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The Plaza Accord 30 Years Later

Jeffrey Frankel

September 2015 marked the 30th anniversary of the Plaza Accord, probably the most dramatic policy initiative in the dollar foreign exchange market since Richard Nixon floated the currency in 1973. At the Plaza Hotel in New York on September 22, 1985, US officials and their counterparts in the other G-5 countries agreed to act to bring down the value of the dollar. Public statements from the officials were backed up by foreign exchange intervention (the selling of dollars in exchange for other currencies in the foreign exchange market).

The Plaza is justly celebrated as a high-water mark of international policy coordination. The value of the dollar had climbed 44 percent against other major currencies in the five years leading up to 1985 (figure 6.1).¹ Largely as a result of the strong dollar and lost price competitiveness, the US trade balance had sunken to record lows in 1985, spurring congressional support for trade interventions that an economist would have found damaging.

In the two years 1985–87, the value of the dollar fell 40 percent. After the exchange rate turned around, so did the trade balance (with the usual lag). In the end the US Congress refrained from enacting protectionist trade barriers.

The Plaza Accord made institutional history as well. The group of officials that met in New York developed into the G-7 Finance Ministers Group, which has continued to meet ever since.²

Overall, the Plaza was a major public success. It is therefore sobering to realize that the essence of the initiative—a deliberate effort to depreciate a major currency—would be anathema today. In recent years policy actions by a central bank that have the effect of keeping the value of its currency lower than it would otherwise be are likely to be called "currency manipulation" and to be considered an aggressive assault in the "currency wars." In light of these concerns, the G-7 has refrained from intervening in foreign exchange markets in recent years. In February 2013 the G-7 partners even accepted a proposal by the US Treasury to agree to refrain from unilateral foreign exchange intervention, in an insufficiently discussed ministers' agreement that one could call the "anti-Plaza" accord (G-7 2013).

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¹ The percentage is expressed in log terms. The Fed index of the dollar against major currencies rose from 93 in September 1980 to 144 at the February 1985 peak (1973 = 100).

 $^{^{2}}$ In 1986 Secretary Baker persuaded the G-7 to agree to monitor a set of "objective indicators," including GDP and other economic variables, hoping to coordinate economic expansion. In February 1987 the G-7 ministers agreed at the Louvre that the dollar had fallen far enough, especially against the yen, and that they would try to prevent it from falling further (Funabashi 1988; Baker 2006, 431–32).

The first section of this chapter reviews what happened at the Plaza in September 1985 and during the months leading up to it.³ The subsequent two sections consider the effects of foreign exchange intervention and current worries regarding currency manipulation and currency wars. The last section considers intervention policy and the dollar as of 2015.



Figure 6.1 Trade-weighted value of the dollar against major currencies, 1973–2015

History of the Plaza Agreement

A play-by-play review of the events of 30 years ago can help shed light on the interacting roles of politics, personalities, and chance, in addition to the role of economic fundamentals.

Appreciation of the Dollar in the Early 1980s

The 26 percent appreciation of the dollar between 1980 and 1984 was not difficult to explain based on textbook macroeconomic fundamentals. A combination of tight monetary policy associated with Federal Reserve Chairman Paul Volcker during 1980–82 and expansionary fiscal policy associated with President Ronald Reagan during 1981–84 pushed up long-term interest rates, which in turn attracted a capital inflow and appreciated the currency, just as the famous Mundell-Fleming model predicted would happen.

Note: The 1985 peak was far higher than any other point in the last 40 years.

³ Frankel (1994a) gives a more extensive account of US policy with respect to the exchange rate during the decade of the 1980s. See also Funabashi (1988); Destler and Henning (1989); Baker (2006, 427–33); Mulford (2014, 169–72); and Bordo, Humpage, and Schwartz (2015).

Martin Feldstein, then chairman of the Council of Economic Advisers, popularized the "twin deficits" view of this causal chain. As a result of the fiscal expansion—tax cuts and increased spending—the budget deficit rose (and national saving fell). As a result of the strong dollar, the trade deficit rose. The budget deficit and trade deficit were thus linked. The exchange rate in this view was not the fundamental problem but only the natural symptom of the monetary/fiscal policy mix, the channel through which it was transmitted to the trade deficit (Council of Economic Advisers 1984, Feldstein 1984).

Some trading partners expressed concerns about the magnitude of the dollar appreciation. The French, in particular, favored intervention in the foreign exchange market to dampen such movements. But Treasury Secretary Donald Regan and other administration officials rejected the view that the US trade deficit was a problem, arguing that the strong dollar reflected a global vote of confidence in the US economy, and opposed proposals for intervention in the foreign exchange market to bring the dollar down. Their policy was benign neglect of the exchange rate. In the third month of the administration, Under-Secretary for Monetary Affairs Beryl Sprinkel had announced that its intention was not to intervene at all, except in the case of "disorderly markets." For Sprinkel, a long-time member of the monetarist "Shadow Open Market Committee" and follower of Milton Friedman, the matter was a simple case of the virtues of the free market.

