

CHAPTER 11

Cooperation, Conflict, and Crisis in the Contemporary International Monetary System

In May 2017, U.S. President Donald Trump tweeted that the United States was running a MASSIVE trade deficit with Germany. By late July, news reports suggested that the Trump administration was pressuring the International Monetary Fund to focus more attention on Germany's trade surplus which had surpassed China's as the world's largest. The Commission of the European Union added to the pressure that the German government was feeling, noting that the unprecedentedly large German current account surplus—more than 8 percent of GDP in 2016—was limiting that capacity for growth in other EU economies and calling for Germany to increase public and private investment in order to contribute to stronger growth throughout the EU. German Chancellor Angela Merkel and her economic team have resisted this pressure, and have remained committed to a tight fiscal policy that they had embraced in 2010. Indeed, in October of 2017, the German political parties that were trying to form a coalition agreement made a balanced budget their first priority.

This contemporary conflict between Germany and the U.S. and the broader EU reminds us that the more things change, the more they seem to remain the same. It doesn't take all that much imagination to see that Trump and Merkel are engaged in the same dispute that brought down the Bretton Woods System in the early 1970s. This is somewhat surprising because abandoning Bretton Woods was supposed to provide domestic economic autonomy and relegate such conflicts to the past. Shifting to floating exchange rates was supposed to provide domestic autonomy in

two ways. First, governments hoped that a system of floating exchange rates would allow macroeconomic policies to pursue distinct objectives. Any current-account imbalances that emerged would be eliminated automatically through these exchange-rate movements. No longer would governments be forced to alter their macroeconomic policies to eliminate payments imbalances.

Governments have found, however, that neither the shift to more flexible exchange rates nor the creation of a regional monetary system among deeply integrated European economies has prevented distributive conflicts of the kind that ultimately brought down the Bretton Woods system. The determination to set macroeconomic policy independent of foreign considerations has generated large current-account imbalances that in turn give rise to large cross-border capital flows, disruptive exchange-rate movements, and episodes of financial instability. These economic consequences in turn generate political pressure for policy coordination in order to correct the underlying imbalances. As a result, governments have found themselves engaged in the same types of distributive conflict that brought down the Bretton Woods system in the early 1970s.

This chapter examines how politics generates these imbalances, and how these imbalances drive the politics of cooperation and conflict in the contemporary international monetary system. We look first at the two episodes that have occurred within the broader international monetary system. The first unfolds during the 1980s, while the second begins in the late 1990s and ends with the great financial crisis of 2007–2009. We then turn our attention to monetary cooperation and conflict in the European Union (EU), tracing how disputes over distribution of the costs of exchange-rate stability have shaped the evolution of this regional monetary system.

From the Plaza to the Louvre: Conflict and Cooperation During the 1980s

The 1980s saw the emergence of global imbalances and distributive conflict over the adjustment of these imbalances that echoed the political dynamics that triggered the collapse of the Bretton Woods system. The 1970s had seen relatively small current-account imbalances in the major industrial countries that generally adjusted quickly. This period of relative balance gave way to an extended period of current-account imbalances in the early 1980s (Figure 11.1). After 1980, the United States developed the largest current-account deficit in the global economy. By 1984, the U.S.

current-account deficit had widened to a then-record \$100 billion. From there it deteriorated further, reaching \$150 billion, or about 3.5 percent of GDP, by 1987. American deficits were offset by large current-account surpluses in Japan and Germany. Japan's current-account surplus increased steadily throughout the decade and at its peak equaled close to half of the American current-account deficit. Current-account surpluses emerged in Germany as well, though they lagged behind and were somewhat smaller than the surplus in Japan.

Current-account imbalances were a product of divergent macroeconomic policies in the three major industrial economies. In the United States, the Reagan administration entered office in 1981 and quickly cut taxes and increased military spending. The resulting expansion of the government budget deficit fueled domestic demand and pulled in imports. In contrast, governments placed macroeconomic policy on a more restrictive basis in Germany and Japan. German policymakers embarked on a period of fiscal consolidation beginning in 1981. Confronting large deficits inherited from the 1970s, a new conservative government took steps to return the government budget to balance. At the same time, the Bundesbank tightened monetary policy to combat inflation. The Japanese government also shifted from the rather expansionary policy orientation that had characterized the 1970s to fiscal retrenchment (Suzuki 2000). The government sought to restore its budget to surplus by 1985 and embraced a restrictive monetary policy as well. In both countries, restrictive macroeconomic policies generated large current account surpluses.

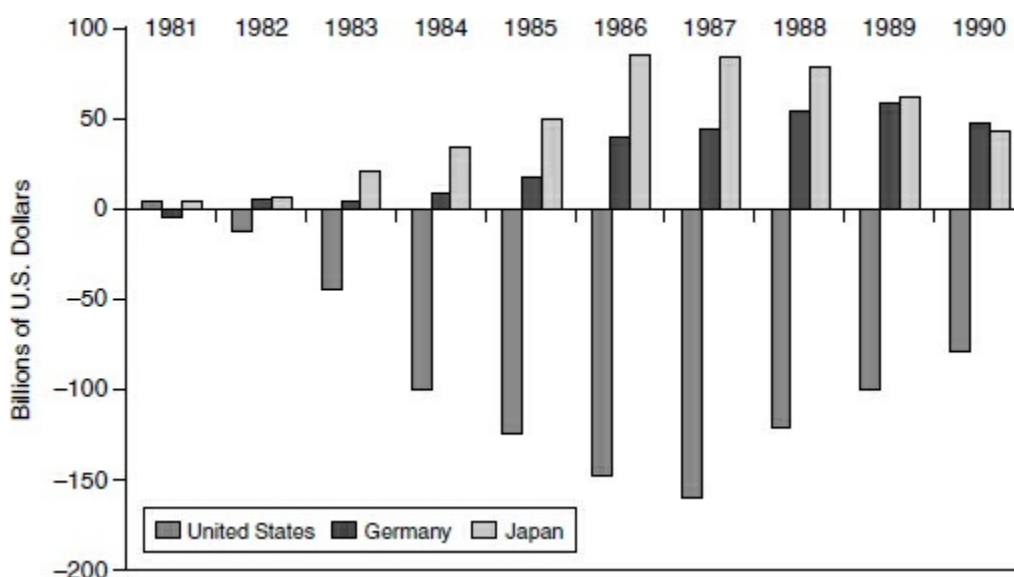


FIGURE 11.1

Current Account Imbalances, 1981–1990

Source: International Monetary Fund, IFS Online.

A Closer Look

Savings, Investment, and the Current Account

We can deepen our understanding of macroeconomic policy coordination by looking more closely at the relationship between fiscal policy and current-account imbalances. The standard Savings-Investment framework will help us do so. As we learned in [Chapter 10](#), a country's current-account balance is equal to the difference between its national income and expenditures. The Savings-Investment framework builds on and refines this basic relationship to suggest that the current account is equal to the difference between national savings and national investment.

We can see this relationship by manipulating the standard national income identity. The national-income identity states:

$$Y = G + C + I + (X - M) \quad (1)$$

In words, national income (Y) equals the sum of the government sector (G), private consumption expenditures (C), investment expenditures (I), and the current account (exports [X] minus imports [M]). National savings equals the portion of national income that is not consumed by government and individuals. Thus:

$$\begin{aligned} Y - (G + C) &= I + (X - M) \\ S &= Y - (G + C) \end{aligned} \quad (2)$$

And substituting

$$S = I + (X - M) \quad (3)$$

Where S stands for national savings. Finally, we subtract I from both sides:

$$S - I = (X - M) \quad (4)$$

The difference between national savings and national investment equals the current account. Increased savings or decreased investment improves the current account, while falling savings or increased investment worsens the current account.

