The Plaza Accord, 30 Years Later

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Abstract

The paper reviews an event of 30 years ago from the perspective of today: a successful G-5 initiative to reverse what had been a dangerously overvalued dollar. The "Plaza Accord" is best viewed not as the precise product of the meeting on September 22, 1985, but as shorthand for a historic change in US policy that began when James Baker became Treasury Secretary in January of that year. The change had the desired effect, bringing down the dollar and reducing the trade deficit. In recent years concerted foreign exchange intervention, of the sort undertaken by the G-7 in 1985 and periodically over the subsequent decade, has died out. Indeed the G-7 in 2013, fearing "currency manipulation," specifically agreed to refrain from intervention in a sort of "anti-Plaza accord." But the day will come when coordinated foreign exchange intervention is again appropriate.

JEL classification codes F31, F33, N1

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The Plaza Accord, 30 Years Later

September 2015 marks the 30th anniversary of the Plaza Accord. It was probably the most dramatic policy initiative in the dollar foreign exchange market since Richard Nixon originally floated the currency in 1973. At the Plaza Hotel in New York on September 22, 1985, US officials and their counterparts among the Group of Five largest industrialized countries agreed to act to bring down the value of the dollar. Public statements from the officials were backed up by foreign exchange intervention, selling 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 per cent against other major currencies in the five years leading up to 1985.[1] (See Figure 1.) Largely as a result of the strong dollar and lost price competitiveness, the US trade balance had fallen to record lows as of 1985, a deficit of $122 billion. The trade deficit spurred congressional support for proposed trade interventions that an economist would have found damaging. In the two years 1985-87, the dollar came back down 40 per cent. 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 had 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.

With the Plaza Accord viewed favorably, it is 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 the currency war concerns, the G-7 has refrained from foreign exchange intervention in recent years. The G-7 partners in February 2013 even accepted a proposal by the US Treasury to agree to refrain from unilateral foreign exchange intervention, in an insufficiently discussed ministers' agreement that we could call the "anti-Plaza" accord.[3]

Part 1 of this paper reviews what actually happened at the Plaza in September 1985 and during the months leading up to it.[4] Parts 2 and 3 of the paper consider the effects of foreign

[1] 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).

[3] G7 (2013).

[4] Frankel (1994a) gives a more extensive account of American policy with respect to the exchange rate during the decade of the 1980s. See also Baker (2006, 427-433), Bordo, Humpage and Schwartz (2015), Destler and Henning (1989), Funabashi (1988), and Mulford (2014, 169-172).

exchange intervention and then the current worries regarding currency manipulation and currency wars. Part 4 concludes with a consideration of intervention policy and the dollar as of 2015.

Figure 1: The dollar's value (1973-2015). The 1985 peak was far higher than any other point in the last 40 years.

1. History of the Plaza Agreement

1.1 The appreciation of the dollar in the early 1980s

At first, when the dollar appreciated by some 26% during the period 1980 to 1984, it was not difficult to explain the movement by the traditional macroeconomic fundamentals of textbooks. 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. This is what the famous Mundell-Fleming model predicted would happen.

Martin Feldstein, 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 is not the fundamental problem, but only the natural symptom of the monetary/fiscal policy mix, the channel whereby it is transmitted to the trade deficit.[5]

Some trading partners expressed concerns at 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, argued instead 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. The Under Secretary for Monetary Affairs, Beryl Sprinkel, had announced in the third month of the Administration that its intention was not to undertake such intervention 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 US responded to complaints about excessive exchange rate movements by agreeing to request an expert study of the effectiveness of foreign exchange intervention. But when the resulting Jurgensen Report was submitted to the G-7 leaders at the Williamsburg Summit in 1983, its finding was that intervention did not offer a very useful tool to affect exchange rates.[6] The basic argument, very common among economists, was that sterilized intervention has no effect and unsterilized intervention is just another kind of monetary policy.