At the Versailles Summit of G-7 leaders in 1982, the United States responded to complaints about excessive exchange rate movements by agreeing to request an expert study of the effectiveness of foreign exchange intervention. When the resulting Jurgensen Report was submitted to the G-7 leaders at the Williamsburg Summit in 1983, the findings of the underlying research were not quite as supportive of intervention as the other countries had hoped (Henderson and Sampson 1983, US Department of Treasury 1983, Obstfeld 1990). The basic argument was that sterilized intervention has no long-lasting effect and unsterilized intervention is just another kind of monetary policy.

Between March 1984 and February 1985, the dollar appreciated another 17 percent. This final phase of the currency's ascent was more rapid than the earlier phases and could not readily be explained on the basis of economic fundamentals. The long-term interest rate differential peaked in June 1984. Its subsequent decline was in the wrong direction to explain the remainder of the upswing. The US GDP growth rate and trade balance were also moving down -- the wrong direction to explain the continued dollar appreciation. At the time some economists argued that the foreign exchange market was "misaligned" or had been carried away by an irrational "speculative bubble" (Bergsten 1984, Cooper 1985, Krugman 1985, Frankel 1985). Whatever the cause, the trade deficit reached \$112 billion in 1984 and continued to widen. Some who had hitherto supported a freely floating exchange rate for the dollar began to change their minds.

Dating the 1985 Shift in Dollar Policy

Between the first Reagan Administration and the second, there was a change in policy with respect to the exchange rate: a shift from a relatively doctrinaire laissez-faire policy during 1981–84 to a more flexible policy of activism during 1985–88. An obvious point from which to date the switch is September 22, 1985, when finance ministers and central bank governors met at the Plaza Hotel and agreed to try to bring the dollar down (Funabashi 1988, 9–41; Mulford 2014, 169–72). The Plaza Accord was certainly the embodiment of the new regime. But I would prefer to date the start of the new era from the beginning of 1985. With the inauguration of the second Reagan Administration in January 1985, Don Regan and James Baker decided to trade jobs:

Regan became White House chief of staff, and Baker took Regan's job as the secretary of the Treasury (Regan 1988; Baker 2006, 219–20). At the same time, Beryl Sprinkel left Treasury, and Baker's aide Richard Darman became deputy secretary at the department. David Mulford joined the team in January, as the new assistant secretary for international affairs (Mulford 2014, 156).

At the White House Baker had developed a reputation for greater pragmatism than other, more ideological members of the administration. In his January confirmation hearings, he showed signs of the departure with respect to exchange rate policy, stating at one point that the Treasury's previous stance against intervention was "obviously something that should be looked at" (Destler and Henning 1989, 41-42).

Another reason to date the change from early in the year is that the dollar peaked in February and had already depreciated by 13 percent by the time of the Plaza meeting. Some observers, such as Feldstein (1986) and Taylor (chapter 12 of this volume), argue that the gap in timing shows that exchange rate "policy" had little connection with the actual decline of the dollar, which was determined in the marketplace regardless of the efforts governments made to influence it.

Notwithstanding that official policy did not change until September, however, there are two persuasive respects in which the bursting of the bubble at the end of February may have been in part caused by policy change. First, it was widely anticipated that Baker and Darman would probably be more receptive to the idea of trying to bring down the dollar than their predecessors had been. If market participants have reason to believe that policy changes to reduce the value of the dollar will be made in the future, they will sell dollars today in order to protect themselves against future losses, which will have the effect of causing the dollar to depreciate today.

Second, some intervention was agreed on at a G-5 meeting on January 17—Baker attended the dinner—and did take place subsequently (Funabashi 1988, 10). Surprisingly, the G-5 public announcement in January used language that, on the surface at least, sounds more prointervention than was used later in the Plaza announcement: "In light of recent developments in foreign exchange markets," the G-5 "reaffirmed their commitment made at the Williamsburg Summit to undertake coordinated intervention in the markets as necessary."

The US intervention that winter was small in magnitude.⁴ But the German monetary authorities, in particular, intervened heavily, selling dollars in February and March.⁵ The February intervention was reported in the newspapers and, by virtue of timing, appears a likely candidate for the instrument that pricked the bubble. Baker's accession to the Treasury in January and the G-5 meeting probably encouraged the Germans to renew their intervention efforts at that time.

One could take a narrow viewpoint and argue that the Plaza Accord should be defined to include only the deliberations made on September 22 at the Plaza Hotel and not other developments in 1985. But my view is that it is appropriate to use the term to include all the elements of the shift in dollar policy that occurred when Baker became Treasury secretary, including other meetings, public statements, perceptions, and—especially—foreign exchange market interventions.

⁴ The US authorities purchased \$659 million in foreign exchange between January 21 and March 1, a fraction of the \$10 billion purchased by the major central banks (Federal Reserve Bank of New York 1985a, 1985b).

⁵ Intervention was particularly strong on February 27. At the time it appeared to have an impact on the market (*Wall Street Journal*, September 23, 1985, p.26).

