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The Making of Exchange Rate Policy in the 1980s

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Abstract

This paper, written for an NBER conference on "American Economic Policy in the 1980s," discusses the dollar from the standpoint of why the political system adopted the policies that it did, rather than of what moved the exchange rate or what policies might have been better. The first half is a chronology of major exchange rate developments during the decade. The second half analyzes the actors and interest groups involved, their views on exchange rate policy, and the system within which they interacted.

The strong dollar policy of the first Reagan Administration was less the result of the power of a particular economic ideology or interest group, than it was the result of Treasury Secretary Donald Regan's tenacious defense of the desirability of the side effects of the President's economic program. The more pragmatic response of his successor, James Baker, to the problems of the trade deficit was to sanction the depreciation of the dollar from 1985 to 1987. But the success of the Plaza strategy was less the result of a skillful and deliberate manipulation of policy tools to satisfy important interest groups, than it was the outcome of a mutually reinforcing convoy of three bandwagons: bandwagons of the markets, the media, and the makers of policy.

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I. INTRODUCTION

Although the 1970s were the decade when foreign exchange rates broke free of the confines of the Bretton Woods system under which governments since 1944 had been committed to keeping them fixed, the 1980s were the decade when large movements in exchange rates first became a serious issue in the political arena. For the first time, currencies claimed their share of space on the editorial and front pages of American newspapers. For the first time, Congressmen expostulated on such arcane issues as the difference between sterilized and unsterilized intervention in the foreign exchange market, and proposed bills to take some of the responsibility for exchange rate policy away from the historical Treasury-Fed duopoly.

The history of the dollar during the decade breaks up fairly neatly into three phases: 1981-84, when the currency appreciated sharply against trading partners' currencies, 1985-86, when the dollar peaked and reversed the entire distance of its ascent, and 1987-90 when the exchange rate fluctuated within a range that -- compared to the preceding roller coaster -- seemed relatively stable. It was of course the unprecedented magnitude of the upswing from 1980 to February 1985, 59 per cent in the Fed's trade-weighted index, that made the exchange rate such a potent issue. U.S. exporters lost price competitiveness on world markets, and other U.S. firms faced intensive competition from cheaper imports. Most analysts considered the appreciation of the dollar (allowing for the usual lag of at least two years in trade effects) to be the primary cause of the subsequent deterioration of the U.S. merchandise trade deficit, which rose \$123 billion from 1982 to 1987.

This paper begins with a review of the history of exchange rate policy during the 1980s. It then proceeds to discuss the competing philosophical views, proposals, and economic theories, and the competing objectives, interest groups and policy-makers, that went into the determination of policy. The paper concludes with some thoughts on possible generalizations regarding the political economy of exchange rates.

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It must be acknowledged from the outset that the topic of "exchange rate policy" differs in at least one fundamental respect from such topics as regulatory or trade policy: many economists believe that there is no such thing as exchange rate policy, or, to be more precise, that there is no independent scope for the government to affect the exchange rate after taking into account monetary policy (and perhaps fiscal policy, or some of the microeconomic policies that are considered by other papers in this conference).

There are, on the other hand, many who believe that such tools as foreign exchange intervention and capital controls <u>can</u> have independent effects on the exchange rate. Everyone agrees, furthermore, that an announcement by government officials regarding a desired path for the exchange rate or regarding possible changes in exchange rate <u>regimes</u> (e.g., fixed, vs. pure floating, vs. managed floating, vs. target zones) can have important effects via perceptions by market participants of its implications for future monetary policy.

If this were a paper on the economics of exchange rate determination, then it would be central to try to settle the issue of whether the money-supply process, and a stable money-demand relationship, can together explain the exchange rate. But the assignment here concerns the political process of policydetermination rather than the economic process of exchange-rate determination. There is no question that the exchange rate is a distinct subject for concern, debate, deliberation, and attempted influence.

In exchange rate policy, as in regulatory policy, "do nothing" is one of the options for the government. Indeed, as we shall see, this was the option officially adopted during the first Reagan Administration, 1981-84. Nevertheless, it is by no means a foregone conclusion that this option is the one that is most desirable from an economic standpoint, nor that it is the one that is likely to prevail for long from a political standpoint.

II. THE CHRONOLOGY OF U.S. EXCHANGE-RATE POLICY IN THE 80S

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1. The First Phase of Dollar Appreciation: 1980-82

The dollar ended the 1970s in the same fashion that it had started it, by falling in value. The devaluations of 1971 and 1973 had been deliberate attempts to eliminate the accumulating disequilibrium of the Bretton Woods years. The depreciation of 1977-78 also began with a deliberate attempt by Treasury Secretary Michael Blumenthal and others in the Carter Administration to "talk down" the dollar. In the absence of a willingness among trading partners to expand at as rapid a rate as the United States, a depreciation of the dollar was at the time viewed as the natural way of staving off the then-record U.S. trade deficits that were beginning to emerge. But the decline soon got out of control. The depreciation of the late 1970s is now usually thought of, in the economic arena, as a symptom of excessive U.S. monetary expansion, and, in the political arena as one of many symbols of the "malaise" that is popularly associated with the Carter Administration.

The reversal of this down-phase in the dollar began, not with the coming of Ronald Reagan, but rather with the monetary tightening by Federal Reserve Chairman Paul Volcker. In October 1979 the Fed announced a change in its open market procedures, designed to combat inflation and motivated partly by the need to restore the dollar to international respectability. For the subsequent several years, Volcker showed his determination to let interest rates rise however far they had to rise to defeat the inflation of the 1970s. During the 1981-82 period, the U.S. long-term government bond rate averaged 13.3 per cent, a two-point increase relative to 1980. Interest rates among a weighted average of trading partners rose as well, but not by as much: the U.S. differential averaged 1.9 per cent over 1981-82 compared to 0.6 per cent in 1979-80. The real (that is, inflation-adjusted) interest rate differential rose even more, by between 2 and 3 points, depending on the measure of expected inflation used.¹ The increase in the relative attractiveness of dollar assets in the eyes of global investors brought about between 1980 and 1982 an appreciation of the U.S. dollar by 29 per cent in nominal terms, and 28 per cent in real terms. Evidence of the textbook-perfect effects of the monetary contraction was seen not only in

¹ Frankel (1985).

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the rise of the dollar, but also more broadly in the recessions of 1980 and 1981-82. The traditional channel of monetary transmission to the real economy, the negative effect of an increase in interest rates on the construction industry and other interest-rate-sensitive sectors, was subsequently joined by the modern channel of transmission, the negative effect of an increase in the value of the dollar on export industries and other exchange rate-sensitive sectors.

2. The Second Phase of Dollar Appreciation: 1983-84

The trough of the recession came at the end of 1982; a recovery began in 1983 that was both vigorous and destined to be long-lived. The dollar continued on its previous upward path. Between 1982 and 1984 it appreciated another 17 percent in nominal terms and 14 per cent in real terms. The textbooks had no trouble explaining why global investors continued to find dollar assets increasingly attractive: the U.S. long-term real interest rate continued to rise until its peak in mid-1984. The differential vis-a-vis trading partners during 1983-84 averaged about 1 percentage point higher than in the previous two years. Nor did the textbooks have much trouble explaining the source of this increase in U.S. real interest rates. As the Reagan Administration cut income tax rates, indexed tax brackets for inflation, and began a massive build-up of military spending, the budget deficit rose from 2 per cent of GNP in the 1970s to 5 per cent of GNP in the mid-1980s. (The sharp increase in the budget deficit in 1982 could be largely blamed on the recession. But by 1985 the increase was mostly structural.) The increased demand for funds that these deficits represented readily explains the increase in U.S. interest rates, the inflow of capital from abroad, and the associated appreciation of the dollar.

At the same time, the effects of the ever-loftier dollar began to be felt in earnest among those U.S. industries that rely on exports for customers or that compete with imports. The affected sectors on the export side included particularly agriculture, capital goods, and aircraft and other transportation equipment; on the import side they included textiles, steel, motorcycles and consumer electronics; and on both sides they included semiconductors and

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automobiles. Overall, the effects on exports and imports added up to a \$67 billion trade deficit in 1983, double the record levels of 1977-78. This too was a prediction of the standard textbook model. The fiscal expansion was essentially "crowding out" private spending on American goods, not only in the interest-rate-sensitive sectors through the traditional route, but also in the exchange-rate-sensitive sectors through the modern route.

3. The Noninterventionist Policy of the First Reagan Administration

Throughout this period, 1981-84, the Reagan Administration had an explicitly laissez faire (or benign neglect) policy toward the foreign exchange The policy was non-interventionist in the general sense that the market. movement of the dollar was not seen as requiring any sort of government response, or indeed to be a problem. It was also non-interventionist in the narrower sense that the authorities refrained from intervening in the foreign exchange market, that is, from the selling (or buying) of dollars in exchange for marks, yen or other foreign currencies. The UnderSecretary for Monetary Affairs, Beryl Sprinkel, announced in the third month of the Administration that its intention was not to undertake such intervention except in the case of "disorderly markets." Lest anyone think that the qualifying phrase was sufficiently elastic to include common fluctuations in the exchange rate, he explained that the sort of example of disorderly markets that the Administration had in mind was the occasion of the March 1981 shooting and wounding of the President.² The historical data reveal that this date was in fact almost the only occasion between 1981 and 1984 when the U.S. authorities intervened in the market.

