

CHAPTER 6

Currency War III (2010–)

"The purpose . . . is not to push the dollar down. This should not be regarded as some sort of chapter in a currency war."

Janet Yellen,
Vice Chair of the Federal Reserve,
commenting on quantitative easing,
November 16, 2010

"Quantitative easing also works through exchange rates. . . . The Fed could engage in much more aggressive quantitative easing . . . to further lower . . . the dollar."

Christina D. Romer,
former Chair of the Council of Economic Advisers,
commenting on quantitative easing,
February 27, 2011

Three supercurrencies—the dollar, the euro and the yuan—issued by the three largest economies in the world—the United States, the European Union and the People's Republic of China—are the superpowers in a new currency war, Currency War III, which began in 2010 as a consequence of the 2007 depression and whose dimensions and consequences are just now coming into focus.

No one denies the importance of other major currencies in the global financial system, including Japanese yen, UK pounds sterling, Swiss francs, and those of the remaining BRICs: Brazilian real, Russian ruble, Indian rupee and South African rand. These currencies derive their importance from the size of the economies that issue them and the volume of trade and financial transactions in which those countries engage. By these measures, the indigenous dollars

issued by Australia, New Zealand, Canada, Singapore, Hong Kong and Taiwan, as well as the Norwegian krone, South Korean won and UAE dirham, all have pride of place. But the combined GDP of the United States, European Union and China—almost 60 percent of global GDP—creates a center of gravity to which all other economies and currencies are peripheral in some way.

Every war has its main fronts and its romantic and often bloody sideshows. World War II was the greatest and most expansive military conflict in history. The U.S. perspective on World War II is neatly divided into Europe and the Pacific, while a Japanese perspective would encompass an imperial empire stretching from Burma to an overextended attack at Pearl Harbor. The English, it seems, fought everywhere at once.

So it is with currency wars. The main battle lines being drawn are a dollar-yuan theater across the Pacific, a dollar-euro theater across the Atlantic and a euro-yuan theater in the Eurasian landmass. These battles are real but the geographic designations are metaphorical. The fact is, currency wars are fought globally in all major financial centers at once, twenty-four hours per day, by bankers, traders, politicians and automated systems—and the fate of economies and their affected citizens hang in the balance.

Participation in currency wars today is no longer confined to the national issuers of currency and their central banks. Involvement extends to multilateral and global institutions such as the IMF, World Bank, Bank for International Settlements and United Nations, as well as private entities such as hedge funds, global corporations and private family offices of the superrich. Whether as speculators, hedgers or manipulators these private institutions have as much influence over the fate of currencies as the nations that issue them. To see that the battle lines are global, not neatly confined to nation-states, one need only consider the oft-told story of the hedge fund run by George Soros that "broke the Bank of England" in 1992 on a massive currency bet. Today there are many more hedge funds with many more trillions of dollars in leverage than Soros would have imagined twenty years ago.

Battles in the Pacific, Atlantic and Eurasian theaters of Currency

War III have commenced with important sideshows playing out in Brazil, Russia, the Middle East and throughout Asia. CWIII will not be fought over the fate of the real or the ruble, however; it will be fought over the relative values of the euro, the dollar and the yuan, and this will affect the destinies of the countries that issue them as well as their trading partners.

The world is now entering its third currency war in less than one hundred years. Whether it ends tragically as in CWI or is managed to a soft landing as in CWII remains to be seen. What is clear is that—considering the growth since the 1980s of national economies, money printing and leverage through derivatives—this currency war will be truly global and fought on a more massive scale than ever. Currency War III will include both official and private players. This expansion in size, geography and participation exponentially increases the risk of collapse. Today the risk is not just of devaluation of one currency against another or a rise in the price of gold. Today the risk is the collapse of the monetary system itself—a loss of confidence in paper currencies and a massive flight to hard assets. Given these risks of catastrophic failure, Currency War III may be the last currency war—or, to paraphrase Woodrow Wilson, the war to end all currency wars.

■ The Pacific Theater

The struggle between China and the United States, between the yuan and the dollar, is the centerpiece of global finance today and the main front in Currency War III. The evolution of this struggle begins with the emergence of China from a quarter century of economic isolation, social chaos and the doctrinaire suppression of free markets by the communist regime.

The modern Chinese economic miracle began in January 1975 with the Four Modernizations plan announced by Premier Zhou Enlai, which affected agriculture, industry, defense and technology. Implementation was delayed, however, due to disruptions caused by Zhou's death in January 1976, followed by the death of Communist

Party chairman Mao Zedong in September of that year and the arrest one month later of the radical Gang of Four, including Madame Mao, after a brief reign.

Mao's designated successor, Hua Guofeng, carried forward Zhou's vision and made a definitive break with the Maoist past at a National Party Congress in December 1978. Hua was aided in this by the recently rehabilitated and soon to be dominant Deng Xiaoping. Real change began the next year, followed by a period of experimentation and pilot programs aimed at increasing autonomy in decision making on farms and in factories. In 1979, China took the landmark decision to create four special economic zones offering favorable work rules, reduced regulation and tax benefits designed to attract foreign investment, especially in manufacturing, assembly and textile industries. They were the precursors of a much larger program of economic development zones launched in 1984 involving most of the large coastal cities in eastern China. Although China grew rapidly in percentage terms in the mid-1980s, it was working from a low base and neither its currency nor its bilateral trade relations with major countries such as the United States and Germany gave much cause for concern.

Today's currency war is marked by claims of Chinese undervaluation, yet as late as 1983 the yuan was massively *overvalued* at a rate of 2.8 yuan to one dollar. However, this was at a time when exports were a relatively small part of Chinese GDP and the leadership was more focused on cheap imports to develop infrastructure. As the export sector grew, China engaged in a series of six devaluations over ten years so that, by 1993, the yuan had been cheapened to a level of 5.32 yuan to the dollar. Then, on January 1, 1994, China announced a reformed system of foreign exchange and massively devalued the yuan to 8.7 to the dollar. That shock caused the U.S. Treasury to label China a currency "manipulator" pursuant to the 1988 Trade Act, which requires the Treasury to single out countries that are using exchange rates to gain unfair advantage in international trade. That was the last time Treasury used the manipulator label against China despite veiled threats to do so ever since. A series of mild revaluations followed in response so that, by 1997, the yuan

was pegged at 8.28 to the dollar, where it remained practically unchanged until 2004.