History routinely uses this sort of shorthand: We celebrate 2015 as the 800th anniversary of the Magna Carta, even though the precise paper signed at Runnymede in 1215 had no immediate effect in England and did not even bear that name. Versions were reissued in subsequent years (a 1217 version is the one that was first called Magna Carta) and eventually came to represent the principle that the king was bound by law.

We use "Bretton Woods" to denote the postwar monetary system based on pegged exchange rates facilitated by the International Monetary Fund (IMF) with gold and the dollar as the international reserve assets. But the system that was agreed at Bretton Woods, New Hampshire, in 1944 had been negotiated over the preceding two years and did not really come into full operation until some 15 years later (initially the IMF had little role to play and European countries delayed restoring currency convertibility), by which time it was already beginning to break down (as the convertibility of the dollar into gold was increasingly in question) (Steil 2013). Nevertheless "Bretton Woods" is a useful shorthand, like "Magna Carta." It is similarly useful to apply "Plaza Accord" to the set of changes in policy with respect to the dollar that took place in 1985.

The Plaza Meeting Itself

In April 1985, at an Organization of Economic Cooperation and Development (OECD) meeting, Baker announced, "The US is prepared to consider the possible value of hosting a high-level meeting of the major industrial countries" on the subject of international monetary reform. Similar trial balloons were floated in Congress (Putnam and Bayne 1987, 199). But the other shoe was yet to drop. Monetary and exchange rate issues were not extensively discussed at the Bonn Summit of G-7 leaders in May 1985.⁶

Preparations for the Plaza meeting began soon thereafter but were kept closely guarded. In June top Treasury officials discussed the possibility of concerted intervention with top officials in Japan's Ministry of Finance (Gao 2001, 175). The G-5 deputies met secretly in July and August, led by Assistant Secretary Mulford (Mulford 2014, 169–70). Details were worked out in a final preparatory meeting of G-5 deputies in London on September 15.

Finally, on September 22 the G-5 ministers and central bankers met at the Plaza. They agreed on an announcement that "some further orderly appreciation of the nondollar currencies is desirable" and that they stood "ready to cooperate more closely to encourage this when to do so would be helpful." By the standards of such communiqués, this language was considered (at least in retrospect) to have constituted strong support for concerted intervention, even though the word *intervention* did not appear. A figure of 10–12 percent depreciation of the dollar over the near term had been specified as the aim in a never-released "nonpaper" drafted by Mulford for the September 15 meeting in London (Funabashi 1988, 16–21). The G-5 ministers at the Plaza

⁶ The G-7 summit of May 1985 was overshadowed by the public relations setback of Bitburg, which arose when President Reagan visited a German cemetery that contained graves of SS soldiers (Putnam and Bayne 1987, 200–201). According to some reports, this mistake on the part of the White House advance team was an indirect consequence of the strong dollar: On the afternoon on which aide Michael Deaver should have been inspecting the Bitburg cemetery, he and other White House aides were reportedly out buying BMWs (Bovard 1991, 316), which at the time could be had in Germany for half the US price as the result of the appreciation of the dollar against the mark. (President Reagan later blessed the Plaza initiative [Baker 2006, 431].)

accepted those numbers as the aim (according to US government sources).⁷ There was, apparently, little discussion among the participants at the Plaza as to whether changes in monetary policy would be required to achieve the aim of depreciating the dollar, suggesting that the agreed intervention should probably be classified as sterilized.

On the Monday that the Plaza announcement was made public, the dollar fell 4 percent against a weighted average of other currencies (slightly more against the mark and the yen). Subsequently, it resumed a gradual depreciation, at a rate similar to that of the preceding seven months.⁸

Is Intervention Effective?

Economists who question whether the Plaza was effective are skeptical about one of two questions regarding the effects of intervention. First, is intervention effective at changing the exchange rate even if it is sterilized (i.e., even if it does not take the form of a change in the money supply)? Second, if it does change the exchange rate, does it change the trade balance? Both questions remain of general interest, well beyond the events of 30 years ago. I consider each in turn.

Is Intervention Effective at Moving the Exchange Rate?

In the decade following the Plaza, the United States and other major governments continued to intervene in the dollar market periodically, sometimes in one direction, sometimes in the other. During most of this period, market participants believed that such interventions were important: Traders would leap for their terminals when reports of central bank sales or purchases came out. In contrast, a majority of American economists and central bankers retained the view of the early 1980s that intervention is ineffective except to the extent that it changes money supplies.⁹

Using previously unavailable data on daily intervention by the Bundesbank and the Federal Reserve in the 1980s, Kathryn Dominguez and I reexamined the issue (Dominguez and Frankel 1993a, 1993b, 1993c). We found statistically significant effects. For example, in 10 out of 11 major episodes during the period 1985–91, the deutsche mark/dollar rate in the month after the episode moved in the direction in which the monetary authorities were trying to push it. Other researchers have found similar results using broader datasets.¹⁰ Yet others report more negative findings regarding the effectiveness of intervention (e.g., Beine, Bénassy-Quéré, and Lecourt 2002). Edison (1993) and Sarno and Taylor (2001) survey the empirical research.