Fiscal policy affects the current account via its impact on national savings. We can define private savings and government savings. We

can define private savings

$$S_p = Y - C - T \quad (5)$$

where T is taxes paid to the government. We can define government savings as

$$S_G = T - E \quad (6)$$

where E is government expenditures. Government savings are thus a function of the budget balance. Tax revenues greater than expenditures (a budget surplus) generate government savings. Tax revenues less than expenditures (a budget deficit) generate government dissavings. Fiscal policy thus affects the current account balance directly. Assuming that all else remains constant, a larger budget deficit (or smaller surplus) worsens the current account. Conversely, a smaller budget deficit (or larger surplus) improves the current account.

It is important to recognize that the relationship between fiscal policy and the current account is indeterminate. Our conclusion that a change in fiscal policy produces an equivalent change in the current-account balance rests on the key assumption that all else remains constant. This means that a change in fiscal policy will affect the current account so long as neither private savings nor investment responds to the change in fiscal policy. Is this always a reasonable assumption? Individuals might recognize that a larger government deficit must eventually generate higher taxes and respond by saving more. Moreover, during the 1990s, the impact on the current account of a smaller budget deficit was offset by an investment boom that may in fact have been a consequence of lower interest rates induced by fiscal consolidation. Hence, although the savings-investment framework is a useful framework, it does not establish deterministic cause-and-effect relationships.

In spite of this qualification, the savings-investment framework helps us better understand the motivation for macroeconomic policy coordination. Governments discuss fiscal policy coordination as a means to adjust global current-account imbalances, because manipulation of tax and expenditures directly alters national savings rates and can affect current-account balances. It is not hard to understand why such coordination has proven difficult to achieve. Few issues pose greater domestic political obstacles to change than taxes

and government programs.

Capital flows from Japan and Germany financed the U.S. current-account deficit. Foreign governments purchased an additional \$184 billion of U.S. government-issued debt between 1980 and 1989. Foreign institutional investors acquired an additional \$150 billion of government debt as well as an additional \$400 billion of American corporate securities. By the end of the decade, American foreign debt to the rest of the world had increased from \$440 billion to more than \$2 trillion. As a consequence, the United States transitioned from a net international creditor to a net international debtor. A net international creditor country is one for which foreign assets owned by residents are greater than the total value of domestic assets owned by foreigners. As [Figure 11.2](#) illustrates, the U.S. position as a net creditor diminishes as the decade progresses. By 1984, the U.S. had shifted into net debtor status and by the end of the decade, the United States net investment position stood at minus \$260 billion.

The ability of the United States to attract capital flows from surplus countries depended upon ensuring that the return to investment was greater in the United States than in other economies. Consequently, in order to pull capital from Japan and Germany, the United States had to maintain relatively high real interest rates. Thus, as the U.S. budget and current-account deficits widened, interest rates rose in the United States. As capital flowed into the American economy in response, the dollar strengthened dramatically. [Figure 11.3](#) depicts the dollar's value, on a trade-weighted basis, since 1980. From a postwar low in 1979, the dollar strengthened sharply after 1980. By 1985, the dollar had appreciated by 50 percent.

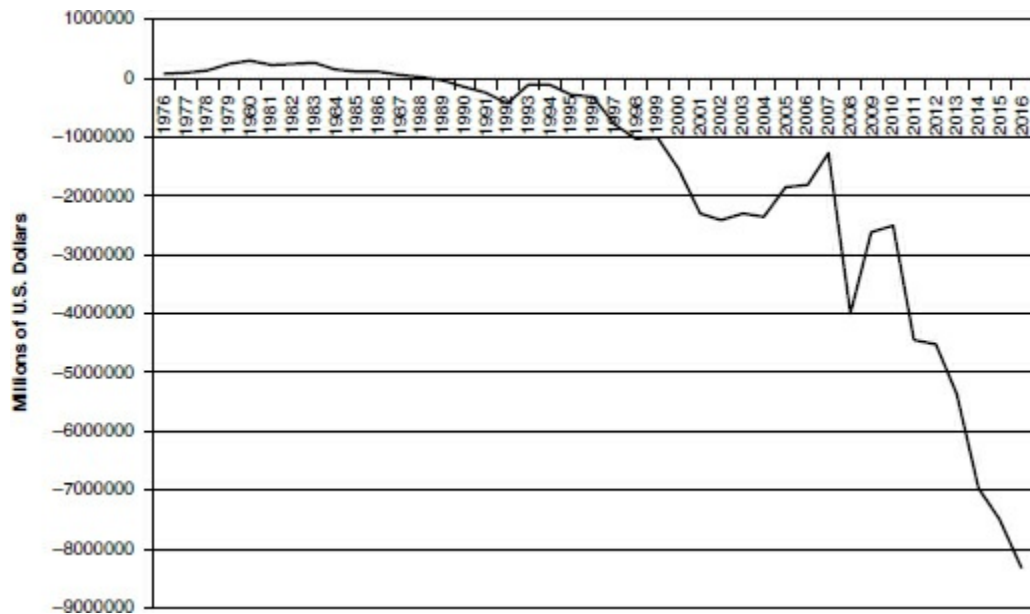


FIGURE 11.2

United States International Investment Position

Source: Bureau of Economic Analysis, 2017.



FIGURE 11.3

Dollar's Exchange Rate, 1980–2017

Source: Federal Reserve Bank, www.federalreserve.gov/releases/h10/Summary.

The Reagan administration did nothing to reduce the current-account deficit or reverse the dollar's appreciation during its first term in office. Although foreign governments were growing increasingly concerned about the imbalance and the soaring dollar, the Reagan team championed the dollar's rise as evidence of a strong American economy. This policy of benign neglect changed, however, as the series of record current-account

deficits and strengthening dollar generated substantial protectionist pressure. Congressional hearing after congressional hearing decried the decline of American international competitiveness. Business and political elite attributed this decline to policies and practices of foreign governments, particularly of the foreign government with which the United States had its largest bilateral trade deficit—Japan. Hence, the trade imbalance generated a wave of Japan bashing that came to define U.S. trade policy for much of the decade (see [Chapter 2](#)). On the one hand, Congress pressured the Reagan administration to take steps to force a change in Japanese policy. The desired changes involved eliminating Japanese barriers to American imports and ending Japanese industrial policies perceived to give to Japanese firms an unfair advantage over their American competitors in global markets. The Senate passed a bill by a 92–0 margin, for example, linking the ability of Japanese automakers to sell in the United States to market-opening initiatives in Japan. At the same time, the congressional and business elite threatened to raise trade barriers to protect American firms from unfair competition. A bill introduced in 1985 threatened to impose a 20 percent tariff rate on Japanese imports, and then reduce this rate by one point for each \$1 billion improvement in the bilateral trade balance (Suzuki 2000, 140).

In 1985, the Reagan administration responded to the increasingly protectionist Congress by seeking an international solution to currency misalignments and current-account imbalances. The moment looked favorable. The dollar's appreciation appeared to have peaked, and in the spring of 1985 the dollar had actually begun to depreciate. Secretary of the Treasury James A. Baker III initiated discussions with the German, Japanese, British, and French governments to see whether they would be willing to cooperate in order to realign the dollar, yen, and mark (Funabashi 1988). Initial discussions led to a meeting of the G5 finance ministers at the Plaza Hotel in New York City on September 22, 1985. In a compact known as the **Plaza Accord**, the five governments agreed to reduce the value of the dollar against the Japanese yen and the German mark by 10 to 12 percent. To achieve this realignment, governments consented to intervene in the foreign exchange markets whenever it appeared that the market was pushing the dollar up. In other words, rather than pushing the dollar down, the G5 would try to prevent the market from pushing it up. They agreed to allocate \$18 billion to these interventions, with the United States, Germany, and Japan each bearing 25 percent of the total costs, and Britain and France sharing the other 25 percent. Over the next 15 months, governments intervened in the foreign exchange market

whenever the dollar's depreciation appeared to be slowing or threatening to reverse.