In the late 1980s, China suffered a significant bout of inflation, which prompted popular discontent and a conservative backlash led by old-guard communists against the economic reform and opening programs of Deng. Separately, a liberal protest movement, led by students and intellectuals seeking democratic reform, also contributed to political upheaval. These conservative and liberal movements collided violently and tragically in the Tiananmen Square massacre of June 4, 1989, when People's Liberation Army troops, acting on orders from the Communist Party leadership, used live fire and tanks to clear human rights and prodemocracy protestors from the square in the center of Beijing adjacent to the old imperial Forbidden City. Hundreds were killed. There was a slowdown of the Chinese economy after 1989, partly as a result of efforts to curb inflation and partly as a foreign reaction to the Tiananmen Square massacre. This pause proved temporary, however.

In the 1990s, China finally broke the "iron rice bowl," the welfare policy that had previously guaranteed the Chinese people food and some social services at the cost of slow growth and inefficiency. Something resembling a market economy began to appear, which meant that Chinese workers had the opportunity to do better for themselves but had no guaranteed support if they failed. The key to this new social contract was the steady creation of millions of jobs for the new job seekers. With memories of Tiananmen fresh in their minds and the historical memory of over a century of chaos, the leadership knew the survival of the Communist Party and the continuation of political stability depended on job creation; everything else in Chinese policy would be subordinate to that goal. The surest way to rapid, massive job creation was to become an export powerhouse. The currency peg was the means to this end. For the Communist Party of China, the dollar-yuan peg was an economic bulwark against another Tiananmen Square.

By 1992, reactionary elements in China opposed to reform again began to push for a dismantling of Deng's special economic zones and other programs. In response, a visibly ailing and officially re-

tired Deng Xiaoping made his famous New Year's Southern Tour, a personal visit to major industrial cities, including Shanghai, which generated support for continued economic development and which politically disarmed the reactionaries. The 1992 Southern Tour marked a second-stage takeoff in Chinese economic growth, with real GDP more than doubling from 1992 to 2000. However, the effect of this spectacular growth in the 1990s on U.S.-China economic relations was muted by the continuing U.S. response to the Tiananmen Square massacre, which included economic sanctions and a general cooling of direct foreign investment by U.S. firms in China. A series of blunders and miscalculations, including the firing of a NATO cruise missile at the Chinese embassy in Belgrade in 1999, served to increase tensions. Economic relations were kept in an adversarial state by the April 2001 collision of a Chinese jet fighter with a U.S. reconnaissance plane, killing the Chinese pilot and causing the emergency landing of the U.S. plane on Chinese territory and temporary imprisonment of the crew.

Ironically, it was the al-Qaeda attacks on September 11, 2001, and China's resulting firm support for the U.S.-led global war on terror that finally broke the ice and helped U.S.-China relations get back on track. Despite almost twenty-five years of significant economic progress by China, beginning in 1976, it was only in 2002 that U.S.-China bilateral trade and investment codependence kicked into high gear.

That year, 2002, also marked the beginning of Fed chairman Alan Greenspan's experiment with sustained ultralow interest rates. Greenspan had started to cut rates in the summer of 2000 following the tech bubble collapse. The resulting decline of over 4.75 percent in the fed funds rate from July 2000 to July 2002 could be viewed as a normal cyclical easing designed to help the economy out of a rut. What happened next was an extraordinary period of over two additional years during which the effective fed funds rate never rose above 1.8 percent and dropped below 1.0 percent in December 2003. As late as October 2004, the effective fed funds rate was 1.76 percent, almost exactly where it had been in July 2002.

This low rate policy was justified initially as a response to the

challenges of the 2000 tech bubble collapse, the 2001 recession, the 9/11 attacks and Greenspan's fears of deflation. Yet it was primarily fear of deflation that caused Greenspan to keep rates low for far longer than would ordinarily be justified by a mild recession. China was now exporting its deflation to the world, partly through a steady supply of cheap labor. Greenspan's low rate policy, partly intended to offset the effects of Chinese deflation in the United States, sowed the seeds of the full-scale currency war that emerged later in the decade.

Greenspan's low rates were not only a policy response to potential deflation; they were also a kind of intravenous drug to Wall Street. The Federal Open Market Committee, the body that sets the fed funds target rate, was now acting like a meth lab for hyperactive deal junkies on the Street. Lower rates meant that all types of dubious or risky deals could begin to look attractive, because marginal borrowers would ostensibly be able to afford the financing costs. Low rates also set off a search for yield by institutional investors who needed higher returns than were being offered in risk-free government securities or highly rated bonds. The subprime residential loan market and the commercial real estate market both exploded in terms of loan originations, deal flow, securitizations and underlying asset prices due to Greenspan's low rate policies. The great real estate bubble of 2002 to 2007 was under way.

In September 2002, just as the low rate policy was taking off, Greenspan gained an ally, Ben Bernanke, appointed as a new member of the Fed Board of Governors. Bernanke's deeply rooted fear of deflation was even greater than Greenspan's. Bernanke would quickly establish his deflation-fighting credentials with a speech to the National Economists Club in Washington, D.C., just two months after being sworn in as a Fed governor. The speech, entitled "Deflation: Making Sure 'It' Doesn't Happen Here," was widely noted at the time for its reference to Milton Friedman's idea of dropping freshly printed money from helicopters to prevent deflation if necessary, and earned Bernanke the sobriquet "Helicopter Ben."

Bernanke's 2002 speech was the blueprint for the 2008 bailouts and the 2009 policy of quantitative easing. Bernanke spoke plainly

about how the Fed could print money to monetize government deficits, whether they arose from tax cuts or spending increases, saying:

A broad-based tax cut . . . accommodated by a program of open market purchases . . . would almost certainly be an effective stimulant to consumption. . . . A money-financed tax cut is essentially equivalent to Milton Friedman's famous "helicopter drop" of money. . . .