⁷ The "nonpaper" also specified the total scale of intervention to be undertaken over the subsequent six weeks (up to \$18 billion) and the allocation among the five countries (Funabashi 1988, 16–21). By the end of October intervention actually undertaken was \$3.2 billion by the United States, \$5 billion by the other four countries, and more than \$2 billion by G-10 countries that were not represented at the Plaza, particularly Italy (Federal Reserve Bank of New York 1985–86).

⁸ The fact that the rate of depreciation in the six months after the Plaza was no greater than in the six months before the Plaza is the reason why Feldstein (1986) claims that the change in policy had no effect.

⁹ E.g., Truman (2003). With the advent of quantitative easing, it has become more widely accepted that changes in the balance sheet of the central bank can have effects on interest rates even after controlling for the size of the monetary base, as in the venerable portfolio balance model. If this is the case, why should it not also affect exchange rates? This rehabilitation of the portfolio-balance view is one reason why the effectiveness of sterilized intervention deserves a fresh look.

¹⁰ For example, Catte, Galli, and Rebecchini (1994) extend the dataset to include intervention operations by other central banks. They claim to find even stronger evidence of effects on the exchange rate. Ito (1987, 2003) found that Japanese intervention to affect the yen/dollar exchange rate was effective, and accompanying US intervention especially so.

The econometric part of the Dominguez-Frankel research sought to disentangle two distinct possible effects of intervention. The first is the portfolio effect, which may result from actual purchases and sales of marks and dollars in the marketplace (regardless of whether the central bank's actions are publicly known at the time or kept secret). The second is the additional expectations effect, whereby public reports of intervention may alter expectations of the future exchange rate (regardless of whether the intervention actually takes place), which will feed back to the current equilibrium price. The Dominguez-Frankel study used data that had not been widely used by other researchers, including: previously confidential daily intervention data, newspaper reports on intervention, survey data on the expectations of market participants, and a measure of portfolio risk. Results showed significant effects of intervention through both channels, though only in the case of the expectations effect was the impact estimated to be quantitatively large.

Not all attempts at foreign exchange intervention were found to be successful. A number of lessons were drawn as to the circumstances under which intervention is most likely to work (see Dominguez 1990, 2006; Dominguez and Frankel 1993a, 1993b, 1993c; Fratzscher et al. 2015; and research cited in the surveys by Edison 1993 and Sarno and Taylor 2001):

- Because the foreign exchange market is now so large (several trillion dollars in daily turnover worldwide), purchases and sales on the scale that governments are generally prepared to make will not have much effect if the market is already firmly convinced of the proper value of the currency. If the market is determined to be on the other side, the authorities will lose the battle, particularly if they are trying to support a parity that is no longer justified by macroeconomic fundamentals. Intervention can be successful when the market holds weak views as to the true worth of the currency, particularly in the case of a speculative bubble, and is willing to be led by the authorities, as it was in 1985.
- The initial intervention in any given episode during the post-Plaza period (1985–91) had a greater effect than follow-up interventions on subsequent days, suggesting that surprise may be an important element. The effort generally has an effect within the first few days or weeks if it is going to have an effect at all.
- Operations are more likely to be effective if they are coordinated by a number of major central banks, as they were in 1985 and subsequent years. It is particularly important that the United States be one of the countries participating.
- The major effect comes via expectations. The average effect of reports of intervention (by wire services and newspapers) on forecasts of what the rate will be one month ahead was estimated at 0.4 percent, and this effect translated almost one-for-one into the contemporaneous spot exchange rate itself. Intervention should thus be revealed to the public if the authorities want it to have a major effect. Explicit announcements by US officials had greater effects (estimated at about 0.8 percent) than when the New York Fed merely allowed the banks through which it trades to share the information. Examples include the Plaza statement of September 1985, the Louvre statement of February 1987, and the Bush Administration's "ambush" to reverse dollar appreciation in July 1991.
- The authorities are not necessarily able to affect the exchange rate for a long period, absent a corresponding change in fundamentals. The effect was usually present one month after the intervention; whether it remained after a year is unclear. Critics of sterilized intervention claim that at most it can have an effect only in the short run. But even short-term effects can be useful. Examples of episodes in which the effect lasted

long enough to be useful include the "pricking of the dollar bubble" in 1985, the "bear squeeze" of January 1988 (which supported the dollar as a bridge until expected improvements in the trade balance materialized), and the placing of a floor and ceiling, respectively, on the dollar in February and July 1991.

Occasional intervention continued during the first Clinton Administration, in 1992–95, mainly to support the dollar (Frankel 1994b). G-7 intervention in May 1995, after the dollar had depreciated to a record low against the yen, appears to have been successful in turning the trend around, consistent with the mantra of the new Treasury Secretary Robert Rubin that "a strong dollar is in the national interest."