By early 1987, the dollar had fallen almost 40 percent from its peak. Governments moved to prevent further depreciation. Meeting at the French Ministry of Finance at the Louvre in Paris in February 1987, governments agreed to strive to stabilize exchange rates at their current values. This **Louvre Accord** marked the end of the period of realignment and the beginning of a conversation about whether governments could shift to more institutionalized exchange-rate cooperation moving forward. In particular, policymakers discussed the creation of a variant of fixed-but-adjustable exchange rates called a **target zone**, in which all currencies would have a central parity surrounded by wide margins—one prominent proposal advocated margins of plus or minus 10 percent—within which the exchange rate would be allowed to fluctuate (Williamson 1983; Solomon 1999). When a currency moved outside the margins, governments would be obligated to intervene in the foreign exchange market or to alter domestic interest rates in order to bring it back inside. The idea, which would require substantial and continuous policy coordination, failed to attract sufficient support. As a result, exchange rate cooperation fell off the global agenda.

Governments also embarked on discussions about and accepted some relatively broad commitments to coordinate monetary and fiscal policies in order to promote adjustment of the current account imbalances. The agreement reached in Paris called on the surplus countries to “follow policies designed to strengthen domestic demand and to reduce their external surpluses while maintaining price stability” (Group of 6 1987). For their part, deficit countries agreed to “follow policies designed to encourage steady, low-inflation growth while reducing their domestic imbalances and external deficits” (Group of 6 1987). In practice this meant that Germany and Japan were pressured to adopt more expansionary fiscal policies, largely by reducing taxes, in order to spur domestic demand and increase imports. For its part, the United States would adopt a more restrictive fiscal policy to reduce its budget deficit, thereby decreasing domestic demand and U.S. imports. In conjunction with the dollar's depreciation, the coordination of fiscal policies would promote current-account adjustment.

In practice, however, domestic politics frustrated the implementation of the agreement reached in Paris. In Japan, American pressure to adopt a more expansionary fiscal policy met little success through 1987 (Suzuki 2000). Baker had begun pressuring the Japanese government to adopt a

more expansionary fiscal policy as early as 1985. Yet, with a majority of the ruling Liberal Democratic Party committed to fiscal consolidation, the Japanese government could not make substantial concessions to the United States. It took the combination of continued threats of protectionist measures by the U.S. Congress, a yen that continued to appreciate and thus weaken Japan's export competitiveness, and a worrying increase in Japanese unemployment before the Japanese government shifted course. By late 1987, the Japanese government had secured support for a 6 trillion yen fiscal stimulus.

Yet, as reluctant as the Japanese were to alter fiscal policy, they were the most willing and able of all of the governments to make adjustments. In the United States, disagreement between Congress and the administration about how to reduce the deficit blocked progress. The Democrats, who controlled Congress, wanted to reduce the deficit through a combination of higher taxes and reduced military expenditures. The Republican administration, however, preferred to trim other expenditures, with a particular emphasis on social programs. With each party pushing for alternative solutions, the result was deadlock:

[b]oth parties called the deficits a scandal but could not agree on how to reduce them. The president remained adamantly against any further tax increases and held tenaciously to his defense buildup. The [House] Democrats wanted Social Security shielded from budget cutters and dug in their heels opposing further domestic program cuts.

(LeLoup 2005, 82)

In Germany, macroeconomic stimulus was blocked by continued reluctance to jeopardize price stability. German policymakers pointed to prior experience with international coordination (Greenhouse 1987). During the late 1970s, for example, they had acceded to pressure exerted by the Carter administration and implemented a fiscal stimulus to help pull the world economy out of recession. The initiative had done little to produce growth, they argued, but did generate unwelcome inflation in Germany. Monetary stimulus was blocked by the German central bank, the Bundesbank. Bundesbank policymakers appeared to be split, although a minority recognized the need for German contribution to global adjustment. The majority of members, however, focused on German economic conditions and believed that using German monetary policy to promote global adjustment would merely stimulate inflation at home.

The inability and reluctance to implement the commitments made at Paris concerning macroeconomic policy generated tension between

American and German policymakers that eventually spilled out into the public where it triggered financial market turbulence. In late September, policymakers met and agreed to maintain interest rates at then-current levels. Only 2 weeks later, however, the Bundesbank raised interest rates in Germany. The German action angered the Reagan administration. As Baker complained in front of the American press, German interest rate increases “were inconsistent with the spirit of” the agreements they had reached that year (Kilborn 1987). Higher interest rates, Baker argued, would slow the German economy, thereby reducing German demand for American products. The moves would therefore make it more difficult for the United States to reduce its current-account deficit. Baker suggested that the trend of higher interest rates in Germany might force the United States to allow the dollar to depreciate further in compensation.

Baker’s remarks annoyed German policymakers. On the one hand, German officials noted that public criticism of currency values and interest rates was dangerous. Disagreement between the United States and Germany in public could easily trigger market unrest (Schmemmann 1987). German officials also noted that the American trade deficit was not caused by German monetary policy. Its cause lay squarely in the U.S. government’s budget deficit. According to the Germans, therefore, Baker might better focus on reducing the deficit rather than criticizing the Bundesbank. Finally, the Bundesbank noted that its interest rate increases were driven by market developments outside their control.

German concerns about the peril arising from airing grievances in public were prescient, for on the Monday following Baker’s public criticism, equity markets around the world registered large, and in many cases, record losses. In Germany, equity markets tumbled by more than 7 percent; in Paris and Italy losses topped 6 percent. In Great Britain, the FTSE 100, the British equivalent to the American Dow Jones, lost 11 percent. The biggest slide came in the United States, however, where the Dow Jones Industrial Index lost 22.6 percent, its largest single-day loss since World War I. And although one should always be cautious when attributing financial sell-offs such as this to specific events, analysts seemed to agree that the financial turbulence was a direct market response to the evident inability of the United States and Germany to find a cooperative solution to global imbalances.

Financial turmoil brought about the policy changes that negotiations alone failed to achieve. The German Bundesbank cut a key interest rate and injected liquidity into the German financial system. In the United States, the deadlock between congressional Democrats and a Republican

administration that had blocked meaningful deficit reduction broke. President Reagan announced his willingness to consider any proposal Congress might make. Congress moved quickly to convene a summit that would construct a political coalition around the elements of a deficit-reduction package. Out of this process came the Gramm-Rudman-Hollings Act, legislation that helped the United States place the budget on a deficit-reduction path during the late 1980s and early 1990s.

International monetary politics during the 1980s, therefore, provide neither domestic policy autonomy nor smooth painless adjustment of imbalances via exchange-rate movements. Instead, the decade brought large current-account imbalances as a result of governments pursuing divergent macroeconomic objectives. The large cross-border flows that financed these imbalances generated exchange-rate misalignments that aggravated the problem. And although governments agreed that these imbalances needed correction, they disagreed about who should change policy to correct them. In many respects, these disagreements arose from the impact of domestic politics on macroeconomic policymaking. The United States sought to push the burden of adjustment onto surplus economies. Governments in Japan and Germany resisted and pressed the United States to balance its budget. The conflict over who would adjust persisted until a public spat between the United States and Germany sparked massive turbulence in global equity markets.