Of course . . . the government could . . . even acquire existing real or financial assets. If . . . the Fed then purchased an equal amount of Treasury debt with newly created money, the whole operation would be the economic equivalent of direct open market operations in private assets.

Bernanke was explaining how the Treasury could issue debt to buy private stock and the Fed could finance that debt by printing money. This is essentially what happened when the Treasury took over AIG, GM and Citibank and bailed out Goldman Sachs, among others. It had all been spelled out by Bernanke years earlier.

With Bernanke on the board, Greenspan had the perfect soul mate, and in time the perfect successor, in his antideflationary crusade. The Greenspan-Bernanke fear of deflation is the one constant of the entire 2002–2011 period. In their view, deflation was the enemy and China, because of low wages and its low production costs—from ignoring safety and pollution—was an important source.

Despite its economic miracle, China ran trade deficits with the world as late as 2004. This is not unusual in the early stages of a developing economy, when efforts at export success must be tempered by the need to import infrastructure components, industrial equipment, raw materials and technology with which to launch exports. China did run a bilateral trade surplus with the United States; however, this was not initially cause for concern. In 1997 the U.S. trade deficit with China was less than \$50 billion. Then the deficit grew steadily, and in the space of three years, from 2003 to 2006, it exploded from \$124 billion to \$234 billion. This period, beginning in 2003, marks the intensification of concern about the U.S.-China

bilateral trade relationship and the role of the dollar-yuan exchange rate in that relationship. In 2006, Senator Charles E. Schumer of New York called the U.S. trade deficit "a slow bleeding at the wrists for the U.S. economy" and pointed to China as a leading contributor.

China's internal deflation is exported to the United States through the currency exchange rate and ends up threatening deflation in the United States. This begins with the Chinese policy decision to peg the exchange rate between the yuan and the dollar. The yuan does not trade freely on international currency markets in the same way that dollars, euros, sterling, yen and other convertible currencies do. The use of the yuan and its availability to settle transactions are tightly controlled by the People's Bank of China, or PBOC, the country's central bank.

When a Chinese exporter ships goods abroad and earns dollars or euros, it must hand over those currencies to the People's Bank of China in exchange for yuan at a rate fixed by the bank. When an exporter needs some dollars or euros to buy foreign materials or other imports, it can get them, but the PBOC makes only enough dollars or euros available to pay for the imports and no more; the rest is kept by the bank.

The process of absorbing all the surplus dollars entering the Chinese economy, especially after 2002, produced a number of unintended consequences. The first problem was that the PBOC did not just take the surplus dollars, but rather purchased them with newly printed yuan. This meant that as the Fed printed dollars and those dollars ended up in China to purchase goods, the PBOC had to print yuan to soak up the surplus. In effect, China had outsourced its monetary policy to the Fed, and as the Fed printed more, the PBOC also printed more in order to maintain the pegged exchange rate.

The second problem was what to do with the newly acquired dollars. The PBOC needed to invest its reserves somewhere, and it needed to earn a reasonable rate of return. Central banks are traditionally ultraconservative in their investment policies, and the PBOC is no exception, preferring highly liquid government securities issued by the United States Treasury. As a result, the Chinese acquired mas-

sive quantities of U.S. Treasury obligations as their trade surplus with the United States persisted and grew. By early 2011, Reuters estimated that total Chinese foreign reserves in all currencies were approximately \$2.85 trillion, with about \$950 billion of that invested in U.S. government obligations of one kind or another. The United States and China were locked in a trillion-dollar financial embrace, essentially a monetary powder keg that could be detonated by either side if the currency wars spiraled out of control.

The United States desperately urged China to increase the value of the yuan in order to reduce the growing U.S. trade deficits with China and slow the massive accumulation of dollar-denominated assets by the PBOC. These pleas met with very limited success. From 2004 through mid-2005 the yuan remained pegged at about 8.28 yuan to one dollar, about where it had been since 1997. Suddenly, over the course of two days in late July 2005, the yuan increased in value from 8.28 to 8.11 to the dollar, an increase of almost 3 percent. From that sudden upward revaluation, the yuan began a long, gradual revaluation over the next three years, eventually reaching the level of about 6.82 to one dollar in mid-July 2008.

Then the PBOC again slammed on the brakes and held the yuan steady around the 6.83 level for the next two years. In June 2010, a second round of revaluation commenced, which by August 2011 brought the yuan slowly but steadily above 6.40 yuan to the dollar. This rise in the dollar value of the yuan was hardly smooth and was never without acrimony. The rhetorical and political battles between China and the United States from 2004 to 2011 on the subject of exchange rates dominated U.S.-Chinese economic relations despite a host of other important bilateral issues, including Iran and North Korea.

It is intriguing to think about how imbalances such as the U.S. bilateral trade deficit with China and China's massive accumulation of U.S. government debt would have evolved under the Bretton Woods system. China's accumulation of U.S. debt would have begun the same way and there would always have been a desire to hold some amount of U.S. Treasury securities for diversification and liquidity-management reasons. But at some point, China would have

asked to cash in some of its Treasury securities for U.S. gold held in reserves, as was allowed under Bretton Woods. A relatively small redemption, say, \$100 billion of Treasury notes, done in early 2008 when gold was about \$1,000 per ounce, would have equaled 100 million ounces of gold, or about 2,840 metric tons. This amounts to 35 percent of the entire official gold supply of the United States. Indeed, a full redemption of all U.S. government securities by China would have wiped out the U.S. gold supply completely and left the United States with no gold and China the proud owner of over 9,000 metric tons. One can imagine Chinese naval vessels arriving in New York Harbor and a heavily armed U.S. Army convoy moving south down the Palisades Interstate Parkway from West Point to meet the vessels and load the gold on board for shipment to newly constructed vaults in Shanghai. No doubt such a scene would have been shocking to the American people, yet that imagined shock proves a larger point. America has, in fact, run trade deficits large enough to wipe out its gold hoard under the old rules of the game. Still, the idea of the gold standard was not to deplete nations of gold, but rather to force them to get their financial house in order long before the gold disappeared. In the absence of a gold standard and the real-time adjustments it causes, the American people seem unaware of how badly U.S. finances have actually deteriorated.