From March 1984 to February 1985 the dollar appreciated another 17 percent. This final phase of the currency's ascent differed from the earlier phases, not only in that the appreciation was at an accelerated rate, but also in that it could not readily be explained on the basis of economic fundamentals, whether by means of the textbook theories or otherwise. The interest rate differential peaked in June 1984 and thereafter moved in the wrong direction to explain the remainder of the upswing. Some economists argued at the time that the foreign exchange market was "misaligned" or had been carried away by an irrational "speculative bubble" (Bergsten 1984; Krugman 1985; Cooper 1985; Frankel 1985). In any case, 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.

1.2 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.

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[5] Feldstein (1984) and Council of Economic Advisers (1984).

[6] Report of the Working Group, 1983; Henderson and Sampson, 1983; Obstfeld, 1990. Putnam and Bayne, 1987, p.179, report the debate within the G-7 at the Williamsburg Summit in May 1983.

An obvious point from which to date the switch is 22 September 1985, when finance ministers and central bank governors met at the Plaza Hotel and agreed to try to bring the dollar down.[7] 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 that year. With the inauguration of the second Reagan administration in January 1985, Don Regan and James Baker, decided to trade jobs, Regan becoming White House Chief of Staff and Baker taking Regan's job leading the Treasury Department.[8] At the same time, Beryl Sprinkel left Treasury. Baker's aide Richard Darman became Deputy Secretary at the Department. David Mulford happened to joined the team in January as well, as the new Assistant Secretary for International Affairs.[9]

Baker had developed at the White House a reputation for greater pragmatism than other, more ideological members of the administration. In January confirmation hearings, the incoming cabinet official explicitly 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."[10]

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, such as Feldstein (1986), have argued that the gap in timing shows that exchange rate "policy" had in fact little connection with the actual decline of the dollar, which was instead determined in the private marketplace regardless of what efforts governments made to influence it. But, notwithstanding that official policy did not change until September, 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 move to 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 attended by Baker and Darman on 17 January 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 pro-intervention 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 U.S. intervention that winter was small in magnitude.[11] But the German monetary authorities, in particular, intervened heavily to sell dollars in foreign exchange markets in

[7] Funabashi (1988, 9-41); Mulford (2014, 169-172).
[8] Regan (1988), Baker (2006, 219-220).
[9] Mulford (2014, 156).
[10] Destler and Henning (1989, 41-42).
[11] A total of $659 million in foreign exchange purchases from 21 January to 1 March, as compared to $10 billion by the major central banks in total (*Federal Reserve Bank of New York Quarterly Review* 10, Spring 1985: 60; and 10, Autumn 1985: 52).

February and March.[12] The February intervention was reported in the newspapers and, by virtue of timing, appears a likely candidate for the instrument that pricked the bubble. It is in turn likely that the accession of Baker to the Treasury in January and the G-5 meeting were the developments that 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 that year: the other meetings, public statements, perceptions and – especially – foreign exchange market interventions.

History routinely uses this sort of short-hand. We also 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.

To take another example closer to home, we use "Bretton Woods" to denote the postwar monetary system based on pegged exchange rates facilitated by the 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, 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), and by then was already beginning to break down (as the convertibility of the dollar into gold was increasingly in question).[13] 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.

1.3 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 the Congress.[14] 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.[15]

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[12] Intervention was particularly strong on 27 February and appeared at the time to have an impact on the market (e.g., *Wall Street Journal*, 23 September, 1985, p.26).

[13] Steil (2013).

[14] E.g., Putnam and Bayne (1987, 199).

[15] The G-7 summit of May 1985 was overshadowed by the public relations set-back of Bitburg, which arose when President Reagan embarrassingly found himself committed to visiting a German cemetery that contained graves of Nazi SS soldiers (Putnam and Bayne 1987, 200-201). According to some

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.[16] The G-5 Deputies met secretly in July and August, led by Assistant Secretary Mulford.[17] Details were worked out in a final preparatory meeting of G-5 deputies in London on 15 September.