GLOBAL IMBALANCES AND THE GREAT FINANCIAL CRISIS OF 2007–2009

The first decade of the twenty-first century saw the emergence of a second episode of large global imbalances, political conflict over the adjustment of these imbalances, and financial crisis. [Figure 11.4](#) depicts the evolution of global current-account imbalances between 1996 and 2010. The improvement of the U.S. current-account position that had been achieved by the early 1990s reversed at the end of the decade. By the middle of the first Bush administration, the American current-account deficit had widened to more than \$400 billion. The deficit then widened further, to slightly more than \$800 billion in 2006, and then held steady at about \$700 billion. As a share of American national income, these current-account deficits were larger than those of the 1980s, rising to 6 percent of GDP at their peak.

American current-account deficits were offset by surpluses in other economies. Japan and Germany were once again important surplus

countries. What distinguishes this episode from the 1980s, however, is the emergence of new surplus countries in East Asia, with China assuming particular importance. East Asian economies began to run large current-account surpluses following the severe financial crisis they suffered in 1997 (see [Chapter 15](#)). By the turn of the century, these emerging market economies had become some of the most important creditor countries in the global economy. China had emerged as the single largest supplier of credit to the United States.

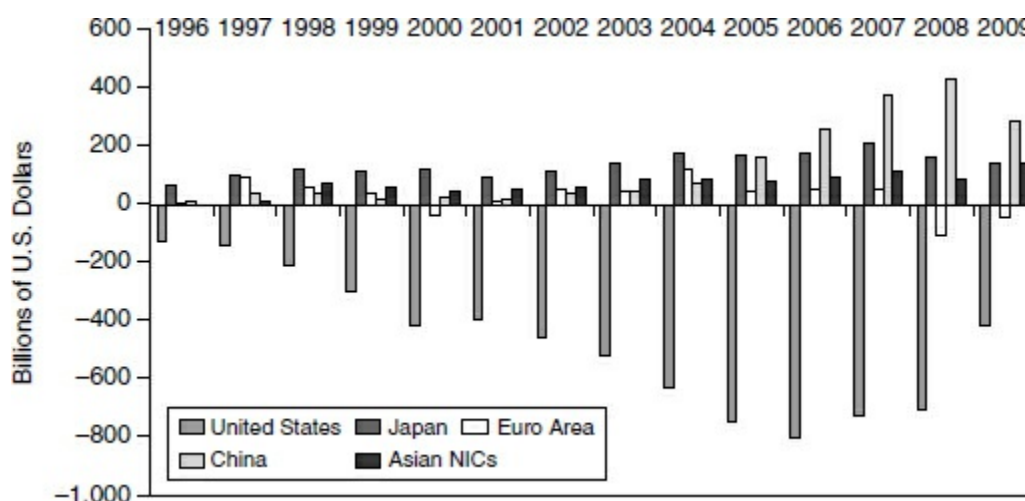


FIGURE 11.4

Current Account Imbalances, 1996–2009

Source: IMF. *World Economic Outlook Database*, April 2010.

The need to borrow from surplus economies to finance persistent current-account deficits increased American foreign indebtedness. Foreign government holdings of American government debt increased by 2.5 trillion between 1999 and 2008. Governments in China and other East Asia countries were among the largest purchasers of these assets. China alone accumulated more than \$2 trillion of dollar reserves in the course of the decade. Foreign private institutions also accumulated substantial holdings of U.S. government debt and corporate securities. In fact, foreign holdings of non-government securities increased from \$2.4 to \$6.2 trillion between 1999 and 2007. As a result, the U.S. **international investment position** deteriorated sharply to -\$2 trillion by 2007. Indeed, one big puzzle for the decade is why the U.S. international investment position stabilized after 2004 in spite of continued heavy borrowing.

As had been the case during the 1980s, imbalances and capital flows that financed them caused the dollar to strengthen against America's principal trading partners. As [Figure 11.3](#) illustrates, the dollar had

remained fairly stable for almost 10 years following the Louvre Accord. It began to strengthen toward the end of the 1990s as the current-account deficit widened. This appreciation continued during the first few years of the twenty-first century and peaked in 2002. Total appreciation approached 50 percent. From its peak in 2002, the dollar then lost value steadily until, by 2010, it had returned to the value it held during much of the 1990s.

Once again, the emergence of large current-account deficits and an appreciating dollar sparked protectionism in the United States. As the dollar peaked in value between 2000 and 2003, American producers faced intensifying import competition and turned to the political system for relief. As Jerry Jasinowski, President of the National Association of Manufacturers, argued,

the overvaluation of the dollar is one of the most serious economic problems—perhaps the single-most serious economic problem—now facing manufacturing in this country. It is decimating U.S. manufactured-goods exports, artificially stimulating imports and putting hundreds of thousands of American workers out of work.

(Phillips 2002, B17)

Business and political elite focused on the country with which the United States had its largest bilateral trade deficit: China. Congressional leaders focused particular attention on the undervalued Chinese currency. They argued that China's policy of pegging to the dollar at an undervalued rate constituted an unfair trade practice. Congress began considering remedies. Senators Sander Levin of Michigan, Lindsey Graham of South Carolina, and Chuck Schumer of New York championed such efforts. They proposed (though never managed to pass) a variety of trade policy responses, including a surcharge on Chinese imports, and changes to American law to enable producers to gain administered protection (anti-dumping and CVD duties) for currency manipulation. The dollar's appreciation therefore spilled over into trade politics, where it sparked demands for a "get tough on China" trade policy that would include the imposition of tariffs on goods from countries engaged in currency manipulation.

Congressional threats to impose trade barriers in response to the macroeconomic imbalance triggered action from the executive branch. One lever that Congress had over the Executive was the requirement that the Treasury report to Congress on foreign governments' exchange-rate policies twice each year. As the deadline for each report neared, Congress would press the administration to label China a currency manipulator. The

process forced the Bush administration to take some action aimed at changing Chinese policy. The action that the Bush administration embraced was an international bargaining process that sought to realign currencies and alter macroeconomic policies to encourage gradual adjustment. The echoes of the Plaza process are clear.

The Bush administration attributed global imbalances, not to U.S. policy, but to what it called a “global savings glut,” a reference to very high savings rates in Asia, and to China’s determination to stabilize their currency against the dollar. Given this diagnosis, the administration pushed China to expand consumption and allow the RMB to appreciate against the dollar. This pressure came directly from the Bush administration in bilateral negotiations. Pressure came also through American efforts to focus the attention of the IMF on China’s exchange-rate policy. The United States also pressed key European governments, especially Germany, to reduce current-account surpluses as part of the broader effort to narrow the global imbalance (Sobel and Stedman 2006).

Governments in surplus countries resisted U.S. pressure and sought changes in American policy. European governments attributed the U.S. current-account deficit to the federal government’s budget deficit that emerged following the Bush administration’s large tax cut of 2001. Moreover, European governments (especially the German government) argued that because the euro area as a whole was in current-account deficit (Germany’s current-account surplus was offset by deficits in the Mediterranean countries), global imbalances were not an EU issue. For its part, the Chinese government resisted American pressure to allow the RMB to appreciate, though they did shift to a more flexible crawling peg exchange-rate regime in the summer of 2005 (see Bowles and Wang 2008). They too tended to view the U.S. “global savings glut” argument with suspicion and suggested that the United States could adjust by balancing its budget. Because each government sought maximum policy change by others and minimum policy change at home, negotiations failed to generate policy changes that would reduce the magnitude of the imbalances.