We shall discuss in Sections III and IV the various philosophies that gave rise to the laissez-faire stance of the first Reagan Administration. For the moment, let us note that the matter is somewhat more complicated than a simple case of government regulation versus the free-market.

For Sprinkel, a long-time member of the monetarist "Shadow Open Market

 $^{^2}$ The source here, as for many other points in this paper, is the excellent study by Destler and Henning (1989, p.20).

Committee" and follower of Milton Friedman, the matter was a simple case of the virtues of the free market. Under floating exchange rates, the price of foreign currency is whatever it has to be to equilibrate the demand and supply of foreign currency in the market; it is, virtually by definition, the "correct price." Attempts by the monetary authorities to intervene in the foreign exchange market to keep the value of the currency artificially high or artificially low are unsound gambles with the taxpayers' money, as likely to be counterproductive as attempts by the Department of Agriculture to intervene in the market for grain to keep the price of grain artificially high or artificially low.

But there were other free-market conservatives in the starting team at Treasury, the supply siders, who believed in the need to stabilize the exchange rate, just as firmly as the monetarists believed in the desirability of leaving it to be determined by the market. The issue was settled firmly on the side of non-intervention by the Secretary, Donald Regan. He had neither a monetarist nor a supply-sider philosophy (nor, indeed, much of an economic or philosophic framework of any sort). Regan, rather, saw the issue more in terms of politics and personalities. In the absence of any guidance from the White House (and, on exchange rate policy even more than on other areas of policy, there was in fact no guidance forthcoming from the White House³), Regan saw his role as defending himself and the President from any suggestions that the status quo with respect to the dollar was a bad thing, or that it required a response. He subscribed to the "Safe Haven" view that the pattern of capital inflow, dollar appreciation, and trade deficit, was the result of the favorable investment climate created by the Reagan tax cuts and regulatory changes, in opposition to the textbook view that it was the result of a fiscal expansion and increase in real interest rates.

When the heads of state of the G-7 countries met at Williamsburg, Virginia, May 28-30, 1983, the Europeans complained to Reagan about America's budget deficit and its effects such as high interest rates. But Reagan and Regan responded that the strong dollar and U.S. trade deficits were not problems, and

³ Donald Regan (1989).

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in any case were not due to high interest rates and fiscal expansion.⁴

Within the first Reagan Administration, the view that the strong dollar was the result of the differential in real interest rates was put forward early and often by Martin Feldstein, the Chairman of the Council of Economic Advisers from 1982 to 1984.⁵ His view was that the source of the increase in real interest rates was the increase in the federal structural budget deficit and consequent shortfall of national saving. This explanation was increasingly accepted as the correct one for the appreciating dollar and widening trade deficit by other members of the President's cabinet. Representatives of trading partners' governments also tended to share this view. But it was rejected by the Treasury and some White House aides, principally on the grounds that the emphasis on the "twin deficits" amounted to "selling short" America and the President's policies. Regan and Feldstein were frequently described in the press as embattled over the issue.

In February 1984, the annual <u>Economic Report of the President</u>, the main text of which is in fact always the report of the Council of Economic Advisers, was submitted to the Congress. It contained an estimate that the market considered the dollar to be "overvalued" by more than 30 per cent, and a forecast that as a consequence the trade deficit would almost double to approximately \$110 billion in 1984, and that the borrowing to finance these deficits would in 1985 convert the United States from a net creditor to a net debtor in the international accounts. Regan in Senate testimony, when asked to reconcile this pessimistic outlook with his own, more rosy, forecasts, was quoted as saying that as far as he was concerned, the Senators could throw the report of the Council of Economic Advisers into the waste basket.⁶

⁴ Putnam and Bayne (p.179).

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⁵ After the Williamsburg Summit, Feldstein told the press that he hoped that the meeting had increased awareness of the dangers of the dollar appreciation. Putnam and Bayne (1987, p.179).

⁶ As part of the interagency review process in January, Don Regan had (unsuccessfully) threatened Feldstein that he would tell the President not to sign the Report if it did not adopt a more upbeat tone than the existing draft, abandoning its emphasis on the bad outlook for the trade deficit and its analysis

4. The Yen/Dollar Agreement of 1984

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Complaints about the strong dollar and the effect it was having on trade were heard increasingly, however, and Administration policy-makers became increasingly aware of two (related) risks: that trade would be a potent weapon that the Democrats would use in the November 1984 presidential election, and that such complaints would result in protectionist legislation on Capitol Hill. In October 1983, therefore, Regan launched the Yen/Dollar campaign, an attempt to respond to the political issue of the appreciating dollar and widening trade deficit, without abandoning the Administration's free-market orientation. (As was also true later, the Treasury continued to resist the characterization that the dollar was "too high," and preferred to say that other currencies -- in this case the yen -- were "too low.") Regan, in sub-cabinet and cabinet meetings, succeeded in setting the request for liberalization as a top U.S. priority in President Reagan's visit to Japan and meeting with Prime Minister Nakasone in November 1983. As a result, a working group of Treasury and Ministry of Finance representatives was formed, and its work culminated in the Yen/Dollar Agreement of May 1984.

I described in my 1984 study⁷ how the impetus behind the U.S. campaign for Japanese liberalization was rooted in what I considered questionable economic logic on the part of Treasury Secretary Don Regan. This was the notion that Japanese financial liberalization would help promote capital flow from the United States to Japan, rather than the reverse, and would help reduce the corresponding U.S. trade deficit, through an appreciation of the yen against the dollar. Regan acquired this theory from an American businessman, Caterpillar Tractor Chairman Lee Morgan, in late September 1983.⁸ It was not a theory that had previously

of the dollar as the major cause of the problem. The text was not altered in substance. Needless to say, the deficit predictions subsequently came true.

⁷ Published by the Institute for International Economics four months after I left the staff of the Council of Economic Advisers.

⁸ Morgan based his analysis and recommendations on Murchison and Solomon (1983). It is quite clear that their goal was promoting the flow of capital from the United States to Japan, rather than the reverse; their list of suggested measures for Reagan to urge on Nakasone included, for example, "An increase in

had many adherents in the U.S. Government.9

The questionable component of the argument adopted by Regan was the proposition that the Japanese authorities at the time were using capital controls or administrative guidance to discourage the flow of capital into Japan and to depress the value of the yen. Prohibitions against foreign acquisition of most Japanese assets did in fact exist in the 1970s, but they were formally eliminated in the Foreign Exchange Law of December 1980. The de facto liberalization dated from April 1979. It is evident from a comparison of the Euroyen and Tokyo shortterm interest rates that arbitrage was able to eliminate the onshore-offshore differential that existed prior to that date. In the early 1980s the objective of the Japanese authorities was, if anything, to dampen the depreciation of the yen, not to promote it.¹⁰ Thus it could have been predicted (and was predicted: Bergsten, 1984, CEA, 1984, and Frankel, 1984) that if the Ministry of Finance were to agree to U.S. demands to avoid any remaining interference with international financial flows, the impact would be an acceleration of capital outflow attracted by higher interest rates in the United States, rather than the reverse.

To be sure, other motives for the liberalization campaign were very relevant as well. From the beginning, the appeal of the idea to Don Regan and others in the Administration lay in the political need to be seen beginning to respond to public and Congressional concerns over the rising U.S. trade deficit (particularly in a presidential election year), and the desire to do so in a way

¹⁰ For evidence that the Japanese government in the early 1980s sought to resist the depreciation of the yen against the dollar, not to exacerbate it, see Council of Economic Advisers (1984), Frankel (1984, 16-25), Funabashi (1988, 89-92), GAO (1983), and Haynes, Hutchison, and Mikesell (1986).

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the Government of Japan's overseas borrowing with the proceeds converted immediately into yen to assist Japan in financing its substantial budget deficits" (p.25-27).

⁹ Undersecretary Sprinkel had testified as recently as the preceding April that there was no merit to the theory that the Ministry of Finance was using capital controls to keep the yen undervalued. A study by the General Accounting Office released the same month found the same thing. On the other hand, Secretary of State George Schultz did in private propose something very much like the yen/dollar campaign in the summer of 1983. But he recognized that the State Department was obliged to leave exchange-rate matters to the Treasury.

consistent with free-market ideology. As the first instance of the Treasury attempting to respond to the trade deficit issue via exchange rate policy, in order to fend off protectionist pressures, the Yen/Dollar campaign anticipated the Plaza Accord by almost two years; to this extent, the plan made perfect sense politically.¹¹

Two varieties of the free-market argument are potentially quite sensible. One is that the point of the exercise was to promote the internal efficiency of the Japanese economy. This is apparently one of the things that current U.S. officials have in mind when they speak of the Yen/Dollar Agreement as having been a success, and cite it as a model for the 1990 Structural Impediments Initiative with Japan or Won/Dollar talks with Korea. The typical reaction of an outsider, however, is that the Japanese would not appear to need any advice from the United States on how to run their economy, while the typical reaction of an American would be that the goal of U.S. policy should be to promote the competitiveness of the American economy relative to Japan, rather than the reverse.