Finally, on 22 September, the G-5 ministers and some of their central bankers met at the Plaza and agreed on an announcement that "some further orderly appreciation of the non-dollar currencies is desirable" and that they "stand ready to cooperate more closely to encourage this when to do so would be helpful," language that by the standards of such communiques 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 "non-paper" drafted by Mulford, for the September 15 meeting in London.[18] The numbers were accepted as the aim by the G-5 ministers at the Plaza (according to American government sources).[19] 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 a sudden 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.[20]

2. Is Intervention Effective?

Those who question that the Plaza was in fact effective are skeptical of the answer to one or the other of two separate questions regarding the effects of foreign exchange intervention. First, is intervention effective at changing the exchange rate even if it is sterilized, that is, even

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reports, this mistake on the part of the White House advance team was an indirect consequence of the strong dollar: On the afternoon when aide Michael Deaver should have been inspecting the Bitburg cemetery, he and other White House aides reportedly were instead out buying BMWs (Bovard, 1991, p.316), which at the time could be had in Germany for half the U.S. price as the result of the appreciation of the dollar against the mark. (President Reagan later blessed the Plaza initiative: Baker, 2006, 431.)

[16] Gao (2001, p.175).

[17] Mulford (2014, p. 169-170).

[18] Funabashi (1988, 16-21).

[19] 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). Intervention actually undertaken by the end of October turned out to be $3.2 billion on the part of the United States and $5 billion on the part of the other four countries, plus over $2 billion on the part of G-10 countries that were not represented at the Plaza, particularly Italy (*Federal Reserve Bank of New York Quarterly Review* 10, Winter 1985-86: 47).

[20] That the rate of depreciation in the six months after the Plaza was no greater than in the six months before the Plaza is Feldstein (1986)'s reason for claiming that the change in policy had no effect.

if it does not take the form of a change in the money supply? Second, if it does change the exchange rate, does that change the trade balance? Both questions remain of general interest, well beyond the events of 30 years ago. We briefly consider each in turn.

2.1 Is intervention effective at moving the exchange rate?

In the decade following the Plaza, the U.S. and other major governments continued periodically to intervene in the dollar market, 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 on central bank sales or purchases came out. But a majority of American economists and central bankers retained the view of the early 1980s, represented by the Jurgensen Report, that intervention is ineffective except to the extent it changes money supplies.[21]

Using previously-unavailable data on daily intervention by the Bundesbank and Federal Reserve in the 1980s, Dominguez and Frankel (1993 a,b,c) re-examined the issue. We found statistically significant effects. For example in ten out of eleven major episodes during the period 1985-1991, the DM/$ rate in the month subsequent to the episode moved the direction in which the monetary authorities were trying to push it. Some others found similar results on broader data sets.[22] Others reported more negative findings regarding the effectiveness of intervention.[23] The literature grew. Edison (1993) and Sarno and Taylor (2001) surveyed empirical research up to those respective dates.

The econometric part of the Dominguez-Frankel research sought to disentangle two distinct possible effects of intervention. First is the portfolio effect that may result from actual purchases and sales of marks and dollars in the marketplace (regardless whether the central bank's actions are publicly known at the time, or are kept secret). Second is the additional expectations effect, whereby public reports of intervention may alter expectations of the future exchange rate (regardless whether the intervention has in fact taken place), which will feed back to the current equilibrium price. The study used data that had not been widely used by other researchers: in addition to daily intervention data, it used 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 of the two channels, though only in the case of the expectations effect was the impact estimated to be quantitatively large.

[21] 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 controlling for the size of the monetary base. Why not, then, effects on exchange rates? This is one reason why the effectiveness of sterilized intervention deserves a fresh look.

[22] For example Catte, Galli, and Rebecchini (1994) extended the data set to include intervention operations by other central banks, and claimed to find even stronger evidence of effects on the exchange rate. Ito (1987, 2003) focused on the yen/dollar exchange rate.