Governments’ reluctance to alter macroeconomic policies facilitated the development of the financial weaknesses that ultimately sparked the great financial crisis of 2007–2009. The connection between imbalances and the financial crisis lay in the flow of cheap and plentiful credit from the surplus countries to the United States at an unprecedented rate. The ability to borrow large volumes at low interest rates created credit conditions that typically generate asset bubbles. In the U.S. context, this asset bubble

emerged in residential real estate. Mortgage lenders in the United States issued more than \$1 trillion of new mortgages (and home equity lines of credit) a year in 2002 and 2006. As a result, investment in residential real estate as a share of GDP increased sharply. The surge of investment drove real estate prices up; nationwide, home prices rose by 60 percent between 2000 and the peak in 2006. The magnitude of this housing boom was unprecedented in American history.

Financial institutions channeled about one-third of these funds into real estate with complex financial instruments. Mortgage-backed securities and collateralized debt obligations allowed financial institutions to bundle mortgages with different risks into a single financial instrument and sell them to investors. This slicing and bundling created a single security that was itself a claim on a fairly diverse pool of mortgages. It was believed that these instruments enabled investors to choose how much risk they were willing to hold in their real estate lending. At the same time, credit default swaps, sold by insurers such as AIG, appeared to reduce the risk of mortgage lending even further by promising to repay loans if the original borrowers did not. And although these instruments sheltered investors from risk arising from isolated markets—such as increased loan defaults in one region of the country—they did not shelter investors from a nationwide collapse of real estate prices. Yet, financial institutions discounted the risk of a nationwide collapse of real estate prices because such an event had never before happened—at least not since the 1930s. The worst-case scenario they planned for was a large regional collapse, such as the crisis that occurred during the 1980s.

Yet, real estate prices did collapse nationwide, falling by almost 25 percent during 2007 and early 2008. By the end of 2008, the average price of residential real estate across the United States had fallen back to the pre-bubble price level. As home prices fell, the market value (though not the face value) of the securities issued to purchase real estate fell, too. Consequently, financial institutions that held these securities in large amounts suffered large losses. And because so many of these financial institutions had purchased securities with borrowed funds (called leverage), the losses they suffered as a consequence of falling real estate prices created debt-service difficulties. Debt-service problems extended the negative impact from the collapsing real estate bubble throughout the financial system. Finally, with foreclosures and defaults rising in frequency, AIG and other firms that had insured these assets found themselves on the hook for an amount they couldn't possibly pay out. As a consequence, by late 2007 some of the world's largest banks were

reporting multibillion-dollar losses.

The crisis acquired a global dimension for three reasons. First, a few EU countries, such as Great Britain, Ireland, and Spain, experienced their own real estate bubbles that followed the same time line as the American bubble. Second, European financial institutions purchased mortgage-backed securities in large quantities. As a result, European financial institutions also suffered large losses from the collapse of the U.S. real estate bubble. Finally, the freezing of global credit markets following the bankruptcy of Lehman Brothers in the fall of 2008 made it difficult for all financial institutions to secure the credit needed to finance their activities. As credit dried up, interest rates on interbank lending rose sharply, a clear indication that all market participants, wherever they were based, were struggling to roll over their debt and otherwise secure financing.

As the crisis struck, governments and central banks tried to prevent the total collapse of the system. Initially, central banks injected liquidity into the banking system to smooth market turbulence. In August 2007, for instance, the European Central Bank, along with the Federal Reserve and the Bank of England, injected more than \$200 billion into markets. Similar operations occurred in December 2007. As the crisis deepened, interventions became more heavy handed. Government regulators closed many banks rendered insolvent by their exposure to real estate. In other instances, policymakers worked feverishly to arrange the sale of large banks about to collapse. The Federal Reserve helped arrange the sale of the American investment bank Bear Stearns to J.P. Morgan Chase. The government helped negotiate the sale of Merrill Lynch to the Bank of America and the sale of Wachovia to Wells Fargo. The government tried, but failed, to find a buyer for Lehman Brothers, a failure that many suggest triggered the worst stage of the crisis during the fall of 2008.

Larger banks deemed “too big to fail” benefited from policies that channeled government funds to them to keep them alive—the so-called bailouts. In September 2008, for example, the U.S. government seized Freddie Mac and Fannie Mae, two government-sponsored agencies that were the largest purchasers of mortgage-backed securities in the United States. Treasury Secretary Henry Paulson noted that the two agencies were of such systemic importance that their failure would severely worsen the crisis and could even destroy the financial system. In November 2008, the U.S. government invested \$20 billion in Citigroup in exchange for preferred stock and guaranteed \$300 billion of Citigroup’s debt. The U.S. government’s Toxic Asset Relief Program, passed in late fall of 2008, provided more than \$700 billion to purchase risky and hard-to-value assets

from the largest banks.

Most broadly, governments held a series of G-20 summits to coordinate their responses to the crisis. Meeting first in Washington, DC, in November 2008 and then in London during April 2009, governments agreed to coordinate fiscal stimulus measures in order to boost economic activity in the wake of the financial turbulence. They also agreed to expand the IMF's lending capacity. Also of great importance, governments agreed to establish a Financial Stability Board charged with coordinating and monitoring efforts on the reform of financial regulation (Nelson 2009, 10–11).

Although this process produced little in the way of policy change, it did prompt a change in process. Following its creation in 1999 as a permanent forum in which developed and emerging market countries discussed issues of common concern, the G-20 remained second in importance as an arena behind the G-7. As imbalances gave way to financial crisis in 2008, however, European and American policymakers shifted management of the crisis as well as macroeconomic policy cooperation out of the G-7 and into the G-20 arena. And while some argue that this development was the natural consequence of the growing importance of emerging market countries, others suggest it reflected efforts by G-7 countries to enhance their bargaining power. European governments, some argue, wanted to bring China into the conversation in order to dilute American influence. The U.S. wanted to bring more countries into the process as a balance against Europe's numeric dominance of the G-7 (Nelson 2009, 5–6). At the G-20 summit in Pittsburgh in 2009, governments created a framework for policy coordination intended to prevent the re-emergence of large imbalances.

Policy Analysis and Debate

German Fiscal Policy and EU Growth

Question

Should Germany Loosen fiscal policy to promote growth in the EU?

Overview

The EU's economic recovery from the financial crisis that hit hard in 2008 has been slow. Initially, the European central bank responded to the financial crisis by lowering interest rates, and some governments,

including Germany, embraced the logic of Keynesianism and implemented an expansionary fiscal policy. Meanwhile, the recession accentuated sovereign debt problems in southern European economies such as Greece, Spain, and Portugal. Faced with a possibility of debt default in these countries, EU governments agreed to extend emergency financing on the condition that the recipient governments enact austerity programs to reduce budget deficits through a combination of reduced government expenditures and tax increases. The German government embraced a conservative fiscal policy at home in order to reinforce austerity in the periphery. Wolfgang Schäuble, who was Minister of Finance between 2009 and 2017, was determined to balance the German budget for the first time since 1969, and after he achieved this goal in 2014 he remained committed to this policy of the “black zero.” And while Schäuble has since moved to another position in German politics, developments indicate that the CDU remains committed to the black zero moving forward.