Subsequently, however, intervention virtually died out among the G-7. The European Central Bank (ECB) intervened in 2000 to support its then over-depreciated euro (operations in September of that year were undertaken in cooperation with the United States and others). The last time the Bank of Japan intervened in the foreign exchange market was March 2011, in cooperation with the United States and others, to dampen the strong appreciation of the yen that came in the aftermath of the Tohoku earthquake and tsunami.¹¹ No intervention occurred after that, and in February 2013 the G-7 partners agreed to refrain from foreign exchange intervention altogether.

Updated research on the effectiveness of foreign exchange intervention is needed. Although most large advanced countries no longer intervene in the foreign exchange market, they could do so again in the future. Moreover, major emerging market countries do intervene. Around the time that the G-7 moved to the free-floating corner (i.e., stopped intervening), many emerging market countries switched to managed floating (having abandoned exchange rate targets after the currency crashes of 1994–2002). Looking at the last 15 years of data for emerging market countries and some of the smaller advanced countries that still intervene could shed light on policy alternatives routinely faced by emerging markets coping with inflows (as in 2003–08 and 2010–12) or outflows (in the global financial crisis of 2008–09 and perhaps again as the Fed starts an attempt to normalize interest rates).

The growing body of empirical literature on intervention in emerging market countries generally finds effects. Most studies look at the experience of only one or two countries (see Kearns and Rigobon (2005), Disyatat and Galati 2007; Dominguez, Fatum, and Vacek 2013; Menkhoff 2013; and the papers cited therein). The topic is crying out for panel studies. Adler and Tovar (2011); Blanchard, Adler, and de Carvalho (2015); and Fratzscher et al. (2015) are a start, but there is a need for more.

Effects on the Trade Balance

Some skeptics claim that intervention does not move the exchange rate. Others claim that the exchange rate does not move the trade balance. The second sort of skepticism steadily gained

¹¹ That the yen appreciated strongly in response to the disaster was counterintuitive to most. The explanation is that Japan had been taking out insurance against major earthquakes for many years, with the result that money flooded into the country in March 2011.

adherents in the first two years after the Plaza, when, even though the dollar had depreciated, the US trade deficit continued to increase.¹²

A host of explanations for the lack of trade balance response arose. Many of them (even if not entirely new) gave rise to new areas of academic research. One was the point that pass-through of exchange rate changes to prices of imports in domestic currency is not immediate or complete, especially when the question is passing a dollar depreciation through to higher dollar prices for imports into the large US market.¹³

In the end the US trade balance did turn around, with a lag of two years. This response was not very different from traditional estimates of the lags. According to the *J*-curve, depreciation worsens the trade balance in the short run, because the rising price of imports outweighs the fall in import quantity or the rise in export quantity. After two years or so, the elasticities have risen enough that the quantity effects begin to outweigh the valuation effect.

The US trade deficit in goods and services peaked in the third quarter of 1987, at \$152 billion a year (\$38 billion per quarter). By 1991 it was down to \$30 billion a year.¹⁴ As Krugman (1991) notes, adjustment in the end turned out to work pretty much as it was supposed to. Observers had been too impatient.

Some similar developments have occurred in recent years. An effect of Abenomics in Japan was the strong depreciation of the yen in 2013, which was as expected. Many observers were disappointed when the Japanese trade balance did not quickly improve. Various explanations were proposed about how "Japan is different" because of its heavy dependence on oil and other imported inputs, for which demand is inelastic. Two years later, however, Japan's trade deficit was much reduced. (The 2014–15 global decline in oil prices also helped.)

Did the Plaza Accord Sabotage Japan?

One legacy of the Plaza is a sort of conspiracy theory, which continues to circulate widely in Asia, that the United States deliberately sabotaged the Japanese economy. The most common version is that the effect came via *endaka*, the strong yen, which priced Japanese manufacturing out of world markets (Gao 2001). The claim is that the United States successfully used this weapon against Japan at the Plaza in 1985, then against Korea in 1988–89, and against China in the years since 2004.

In some ways the suspicion is understandable, given the long-time pattern of pressure from the US Treasury on Asian countries to appreciate their currencies. It is true that the yen appreciated sharply against the dollar after the Plaza, rising more than the European currencies. It is also true that Japan's GDP has mostly stagnated since 1990, after decades of strong growth. But the timing is not quite right for the conspiracy theory. In between the 1985–86 appreciation of the

¹² An example of this skepticism is Rose and Yellen (1989). Also relevant is the subsequent "exchange rate disconnect" literature (e.g., Devereux and Engel 2002).

¹³ Two other explanations for the failure of the depreciation to improve the trade balance in 1986 and 1987 were (a) the idea that the preceding loss of market share from the strong dollar might have become near permanent in some sectors (hysteresis) and (b) the new importance of trade with emerging market countries whose currencies were not in the traditional exchange rate indices.

¹⁴ In addition to the depreciation, a US recession was also an important reason for reduced imports in the years 1990–91. The record US trade deficits of the mid-1980s were exceeded in the mid-2000s, even as a share of GDP.

yen and the Japanese recessions of the 1990s came the bubble years (1987–89), when exchange rate policy was no longer working to push the yen up but rather to support the dollar.