The remaining argument is that the point of the campaign was to promote better treatment in Japan of U.S. banks, securities companies, and other providers of financial services. Several measures of this sort indeed appeared on the list that Regan discussed with Finance Minister Noboru Takeshita November 10, 1983, on the occasion of President Reagan's visit to Japan, and in the May 1984 Agreement. This component of the campaign is perfectly analogous to Reagan Administration pressure on Japan at that time to allow, for example, the free import of beef and citrus products. There is no question that the initiation of the Yen/Dollar campaign in October 1983 gained political momentum when New York financial institutions responded to a Treasury invitation to contribute a wishlist of proposed measures. There is also little question that the measures which

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¹¹ We describe below the switch in Treasury emphasis toward bringing down the dollar after James Baker succeeded Don Regan as Secretary in January 1985. See also Funabashi (1988, p.75 ff).

were adopted worked on U.S. service exports in the desired direction.¹² But my claim is that the objective of helping U.S. providers of financial services was secondary to the objective of affecting capital flows and the exchange rate.

5. The "Bubble": June 1984-February 1985

From mid-1984 to February 1985 the dollar appreciated another 20 per cent. 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, and thereafter moved in the wrong direction to explain the remainder of the upswing. Two influential studies were written, to the effect that the foreign exchange market had been carried away by an irrational "speculative bubble"¹³. The trade deficit reached \$112 billion in 1984, and continued to widen. Many who had hitherto supported freely floating exchange rates began to change their minds.

Attitudes in the Administration began to shift subtly in one respect. Treasury officials (both in public and in private) had previously denied that the large federal budget deficit and trade deficit were problems, or that the United

¹³ Paul Krugman (1985) and Stephen Marris (1985). Contemporaneous statements by economists that the dollar was greatly overvalued included presentations by Krugman, Bergsten, and Richard Cooper to a prominent Federal Reserve System conference in Jackson Hole, Wyoming, just one month before the Plaza meeting. Another reference on "the dollar as an irrational speculative bubble" that dates from this year is Frankel and Froot (1990).

 $^{^{12}}$ Several qualifications can be noted. First, measures to help U.S. financial institutions were not in the interest of U.S. manufacturing (and for this reason, did not appear in the original Murchison-Solomon report). Second, in contrast to recent U.S. efforts to include services in the Uruguay Round of GATT negotiations, these measures may not have been in the interest of promoting the existing liberal international trade regime, as they were negotiated bilaterally and the benefits (such as the decision by the Tokyo Stock Exchange to make seats available) often accrued more to U.S. financial institutions than those of third countries. Third, one variety of the "Yanks hoodwinked again" school argues that the wily Japanese somehow used liberalization to attain more benefits for their banks in the United States and Europe than they granted to U.S. banks operating in Japan. Of course, standard theories of the "gains from trade" say that both countries can benefit simultaneously from liberalization.

States was becoming dependent on the foreign capital inflow to make up the shortfall in national saving.¹⁴ But towards the end of the first Reagan Administration, these officials began (explicitly) to admit that the budget deficit was a problem, and (implicitly) to admit that the country did indeed need to borrow from abroad to finance the deficits, and they took steps to facilitate such borrowing. In July 1984, Assistant Secretary David Mulford moved to make it easier for U.S. corporations to borrow from abroad, by eliminating the withholding tax on payment of interest to foreign residents, and allowed bearer bonds to be issued in the Euromarket. In September 1984, the Treasury created a new kind of bond that was specially-targeted so as to appeal to foreign investors, and sent Undersecretary Sprinkel to Tokyo and various European capitals to help drum up customers for these bonds. But these measures did not constitute a decision that the strong dollar and trade deficit presented a problem. When it was no longer possible to postpone the choice between allowing the saving shortfall to keep interest rates high (thereby crowding out the interest-sensitive components of U.S. demand, so as to protect the exchange-ratesensitive components) or allowing it to keep the dollar high (thereby crowding out net exports, so as to protect the interest-sensitive sectors), the Regan-Sprinkel team in late 1984 finally opted for the latter alternative de facto. Indeed the increase in attractiveness of U.S. assets that was brought about by the July policy changes by Treasury furnishes virtually the only change in economic fundamentals that could conceivably help explain the appreciation of the dollar over this period when interest rates were falling.

6. The Plaza Sea-Change: 1985

¹⁴ Some, particularly Destler and Henning (1989, p.29), attribute the May Yen/Dollar Agreement to a desire on the part of Treasury officials to make it easier for Americans to borrow from Japan. But this argument dates the borrowing motivation too early and attributes too much consistency to Treasury behavior. As of the Spring of 1984, these officials were still claiming that the U.S. did not need to borrow from abroad to finance a shortfall of saving. The motivation in the Yen/Dollar Agreement was, rather, the one noted above: to try to decrease the yen/dollar exchange rate and reduce the U.S. trade deficit, which is diametrically opposed to the motivation of increasing the net flow of capital from Japan to the United States.

The pivotal event in the making of exchange rate policy in the 1980s was the shift from a relatively doctrinaire laissez-faire policy during the first Reagan Administration, to a more flexible policy of activism during the second Administration. We will consider in later sections the extent to which economics, politics, and personalities combined to produce this shift, and the extent to which the shift in policy was in turn responsible for the reversal of the dollar's appreciation.

An obvious point from which to date the switch is September 22, 1985, when Finance Ministers and Central Bank governors from the G-5 countries met at the Plaza Hotel in New York and agreed to try to bring the dollar down.¹⁵ 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, Don Regan and Beryl Sprinkel left the Treasury (for the White House and Council of Economic Advisers, respectively). James Baker became Secretary of the Treasury, and his aide Richard Darman became Deputy Secretary.¹⁶ Both men had already developed at the White House a reputation for greater pragmatism than other more ideological members of the Administration. In January confirmation hearings, Baker 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..."17

Another reason to date the change from early in the year is that the

¹⁷ Destler and Henning (1989, p.41-42).

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¹⁵ The story of the Plaza is described in detail in Funabashi (1988, pp.9-41).

¹⁶ The Deputy Secretary job that Darman took had previously been occupied by Tim McNamar. (McNamar did not quite have either Sprinkel's zeal for freemarket ideology nor Regan's zeal for the exercising of power, and in any case did not play a central role on exchange rate policy.) The position of UnderSecretary for Monetary Affairs was not filled after Sprinkel's departure. Thus Darman de facto succeeded Sprinkel in the area of exchange rate policy. David Mulford continued in the next-lower rank as Assistant Secretary for International Affairs throughout the remainder of the Second Reagan Administration (and was eventually promoted to a new position of Under Secretary for International Affairs in the Bush Administration).

dollar peaked in February, and had already depreciated by 13 per cent by the time of the Plaza meeting. Some, such as Feldstein (1986), would argue that the gap in timing shows that exchange rate "policy" in fact had 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,¹⁸ there are two 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 upon at a G-5 meeting in London attended by Baker and Darman on January 17, and did take place subsequently.¹⁹ The U.S. intervention was small in magnitude.²⁰ But the German monetary authorities, in particular, intervened heavily to sell dollars in foreign exchange markets in February and March.²¹ They, like monetary authorities in other G-7 countries, had largely discontinued efforts to dampen the appreciation

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¹⁸ A June 1985 meeting of G-10 Deputies in Tokyo, for example, concluded that there was no need for international monetary reform, and also endorsed the 1983 finding of the Jurgensen Report that intervention did not offer a very useful tool to affect exchange rates. (Obstfeld, 1990, and Dobson, 1990, p.27.)

¹⁹ Funabashi (1988, p.10). Surprisingly, the G-5 public announcement on January 17 used language that, on the surface at least, sounds more prointervention than was used later in the Plaza announcement: the G-5 "in light of recent developments in foreign exchange markets, reaffirmed their commitment made at the Williamsburg Summit to undertake coordinated intervention in the markets as necessary."

²⁰ A total of \$659 million in foreign exchange purchases from Jan. 21 to March 1, as compared to \$10 billion by the major central banks in total. (<u>Federal Reserve Bank of New York Quarterly Review</u> 10, Spring 1985, p.60; and Autumn, p.52.)

²¹ Intervention was particularly strong on February 27, and appeared to have an impact on the market. (E.g., <u>Wall Street Journal</u> 9/23/85, p.26.)

of the dollar earlier, in the absence of a willingness to cooperate on the part of the United States. 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 London G-5 meeting were the developments that encouraged the Germans to renew their intervention efforts at that time.

The German authorities could claim credit for the reversal of policy. (So, for that matter, could the French, who had long and consistently been arguing in favor of foreign exchange intervention.) Looking back, Baker instead got the credit in public, perhaps because of his skill at receiving favorable coverage from the U.S. media, and the extent to which political perceptions in the 1980s asymmetrically tended to radiate from Washington, D.C., out to the rest of the world, rather than vice versa.

In April Baker at an OECD meeting said "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. This trial balloon never went much further, despite similar proposals in the Congress.²² Monetary issues were not extensively discussed at the Bonn Summit of G-7 leaders in May.²³

But on September 22, the G-5 Ministers, meeting at the Plaza, agreed upon 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 is considered (at least in retrospect) to have constituted

²² Putnam and Bayne (p.199).