While such fiscal conservatism might have been an appropriate EU and German response to the series of sovereign debt crises that occurred in member countries between 2008 and 2010, it seems less appropriate today, almost 10 years after the crisis first struck. Indeed, the continuing commitment to tight fiscal policies by Germany makes it more difficult for other EU economies to realize their growth potential, to generate the export revenues required to service their debt, and thus to realize a full recovery from the extended period of austerity and adjustment. As one prominent economist has noted,

its neighbors need German demand for their goods and services far more than they need Germany to set an example of fiscal prudence. It is clear—given the risk of a debt-deflation trap in Germany’s eurozone partners—that successful adjustment in the eurozone can only come if German prices and wages rise faster than prices and wages in the rest of the eurozone.

(Setser 2016)

As a result, many policymakers and technocrats that work in various international economic institutions are now encouraging Germany to move toward a less conservative fiscal policy.

Policy Options

- Encourage the EU, the IMF, and the U.S. to pressure the German

government to embrace a more expansionary fiscal policy in order to reduce its current account surplus.

- Allow Germany to continue to embrace a fiscal policy that it considers best suited to the economic and political pressures in the German economy.

Policy Analysis

- What impact, if any, would a more expansionary German fiscal policy have on the credibility of the euro and the European banking system?
- Why might European governments hesitate to exert pressure on Germany regarding its fiscal policies?
- Does the United States have an interest in having Germany embrace a more expansionary fiscal policy?

Take A Position

- Which option do you prefer? Justify your choice.
- What criticisms of your position should you anticipate? How would you defend your recommendations against these criticisms?

Resources

Online: Do online searches for “European austerity.” You can track discussion of Germany’s fiscal policy and its impact on the EU via your library’s electronic news databases. The *Financial Times* will contain particularly detailed coverage.

In Print: It might be useful, however, to read the history of previous financial crises. A good starting point is Carmen M. Reinhart and Kenneth S. Rogoff, *This Time Is Different: Eight Centuries of Financial Folly* (Princeton, NJ: Princeton University Press, 2009). You can read about the impact of austerity in Mark Blyth, *Austerity: The History of a Dangerous Idea* (New York: Oxford University Press, 2013). See Yoichi Funabashi, *Managing the Dollar: From the Plaza to the Louvre* (Washington, DC: Institute for International Economics, 1988) for an excellent discussion of prior macroeconomic policy disputes.

These post-crisis policy and institutional reforms have not had much of an impact on international macroeconomic cooperation and coordination. Global imbalances did narrow in the immediate aftermath of the GFC, but this reflected the collapses of demand in the global economy rather than far-reaching international coordination. Global imbalances have remained stubbornly large since 2012, averaging close to 2 percent of world GDP each year. The composition of the imbalance has changed, however. Especially significant has been the re-emergence of Germany as the economy with the world's largest current account surplus—pushing China into second place in 2016. We see less significant change on the deficit side, as the United States continues to post the world's largest current account deficits. The persistence of these global imbalances has led once again to political conflict as the Trump administration has pressured the German government (as well as China) to take steps to reduce the German surplus or else face retaliatory measures from the U.S.

Nor has the international monetary system shifted away from its reliance upon the dollar as the primary reserve currency in any appreciable degree since the crisis. And to some extent, the failure for this to occur may be the most surprising post-crisis development. In the immediate aftermath of the 2008 crisis many observers predicted that the dollar's role as the international monetary system's primary reserve currency were numbered. They saw the euro and the Chinese renminbi (RMB) as emerging rivals to the dollar's global status. Arvind Subramanian (2011, 5), for instance, predicted in 2011 that the RMB “could surpass the dollar as the premier reserve currency well before” 2025. Many private investment managers share this belief—“I’ll eat my hat if the renminbi isn’t the strongest currency on the planet over the next 10 years” one London-based manager is reported to have said in 2014 (quoted in Cohen 2015, 214). Yet, the dollar has defied such expectations and retained its central position. The dollar's resilience may have as much to do with the shortcomings of the existing alternatives as with the inherent strength of the dollar. The eurozone has been mired in crisis since 2008, creating an uncertain future for the euro; the Chinese financial system requires significant reforms before the RMB can play a large global role (Prasad 2016).

International monetary politics during the last 40 years have been characterized by a recurring pattern of political conflict sparked by large and persistent global imbalances. In general, this pattern is driven by divergent macroeconomic objectives in the world's largest economies that create trade imbalances. The large cross-border capital flows that finance these trade imbalances produce substantial exchange-rate misalignments

that aggravate the problem. And although governments have agreed that imbalances are unsustainable and potentially quite dangerous to global economic stability, they disagree about who should change policy to correct them. The United States repeatedly tries to push adjustments onto surplus economies. Governments in the surplus economies resist adjustment and press the United States to adopt policy changes. Because all parties refused to adjust, imbalances generate financial imbalances that increase the chances of suffering a significant financial crisis like the GFC of 2008–2009. Although GFC made governments keenly aware of the risks attached to persistent global imbalances, governments remain very reluctant to coordinate policy to minimize the chances of a repeat.

EXCHANGE-RATE COOPERATION IN THE EUROPEAN UNION

Within the EU, cooperation has been more common than conflict. EU governments in the EU have pursued formal and institutionalized exchange-rate cooperation since the late 1970s. European governments have desired more stable intra-European exchange rates for two reasons. First, exchange-rate instability is costly for the typical EU country, which is highly open to trade and which trades most with other EU countries. As a result, exchange-rate movements within the EU are more disruptive to individual economies in the EU than in the broader international monetary system (see Frieden 1996). In other words, the cost of floating in the EU is so high that European governments are more willing to sacrifice domestic autonomy to stabilize their exchange rates.

Yet, even within this tightly integrated regional economy, governments have found that their willingness to stabilize exchange rates has been a consequence of the extent to which they share common macroeconomic policy objectives. Throughout most of the last 30 years, most European governments did not consider the loss of domestic economic autonomy to be very costly. Meaningful costs arise when governments want to pursue different monetary policies but cannot. During the 1970s, for example, EU governments moved on divergent paths. Some, such as the French and the Italians, pursued expansionary macroeconomic policies that boosted inflation. Others, such as Germany and the Netherlands, were more conservative and emphasized the maintenance of low inflation. With each government committed to different policy objectives, a common exchange-rate system would have been quite costly.

By the late 1970s, most EU governments believed that reducing

inflation had to be their chief objective, and as a consequence, almost all governments used monetary policy to restrict inflation. Because all governments were pursuing low inflation, all could participate in a common exchange-rate system without any having to sacrifice the ability to pursue a desired policy objective. Thus, the cost of participating in a fixed exchange-rate system was quite low. As EU government policy objectives converged, therefore, they found it easier to create and maintain a common exchange-rate system. Moreover, and for reasons we explore in detail in [Chapter 13](#), governments thought that participating in a fixed exchange-rate system would help them achieve and maintain price stability. The resulting exchange-rate system, called the **European monetary system** (EMS), began operation in 1979. The EMS was a fixed-but-adjustable system in which governments established a central parity against a basket of EU currencies called the European Currency Unit (ECU). Central parities against the ECU were then used to create bilateral exchange rates between all EU currencies. EU governments were required to maintain their currency's bilateral exchange rate within 2.25 percent of its central bilateral rate.

In practice, the EMS revolved around German monetary policy. The Bundesbank was reluctant to participate in the EMS because it was concerned that it would be forced to continually intervene in the foreign exchange market to support the weaker European currencies. Continued intervention to defend these weaker currencies would raise German inflation, just as intervention to defend the dollar had done under Bretton Woods. German participation in the EMS was secured, therefore, by allowing the Bundesbank to use German monetary policy to maintain low inflation in Germany. Other EU governments would alter their monetary policies in order to maintain the peg to the mark. The burden of maintaining fixed exchange rates therefore fell principally upon the countries with high inflation. Other EU governments accepted this arrangement, in part because they had created the EMS to help them reduce inflation. Pegging their currencies to the German mark, therefore, would force EU governments and central banks to mimic Germany's low-inflation monetary policy stance. Over time, therefore, inflation rates throughout the EU would converge on inflation rates in Germany.

