short, it seems clear that both international and domestic factors matter in explaining the uneven patterns of financial liberalization over the past few decades. Ideational and material factors are difficult to separate, though the relative importance of ideas may be greater in some countries than in others, depending among other things on the coherence of policymaking teams.[100] Ideas also have been important in reshaping the financial sector in ways that have in turn influenced policy and the shape of financial regulation (see chapter 5).

[98] IMF, *Evaluation of the IMF's Approach.*

[99] Peter L. Bernstein, *Capital Ideas: The Improbable Origins of Modern Wall Street* (New York: Free Press, 1992). See also Donald MacKenzie, *An Engine Not a Camera: How Financial Models Shape Markets* (Cambridge: MIT Press, 2006); and Perry Mehrling, *Fischer Black and the Revolutionary Idea of Finance* (Hoboken, N.J.: Wiley, 2005).

[100] Chwieroth, "Neoliberal Economists."

CONCLUSION

We have argued in this chapter that the very uneven process of democratization in combination with Keynesian economic ideas promoted demands for national macroeconomic activism by governments and monetary authorities. Over the course of the past century, this process undermined the role of gold in international monetary organization and rendered pegged exchange rate systems increasingly unviable. In the 1970s, the principle of national macroeconomic activism came under challenge from monetarist and new classical economics, but most central banks have retained the Keynesian idea that discretionary monetary management remains a powerful policy tool. Domestic political pressure for monetary activism remains strong in most developed democracies.[101]

Although one of the components of national monetary activism was the often substantial use of capital controls to limit international financial interdependence, over time this proved unsustainable. The reemergence of private international financial markets has been driven by a range of international and domestic forces, both material and ideational. Combined with the continuing importance of national macroeconomic policy activism, growing financial interdependence has had a powerful impact on the shape of the international monetary organization, in particular by increasing the vulnerability of pegged exchange rate regimes. We consider this and other implications in more detail in the next chapter.

FURTHER RESOURCES

Further Reading

Harold James. *International Monetary Cooperation since Bretton Woods.* Washington, D.C.: International Monetary Fund; New York: Oxford University Press, 1996. An excellent history of international monetary relations since World War II.

[101] We discuss the possible exception of Europe in the following chapter.

Ngaire Woods. *The Globalizers: The IMF, the World Bank, and Their Borrowers*. Ithaca, N.Y.: Cornell University Press, 2006. Provides a clear analysis of the two main international financial institutions, their governance, and their relationships with developing countries that borrow from them.

Benjamin J. Cohen. *Global Monetary Governance*. London: Routledge, 2008. A collection of important essays on the evolution of the international monetary and financial system since the 1960s.

Useful Websites

- http://web.pdx.edu/~ito/. Menzie Chinn and Hiro Ito's "KAOPEN" database, which currently provides capital account openness indices for 181 countries over 1970–2005 and is periodically updated.
- http://www.imf.org/external/data.htm. The IMF's data and statistics site, which includes a range of important databases including International Financial Statistics, World Economic Outlook, the Joint BIS-IMF-OECD–World Bank Statistics on External Debt, the Dissemination Standards Bulletin Board, and the *Annual Report on Exchange Arrangements and Exchange Restrictions*.
- www.imf.org/ieo. The IMF's Independent Evaluation Office site, which produces useful independent reports on the IMF's role in international money and finance.
- http://www.brettonwoodsproject.org. The Bretton Woods Project site, an independent organization that monitors the IMF and World Bank and offers reform proposals.