A variant of the conspiracy theory is the notion that Japanese purchases of dollars during the bubble years led to excessive money growth and the soaring prices of equities and real estate in Japan. The bursting of that bubble then led to the Japanese recession. This idea is virtually the opposite of the theory that the Plaza was responsible for the end of strong growth in Japan: buying dollars is the opposite of selling dollars (Corbett and Ito 2010).

Currency Manipulation

In 1985 G-7 coordination meant joint intervention in the foreign exchange market. Today G-7 coordination means refraining from intervention, which is called currency manipulation if pursued unilaterally. Some observers, such as Gagnon (2012, 2013) specify that foreign exchange intervention is a necessary criterion in the definition of currency manipulation. Others believe that monetary stimulus even without intervention can qualify as currency manipulation.

The first sentence of the 2013 G-7 communiqué delegitimizes foreign exchange intervention: "We, the G7 Ministers and Governors, reaffirm our longstanding commitment to market determined exchange rates...." The second sentence seems to accept the broadening of the definition of manipulation to other policies that can affect the exchange rate: "We reaffirm that our fiscal and monetary policies have been and will remain oriented towards meeting our respective domestic objectives using domestic instruments, and that we will not target exchange rates." The implication is that monetary stimulus is valid as long as the authorities are not aware that it is likely to depreciate their currency—or at least as long as doing so is not their purpose. In the absence of mind-reading skills, the communiqué in practice rules out intervention as well as statements by officials to influence currencies but it does not rule out monetary stimulus.

Beggar-Thy-Neighbor Policies

Is currency depreciation a beggar-thy-neighbor policy that calls for enforced rules against currency manipulation? Let us stipulate that because a depreciation of the currency raises a country's price competitiveness on world markets, it stimulates the country's net exports—perhaps with a delay of a year or two—and thus achieves a switching of world spending toward the goods and services of the originating country at the expense of spending on goods and services of other countries. (Notice that we assume here that the switching effects that the exchange rate has via the trade balance dominate any other effects it may have.¹⁵)

It is then easy to see why such an exchange rate policy is often viewed as a classic beggar-thyneighbor policy, analogous to erecting tariffs. It might seem a short step from there to the view that everyone would be better off in a cooperative regime in which all countries agreed to refrain from deliberate intervention to depreciate their currencies (just as all countries benefit if they all remove protectionist trade barriers). But the analogy may be misplaced. A noncoordinated world

¹⁵ In some countries, especially emerging markets and developing countries, depreciation of the currency has contractionary effects, which may be large enough to offset the expansionary switching effect on the trade balance. These effects include balance sheet effects (if the depreciating country has a large stock of debt denominated in foreign currency) and the effect on the local-currency price of oil or other imported inputs. If these contractionary effects of depreciation were important, it would seem to follow that an appreciation of other currencies—because the dollar is depreciating—would have expansionary effects on their economies. Beggar-thy-neighbor would be converted to enrich-thy-neighbor.

in which each country chooses its monetary policy independently, subject to the choices of other countries, is very different from the problems of a noncoordinated world in which each country chooses its tariffs independently.

The classic examples of both kinds of beggar-thy-neighbor policies came in the 1930s. The Smoot-Hawley Tariff, enacted by the United States in 1930, was emulated by other countries, causing global trade to collapse. Britain, the United States, France, and other countries pursued competitive devaluations in the early 1930s, as each in turn took its currency off the gold standard (Eichengreen 2015). The disasters of the 1930s motivated the architects of the postwar system who met at Bretton Woods in 1944 to adopt both the principle of free trade and the principle of pegged exchange rates. The dollar could not be devalued. Other exchange rates were adjustable in the event of fundamental disequilibrium, but to devalue otherwise would be considered unfair currency manipulation under IMF Article IV.

Eichengreen and Sachs (1985, 1986) offer a powerful revisionist interpretation of the exchange rate developments of the 1930s. They argue that (unlike tariffs) the devaluations were not collectively damaging but may actually have been beneficial. Each devaluation was a reduction not just in the value of the currency in terms of other currencies but also in terms of gold. When each country had taken its turn, the net effects on exchange rates largely canceled out, but the net effects vis-à-vis gold did not. Each country was left with a currency that was worth less in terms of gold (the price of gold was higher in terms of their currency). As a result the nominal value of gold reserves rose. As gold reserves were the ultimate backing for the money supply, the rise in their value allowed an expanded money supply in each country and lower interest rates, which is just what the world needed at the time.

The Bretton Woods system came crashing down in the early 1970s. After the members of the IMF ratified the move to floating exchange rates in the Jamaica Communiqué of January 1976, they agreed to a framework for mutual surveillance under the 1977 Decision on Surveillance over Exchange Rate Policies; in 1978 they amended Article IV. Both Principle (A) of the 1977 Decision and Clause 3 of Section 1 of Article IV require that each member "avoid manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain an unfair competitive advantage over other members." It is almost as if they shifted from interpreting manipulation as failure to intervene sufficiently in the foreign exchange market to interpreting it as excessive intervention in the foreign exchange market.