Few observers initially gave the EMS much chance of success. Inflation rates averaged just above 10 percent in EU countries, whereas German inflation stood below 5 percent. Such divergent rates of inflation, reflecting substantially different monetary policies, could easily pull the system apart. Indeed, the EMS got off to a rocky start. Currency

realignments were frequent in the system's first year of operation, and a conflict between France and Germany almost destroyed the system in 1981–1983. Conflict arose when newly elected French president, François Mitterrand, adopted an expansionary macroeconomic policy in 1981. This expansion caused French inflation to rise, the French balance of payments to deteriorate, and the franc to weaken in the EMS. Mitterrand blamed the franc's weakness on the restrictive macroeconomic policies pursued in Germany (and the other EU countries), refused to alter French policy, and demanded that Germany loosen its policy in line with France. After 18 months of uncertainty about whether Mitterrand would remove the franc from the system or accept the system's constraints, he reversed course and adopted restrictive macroeconomic policies. The EMS stabilized in the following years. Inflation rates converged, and currency realignments became infrequent. The EMS had defied its critics' expectations. The EMS worked, however, primarily because its member governments placed high value on stable exchange rates and because they all gave priority to the same domestic objective: keeping inflation low. Consequently, participation in the system did not require any government to give up the pursuit of its domestic objectives.

Conflict among EMS participants emerged as perceptions of the cost of participation in the system changed. By the late 1980s, many EU governments were becoming dissatisfied with the Bundesbank's role in the EMS. EU governments were content to place Germany at the center of the EMS as long as they were striving to reduce inflation. They were less content with this asymmetry once inflation had come down. Many governments began to question why the Bundesbank should continue to set monetary policy for the system as a whole. They argued that the Bundesbank should be required to conduct a share of the foreign exchange market intervention necessary to stabilize the mark in the EMU. In addition, because German monetary policy was transmitted by the EMS throughout the EU, the other EU governments argued that they should have some influence over that policy. By 1987, France and Italy, along with some officials in the European Commission, were suggesting that it was time to reform the EMS in order to reduce Germany's privileged role in the system (Oatley 1997). The parallel to French and German criticism of U.S. monetary policy under the Bretton Woods system during the late 1960s is striking.

Dissatisfaction with the distribution of the costs of exchange-rate stability in conjunction with an unwillingness to revert back to more flexible exchange rates created pressures to change EU exchange-rate

institutions. Momentum for such institutional reform was reinforced by the reinvigoration of European integration. Apart from the EMS, EU governments had launched few new initiatives during the 1970s, as the oil shock, the collapse of the Bretton Woods system, and economic stagnation made few governments willing to further integrate their economies. EU governments relaunched integration in the mid-1980s by eliminating the remaining barriers to intra-EU flows of products, labor, and capital. The Single European Act, as this initiative was called, gave rise to pressure for **monetary union** because many EU officials believed that the gains from a single market could be realized only with a single currency (see Emerson 1992). Monetary union thus emerged from dissatisfaction with the distribution of costs within the EMS and gained momentum from the broader effort to complete the single market.

Germany, and in particular the Bundesbank, was reluctant to pursue deeper monetary cooperation. The Bundesbank's concerns were fundamentally similar to those that caused it to be reluctant about participation in the EMS: it feared that EMU would force Germany to accept higher inflation than it desired. The Bundesbank recognized that in a monetary union it would share control of monetary policy with all EU members. It believed that many EU governments were willing to tolerate higher inflation than it considered ideal. Bundesbank policymakers were particularly concerned about joining a monetary union alongside Mediterranean economies. Greece, Italy, Portugal, and Spain all had substantial government budget deficits and large debt burdens as well as persistently high inflation. In addition, the business cycle in these Mediterranean economies was not well synchronized with Northern Europe. As a consequence, Bundesbank policymakers were concerned that participating in a monetary union with the Mediterranean countries would necessarily force Germany to accept monetary policies that were not well suited to the German economy. As a result, Germany would have to accept a higher inflation rate than it considered necessary.

Although the Bundesbank opposed monetary union, it appears that narrow monetary objections were trumped by broader geopolitical considerations. The pressure to create a European monetary union emerged just as the Berlin Wall collapsed. The French government saw the collapse of the Berlin Wall as an opportunity to achieve monetary union. They therefore conditioned French support for German political and economic reunification on German support for monetary union. German Chancellor Helmut Kohl's determination to reunify Germany led him to subordinate the Bundesbank's specific monetary objections to his conception of

Germany's broader interests. Germany would thus unify and simultaneously commit itself more deeply to the European integration project.

Once Bundesbank policymakers recognized that they could not prevent German participation in monetary union, they sought to craft monetary institutions that would safeguard its conception of Germany's economic interests. In particular, Bundesbank policymakers pushed for rules to govern the new European Central Bank (ECB) that would insulate its monetary policy decisions from politics. They pushed for a set of convergence criteria that they believed might prevent the Mediterranean countries from qualifying for membership in monetary union. They pushed for rules that required members to pursue relatively conservative fiscal policies. Finally, the Bundesbank insisted that the ECB be prohibited from purchasing government debt, a necessary check that would prevent governments from creating inflation by running large fiscal deficits. In short, Bundesbank policymakers did everything they could to ensure that monetary union would not generate inflation in Germany.

For the first 10 years of monetary union, the Bundesbank's ability to shape EMU institutions appeared to have secured Germany's interests. Inflation remained low across Europe and there were few indications that the Mediterranean countries were impinging on Germany's ability to pursue its economic policy objectives. The only source of disagreement among the system's governments during the euro's first few years involved the currency's external value, and here the ECB refused to actively encourage euro depreciation. This calm collapsed into heated conflict in 2009, however, as severe sovereign debt problems emerged in the Mediterranean countries. Portugal, Ireland, Italy, Greece, and Spain had all borrowed heavily from international lenders between 2000 and 2008. Capital inflows generated robust growth and asset bubbles, very much like the experience of the United States. When these asset bubbles popped in 2008, these economies fell into severe recession and faced mounting debt service problems. As debt service problems emerged, EU governments battled over how the costs of adjustment in the face of this debt problem should be distributed between northern and southern European economies.

The conflict is well illustrated by the case of Greece, the first to experience a severe debt crisis. The Greek government borrowed heavily from foreign lenders to fund budget and current account deficits. Between 2000 and 2008, Greek budget deficits averaged 5 percent of GDP and its current account deficits averaged 9 percent of GDP (Nelson, Belkin, and

Mix 2010). Borrowing to cover these deficits pushed Greece's external debt to 115 percent of GDP by 2008. This already precarious financial position worsened in 2009 as the Greek economy moved into recession. With government expenditures rising and government revenues falling, the budget deficit rose to 13 percent of GDP. The announcement of this large deterioration caused markets to question whether Greece could service its debt. Consequently, the Greek government found it more expensive and more difficult to borrow. Indeed, by early 2010 interest rates on Greek government debt were 400 basis points higher than rates on equivalent German government debt—a clear sign of the market's loss of confidence in Greece's ability to service its debt. It looked increasingly likely that the Greeks would be driven to default.