²³ History records that the G-7 Summit of May 1985 was overshadowed by the public relations disaster 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, pp.200-201.) History will neither confirm nor deny the report that 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 reportedly was instead out buying a Mercedes, 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.

strong support for concerted intervention, even though the word "intervention" did not appear. A figure of 10-12 per cent depreciation of the dollar over the near term had been specified as the aim in a never-released "non-paper" drafted by Mulford for a secret preparatory meeting of G-5 Deputies in London on September 15, and (according to American government sources) was accepted as the aim by the G-5 Ministers at the Plaza.²⁴ There was, apparently, little discussion among the participants as to whether changes in monetary policy would be required to achieve the aim of depreciating the dollar.

On the Monday that the Plaza announcement was made public, the dollar fell a sudden four per cent against a weighted average of other currencies (slightly more against the mark and yen). Subsequently, it resumed a gradual depreciation at a rate similar to that of the preceding seven months.²⁵ Interest rates continued to decline gradually, despite fears of Volcker and many others that a depreciation might discourage international investors from holding dollars and thereby force interest rates up.²⁶ Before long, the Plaza had widely become considered a great public success.

7. The Apotheosis of International Coordination: 1986

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Baker's ambitions for joint international policy-making concerned more than just exchange rates. His efforts to get Japan, Germany and other trading partners to agree to expand their economies go back to negotiations leading up

²⁴ The "non-paper" 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, pp.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, p.47.)

²⁵ Because the rate of depreciation in the six months after the Plaza, was no greater than in the six months before the Plaza, Feldstein (1986) argued that the change in policy had no effect. This logic is far from conclusive, however.

²⁶ The role of Volcker and monetary policy during this period is discussed in Part VII of the paper.

to the Plaza.²⁷ At the next Summit of G-7 heads of state, held in Tokyo in May 1986, the U.S. persuaded the others to adopt a system of so-called "objective indicators." The list of indicators included: the growth rate of GNP, the interest rate, the inflation rate, the unemployment, the ratio of the fiscal deficit to GNP, the current account and trade balances, the money growth rate, and international reserve holdings, in addition to the exchange rate. The plan was to expand the existing G-5 Finance Ministers' meetings to include Italy and Canada, and to agree in each meeting on a set of quantitative predictions/goals for each of the indicator variables. At subsequent meetings, each of the seven economies' performances would be judged against those goals. In the words of the Tokyo Economic Declaration, the Finance Ministers and Central Bankers would "make their best efforts to reach an understanding on appropriate remedial measures whenever there are significant deviations from an intended course."

Mulford, as an unnamed Treasury source, indicated to the press that G-7 members were supposed to feel substantive "peer pressure" to modify their policies so as to meet the agreed-upon goals. The other countries suspected that the U.S. Treasury's aim in setting up this system was to pressure them into greater economic expansion, as a way for the United States to reduce its trade deficit without itself having to undertake unpleasant fiscal retrenchment. The Germans spoke out against the "robotization" of international policy-making.

The maneuvering that went on outside G-7 meetings in 1986 was more substantive than the maneuvering that went on inside. Baker was repeatedly quoted in the press as "talking the dollar down," in large part as a weapon to induce the trading partners to cut interest rates. This was a tack very much reminiscent of an earlier Treasury Secretary, Blumenthal. The pitch went something like: "We would prefer that you expand your economies and thereby import more from us, so that reduction of the U.S. deficit can be achieved in a way consistent with growth for all parties. But if you are not willing to go along, then I am afraid we are just going to have to let the dollar depreciate

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²⁷ Funabashi (1988, pp.11-12, 36-38), Putnam and Bayne (1987, p.205), and <u>Wall Street Journal</u> 9/23/85, p1,25.

more, in which case your exports to us will fall."

The Germans and Japanese intervened in the foreign exchange market to try to support the dollar, but complained that "these efforts were in vain, not least because statements by U.S. officials repeatedly aroused the impression on the markets that the U.S. authorities wanted the dollar to depreciate further. Moreover, until then [the Louvre Accord in late January 1987] the Americans hardly participated in the operations to support their currency."²⁸ Meanwhile, Fed Chairman Volcker was also being quoted as favoring the current level for the exchange rate, in apparent opposition to Baker.

By September 1986, the yen/dollar rate had declined from its peak of 260, to about 154. Japanese exporters were feeling heavily squeezed. At an unannounced rendezvous in San Francisco, Japanese Finance Minister Kiichi Miyazawa met with Baker. They made a deal under which the exchange rate would be stabilized in its current range, and in return the Japanese would undertake greater fiscal expansion. The agreement was not announced until October. In the interim the yen had depreciated back to about 162 Y/\$. The Americans suspected the Japanese of deliberate manipulation so as to lock in a more favorable rate, and returned to talking down the dollar. This episode is an example of the difficulty of enforcing an international cooperative agreement if its terms are not made explicit and public from the beginning to allow participants and outside observers to judge compliance.

8. The Louvre Accord and the Return of Dollar Stability

The next meeting of G-7 Finance Ministers was held at the Louvre in Paris on February 21-22, 1987. The Baker-Miyazawa agreement proved to be something of a dry run for the Louvre Agreement. The ensuing communique showed that the U.S. had agreed that the dollar should be stabilized "around current levels," and in return Japan had agreed to expand domestic demand in general, and Germany and some of the others had agreed more narrowly to cut taxes. One

²⁸ <u>Report of the Deutsche Bundesbank for the Year 1986</u>, p.63, quoted by Obstfeld (1988, p.48).

interpretation as to why Germany and the others were willing to participate at the Louvre when they had not been earlier, is that the Baker-Miyazawa Agreement demonstrated the readiness of the U.S. and Japan to proceed with a "G-2," and the Germans and others did not want to be left out.²⁹

Two questions of importance for evaluating the Louvre Agreement concern quantitative bands and intervention. The communique that was released after the meeting, as with all G-7 meetings, contained little hard information and conveyed the major policy change with a few understated words: "The Ministers and Governors agreed that the substantial exchange rate changes since the Plaza Agreement will increasingly contribute to reducing external imbalances and have now brought their currencies within ranges broadly consistent with underlying economic fundamentals ... Further substantial exchange rate shifts among their currencies could damage growth and adjustment prospects in their countries." As with the Plaza Accord, participants denied to the press that any specific quantitative target range had been set.³⁰ Subsequent newspaper reports spoke of the range or target zone that had been set at the Louvre and made guesses as to what it might be. Most knowledgeable observers surmised that probably no explicit quantitative range had in fact been agreed upon. This view was overturned, however, when Funabashi (1988, pp. 183-87) reported that the Louvre participants had after all set a "reference range" of 5 per cent around the current level.³¹

³⁰ <u>Wall Street Journal</u> 2/23/87, p.3.

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³¹ More precisely: a narrower margin of plus-or-minus 2 1/2 %, after which point intervention would be called for on a voluntary basis, and a wider margin of plus-or-minus 5 %, at which point a collaborative policy response would be obligatory. Such meetings are notorious for each country emerging with its own

²⁹ Standard economic theories of the gains from coordination do not explain why a country should necessarily mind if other countries enter into an agreement without it. (Indeed, in many cases, the excluded countries should in theory be able to reap the benefits from worldwide economic expansion, enhanced monetary stability, or some other "public good," without having to bear any of the burden.) But there must be some loss of power or prestige from being left out, because it is a commonly-expressed subject of concern. Italy, which at the Tokyo Summit of May 1986 had won an expansion of the G-5 ministers group to the G-7 (Putnam and Bayne, 1987, pp.208-09), refused to join in the Louvre communique, in protest against its exclusion from an informal G-5 meeting that had already worked out the Louvre Accord.

The advantage of having kept the target range secret was borne out when the dollar broke out of the lower end of the range. By April of 1987, the scheduled time of a G-7 meeting, the yen/dollar rate had fallen 7 per cent from the Louvre baseline. The Japanese Finance Minister, Miyazawa, was forced to accept Baker's proposal to "rebase" at the current level of 146 yen/dollar, with the same width of the reference range bands as before.

The U.S. commitment at the Louvre to oppose further depreciation of the dollar might be supposed to show up in three ways, besides the announcement of the agreement itself: an absence of statements by the Secretary of the Treasury "talking down the dollar," purchases of dollars in foreign exchange intervention operations, and a tighter monetary policy. From then on, Baker did indeed refrain, for the most part, from talking down the dollar. For the first time since the heavy dollar sales of 1985, the U.S. also did indeed intervene substantially in the foreign exchange market in the aftermath of the Louvre, buying dollars to discourage further depreciation. Finally, U.S. interest rates did indeed begin a gradual rise in February (reversing a three-year downward trend), although the Federal Reserve was motivated more by a desire to choke off inflation, which was beginning to edge up slightly again, than by a feeling of commitment to support the value of the dollar. Perhaps as a result of these three steps, the dollar appreciated, particularly against the mark, from the date of the Louvre until mid-March (at one point inducing a small amount of Fed intervention in March to dampen the appreciation).