US Complaints about Currency Manipulation by Others

Congressional concerns about US trade in the mid-1980s did result in one major piece of currency legislation. In the Omnibus Trade and Competitiveness Act of 1988, the US Congress mandated biannual reports from the US Treasury regarding whether trading partners were manipulating currencies. Section 3004 requires the Treasury to "consider whether countries manipulate the rate of exchange between their currency and the United States dollar for purposes of preventing effective balance of payments adjustments or gaining unfair competitive advantage in international trade." Under the law the United States must hold talks with governments deemed to be breaking the rules.

In the first of the Reports to Congress on International Economics and Exchange Rate Policy, filed in October 1988, Korea and Taiwan were found guilty of manipulation; Singapore and

Hong Kong got off with warnings (policy changes were recommended). In the years that followed, all countries deemed to be manipulators or given warnings were Asian.

In 2003 the United States began to put increasing pressure on China to appreciate its currency.¹⁶ There were good arguments why China should have moved in the direction of increasing exchange rate flexibility and allowed its currency to appreciate (whether the criterion was China's own economic interest or the need to facilitate an orderly unwinding of record global current account imbalances). But especially in US election years, such as 2004, much of the political pressure was tied to the bilateral US–China trade deficits and loss of American jobs in manufacturing, criteria that have little basis in IMF agreements or economic logic. Much of the pressure on the Treasury to name China a manipulator came from Capitol Hill. The Schumer-Graham bill, originally proposed in February 2005, would have imposed (WTO–illegal) tariffs of 27.5 percent on all Chinese goods if China did not substantially revalue its currency. The bill did not pass, but other versions were subsequently proposed.

Many in the US Congress in 2015 opposed giving trade promotion authority (TPA) to President Obama because the legislation did not include language to enforce prohibition of currency manipulation by other countries.¹⁷ TPA is the same "fast-track" authority that every president since Nixon has been granted to allow international trade negotiations to proceed. Obama wanted it in particular to be able to complete negotiations over the Trans-Pacific Partnership (TPP) with Asian countries and the Transatlantic Trade and Investment Partnership (TTIP) with Europe.

Currency manipulation is best addressed in other forums, including bilateral and G20 talks and IMF surveillance. Critics believe those venues are too weak and want to be able to apply the penalty of trade sanctions. My view is that if the United States had insisted that strong currency manipulation language go into the TPP, other countries would have refused—and with good reason. There is too much disagreement over what constitutes unfair currency manipulation. Some US interest groups and members of Congress, for example, think that China and Japan are manipulating their currencies right now, even though they have in fact not intervened to reduce the value of their currencies in several years. The provision would thus likely have been misused.

An analogy could be made with antidumping legislation. The original intellectual rationale for such legislation was predatory pricing. But the way the laws ended up being written and enforced, cases seldom involve predatory pricing. In practice antidumping countermeasures are usually a disguised form of protectionism. Currency manipulation rules could be misused in the same way.

There are times when a country's currency can be judged undervalued or overvalued and times when its trading partners have a legitimate interest in raising the question with its government. But even in those rare cases when currency misalignment is relatively clear, trade agreements are not the right venue for addressing it, in my view. The undervalued renminbi was addressed in bilateral China–US discussions in 2004–11, with success: China allowed the currency to appreciate 35 percent over time. Today the renminbi is well within a normal range (Kessler and Subramanian 2014, Cline 2015, IMF 2015). Although the People's Bank of China did indeed buy up huge quantities of dollars in exchange for renminbi between 2004 and 2014, thereby

¹⁶ For more extensive analysis of this history and other relevant references, see Frankel and Wei (2007).

¹⁷ Some economists (e.g., Bergsten 2013, 2015a; Gagnon, 2012, 2013), support such provisions regarding currency manipulation, enforced by trade sanctions; many others are opposed (e.g., Bénassy-Quéré et al. 2014, Frankel 2015).

keeping its currency from appreciating as fast as it otherwise would have, it stopped doing so in 2014.¹⁸

China isn't in the TPP or the TTIP. Japan is in the TPP, and the yen depreciated greatly over 2014–15. Some US economic interests, particularly the auto industry, accuse Japan of manipulation to keep the yen undervalued. Many congressional critics cite Japan as the target of their proposals to insist that currency manipulation language be part of the TPP. But the Bank of Japan has stopped intervening in the foreign exchange market, beyond one episode in 2011. In 2013 Japan joined the other G-7 countries in agreeing to refrain from foreign exchange intervention.

Members of the euro zone are in the TTIP negotiations, and the euro has depreciated significantly over the last year. But the ECB has not intervened to push down the euro. It is party to the 2013 agreement not to intervene.

Does Monetary Stimulus Constitute Currency Manipulation?

Both Japan and the ECB have undertaken substantial monetary easing since 2013, which explains some of the depreciation of their currencies. It is presumably these actions that US critics of TPA, TPP, and TTIP have in mind when they accuse Japan and Europe of currency manipulation. But monetary expansion is not currency manipulation. For one thing countries can hardly be blamed for undertaking monetary stimulus when domestic economic conditions require it. As the US Treasury explains to domestic critics, that is what the United States did with its quantitative easing of 2008–12, the context in which Brazilian Minister Guido Mantega, backed by President Dilma Rousseff, originally coined the term "currency war."