[23] E.g., Beine, Bénassy-Quéré, and Lecourt (2002).

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 was most likely to be work.[24]

* First, the conventional wisdom is correct that, 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. The authorities will lose the battle if the market is determined to be on the other side. This is particularly relevant when the government is trying to support a parity that is no longer justified by macroeconomic fundamentals. The successful effect of intervention comes 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. A good example of this was the dollar in 1985.

* Second, the initial intervention in any given episode during the post-Plaza period (1985-1991) had a greater effect than follow-up interventions on subsequent days. 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.

* Third, the operations are more likely to be effective if they are "concerted," i.e., coordinated among a number of major central banks as they were in 1985 and subsequent years. It is particularly important that the U.S. be one of the countries participating.

* Fourth, 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 per cent, and this effect translated almost one-for-one into the contemporaneous spot exchange rate itself. Thus intervention should be revealed to the public if the authorities wish it to have a major effect. Explicit announcements by U.S. officials had even greater effects (estimated about 0.8 per cent) 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.

* Fifth, the authorities are not necessarily able to affect the exchange rate for a long period, absent a corresponding change in fundamentals. The effect usually appeared still to be present one month after the intervention. Whether the effect is still there a year later was impossible to say. But even short-term effects can be useful. Examples of episodes where the effect lasted long enough to be useful included such operations as 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 successful placing of a floor and ceiling, respectively, on the dollar in February and July 1991.

[24] Dominguez (1990, 2006), Dominguez and Frankel (1993a, b, c), Fratzscher et al (2015), and research by others cited in the surveys by Edison (1993) and Sarno and Taylor (2001).

Occasional intervention continued during the first Clinton Administration, 1992-95, mainly to support the dollar.[25] Subsequently, however, intervention was virtually discontinued among the G-7. The last time the European Central Bank intervened was in 2000; the operation was in cooperation with the US and others to support its then over-depreciated euro. The last time the Bank of Japan intervened in the foreign exchange market was in 2011, again in cooperation with the US and others, to dampen a strong appreciation of the yen that came in the aftermath of the earthquake and tsunami.[26] Since then, nothing. As noted in the introduction, the G-7 partners in February 2013 agreed to refrain from foreign exchange intervention.

One might think that the question of whether foreign exchange intervention is effective would be only of historical interest. But that would not be right.[27] True, most big advanced countries don't intervene in the foreign exchange market these days. But, for one thing, 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).

We need an updating of research on the effectiveness of foreign exchange intervention. It would still be useful to figure out if it works, as an additional tool that is at least partly independent of monetary policy. An updating means looking at the last 15 years of data for emerging market countries and a few of the smaller advanced countries that still intervene. One use for such research is for thinking about policy alternatives routinely faced by emerging markets coping with inflows (e.g., 2003-08 or 2010-12) or their reversal (in the Global Financial Crisis of 2008-09 and perhaps again as the Fed ends its period of monetary easing and starts to raise interest rates). Another use is for thinking about the major advanced countries, who, someday, will intervene again.

There is a growing empirical literature on intervention in emerging market countries and it seems generally to find effects. So far, most studies look at the experience of only one or two individual countries.[28] 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 room for more.

2.2 Effects on the trade balance

While some skeptics claim that intervention does not move the exchange rate, in 1985 or otherwise, other skeptics claim that the exchange rate does not move the trade balance. The latter sort of skepticism steadily gained adherents in the first two years after the Plaza when, even though the dollar had depreciated, the US trade deficit in 1986 and 1987 continued to

[25] Frankel (1994b).

[26] That the yen had appreciated strongly in response to the Fukuoka 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.

[27] Bordo, Humpage and Schwartz (2012).