9. The Financial Markets Fear a Dollar Plunge: 1987

Many analysts had been warning for some time of the possibility of a "hard landing," which could be defined as a fall in the dollar which, because it is caused by a sudden portfolio shift out of dollar assets, is accompanied by a sharp increase in interest rates that have a contractionary effect on economic

view as to what was agreed upon, and there is always the possibility that the 5 per cent target range was a U.S. proposal about which some countries, such as Germany, were unenthusiastic. No legal or quasi-legal documents are signed at such meetings.

activity.³² Two events shook financial markets in 1987; each of them began with markings of such a portfolio shift. First, in the Spring, a fall in demand for U.S. bonds, perhaps led by nervous foreign investors, led to a depreciation of the dollar (despite concerted intervention in support of the dollar), and an abrupt decline in bond prices and increase in interest rates.

Second, world stock markets crashed in October 19, 1987. Of the various possible causes that have been proposed for the bursting of the apparent bubble, several are international in nature. By the Fall of 1987, the U.S. trade deficit had still not improved, 33 and Jim Baker was again hoping to convince the largest trading partners to expand their economies. On October 15, the Commerce Department reported an unexpectedly large August trade deficit, and the New York stock market reacted with a then-record 95 point fall.³⁴ On October 18, Baker again called on the German Minister, Stoltenberg, to undertake expansion, with renewed dollar depreciation as the threatened alternative. When the U.S. and other stock markets crashed on the next day (508 points in the case of New York), two possible causes that were identified were the October 14 trade deficit announcement, and Baker's threat to the Germans to let the dollar fall. A third hypothesis is that the markets feared that the Fed would deliberately raise interest rates to try to keep the dollar from falling through a floor set at the Louvre.³⁵

Many observers on October 19 at first feared that the hard landing was

³² E.g., Marris (1985). This was also a major concern of Paul Volcker's.

³³ In retrospect, the trough in the dollar trade deficit occurred in the third quarter of 1987 (and the trough in the "real trade deficit," that is the quantity of exports minus the quantity of imports, in the third quarter of 1986).

³⁴ Other immediate market reactions that day included a decline in the dollar and an increase in short-term interest rates, precisely as in the portfolio-shift/hard-landing scenario. (Wall Street Journal 11/5/87, p/22.)

³⁵ Feldstein (1988b) and Obstfeld (1988, p.53). This explanation was partly inspired by Chairman Greenspan's move to raise interest rates earlier in the year. But Greenspan's motivation was probably to respond to incipient signs of re-emerging inflation, particularly to demonstrate his independence from the Administration and to earn his tough-guy credentials in the eyes of the market soon after his appointment to replace Paul Volcker, more than to meet any exchange rate commitment made by Baker at the Louvre.

at hand. But, in large part due to the rapid reaction of the Federal Reserve, interest rates fell rather than rose and there was no subsequent slowdown in economic activity. The Fed was prepared to allow a sharp decline in the dollar if the alternative were insufficient liquidity to avert a financial crisis (though the dollar, surprisingly, did not depreciate on October 19).

Consultations among the various governments began immediately, but in the absence of a clear idea as to what macroeconomic policy commitments could be made, with respect to U.S. fiscal policy in particular, no G-7 meeting was scheduled. Dollar depreciation was again a concern, with frequent intervention in support of the dollar having little apparent effect. Two months after the stock market crash, G-7 representatives decided in a "Telephone Accord" to try to breathe new life into the Louvre agreement. Paragraph 8 of their December 22, 1987, communique (which the G-7 leaders were later to repeat word-for-word in the communique of the Toronto Summit in June 1988) modified slightly earlier statements in favor of exchange rate stability. It included new wording: "either excessive fluctuation of exchange rates, a further decline of the dollar or a rise in the dollar to an extent that becomes destabilizing to the adjustment process, could be counterproductive..."36 The asymmetry of the language, describing the undesirability of a rise in a more qualified way than the undesirability of a fall, was a deliberate signal that the group wanted to put a floor under the dollar at its current level. The markets were initially unimpressed, but heavy around-the-clock intervention in support of the dollar³⁷ in January 1988 was apparently quite effective at combatting dollar weakness.

Periodically in 1987 and 1988, Japan's Ministry of Finance used administrative guidance to encourage Japanese institutional investors to hold more U.S. assets than they might choose on profit-maximizing grounds, in order

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³⁶ Dobson (1990, Table 2.3), and <u>New York Times</u>, 1/8/88, p.26.

³⁷ Called the "G-7 bear trap" by Destler and Henning (1989, p.66). The intent of the intervention was to "bridge" until substantial improvements in the U.S. trade deficit materialized, at which time market sentiment in favor of the dollar could take over. In the event, this plan worked quite well. (Dobson, 1990, pages 2.30 and 3.22.)

to keep the dollar from depreciating further than it already had by then. This happened, in particular, in response to the U.S. bond-market fall in the Spring of 1987. Koo (1988, p.8) tells us: "Even though the imposition of such quasicapital controls [reporting-requirements for Japanese banks handling foreign exchange -- and an implicit threat behind them -- imposed in May 1987 to head off a dollar collapse] was against the spirit of the Yen/Dollar Committee sponsored jointly by the Japanese Ministry of Finance and the US Treasury to deregulate Japanese financial markets, no complaints were heard from the US."³⁸

10. Dollar Rallies: 1988 and 1989

The dollar began to appreciate after the intervention of January 1988. Its strength in mid-1988, leading up to the November presidential election, led some observers to suggest that the authorities in Japan and Germany were supporting the U.S. currency in order to help candidate George Bush win the election and thus head off the danger of protectionist trade policies under the Democrats.

A new dollar rally followed in 1989. For the first time since 1985-86, the official message switched from a desire for "exchange rate stability around recent levels" back to an implication that the current strength of the dollar was not justified:³⁹ In the communique of a Washington meeting in September 1989, the G-7 "...considered the rise in recent months of the dollar inconsistent with longer run fundamentals." But there is less evidence in 1989 that foreign exchange intervention succeeded in moving the market than there was in the 1985-88 period.

The yen, in particular, weakened against the dollar at the end of the decade, in association with political scandals in Japan in 1989 and an investor shift out of Japanese security markets in early 1990. Japanese officials apparently thought that, having supported the U.S. currency earlier, the

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³⁸ See also Hale (1989, pp.2-4).

³⁹ Dobson (1990, p. 22).

Americans should now return the favor and support the yen. U.S. authorities had bought yen and marks in 1988 and 1989 to dampen the appreciation of the dollar. But a Paris G-7 meeting in early April of 1990 produced no support for Japan (beyond a statement that the Ministers had "discussed...the decline of the yen against other currencies, and its undesirable consequences for the global adjustment process"⁴⁰).

11. Exchange Rates Policies in Other Parts of the World

Most political discussion of "the dollar" does not bother to distinguish what partner currencies are intended, or what their relative weight is in the basket. Some standard weighted average of the major industrialized countries is usually used when precise numbers are needed, while the mark and -- especially -- the yen often come in for extra attention, by virtue of the importance of Germany and Japan in international trade and finance. The lack of American concern with other currencies stems in part because the various dollar exchange rates are highly correlated, and in part because the less-important currencies are considered esoteric in the U.S. political sphere.⁴¹ Nevertheless, some specific issues concerning other currencies did arise in the 1980s, and are worth mentioning both as they relate to the dollar and to the extent that they shed light on American thinking regarding foreign exchange markets in general.

First, after the LDC debt crisis surfaced in August 1982, it became necessary for many countries in Latin America and elsewhere to take policy steps to convert their existing trade deficits into trade surpluses, and thereby earn the foreign exchange to service their international debts. High on the usual list of such policy steps is the devaluation of the currency. The Mexican peso, Brazilian cruzeiro (later the cruzado), Argentine peso (later the austral), and many others underwent repeated large nominal and real devaluations. For the most part these devaluations were components of policy packages taken under the

⁴⁰ Dobson, Table 2.3.

⁴¹ Recall the famous quote from the Nixon tapes, "I don't give a _____ about the lira."

guidance, indeed insistence, of the International Monetary Fund and with the full support of the U.S. government. But demurs were occasionally heard from two different sources within the U.S. political galaxy. A few U.S. industries that faced competition from these countries charged that the devaluations represented subsidies or other unfair trading practices, and were sometimes supported in these charges by protectors in the Commerce Department or in the Congress. (An example was charges by the U.S. copper industry that they faced unfair competition from Chile in the form of a devaluation of the Chilean peso.)

The other source of protest was more philosophical than political: the "supply-siders" argued that devaluation, like fiscal austerity (the twin officially-sanctioned policy for problem debtors), was not an effective or desirable way to improve the trade balance, because it had no real effects. The supply-sider viewpoint deserves attention -- if for no other reason -- because it was represented in the Reagan Administration, especially at the beginning, with sufficient vigor (for example) to produce the 1981-83 tax cuts.