Furthermore, when monetary stimulus is the cause of currency manipulation, as opposed to sterilized foreign exchange intervention, the presumption of a negative impact on other countries via the trade balance disappears. Counteracting the effect via the exchange rate and consequent expenditure switching is the intended increase in income and consequent boost to imports.

Finally, even if the expenditure-switching effect of monetary stimulus dominates the expenditure-increasing effect, so that there is an overall loss of demand to trading partner countries, countries need not be passive. They can respond to a loss in demand with macroeconomic stimulus of their own.

There is an argument for our time that is analogous to the Eichengreen-Sachs (1985, 1986) reinterpretation of the 1930s (Eichengreen 2013). Yes, US developments have major impacts on other countries, even when exchange rates are floating (see, e.g., Rey 2015). But if trading partners don't like the implications of a dollar depreciation such as the one that resulted in 2010–11 from the second round of US quantitative easing, their central banks are free to ease their own monetary policies (buying domestic assets) or even intervene in the foreign exchange market (buying dollars) to prevent the unwanted appreciation of their own currencies—as China and many other emerging market countries did during that period. The currency war critique is right in the indisputable respect that, by definition, not every country can depreciate its currency. But

¹⁸ If anything the Chinese sold dollars in exchange for renminbi during 2014-15, keeping the value of the currency higher than it would otherwise would have been. China's reserves peaked at \$3.99 trillion in July 2014 before declining to \$3.23 trillion by January 2016.

it does not follow that a system in which every central bank is buying assets (domestic or foreign) is a system in which everybody is worse off. To the contrary, the result may even be the sort of global monetary expansion that the world needs during a time such as the 1930s or the aftermath of the 2008–09 global recession.

Conclusion: Is It Time for Another Plaza?

Although the G-7 countries have not found the need to intervene in their foreign exchange markets in recent years, it would be shortsighted to think that this state of affairs will continue forever. Coordinated intervention should be a legitimate option. Almost by definition, if a set of major countries jointly agree to intervention operations, they must believe it is in their interests. No set of rigid multilateral rules either prohibiting or requiring intervention should be sought, particularly in the context of trade rules.

Intervention is most likely to make sense in those infrequent occasions when the exchange rate wanders far from macroeconomic fundamentals, as it had by early 1985. The weakness of the euro in 2000–01 and the strength of the yen in 2011 were two such "misalignments."¹⁹ They are also the most recent occasions on which the United States joined with partners in concerted foreign exchange intervention. One might have argued that the euro was again getting close to meeting the criterion when it strengthened in early 2014 despite very low growth in the euro zone.²⁰ But on that occasion ECB plans for quantitative easing, which eventually went into effect in January 2015, soon succeeded in depreciating the euro to a more appropriate level.

The dollar appreciated 18 percent between mid-2014 and mid-2015. The US trade balance is expected to deteriorate as a result. Congressional worries over trade have been strong enough in recent years to seriously endanger President Obama's efforts to negotiate trade agreements. Some observers, such as Bergsten (this volume), have asked whether the dollar might be getting close to the level at which "another Plaza" is called for.

The answer is no. The situation today is different from the situation in 1985.²¹ For one thing the dollar's recent appreciation is nowhere near as great as it was leading up to 1985. For another, unlike then, the macroeconomic fundamentals of textbook theories explain the recent appreciation episode unusually well. The US economy performed relatively strongly from mid-2014 to mid-2015, both compared with the preceding six years and compared with other countries. For this reason the Fed ended quantitative easing in 2014 and is getting ready to raise interest rates—in contrast to other countries, where central banks have moved toward monetary stimulus. Both US economic performance and the change in monetary policy are explanations for the strong dollar. These developments should be welcomed, taken as a whole, notwithstanding the effect on exports.

¹⁹ Misalignments can arise from unwarranted exchange rate movements when the currency is floating and from the absence of warranted movements when the currency is pegged.

²⁰ The ECB could have decided to buy dollars, if it had not agreed the year before to refrain (Jeffrey Frankel, "Why the ECB Should Buy US Treasuries," keynote speech delivered at the Federal Reserve Bank of Dallas and Southern Methodist University, Dallas, April 4, 2014).

²¹ Green, Papell, and Prodan (chapter 8 of this volume) conclude that the present differs from the pre-Plaza period in several key dimensions.

Wouldn't a rising trade deficit have a negative effect on US growth? Not really. The dollar appreciation is probably one of the major reasons why the Fed held off past June 2015 on its long-anticipated decision to raise short-term interest rates, to avoid a growth slowdown or even a descent into deflation. Precisely because the Fed can be relied on to target the overall economy, the dollar and trade balance primarily affect the composition of GDP, not the total.

The Plaza should remain the classic precedent for coordinated G-7 intervention in the foreign exchange market when one or more of their currencies is very far out of line. Those conditions do not apply today. But the pendulum will swing back. The day will come when Plaza-style intervention is again appropriate.

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