While this example may seem extreme, it is exactly how most of the world monetary system worked until forty years ago. In 1950, the United States had official gold reserves of over 20,000 metric tons. Due to persistent large trade deficits, at the time with Europe and Japan rather than China, U.S. gold reserves had dropped to just over 9,000 metric tons when Nixon closed the gold window in 1971. That drop of 11,000 metric tons in the twenty-one years from 1950 to 1971 went mostly to a small number of export powerhouses. Over the same period, German gold reserves rose from zero to over 3,600 metric tons. Italy's gold hoard went from 227 metric tons to over 2,500 metric tons. France went from 588 metric tons to over 3,100 metric tons. The Netherlands, another rising gold power, went from 280 metric tons to almost 1,700 metric tons. Not all of these expanding gold reserves came from the United States. Another gold

power, the United Kingdom, saw its gold reserves drop from over 2,500 metric tons in 1950 to only 690 metric tons by 1971. But in general, U.S. gold was moving from the United States to its trading partners as part of the automatic rebalancing contemplated by the Bretton Woods system.

China's rise to export powerhouse status did not take place in this golden age of the 1950s and 1960s. It took place largely in the early twenty-first century, when claims were settled in paper IOUs or their electronic equivalents. This meant that China did not receive any official gold for its export success. It also meant that there was no effective check on the ability of the United States to print money, borrow and keep spending beyond its means. This borrowing and spending binge was encouraged by the ultralow interest rate policies of Greenspan and Bernanke. Absent a gold standard or some other monetary constraint to apply the brakes, China and the United States hurtled toward CWIII with no compass and no map for navigating paper claims of an unprecedented magnitude.

The principal accusation leveled by the United States against China, discussed repeatedly in the press but never formally alleged by the White House since 1994, is that China manipulates its currency in order to keep Chinese exports cheap for foreign buyers. But China's export machine is not an end in itself—it is a means to an end. The real end of Chinese policy is one familiar to politicians everywhere—jobs. China's coastal factories, assembly plants and transportation hubs are at the receiving end of a river of humanity that flows from China's central and southern rural provinces, carrying tens of millions of mostly younger workers in search of steady work at wages only one-tenth of what a comparable job would pay in the United States.

These newly arrived workers live in crowded dormitories, work seventy-hour weeks, take public transportation, eat noodles and rice and have few if any amenities or leisure pursuits. The little they manage to save is remitted back to the village or farm they came from to support aging parents or other relatives with no social safety net. Yet from the perspective of the rural Chinese, this life is the Chinese Dream, a twenty-first-century counterpart to the more ex-

pansive twentieth-century American Dream of a home, car and good schools that came along with a steady job in midcentury America. Of course, those rural immigrants to the cities just need to look around to see the Mercedes, Cadillacs and high-rise luxury apartments of China's new rich to know there is something beyond the dormitory and the city bus.

No one knows better than the Chinese Communist Party leadership what would happen if those jobs were not available. The study of Chinese history is the study of periodic collapse. In particular, the 140-year period from 1839 to 1979 was one of almost constant turmoil. It began with the Opium Wars (1839–1860) and continued through the Taiping Rebellion (1850–1864), the Boxer Rebellion (1899–1901), the fall of the Qing Dynasty in 1912, the warlord and gangster period of the 1920s, civil war between nationalists and communists in the early 1930s, Japanese invasion and World War II (1931–1945), the communist takeover in 1949, the Great Leap Forward (1958–1961), the Cultural Revolution (1966–1976), and finally the death of Mao and the downfall of the Gang of Four in 1976. These events were not just noteworthy points in a chronological history but involved continuing episodes of external war, civil war, widespread famine, mass rape, terror, mass refugee migrations, corruption, assassination, confiscation, political executions and the absence of any effective political center or rule of law. By the late 1970s, Chinese culture and civilization were politically, morally and physically exhausted, and the people, along with the Communist Party, wanted nothing more than stability and economic growth. Liberal democracy and civil rights could wait.

This is why the Tiananmen Square demonstrations in 1989 were as troubling to the Chinese leaders as their violent suppression was shocking to the West. From their perspective, Tiananmen seemed to put China on the edge of chaos again after just ten years of growth and stability. The Chinese Communist Party leadership understood that the nineteenth-century Taiping Rebellion had begun with a single disappointed student and soon embroiled the southern half of the empire in a civil war resulting in twenty million deaths. Chinese history is proof that a social network does not require the Internet

but spreads just as powerfully by word of mouth and by what the Chinese call *dazibao*, or big-character posters. The Chinese leaders also understood that the Tiananmen protests were fueled not just by prodemocracy sentiments but by student and worker resentment at higher food prices and slower job growth as China's policy makers hastened to tamp down the economy to fight the inflation that had begun to take off in the late 1980s.

Of course, the United States also cared about job creation. The 2001 recession had been mild in statistical terms with regard to GDP and industrial output, but the number of unemployed in America spiked up sharply, from 5.6 million people at the end of 2000 to over 8.2 million at the end of 2001. Despite a technical recovery in 2002, the number of unemployed continued to grow and reached over 8.6 million people at the end of 2002. From there, it declined very slowly so that there were still over 7.2 million unemployed at the end of 2005. When the recession of 2007 began, America was still working off this high base of unemployed, and the total number skyrocketed to over 15.6 million unemployed by October 2009. Including those employed part-time but seeking longer hours and those not officially unemployed but desiring a job, the total number of unemployed and underemployed Americans at the end of 2009 stood at over 25 million men and women. Every one of those 25 million Americans has a face, a name and a family. In our statistical age, economists prefer to present this phenomenon in percentage terms, such as 6.0 percent unemployment for year-end 2002 and 9.9 percent for 2009, but reciting the actual numbers of affected persons—more than 25 million—helps to bring home the depths of the employment problem. America desperately needed to create jobs.