Another major non-dollar currency development of the 1980s was the movement toward enhanced monetary and financial unification within Europe. The founding of the European Monetary System by Giscard and Schmidt in 1979 had been portrayed at the time as something of a challenge to the primacy of the dollar, and policy toward the EMS at the U.S. Treasury had been at best neutral.⁴² But when "Europe 1992" frenzy caught fire in Europe in 1988 and generated some fears of a Fortress Europe in the American Congress, media, and business communities, the attitude of the Administration ranged from indifferent to benign. This benign indifference particularly characterized the decade's developments on the monetary side: France's retreat from the go-it-alone expansion and controls on capital outflow that the Socialists had instituted in 1981, the agreement by EMS members to phase out all capital controls by July 1990, and the completely unanticipated decision by East and West Germany in 1990 to undertake monetary

⁴² Funabashi (p.31) explains views within the Treasury.

unification.⁴³ All three events tended to be welcomed as further signs of the worldwide free-market revolution that Ronald Reagan had helped start.

The Europeans, however, often feel that the U.S. policy-makers are insufficiently appreciative of EMS concerns, for example of the way that the long-awaited depreciation of the dollar in 1985 might put strains on the crossrates between the deutschemark and the weaker currencies in the EMS. After the Plaza Accord, Treasury officials thought that the Germans had not done their agreed-upon share of intervention. This view was expressed by Mulford at a G-5 Deputies meeting in Paris in November 1985. The Germans explained that the Bank of Italy had sold over \$2 billion in place of the Bundesbank so as to avoid putting upward pressure on the lira/mark cross rate; they considered American reluctance to accept this explanation to be a sign of indifference to the EMS.⁴⁴

A third area of the world that featured interesting exchange rate developments was the East Asian NICs (Korea, Taiwan, Hong Kong and Singapore). Here U.S. policy played a determining role. In 1986 and 1987 there became fashionable the view that the explanation for the lack of improvement in the U.S. trade balance since February 1985 was that the traditional indices of the U.S. "effective exchange rate" vastly overstated the depreciation of the dollar that had taken place, by giving excessive weight to the yen and European currencies: that such trading partners as the East Asian NICs, Brazil and Mexico (newlyimportant competitors in manufactures) and Argentina, Australia and Canada (traditional competitors in wheat and beef in third-country markets) had little or no representation in the indices, and that their currencies had <u>not</u> appreciated against the dollar.⁴⁵

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⁴³ One striking development of 1990 that was presumably in large part a consequence of the fall of Communism in Central Europe was the appreciation of the mark and other European currencies.

⁴⁴ Funabashi (pp.27-30).

⁴⁵ A few economists at regional Federal Reserve Banks initially overstated the case by including the Latin American countries in a comprehensive <u>nominal</u> exchange rate index and proclaiming that the depreciation of the dollar had in fact not taken place! A properly computed comprehensive <u>real</u> exchange rate index shows that the 1985-87 depreciation of the dollar was less than one would think if the other countries were not included, but that the difference was not large.

The two countries that came in for particular attention were Korea and Taiwan. (Singapore and Hong Kong were relatively exempt from criticism because both follow free-trade policies. The Latin American countries had the excuse of difficult debts to service.) As of 1986, the new Taiwan dollar had only begun to appreciate against the U.S. dollar, and the Korean won still had not begun to do so, even though both countries had large trade surpluses. The U.S. government soon began to apply pressure on the two (as Fred Bergsten first urged in Seoul in July 1986), and the currencies were in fact allowed to appreciate relatively strongly. In the periodic reports to Congress required by the Omnibus Trade Bill of 1988, the Treasury focused heavily on Korea and Taiwan. In the October 1989 report, the Treasury announced the beginning of negotiations that went beyond simply pressuring Korea to appreciate the won, to push for a general liberalization of Korean financial markets and conversion to a market-oriented foreign exchange system, presumably meaning a regime of free-floating.⁴⁶ There was a general appeal to the superiority of free-market principles and a citation of the precedent of the Yen/Dollar talks.

III. COMPETING ECONOMIC THEORIES

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Policies that are adopted are naturally the outcome of the positions held by various interest groups and policy-makers, and their interactions through the political process and their relative power. The last part of this paper discusses the competing interest groups and policy-makers. The middle part discusses the various possible positions regarding exchange rate policy among which they choose. In the area of exchange rates, the links from policy tools to the determination of the exchange rate, and even the links from the exchange rate to the economic welfare of various groups, are not entirely certain. For this reason, the differing models, or views as to how the foreign exchange market

⁴⁶ The Treasury considers as a deadline for these talks to bear fruit December 1990, when a Treasury report on the treatment of U.S. financial institutions in countries like Korea is due to Congress. Frankel (1990).

(and the rest of the economy) operate, can be as relevant as differing economic interests in determining the positions taken by various actors. Thus we begin with a brief discussion of alternative exchange rate theories.

1. Trade Balance Equilibration

A regime of purely-floating exchange rates has held roughly for the United States since 1973, and held precisely in the early 1980s. Under such a regime, the exchange rate is determined in the private market, and adjusts to clear supply and demand for foreign exchange without any intervention by the monetary authority. An old-fashioned view of exchange-rate determination is that the supply and demand for foreign exchange are dominated by exports and imports (respectively), so that under floating rates the exchange rate adjusts so as to clear the trade balance. What makes this view old-fashioned is that foreign exchange markets today are dominated by financial transactions, rather than by trade, and have been ever since the major industrialized countries removed their major controls on the international flow of capital. The importance of international capital flows explains why the record U.S. trade deficits of the mid-1980s did not immediately produce an equilibrating depreciation of the dollar: the deficits were easily financed by massive borrowing from abroad. Some observers, however, professed to be surprised by this development, and argued that the magnitude of the U.S. trade deficit in itself was evidence that floating exchange rates were not operating "as they were supposed to," and that some reform was therefore called for.47

One consequence of the trade balance equilibration view is the implication that if one country adopts a policy change that differs from that of its neighbors (e.g., the fiscal expansion adopted by the United States in the 1980s), under a floating exchange rates the effects are felt entirely within the domestic economy, rather than being in part transmitted abroad, e.g., via a domestic trade deficit and foreign trade surplus. It would in turn follow that under floating rates there is little need for international coordination of

⁴⁷ E.g., Murchison and Solomon (1983).

macroeconomic policy of the sort agreed upon at the Louvre.

Large international capital flows are the most important of several ways in which this 'old-fashioned "insulation" result can be invalidated. Nevertheless, for the case of changes in monetary policy, leading multi-country econometric models suggest that it is in practice not far wrong to think that the exchange rate adjusts so as to produce little effect on the trade balance and little international transmission.⁴⁸ For fiscal policy, on the other hand, the trade balance and transmission effects are typically even greater under floating exchange rates than under fixed rates. Thus it is no surprise that record U.S. trade deficits and European trade surpluses emerged beginning in 1983, nor that calls for international coordination of policy followed.

2. Monetarism

For many, the most common-sensical modern view of international monetary economics was that of the monetarists. Among the relevant tenets of monetarism are: (i) belief in the central role of the money supply, particularly for determining the price level and exchange rate, (ii) a strong preference for low and stable growth in the money supply, so as to give price stability, (iii) suspicion of the motives and abilities of the Federal Reserve Board and an axiomatic belief that the country is more likely to get the proper sort of monetary policy if the Fed is brought more directly under the control of the political process (i.e., Congress or the Treasury), (iv) faith in free markets in general, (v) extension of the free-market philosophy to include the virtues of a freely-floating exchange rate, so that any country that prints too much money has to bear the burden itself in terms of inflation and currency depreciation. This last, the belief in floating exchange rates, was a position that Milton Friedman (1953) had advanced almost alone, at a time when such a change in the exchange rate regime seemed a remote pipe-dream.

The monetarists entered the 1980s riding high. Largely as a response to the inflation of the 1970s, and the other failures of Keynesian economics, the

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⁴⁸ Frankel (1988).

views of Milton Friedman and his followers had gone from those of an outlandish minority to wide acceptance, and had supposedly been adopted as official policy by the Federal Reserve Board. At long last, a member of the Shadow Open Market Committee, Beryl Sprinkel, was appointed UnderSecretary for Monetary Affairs (1981-84), the position in the Treasury that traditionally has had responsibility not only for monetary affairs but the exchange rate and other matters of international finance as well, and another, William Poole, was appointed to the President's Council of Economic Advisers (1982-85).

It was downhill from there. Intellectually, the monetarists were soon faced with the breakdown of their most cherished relationship, that between money and prices. The big fall in velocity in the early 1980s caused the Federal Reserve Board to abandon its monetarist rule (in mid-1982 <u>de facto</u>, and several years later explicitly). Politically, their champion Sprinkel, who duly lectured the Fed from 1983 to 1986 that its rapid rate of money growth would soon produce a resurgence of inflation, was overruled by the Secretary of the Treasury who sought to pressure the Fed for <u>faster</u> growth, for the usual reasons of political expediency (particularly in the election year, 1984). This spectacle must have been an edifying lesson for the monetarists on the political economy of monetary policy. (Refer back to tenet (iii) above.)

Sprinkel in interagency meetings and public appearances tried to explain the appreciation of the dollar as due to the Administration's success at bringing down the rate of inflation. Such a factor could explain a <u>nominal</u> appreciation, but not the <u>real</u> appreciation of the dollar in the early 1980s, which was almost as big as the nominal appreciation. Nor for that matter, could the monetarist view explain the clear observed increase in real interest rates. With both the relationship between money and prices and the relationship between the price level and the exchange rate breaking down, the monetarists were in heavy retreat by the latter part of the decade. Sprinkel was not happy with the Treasury's 1985 conversion to managed exchange rates, but by then he was not in a position to affect policy on that topic.