[28] See, for example, Disyatat and Galati (2007) and the papers cited therein.

worsen rather than improve.[29] A host of explanations for the lack of trade balance response arose. Many of these explanations (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.[30]

In the end, the US trade balance did turn around, with a lag of two years. This was not, after all, very different from traditional estimates of the lags. According to the "J-curve," in the short run the depreciation worsens the trade balance because the rising price of imports outweighs the fall in import quantity or rise in export quantity. After two years or so have passed, 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 per annum [$38 billion per quarter]. By 1991 it was down to $30 billion per year.[31] As Krugman (1991) pointed out, adjustment in the end turned out to work pretty much as it was supposed to. Observers had been too impatient.

We have seen some similar developments in recent years. An effect of Abenomics in Japan was a strong depreciation of the yen in 2013. That was as expected. Many were disappointed, however, when the Japanese trade balance did not quickly improve. Various explanations were adduced as to how "Japan is different" because it is so dependent on oil and other imported inputs (which are inelastically demanded). But it appears that after two years passed, Japan's trade deficit has been much reduced in the first half of 2015.[32]

2.3 Did the Plaza Accord sabotage Japan?

One legacy of the Plaza is a sort of conspiracy theory that has continued to circulate widely in Asia. The theory is 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.[33] The idea is that the US 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.

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[29] Typical was Rose and Yellen (1989). Also relevant was the subsequent "exchange rate disconnect" literature: e.g., Devereux and Engel (2002).

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

[31] 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.

[32] The 2014-15 global decline in oil prices also helped.

[33] Gao (2001).

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, more than did 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 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 that Japanese purchases of dollars during the bubble years led to excessive money growth and thereby to the soaring prices of equities and real estate in Japan. The bursting of that bubble then led to the Japanese recession. But this is virtually the opposite of the theory that the Plaza did it: buying dollars is the opposite of selling dollars.[34]

3. Currency manipulation

In 1985, G7 coordination meant joint intervention in the foreign exchange market. Today G7 coordination means refraining from intervention, which is called currency manipulation. Some specify that foreign exchange intervention is a necessary criterion in the definition of currency manipulation. Others think that it can qualify as currency manipulation even if the policy that is used is monetary stimulus rather than intervention.

The first sentence of the 2013 communique (G7, 2013) 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 so long as the authorities are not aware that it is likely to depreciate their currency, or at least so long as this is not their purpose. In the absence of mind-reading skills, the communique in practice rules out intervention plus statements by officials to influence currencies, but not monetary stimulus.

3.1 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 the 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 that it achieves a switching of world spending toward the goods and services of the originating country, which comes at the expense of spending on goods and services of other countries. (To be careful, notice that we are assuming

[34] Corbett and Ito (2010).

that the "switching" effects that the exchange rate has via the trade balance dominate any other effects that the exchange rate may have.[35])

It is then easy to see why such an exchange rate policy is often viewed as a classic "beggar-thy-neighbor" policy, analogous to putting up tariffs against imports. And it might seem a short step from there to the view that everyone would be better off in a cooperative regime where they all agreed to refrain from deliberate intervention to depreciate their currencies, by analogy with agreeing to refrain from protectionist trade barriers. But the analogy may be misplaced. A non-coordinated world in which each country chooses its monetary policy independently, subject to the choices of other countries, is very different from the problems of a non-coordinated 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 US in 1930 was emulated by other countries, collapsing global trade. Britain, the US, France, and others pursued competitive devaluations in the early 1930s, as each in turn took its currency off the gold standard.[36] 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 couldn't be devalued. Other exchange rates were adjustable in the event of fundamental disequilibrium; but to devalue otherwise would be unfair currency manipulation under IMF Article IV.