For a while, this human tragedy was masked by the easy money policies of Greenspan and Bernanke and the resulting euphoria of credit card spending, rising home prices, rising stock prices and large no-down-payment mortgages for all comers. Although there were some complaints about Chinese currency manipulation and lost American jobs in 2004 and 2005, these complaints were muted by the highly visible but ultimately unsustainable prosperity of those years resulting from the easy money. When the music stopped

abruptly in 2007 and the United States careened into the Panic of 2008, there was no longer a place for Chinese policy makers to hide.

Now U.S. politicians, led most noisily by Senator Charles Schumer, publicly attacked the pegging of the yuan-dollar exchange rate and blamed the Chinese for lost jobs in the United States. A bipartisan group of U.S. senators, including Schumer, wrote a letter to the Bush White House in 2008, stating, "The unfair price advantage that the undervalued [Chinese currency] gives Chinese firms has forced many American companies to declare bankruptcy or even go out of business, harming our workers, families and middle class." Senator Schumer and his ilk were undaunted by the fact that there is scant evidence to support this linkage between jobs and exchange rates. It seems unlikely that the typical North Carolina furniture maker would be willing to work for the \$118 per month made by his Chinese counterpart. Even if the yuan doubled in value, the Chinese furniture maker would earn only the equivalent of \$236 per month—still not high enough to make his U.S. counterpart competitive. None of this mattered to the dollar demagogues. In their view, the Chinese currency was clearly to blame and now the Chinese must respond to their demands for revaluation.

The administration of President George W. Bush was well aware of this chorus of complaints but was also attuned to the importance of close relations with China on a number of other issues. China was the largest purchaser of Iranian oil exports and was therefore in a position to influence Iran in its confrontation with the United States over nuclear weapons development. China was an indispensable economic lifeline to the hermetically sealed regime of North Korea, with which it shared a common border, and so was also in a position to help the United States achieve its strategic goals on the Korean peninsula. Large U.S. corporations eyed the Chinese market enviously and were looking for direct market access through expansion, acquisitions or joint ventures with Chinese partners, all of which required Chinese government approvals. China had suffered a loss of face in 2005 when the China National Offshore Oil Corporation withdrew its takeover bid for U.S.-based Unocal Oil after the U.S. House of Representatives voted 398–15 to call on President Bush to

review the bid on national security grounds. Such rejections could easily result in tit-for-tat denial of U.S. acquisitions in China. In short, America had as much to lose as to gain from any confrontation with China, and a continuing high-level expert dialogue seemed like a more fruitful approach.

President Bush addressed the need to keep U.S.-Chinese currency tensions under control by launching the China-U.S. Strategic Economic Dialogue in 2006. These meetings were continued by the Obama administration in expanded form and renamed the Strategic and Economic Dialogue (S&ED) to reflect the inclusion of the U.S. secretary of state and a Chinese state counselor with responsibility for foreign policy. The inclusion of foreign policy officials along with economic officials was a clear recognition of the interconnectedness of the geopolitical and financial aspects of national policy in the twenty-first century.

The Strategic and Economic Dialogue was one of several bilateral and multilateral forums designed in part to deal with the advent of a new currency war. It has helped to avoid an escalation in tensions over the currency manipulation charges, but has done nothing to make the issue go away. A series of bilateral summits between President Hu of China and President Obama of the United States were also convened, but neither the S&ED nor the bilateral summits have produced major progress.

The United States has now chosen the G20 as the main arena to push China in the direction of revaluation, both because of the possibility of attracting allies to join the effort and because the Chinese are more deferential to global opinion than to U.S. opinion alone. Recent significant progress on yuan revaluation has tended to occur not in conjunction with S&ED meetings but rather in advance of G20 meetings. For example, a small but still noteworthy revaluation of the yuan from 6.83 on June 15, 2010, to 6.79 on June 25, 2010, occurred immediately in advance of the G20 leaders' summit in Toronto. Another rally in the yuan from 6.69 on November 1, 2010, to 6.62 on November 11, 2010, coincided with the G20 leaders' summit in Seoul. This demonstrates that the Chinese are attentive to the G20 in ways that they may not be when it comes to other forums.

By the spring of 2011 the U.S.-China Pacific theater in the currency war was quiet. However, the core issues were still unresolved. Employment stress in both China and the United States meant that tensions could erupt at any time. A leadership change in China in 2012 and a presidential election in the United States the same year raised the specter of domestic political forces being a catalyst for further international confrontation.

■ The Atlantic Theater

The Atlantic theater, the relationship between the dollar and the euro, is better understood as one of codependence rather than confrontation. This is because of the much larger scale and degree of interconnectedness between U.S. and European capital markets and banking systems compared to any other pair of financial relationships in the world. This interdependence was never on more vivid display than in the immediate aftermath of the bankruptcy of the Lehman Brothers investment bank in September 2008. Although the bankruptcy was filed in U.S. federal courts after a failed bailout attempt led by the U.S. Treasury, some of the largest financial victims and worst-affected parties were European hedge funds that had done over-the-counter swaps business or maintained clearing accounts at Lehman's London affiliates. This transatlantic fiasco, heavily reported at the time, was amplified in December 2010 when the Fed, in response to disclosures required by the new Dodd-Frank Act, released extensive details of its emergency lending and bailout operations to Europe during the Panic of 2008.

The euro-dollar exchange rate in early 2011 was almost exactly where it was in 2007. The euro was worth \$1.30 in early January 2007 and traded right around \$1.30 four years later, but this equivalence should not be mistaken for stability. In fact the euro-dollar relationship has been highly volatile, with the euro trading as high as \$1.59 in July 2008 and as low as \$1.10 in June 2010.