3. Overshooting

The theory that could readily explain an increase in the real interest rate and a real appreciation of the dollar was the mainstream textbook macroeconomic view subscribed to by Feldstein and Volcker, among others. Аs explained in Part II above, the two variables are closely associated: the increase in the real interest differential signals an increase in the expected rate of return on dollar securities; international investors respond to the enhanced attractiveness of dollar securities by increasing their demand for them, which causes the dollar to appreciate. The elegant seminal statement of this process was the overshooting model of Dornbusch (1976). In the overshooting equilibrium, everyone in the market agrees that the dollar has become "overvalued" in the sense that its current value is greater than its long-run value and it will have to depreciate in the future; the market's expectation that the dollar will depreciate in the future is just sufficient to offset the higher interest rate that dollar assets pay, so that investors view dollar and nondollar securities as equally attractive in this equilibrium.

The overshooting model had some major difficulties of its own. Although the model could account for the fact of the dollar appreciation, and for the magnitude (at least as of early 1984), it could not explain the duration of the appreciation, a long drawn-out process that lasted until February 1985. In theory, the appreciation should have occurred in one jump (e.g., when the magnitude of the budget deficits became known), or in two jumps (e.g., beginning with the monetary contraction of 1980), or at most in four or five jumps (as bits of information on the monetary/fiscal policy mix came out). It should then have begun its gradual return to long run equilibrium. As described in section II.5 above, from mid-1984 on the dollar, far from beginning its return to long-run equilibrium, continued to appreciate at an accelerated rate, in the face of not only an ever-worsening trade balance, but of a real interest differential that had begun to diminish as well. It appeared that the dollar was "overshooting the overshooting equilibrium." This was definitely not how floating exchange rates were supposed to behave, and observers increasingly began considering

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4. New classical macroeconomics

It was clear that the last 20 per cent real appreciation of the dollar up to February 1985 could not be correlated with readily observable, standard, macroeconomic fundamentals. That left two possibilities. The first theory, coming from the new classical macroeconomic school, says that movements in the real exchange rate come from fundamental shifts in "tastes and technology" that may not be observable. Though most proponents of the new classical school are notorious for omitting to suggest what the specific fundamental shifts might be in any particular episode, others have suggested that Reagan reductions in tax rates, especially on capital income, could be the explanation behind the appreciation of the dollar in the early 1980s.⁴⁹

This school of thought provides the most respectable intellectual foundation for the "Safe Haven" view of the strong dollar that was so prevalent in the first Reagan Administration. But many observers find it implausible that there could have been a shift in taste toward American goods or an increase in U.S. productivity, or tax effects, sufficiently large to explain an upswing in the value of the dollar as large as that from mid-1984 to February 1985, only to be reversed rapidly thereafter. The Treasury, at the Plaza in September 1985, abandoned the previous line that the value of the dollar was an indicator of American economic strength; one obvious motivation was the awareness that the downward trend which had appeared over the preceding six months would, under this theory, be interpreted as evidence of American economic weakness.⁵⁰

5. Speculative bubbles

The second possibility is that the final stage of appreciation of the

⁴⁹ For example, Dooley and Isard (1985) and Bovenberg (1990). This view was also put forward by CEA members Niskanen and Poole in the 1985 <u>Economic Report</u> of the President.

⁵⁰ In this sense, Secretary Baker was jumping on the bandwagon, rather than leading it.

dollar to February 1985 was an example of a speculative bubble: a self-confirming increase in the value of the dollar arising from purchases of dollars by speculators who think it will appreciate. The standard theory of speculative bubbles has the advantage that it can be perfectly consistent with rational expectations: a speculator cannot necessarily expect to make money from the knowledge that the market is in a bubble, because he does not know when the bubble will burst. But the standard version of the theory has the disadvantage that it has nothing to say about what gets such speculative bubbles started.

Recent formulations of fads and speculative bubbles that are not necessarily rational focus on the existence of different classes of speculators: one class who forecast based on macroeconomic fundamentals and another who just try to guess which way the rest of the market is going. The apparently-perverse increase in the demand for dollars in 1984-85, for example, might be explained by the decreased confidence speculators were placing in fundamentalists' forecasts of future depreciation, and the increased confidence they were placing in the extrapolations of "technical analysts."⁵¹

6. Portfolio balance

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For present purposes, the most important aspect of the portfolio-balance model is that it adds a policy tool: its says that even <u>sterilized</u> foreign exchange intervention, that is, intervention that does not change money supplies, can affect the exchange rate. The reason is that investors are assumed to view long positions taken in various currencies as imperfect substitutes for each other, even if they are not holding actual foreign currency. Other approaches such as the monetarist model, by contrast, are quite firm that only to the extent that intervention changes money supplies (in which case it is just a species of monetary policy) can it have an effect. This is the position Beryl Sprinkel took, for example, when his French counterpart Michel Camdessus tried to argue

⁵¹ Frankel and Froot (1990), Krugman (1985), and Marris (1985). Technical analysts, also known as "chartists," use such atheoretical techniques as extrapolating past trends in the exchange rate by noting whenever the short-run moving average crosses the long-run moving average.

the desirability of foreign exchange intervention in preparations for the 1982 Summit of G-7 heads of state at Versailles. 52

Another aspect of the portfolio balance approach is that it implies that trade-balance equilibration, though not operative in the short run, is operative in the long run. Because a deficit country must borrow to finance its deficit, the accumulation of international indebtedness over time will eventually force its currency to depreciate. Some would say that mounting indebtedness is what finally forced the dollar down during the period 1985-87.

IV. COMPETING VIEWS ON DESIRABLE EXCHANGE RATE ARRANGEMENTS

Differing models as to how the foreign exchange market operates translate into different views as to the appropriate government response. But it is not a one-to-one correspondence.

1. Leave the foreign exchange market alone

There are four principal variants of the school of thought that says that the government should allow the foreign exchange market to function freely on its own. The most extreme position, held by monetarists and the new classical school, says that there is no need to be concerned about exchange rate fluctuations because they have no real effects. The simplest form of this argument claims that movements in the real exchange rate are non-existent, because movements in the nominal exchange rate only serve to offset differences in inflation rates. But this view steadily lost adherents as the 1980s progressed, because it was evident that the nominal appreciation of the dollar was almost fully reflected as a real appreciation of the dollar. The more sophisticated form of the argument (the new classical view, mentioned above) holds that, although there clearly are real fluctuations in the exchange rate,

⁵² Putnam and Bayne (1987, p.133).

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these are fluctuations due to real changes in productivity or tastes and would have taken place anyway, even if the exchange rate had not been freely floating. An increasing number observers also found this view harder to swallow in 1984-85, but the vote was far from unanimous.

Even among the large majority who agree that exchange rate movements have real effects on the trade deficit and other important variables, there are other viewpoints that lead to the conclusion that the government should refrain from interfering. One is the view that exchange rate movements are the natural result of changes in macroeconomic policy, and may actually be desirable if one takes the changes in policy as given. In the case of the 1982-84 dollar appreciation, attributed to the widening federal budget deficit, the question was whether the dollar appreciation was desirable if one took the budget deficit as a given political constraint.

CEA Chairman Feldstein argued that it was. The strong dollar acted as a "safety valve" to distribute the crowding-out effects of the budget deficit more evenly among sectors of the private economy. The Feldstein Doctrine (so . christened by Fred Bergsten) held that even if policy-makers were somehow able to force the dollar down without changing fiscal (or monetary) policy -- for example, by sterilized foreign exchange intervention or capital controls -- the favorable effects on the export and import-competing sectors would be more-thanoffset by unfavorable effects: the lost capital inflow would result in real interest rates even higher than those prevailing at the time, which would hurt those sectors of the economy (such as capital goods) where demand is sensitive to the real interest rate. The result would be a "lopsided recovery."⁵³

One related viewpoint refuses to "take fiscal and monetary policy as given." It argues that exchange rate targets or other financial gimmickry can deflect political resolve to deal with budget deficits and other domestic objectives that ultimately may be more important than the exchange rate or the

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⁵³ CEA (1984), Feldstein (1984).

trade balance.⁵⁴ Another argues that if central banks are encouraged to intervene in the foreign exchange market, they will gamble away the taxpayers' money, to little avail.⁵⁵ A final viewpoint is that floating rates allow a greater degree of policy independence among countries than do fixed rates or managed floating (even if they do not allow complete insulation as held by the trade-balance equilibration view), and that such de-centralization of national policy-making is best because each country is the best judge of its own needs.⁵⁶

2. Commit monetary or fiscal policy to helping stabilize the exchange rate

The argument that allowing the full effect of the mix of monetary and fiscal policies to be reflected in the exchange rate maximizes the chance that those policies will be adjusted appropriately, has a mirror-image argument on the other side: committing countries to exchange rate targets maximizes the chance that monetary and fiscal policy will be appropriate.