The Greek debt crisis brought into the open for the first time a distributive conflict that had always been implicit in the EU's monetary union. This distributive conflict focused on one central question: who would bear the cost of Greece's excessive debt burden? Would Greece default, thereby pushing the cost onto the institutions and individuals that held Greek debt? Would Greece implement an austerity program to eliminate its budget and current account deficits and thereby generate the funds needed to service its foreign debt? Would other EU governments lend to Greece so it could service its foreign debt without adopting harsh austerity measures? This option would eventually shift the risk of a Greek default from private financial institutions to taxpayers in Germany, France, and other northern European countries. If the Greek government were to default on loans from the EU, residents in these EU countries would have to pay. Would the ECB depreciate the euro, thereby improving Greece's international competitiveness and enabling it to embark on an export-led recovery? Although a weaker euro might benefit Greece, which lacks international competitiveness, a weaker euro would generate inflation in northern Europe.

EU governments have struggled to select among these alternatives. The Greek government asserted that in the absence of financial assistance, it would be forced to default. The so-called troika, the ECB, the EU Commission, and the IMF made it clear that any loans to Greece would necessitate Greek austerity measures. These negotiations unfolded under the shadow of similar sovereign debt problems in Spain, Portugal, and Italy. If Germany went easy on Greece, this would signal other indebted governments that they could expect easy terms as well. This signal would possibly encourage other governments to dump their debt burdens on the broader EU membership. Determined to avoid sending this signal, the

Germans bargained hard, demanding stiff austerity measures as the price of EU assistance. By late spring of 2010, Greece and the troika had reached agreement on a package that included a \$146 billion loan from the EU and the IMF and a set of fairly stringent austerity measures intended to reduce the budget deficit by 7 percent of GDP.

This first agreement failed to resolve the set of problems that had precipitated the crisis and in fact had the unintended consequence of deepening Greece's economic woes, destabilizing the Greek democracy, and undermining support for the euro throughout the EU. On the one hand, the austerity measures that the troika insisted upon, those in 2010 as well as subsequent measures negotiated in 2011 and 2013, pushed the Greek economy into a debt deflation. As the Greek government cut spending and raised taxes, Greek national income fell sharply. Indeed, according to the World Bank, Greek GDP fell by 45 percent between 2008 and 2011, collapsing from \$354 billion to \$195 billion. And though Greek debt was written down, the scale of the forgiveness was relatively small. And as a consequence, Greece's debt to GDP ratio rose dramatically, from 126 percent of national income in 2009 to 177 percent in 2014, even though Greek debt had increased by only 6 percent (Krugman 2015). The economic contraction and the dismantling of the Greek public sector undermined public support for the traditional Greek political parties and created an environment that allowed the leftist party Syriza to win the January 2015 election and create a coalition government with a right-wing populist party.

The new Greek government almost immediately sought to renegotiate the terms of Greece's adjustment. The new prime minister, Alex Tsipras, and his Finance Minister, Yanis Varoufakis, demanded a large write down of Greek debt and an easing of the austerity measures. The troika remained committed to the pre-election approach and refused to amend the terms of Greece's agreement or soften the terms of a new agreement under discussion. As negotiations deadlocked in late June, Greece defaulted on a scheduled payment to the IMF and the Greek financial system lapsed back into a crisis environment. The government responded by closing the banks, imposing measures that restricted capital outflows from Greece, and calling for a national referendum on the terms of the troika's new austerity package. The referendum took place on July 5, and about 60 percent of those who turned out voted against the troika plan. Though Tsipras had hoped that a resounding "no" would strengthen his hand in negotiations with the troika, the worsening economic conditions in Greece and a growing impatience among the troika ultimately forced him to accept even

more stringent measures than had been on offer in the pre-referendum package. Tsipras was then able to convince a majority of the Greek parliament that exit from the eurozone would be even more of a disaster than austerity, and the parliament approved the new austerity package.

The Greek debt crisis thus raises a set of much broader questions about the viability of the EMU. The core question at the base of the issue is whether it is reasonable for governments to accept the constraints imposed by monetary union or whether they wouldn't be better off with greater exchange rate flexibility. If Greece were not a member of the monetary union, it could devalue its currency to regain export competitiveness. And while this wouldn't eliminate entirely the need for austerity measures, it might enable fiscal policy adjustment to occur in a growing rather than contracting economy. Moreover, more flexible currency arrangements would have obviated the need for other EU member governments to find a solution to the Greek debt problem. Hence, the Greek crisis has regenerated a discussion about whether the EU should be a monetary union and, if so, who should be a member.

CONCLUSION

Developments in the contemporary international monetary system reflect the same dynamics that shaped developments under the Bretton Woods system. In concrete terms, the United States continues to run large current account deficits. American deficits continue to be offset by large surpluses in Germany, Japan, and more recently China. These global imbalances generate conflict. The United States continually pressures its largest creditors, Japan and Germany in the 1980s and Germany and China in the 2000s, to alter policies to promote adjustment. Creditor governments in turn pressure the United States to put its government finances in order. The refusal by all governments to make meaningful policy adjustments generates financial instability—a sharp drop in equity prices in one case and a severe crisis of the global financial system in another. In more abstract terms, developments in the contemporary international monetary system are driven by distributive conflict between governments in creditor and in debtor economies over who should bear the costs of adjustment.

Moreover, the experience of EU governments indicates that distributive conflicts are endemic to international monetary systems rather than a consequence of disagreements among specific governments. For even when governments place great value on exchange-rate stability, exchange rate cooperation has been profoundly shaped by distributive conflict.

Indeed, the EU's transition to monetary union was shaped in large part by a desire to redistribute the costs of exchange-rate stability. The ongoing debt problems in Ireland, Greece, and other Mediterranean economies indicate that different macroeconomic policy objectives in northern and southern Europe continue to shape the system's evolution. In the broader international monetary system as well as in the regional systems, the imbalances themselves, as well as the conflict about who should adjust to eliminate them, emerge from the way domestic politics shape macroeconomic policies.

Against the backdrop of these constant characteristics of the international monetary systems, we see substantial change over the past few years. Of particular importance has been China's emergence as a fundamentally important creditor country in the international monetary system. China's emergence in this capacity has affected American policy—shifting American focus from Germany and Japan to China. It has also affected global governance structures. The broadening of the policy coordination process from the Group of 7 to the Group of 20 is symbolic of this change. More fundamentally, China's emergence as a creditor country has placed an emerging market economy in the center of the international monetary system for the first time in its history. It will be interesting to follow the impact of this change in the years to come.

KEY TERMS

European Monetary System
International Investment Position
Louvre Accord
Monetary Union
Plaza Accord
Target Zone

SUGGESTIONS FOR FURTHER READING

For a positive evaluation of how states responded to the 2008–2009 global financial crisis, see Daniel W. Drezner, *The System Worked: How the World Stopped Another Great Depression* (Oxford: Oxford University Press, 2014). Jonathan Kirshner's *American Power after the Financial Crisis* (Ithaca, NY: Cornell University Press, 2014), evaluates the dollar's future in the wake of the crisis. On the Renminbi's possible increased role in the international monetary system, see Eswar S. Prasad, *Gaining Currency: The Rise of the Renminbi* (Oxford: Oxford University Press, 2017).
For those interested in the European monetary system, see Emmanuel Murlon-

Druol, *A Europe Made of Money: The Emergence of the European Monetary System* (Ithaca: Cornell University Press, 2012). On the EU and the Greek crisis, see Yanis Varoufakis' *Adults in the Room: My Battle with Europe's Deep Establishment* (New York: Farrar Strauss and Giroux, 2017), and C. Randall Henning, *Tangled Governance: International Regime Complexity, the Troika, and the Euro Crisis* (Oxford: Oxford University Press, 2017).