The euro and dollar are best understood as two passengers on the same ship. At any given time, one passenger may be on a higher deck

and the other on a lower one. They can change places at will and move higher or lower relative to each other, but at the end of the day they are on the same vessel moving at the same speed heading for the same destination. The day-to-day fluctuations reflect technical factors, short-term supply and demand requirements, fears of default or disintegration of the euro followed quickly by relief at the latest rescue or bailout package. Through it all, the euro-dollar pair travel on, never separated by more than the dimensions of the vessel on which they both sail.

The United States nevertheless has its hands full on the currency war's Atlantic front, not in trying to strengthen the euro excessively but rather in making sure it does not fall apart altogether. The euro itself is a kind of miracle of modern monetary creation, having been invented by the members of the European Union after thirty years of discussion and ten years of intensive technical study and planning. It was the capstone of a European project begun after World War II and intended to preserve the peace.

Beginning at the end of the Renaissance in the mid-sixteenth century, Europe had been racked for over four hundred years by the battles waged during the Reformation, the Counter-Reformation, the Thirty Years' War, the English Revolution, the wars of Louis XIV, the Seven Years' War, the French Revolution, the Napoleonic Wars, the Franco-Prussian War, World War I, World War II, the Holocaust, the dropping of the Iron Curtain and the nuclear terror of the Cold War. By the late twentieth century, Europe was highly cynical about nationalist claims and the potential for military advantage. The old ethnic, national and religious divides were still there. What was needed was a unifying force—something that would tie economies so closely together that war would be unthinkable, if not impossible.

Starting with the six-nation Coal and Steel Community in 1951, Europe progressed through various forms of free trade areas, common markets and monetary systems. The Maastricht Treaty of 1992, named after the city in the Netherlands where it was negotiated and signed, provided for the formation of a political entity, the European Union, and ultimately led to the creation of the euro in

1999. The euro was to be issued by the new European Central Bank. By 2011, the euro was used by seventeen member states.

Yet from the start, analysts warned that a single currency backed by a single central bank was incompatible with the diverse fiscal policies of the member countries adopting the euro. Countries that had historically been profligate and had defaulted on debt or devalued their currencies, such as Greece or Spain, would be awkward partners in a union that included fiscally prudent countries like Germany.

It took ten years for all the flaws in this grand scheme to be fully revealed, although they were there from the start. A toxic combination of venal government ministers, Wall Street hit-and-run derivatives scam artists and willfully blind European Union officials in Brussels allowed countries such as Greece to run deficits and borrow at levels far in excess of Maastricht Treaty limits while burying the true costs in out years and off-balance-sheet contracts. Meanwhile investors happily snapped up billions of euros in sovereign debt from the likes of Greece, Portugal, Spain, Ireland and other eurozone member states at interest rates only slightly higher than solid credits such as Germany. This was done on the basis of high ratings from incompetent ratings agencies, misleading financial statements from government ministries and wishful thinking by investors that a euro sovereign would never default.

The path to the 2010 European sovereign debt crisis was partly the fruit of a new entente among banks, borrowers and bureaucrats. The banks would buy the European sovereign bonds and book the related profits secure in the belief that no sovereign would be allowed to fail. The sovereigns happily issued the bonds in order to finance unsustainable spending that largely benefitted public unions. The interests of the bureaucrats in Brussels were perhaps most insidious of all. If the European sovereign debt crisis resolved itself, everyone would praise the success of the euro project. If some European sovereign debt failed, the bureaucrats' solution would be more, not less, integration and more, not less, oversight from Brussels. By turning a blind eye to the recklessness, Brussels had constructed a no-lose situation. If the euro succeeded they won praise

and if the euro came under stress they won power. The stress came soon enough.

The European banks gorged not only on euro sovereign debt but also on debt issued by Fannie Mae and the full alphabet soup of fraudulent Wall Street structured products such as collateralized debt obligations, or CDOs. These debts were originated by inexperienced local bankers around the United States and repackaged in the billions of dollars by the likes of Lehman Brothers before they went bust. The European banks were the true weak links in the global financial system, weaker even than Citigroup, Goldman Sachs and the other bailed-out icons of American finance.

By 2010, European sovereign finance was a complex web composed of cross-holdings of debt. Of the \$236 billion of Greek debt, \$15 billion was owed to UK entities, \$75 billion was owed to French entities and \$45 billion was owed to German entities. Of the \$867 billion of Irish debt, \$60 billion was owed to French entities, \$188 billion was owed to UK entities and \$184 billion was owed to German entities. Of the \$1.1 trillion of Spanish debt, \$114 billion was owed to UK entities, \$220 billion was owed to French entities and \$238 billion was owed to German entities. The same pattern prevailed in Italy, Portugal and the other heavily indebted members of the euro system. The mother of all inter-European debts was the \$511 billion that Italy owed to France.

While this sovereign debt was owed to a variety of institutions, including pension funds and endowments, the vast majority was owed to other countries' banks. This was the reason for the Fed's secret bailout of Europe in 2008 and why the Fed fought so hard to keep the details confidential until some of it was forced into the open by the Dodd-Frank legislation of 2010. This was the reason Fannie Mae and Freddie Mac bondholders never took any losses when those companies were bailed out by the U.S. taxpayers in 2008. This was why the leading states, Germany and France, rallied quickly to prop up sovereign borrowers in the periphery such as Greece, Ireland and Portugal when the euro sovereign crisis reached a critical stage in 2010. The impetus behind all three bailouts was that the European banking system was insolvent. Subsidizing Greek pensioners and

Irish banks was a small price to pay to avoid watching the whole rotten edifice collapse.

However, in the European sovereign debt crisis, Europe was not alone. Both the United States and China supported the European bailouts for different but ultimately self-interested reasons. Europe is a massive export market for the United States. A strong euro keeps up the European appetite for U.S. machines, aircraft, pharmaceuticals, software, agricultural produce, education and the variety of goods and services the United States has to offer. A collapse of the euro would mean a collapse in trade between the two giants of global output. A collapse of a European sovereign could take down the European banks and the euro with it, as investors instantaneously developed a revulsion for all debt denominated in euros and fled from European banks. The consequences of a European sovereign debt default for U.S. exporters to Europe would be too great; here was an entire continent that was too big to fail. The U.S. bailouts, swap lines and support for issuers like Fannie Mae were all part of a multifaceted, multiyear effort to prop up the value of the euro.