But Eichengreen and Sachs (1985, 1986) offered a powerful revisionist interpretation of the exchange rate developments of the 1930s. They argued that (unlike the tariffs) the devaluations were not collectively damaging but may actually have been beneficial. Each of these devaluations was not just a reduction 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, which is to say that the price of gold was higher in terms of their currency. As a result the nominal value of gold reserves was raised. Since gold reserves were the ultimate backing for the money supply, this 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 Fund ratified the move to floating exchange rates in the Jamaica Communique of January 1976, they agreed a framework for mutual surveillance under what is called the "1977 Decision on

[35] In some countries, especially emerging markets or developing countries, a depreciation of the currency has contractionary effects, which may even be big enough to offset the expansionary switching effect on the trade balance. These include especially balance sheet effects (if the depreciating country has large debts 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."

[36] Eichengreen (2015).

Surveillance over Exchange Rate Policies," and they amended Article IV in 1978. Principle (A) of the 1977 Decision and Clause 3 of Section 1 of Article IV both require that each member shall "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.]

3.2 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 its Omnibus Trade and Competitiveness Act of 1988 the US Congress mandated biannual reports from the US Treasury regarding whether trading partners were manipulating currencies. More specifically, in Section 3004, the Treasury is required 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.'' The law says the US 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, Province of China, were found to be guilty of manipulation, while Singapore and Hong Kong SAR "got off with a warning" in that policy changes were recommended. In subsequent years, those countries pronounced manipulators, or given warnings, have always been Asian.

In 2003 the United States began to put increasing pressure on China to revalue its currency upward.[37] There were good arguments as to why China should have moved in the direction of increasing exchange rate flexibility and/or allowing its currency to appreciate. [This was true whether the criterion was China's own economic interest or facilitating an orderly unwinding of record global current account imbalances.] But especially in 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 either in IMF agreements or in 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 against all Chinese goods if China did not substantially revalue its currency. It did not pass, but other proposed versions followed.

Many in the US congress in 2015 would not support giving Trade Promotion Authority (TPA) to President Barack Obama because the legislation did not include language to enforce prohibition of currency manipulation by other countries.[38] TPA is the same "fast track" authority that every

[37] More extensive analysis of this history and other relevant references are available in Frankel and Wei (2007).

[38] Some economists (e.g., Bergsten, 2013, 2015a, and Gagnon, 2012, 2013), support such provisions regarding currency manipulation, enforced by trade sanctions, while many of us are opposed (e.g., Bénassy-Quéré, Gourinchas, Martin, and Plantin, 2014; and Frankel, 2015).

president since Nixon has been granted to allow international trade negotiations to proceed. Obama wanted it, in particular, to be able to finish negotiations for a Trans Pacific Partnership (TPP) with Asian countries and the Transatlantic Trade and Investment Partnership (TPP) with Europe.

It is true that there are times when a particular 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 in my view, even in those rare cases when the currency misalignment is relatively clear, trade agreements are not the right venue to address it. The undervalued RMB was addressed in bilateral China-US discussions, 2004-11, eventually with success: China allowed the currency to appreciate 35% over time. Today it is well within a normal range.[39] Although the People's Bank of China did indeed buy up huge quantities of dollars in exchange for renminbi from 2004 to 2014, and thereby kept its currency from appreciating as fast as it otherwise would have, it stopped doing that in 2014.[40]

China isn't even in the TPP, nor in the TTIP. *Japan* is in the TPP and it is true that the yen depreciated a lot over 2014-15. Some US economic interests, particularly the auto industry, accuse Japan of manipulation to keep the yen unfairly undervalued. Many congressional critics cite Japan as the target of their proposals to insist that currency manipulation language be part of the TPP. But as we have already noted that 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.

Similarly with Europe: members of the Eurozone are in the TTIP negotiations; the euro too has depreciated a lot over the last year; and some US trade critics accuse Europe of currency manipulation. But the European Central Bank has not intervened in the foreign exchange market since 2000, and that was to support the euro not depress it. The ECB was party to the 2013 agreement not to intervene as well.