China also had an interest in propping up the euro, but its efforts came with a political agenda. Europe is a huge export market for China as well as the United States, and to that extent China's interests are the same as the United States. But China's banks are not nearly as entwined with Europe's as are America's, which gives China more degrees of freedom in terms of deciding how and when to help. The European sovereign debt crisis offered China the chance to diversify its reserves and investment portfolios away from dollars and toward euros, to acquire leading-edge technology systems that had been denied it by the United States and to develop platforms from which it could engage in large-scale technology transfer back to China.

Germany welcomed the U.S. and Chinese support for the euro. As an export powerhouse, Germany might have been expected to favor a weak euro for the same reason that the United States favors a weak dollar and China favors a weak yuan: to gain an edge in the currency wars with a cheap currency that promotes exports. Germany,

however, was not only an external exporter; it was an *internal* exporter within the European Union. For those eurozone exports, there was no currency consideration since both the exporter and the importer, for instance Germany and Spain, used the euro. If the euro were to collapse or members broke away from the euro and reverted to their old currencies at devalued levels, those markets might be lost.

Conventional wisdom had it that Germany anguished over support for Greece and Ireland and the other weak links in the euro chain. In fact, Germany had no attractive alternatives. The costs of a euro collapse far outweighed the costs of regional bailouts. Germany actually benefitted from the European sovereign debt crisis. The continued existence of the euro gave Germany a dominant position inside Europe while a somewhat weaker euro internationally enabled it to gain market share in the rest of the world. The sweet spot for Germany was a euro that was weak enough to help exports to the United States and China but not so weak as to collapse. Germany was successful in finding that sweet spot during 2010 despite the storm and drang surrounding the euro itself.

With the self-interests of the United States, China and Germany all pointing in the same direction, there would be no doubt for now about the survival of the euro. That the banks were flush with rotten assets, that the periphery nations were running unsustainable fiscal policies and that the people of Greece, Ireland, Portugal and Spain were facing austerity in order to keep the assembly lines moving in Seattle and Shanghai were all matters that could wait for another day. For now, the center held.

■ The Eurasian Theater

If the relationship between the euro and the dollar can be described as codependent, the relationship between the euro and the yuan is simply dependent. China is fast emerging as a potential savior of certain peripheral European economies such as Greece, Portugal and Spain based on Chinese willingness to buy some of their sovereign

bonds in the midst of the European sovereign debt crisis. However, Chinese intentions toward Europe and the euro are based on self-interest and cold calculation.

China has a vital interest in a strong euro. The European Union surpasses the United States as China's largest trading partner. If European turmoil were to result in countries such as Greece or Ireland leaving the euro, those countries would return to their former currencies at greatly devalued rates relative to the yuan. This would badly hurt China's exports to parts of Europe. China's interest in supporting the euro is as great or greater than its interest in maintaining the yuan peg against the dollar.

China's motives in Europe include diversifying its reserve position to include more euros, winning respect or friendship among the European countries that it assists directly with bond purchases, and gaining a quid pro quo in connection with such purchases. This quid pro quo can take many forms, including direct foreign investment in sensitive infrastructure such as ports and power generation, access to sensitive European technology and the ability to purchase advanced weapons systems normally reserved for NATO allies and friends such as Israel. China's interests in supporting the euro are not at all adverse to those of Germany, even though Germany and China compete fiercely for export business around the world.

By buying sovereign bonds from peripheral European states, China helps Germany to bear the costs of the European bailouts. By helping to prop up the euro, China helps Germany avoid the losses it would suffer if the euro collapsed, including catastrophic damage to German banks. It is a no-lose situation for China and one that secures its Eurasian flank while it fights the United States head-on. China's main front in the currency wars is the United States, and it has so far avoided a conflagration on the Eurasian front. This is due both to European weakness and Chinese finesse.

The United States likewise supports the euro, and for the same reasons as China: a catastrophic collapse of the euro would weaken its value relative to the dollar and hurt U.S. exports that compete with European exports in markets of the Middle East, Latin America and South Asia. China and the United States not only want the

euro to survive; they also want to see it gain strength relative to the dollar and yuan in order to help their own exports. Europe, China and the United States are united in their efforts to avoid a euro collapse despite their mixed motives and adversarial postures in other arenas.

This much unity of purpose probably means that the euro will muddle through the current crisis and remain intact for the foreseeable future, despite potential bond restructurings and austerity plans. Whether this balancing act can be continued and whether China's charm offensive in Europe will be maintained remains to be seen. If the euro actually does collapse, China could suffer massive losses on its bond positions, a revaluation of the yuan and lost exports all at the same time. China may yet come into confrontation with Europe on a number of issues, but for now it is all quiet on China's western front.

■ Global Skirmishes

Apart from the big three theaters in the currency war—the Pacific (dollar-yuan), the Atlantic (euro-dollar) and the Eurasian (euro-yuan)—there are numerous other fronts, sideshows and skirmishes going on around the world. The most prominent of these peripheral actions in the currency war is Brazil.

As late as 1994, Brazil maintained a peg of its currency, the real, to the U.S. dollar. However, the global contagion resulting from the Mexican “Tequila Crisis” of December 1994 put pressure on the real and forced Brazil to defend its currency. The result was the Real Plan, by which Brazil engaged in a series of managed devaluations of the real against the dollar. The real was devalued about 30 percent from 1995 to 1997.

After this success in managing the dollar value of the real to a more sustainable level, Brazil once again became the victim of contagion. This time the crisis did not arise in Latin America but from East Asia. This new financial crisis broke out in 1997 and spread around the world from Thailand to Indonesia, South Korea, and

Russia and finally came to rest in Brazil, where the IMF arranged a monetary firewall with emergency funding as the Fed frantically cut U.S. interest rates to provide needed global liquidity. In the aftermath of that financial storm, and under IMF prompting, Brazil moved to a free-floating currency and a more open capital account, but it still experienced periodic balance-of-payments crises and required IMF assistance again in 2002.

Brazil's fortunes took a decided turn for the better with the 2002 election to the presidency of Luiz Inácio Lula da Silva, known as Lula. Under his leadership from 2003 through 2010, Brazil underwent a vast expansion of its natural resource export capacity along with significant advances in its technology and manufacturing base. Its Embraer aircraft became world-class and catapulted Brazil to the position of the world's third largest aircraft producer. Its huge internal market also became a magnet for global capital flows seeking higher returns, especially after the collapse of yields in U.S. and European markets following the Panic of 2008.

Over the course of 2009 and 2010, the real rallied from fewer than 2.4 reais to the dollar to 1.69 reais to the dollar. This 40 percent upward revaluation of the real against the dollar in just two years was enormously painful to the Brazilian export sector. Brazil's bilateral trade with the United States went from an approximately \$15 billion surplus to a \$6 billion deficit over the same two-year period. This collapse in the trade surplus with the United States was what prompted Brazilian finance minister Guido Mantega to declare in late September 2010 that a global currency war had begun.

Because of the yuan-dollar peg maintained by China, a 40 percent revaluation of the real against the dollar also meant a 40 percent revaluation against the yuan. Brazil's exports suffered not only at the high end against U.S. technology but also at the low end against Chinese assembly and textiles. Brazil fought back with currency intervention by its central bank, increases in reserve requirements on any local banks taking short positions in dollars, and other forms of capital controls.

In late 2010, Lula's successor as president, Dilma Rousseff, vowed to press the G20 and the IMF for rules that would identify currency

manipulators—presumably both China and the United States—in order to relieve the upward pressure on the real. Brazil's efforts to restrain the appreciation of the real met with some short-term success in late 2010 but immediately gave rise to another problem—inflation. Brazil was now importing inflation from the United States as it tried to hold the real steady against the dollar in the face of massive money printing by the Fed.

Brazil was now experiencing the same dilemma as China, having to choose between inflation and revaluation. When the United States is printing dollars and another country is trying to peg its currency to the dollar, that country ends up printing local currency to maintain the peg, which causes local inflation. As a consequence, investors chasing high returns around the world, the so-called hot money, poured into Brazil from the United States. The situation had deteriorated to the point that a Nomura Global Economics research report in early 2011 declared Brazil the biggest loser in the currency wars. This was true up to a point, based on the appreciation of the real. By April 2011, Brazil was “waving the white flag in the currency war,” in the words of a *Wall Street Journal* analysis. Brazil appeared resigned to a higher value for the real after currency controls, taxes on foreign investments and other measures had failed to stop its appreciation.

Lacking the reserves and surpluses of the Chinese, Brazil was unable to maintain a peg against the dollar by simply buying all the dollars that arrived on its doorstep. Brazil was stuck between the rock of currency appreciation and the hard place of inflation. As was the case with the United States and the Europeans, albeit for different reasons, Brazil increasingly looked to the G20 for help in the currency wars.

Brazil is an important case because of its geographic, demographic and economic scale, but it is by no means the only country caught in the cross fire of a currency war among the dollar, euro and yuan. Other countries implementing or considering capital controls to stem inflows of hot money, especially dollars, include India, Indonesia, South Korea, Malaysia, Singapore, South Africa, Taiwan and Thailand. In every case, the fear is that their currencies will become

overvalued and their exports will suffer as the result of the Fed's easy money policies and the resulting flood of dollars sloshing around the world in search of high yields and more rapid growth.

These capital controls took various forms depending on the preferences of the central banks and finance ministries imposing them. In 2010, Indonesia and Taiwan curtailed the issuance of short-term investment paper, which forced hot money investors to invest for longer periods of time. South Korea and Thailand imposed withholding taxes on interest paid on government debt to foreign investors as a way to discourage such investment and to reduce upward pressure on their currencies. The case of Thailand was ironic because Thailand was the country where the 1997–1998 financial panic began. In that panic, investors were trying to get their money out of Thailand and the country was trying to prop up its currency. In 2011 investors were trying to get their money into Thailand and the country was trying to hold down its currency. There could be no clearer example of the shift in financial power between emerging markets such as Thailand and developed markets such as the United States over the past ten years.

None of these peripheral, mostly Asian, countries trying to hold down the value of their currencies is the issuer of a widely accepted reserve currency, and none has the sheer economic scale of the United States, China or the eurozone when it comes to the ability to fight a currency war by direct market intervention. These countries too would need a multilateral forum within which to resolve the stresses caused by Currency War III. While the IMF has traditionally provided such a forum, increasingly all of the large trading economies, whether G20 members or not, are looking to the G20 for guidance or new rules of the game to keep the currency wars from escalating and causing irreparable harm to themselves and the world.

CHAPTER 7

The G20 Solution

"Let me put it simply . . . there may be a contradiction between the interests of the financial world and the interests of the political world. . . . We cannot keep constantly explaining to our voters and our citizens why the taxpayer should bear the cost of certain risks and not those people who have earned a lot of money from taking those risks."

Angela Merkel,
Chancellor of Germany, at the G20 Summit,
November 2010

The Group of Twenty, known as G20, is an unaccountable and very powerful organization that arose from the need to resolve global issues in the absence of true world government. The name G20 refers to its twenty member entities. They are a mixture of what were once the world's seven largest economies, grouped as the G7, consisting of the United States, Canada, France, Germany, the United Kingdom, Italy and Japan, and some fast-growing, newly emerging economies such as Brazil, China, South Korea, Mexico, India and Indonesia. Others were included more for their natural resources or for reasons of geopolitics rather than the dynamism of their economies; examples are Russia and Saudi Arabia. Still others were added for geographic balance, including Australia, South Africa, Turkey and Argentina. The European Union was invited for good measure, even though it is not a country, because its central bank issues one of the world's reserve currencies. Some economic heavyweights such as Spain, the Netherlands and Norway