3.3 Does monetary stimulus constitute currency manipulation?

Of those who focus on currency manipulation some, such as Gagnon (2012, 2013), specify that foreign exchange intervention is a necessary criterion in the definition of currency manipulation (not a sufficient condition, of course; nobody expects all countries to float freely all the time). Others believe that monetary stimulus even without intervention can qualify as currency manipulation. The latter sort of policy was not at stake at the Plaza.

[39] IMF (2015); Kessler and Subramanian (2014); Cline (2015).

[40] If anything, the Chinese have been selling dollars in exchange for renminbi during this period, keeping the value the currency *higher* than it would otherwise be. China's reserves peaked at $3.99 trillion in July 2014 and then declined to $3.69 trillion by June 2015.

Both Japan and the ECB have undertaken substantial monetary easing since 2013, which explains some of the depreciation of their currencies. This is what 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 the domestic critics, that is what the United States did with its Quantitative Easing of 2008-2012, which is the context in which Brazilian Minister Guido Mantega, 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' economies 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 is the point that 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, this is not the end of the question. 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.[41] Yes, U.S. developments have major impacts on other countries even when exchange rates are floating.[42] But if trading partners don't like the implications for them of a dollar depreciation such as resulted in 2010-11 from the second round of US quantitative easing, their central banks are free to ease their own monetary policies in return (buying domestic assets) or even intervene in the foreign exchange market (buying dollars) and thus to prevent the unwanted appreciation of their own currencies. This is what China and many other emerging market countries did during that period. The currency wars critique is right in the indisputable respect that not every country can depreciate its currency, by definition. But 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, it may even be the sort of global monetary expansion that the world needs during a time such as the 1930s or such as the aftermath of the 2008-09 global recession.

4. Conclusion: Is It Time for Another Plaza, 30 Years Later?

Although the G-7 countries have not found a need to intervene in their foreign exchange markets in recent years, it would be short-sighted to think that this will always be the state of affairs. 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 intervention or requiring it should be sought, particularly not in the context of trade rules.

[41] Eichengreen (2013).
[42] E.g.,Rey (2015).

Intervention is most likely to make sense in those infrequent occasions when the exchange rate has wandered far away from macroeconomic fundamentals as it had by early 1985. The weakness of the euro in 2000-2001 and the strength of the yen in 2011 were two such "misalignments."[43] As it happens they are also the most recent two occasions on which the US joined with partners in concerted foreign exchange intervention. One might have argued that the euro was again getting close to meeting the criterion (in the other direction) when it strengthened in early 2014 despite very low growth in the eurozone.[44] 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% from mid-2014 to mid-2015. The US trade balance is expected to deteriorate as a result. Congressional worries over trade have again been strong enough in recent years to seriously endanger President Obama efforts to negotiate trade agreements. Some have asked whether the dollar might be getting close to the level where "another Plaza" is called for, to bring down the dollar as in 1985.[45] The answer is no.

For one thing, the dollar's recent appreciation is nowhere near as big as it was leading up to 1985, or even 2001. For another thing, unlike then, the elementary macroeconomic fundamentals of textbook theories explain the recent appreciation episode unusually well. The U.S. economy performed relatively strongly from mid-2014 to mid-2015 -- compared to the preceding six years or compared to other countries. This is why the Fed ended quantitative easing in 2014 and [as we speak] is said to be getting ready to raise interest rates -- again in contrast to other countries, where central banks have moved toward monetary stimulus rather than the other way around. American economic performance and the change in monetary policy are both explanations for the strong dollar. These developments should be welcomed, taken as a whole, notwithstanding the effect on exports.

Won'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 upon 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 of more of their currencies is very far out of line. The conditions do not apply today. But the pendulum will swing back. The day will come when Plaza-style intervention is again appropriate.

[43] Misalignments can arise equally from unwarranted exchange rate movements when the currency is floating and from the absence of warranted movements when the currency is pegged.
[44] I.e., the ECB could have decided to buy dollars, if it had not agreed the year before to refrain. Frankel (2014).
[45] E.g., Bergsten (2015b).

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