Many believe that the government should commit to some degree of stabilization of the exchange rate. One of the more prominent and practical proposals is the Williamson proposal for target zones. Part of the argument for making such a commitment is that, even though macroeconomic policies will ultimately have to be adjusted in order to keep the exchange rate within the band, such adjustment is desirable. Williamson (1983, 1987) has argued, for example, that if target zones had been in place in the early 1980s, the Reagan Administration would have been forced to abandon its policies that were producing

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⁵⁴ A counter-argument that places more weight on the exchange-rate and trade-balance objectives is based on the political economy point that Congress tends to adopt damaging protectionist polices when a dollar appreciation increases the trade deficit. Bergsten (1982, 1984), for example, argued that for such reasons the exchange rate objective should be given increased weight.

⁵⁵ This concern is common among the monetarists.

⁵⁶ Corden (1983).

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3. Attempt to de-couple the exchange rate from other macroeconomic policies

For anyone aware simultaneously of the trade costs of an overly strong dollar, the inflationary consequences of an expansionary monetary policy to depreciate the dollar, and the political difficulties of cutting the U.S. budget deficit, any sort of policy instrument that could bring about a depreciation of the dollar <u>without</u> changing monetary or fiscal policy would be a godsend. A few such instruments have been proposed.

Sterilized intervention, though it has no effect on the exchange rate in the view of many because it by definition does not change money supplies, <u>can</u> have an effect if it changes expectations regarding future money supplies <u>or</u> if the portfolio-balance model is correct. At the Versailles Summit of 1982, the French argued that foreign exchange intervention did provide an independent and useful tool; the Americans agreed to form an inter-governmental working group to study the question (and to enact a process of "multilateral surveillance" by the Group of 5). The findings of the working group, known as the Jurgensen Report, were submitted to the G-7 leaders at the Williamsburg Summit of 1983.

Although the Plaza Accord is widely perceived as having strikingly reversed the position of the G-7, particularly the United States, on the question of the effectiveness of intervention, there was in fact no discussion in the Plaza deliberations or in the communique as to whether the intervention undertaken should be sterilized or not. Indeed, there was not much discussion at the major meetings as to what sort of monetary policies would be appropriate to support exchange rate objectives. The exception is that the Plaza Accord called for Japanese monetary policy to "exercise flexible management with due

⁵⁷ Feldstein, on the other hand, has countered that if a serious target zone had been in place in the early 1980s, the government would not have reacted to the dollar appreciation by cutting the budget deficit, but would sooner have shifted to an inflationary monetary policy.

attention to the yen exchange rate."⁵⁸ When the Bank of Japan raised its discount rate soon after the Plaza, it claimed a reduction in the yen/dollar rate as its objective, although others were less sure that this was truly its motive.

Concerted intervention, that is, by all or most of the G-7 central banks simultaneously, is reported to be more effective. There is indeed some evidence that the whole may be greater than the sum of the parts, especially if the intervention is **announced** to the public, and if it reinforces a movement that is already underway.⁵⁹

Capital controls were used by the United States to lessen downward pressure on the dollar before 1973, and by Germany and Japan to stem upward pressure on their currencies. Some, such as Tobin (1978), Bergsten (1984), and Dornbusch (1986), proposed in the early 1980s that the U.S. reimpose controls to stem capital inflow, or that Japan be urged to strengthen its controls on capital outflow (rather than being pressured to remove them). It was also suggested that the Japanese government could and did use **administrative guidance** to discourage Japanese investors from holding dollar assets in the early 1980s, or to encourage them to hold dollar assets in 1987-88.

Most economists viewed these various instruments as unlikely to be very effective, in the absence of changes or monetary or fiscal policy. Many practioners, however, believed that they could have an effect, at least in the short run.

4. Fix the exchange rate

For some countries (small and open), a fixed exchange rate may be a practical option. Here one of the major arguments for fixing the rate is to commit monetary policy to a non-inflationary policy in a way that is sufficiently credible to workers and financial markets that reduced expectations of inflation help to eliminate actual inflation. For a country like the United States, a

⁵⁸ Funabashi, p.265, and Dobson, Table 2.4.

⁵⁹ Dominguez and Frankel (1990).

fixed exchange rate is no longer a very viable option.⁶⁰

Nevertheless, a special case of a fixed exchange rate system, the gold standard, was frequently proposed by a certain influential group, the supplysiders. The same Wall Street Journal editorial-writers that brought us the Laffer Curve in the area of tax policy, also brought us the Mundell-Laffer hypothesis (which claimed that changes in the nominal exchange rate were one-forone and instantly offset by changes in price levels, so that devaluations had no real effects), and the proposal that monetary stability could only be restored by returning to a regime where the Central Bank made a commitment to peg the price of gold. This view had important adherents in the starting team at the Treasury in 1981. But in March 1982, the Gold Commission that had been appointed to investigate such proposals submitted a negative report. By 1983 only the moderate Manuel Johnson, at the Assistant Secretary level, was left among the original supply-siders at Treasury. When Johnson was appointed Vice-Chairman of the Federal Reserve Board at the beginning of 1986 (joining other recent appointees perceived as favoring easier money), some feared that gold standard proponents had taken over. But like Thomas a Becket after he was appointed Archbishop of Canterbury, the historical integrity of the institution prevailed, and Johnson became a model of Central Banker rectitude.

The Administration continued to be susceptible to penetration by a minority of gold bugs, however. Laffer came to meetings of an academic advisory group in the White House, gold-bug think tanks like Jude Wanniski's firm Polyconomics and the Lehrman Institute were heard from frequently, Congressman Jack Kemp was always a rival for the attentions of Conservative Republican supporters, and even Vice President George Bush seemed at times to have been temporarily seduced by visions of gold. Baker, at the October 1987 Annual Meeting of the IMF, proposed that the G-7 add to its list of indicators the price of "a basket of commodities, including gold." This proposal was accepted by the G-7 at the Toronto Summit in June 1988 (though without the explicit reference to

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⁶⁰ McKinnon (1988), however, continued to offer specific versions of his proposal for a return to fixed exchange rates (among the United States, Germany and Japan).

gold, which Baker had included in his speech to out-flank Congressional gold bug Jack Kemp).

V. COMPETING INTEREST GROUPS

In this section we consider some of the major economic interest groups affected by the exchange rate.

1. Manufacturing

U.S. manufacturers were clearly hurt by the appreciation of the dollar in the early 1980s, losing export customers around the world and losing domestic customers to competition from a flood of imports.⁶¹ In contrast to smaller, more open, countries, exchange rate policy in the United States had not traditionally been a high priority in the list of issues on which the manufacturing sector would lobby in national politics. But during the period 1983-85, as the value of the dollar continued to climb to new heights and the trade balance continued to sink to new lows, an increasing number of business groups and chief executives from large corporations lodged complaints in Washington and urged action.

Lee Morgan, Chairman of Caterpillar Tractor in the early 1980s, stands out as an example of activism on the exchange rate issue, both in terms of the consistency and the earliness (starting as early as December 1981⁶²) of his efforts, and in terms of their policy pay-off. The Illinois maker of construction equipment was engaged in intense competition for customers around the world with a Japanese rival, Komatsu. Morgan realized that, as a major American exporter, his interest lay with outward-oriented trade policies rather

⁶² Testimony before a House Committee, cited by Funabashi (p.70).

⁶¹ Branson and Love (1988) provide statistical evidence on the sectoral effects of the strong dollar.

than protectionism. But he also realized that taking measures to reduce costs at Caterpillar would not be sufficient to maintain international competitiveness if they were offset by appreciation of the dollar.

Morgan's influence went far beyond that of the CEO of a typical large corporation. He could claim to be a spokesman for the business community, heading a task force of the influential Business Roundtable, which took a strong position on the exchange rate beginning in 1983. Furthermore, he personally had a degree of access to top policy-makers that went beyond that of a typical political supporter.⁶³ In repeated meetings with Administration cabinet members (the first one was in the White House in October 1982), Morgan argued for an activist exchange rate policy.

For the first two years, such lobbying by the Business Roundtable and others (the National Association of Manufacturers was also vocal on the need for policies to bring down the dollar) appeared to have little or no effect on policy. But, as described in Section II.4 above, Lee Morgan's visit to the White House and Treasury in late September 1983 (with Murchison and Solomon) was the impetus for Don Regan's entire Yen/Dollar campaign. By the beginning of 1985, the number of voices from the U.S. manufacturing sector protesting the Administration's neglect of the dollar and the trade deficit had multiplied greatly. This was certainly a major influence on the thinking of Baker and Darman when they finally shifted the Administration to an activist position on the exchange rate.

The Business Roundtable was usually careful to say that measures to try to bring down the dollar should not be taken in isolation, that measures to reduce the federal budget deficit were an important part of the package. An interesting question was whether the economic interest of American manufacturing lay on the side of efforts to bring down the dollar, if one took the budget

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⁶³ The Reagan Administration was said by insiders to owe a large political favor to Morgan and his company, as one of three American suppliers that had heavily lost business when the government instituted an embargo on equipment being used in the construction of the U.S.S.R.-Europe gas pipeline beginning in December 1981. (Caterpillar lost sales of 200 pipelayers: Nollen, 1987, p.7). It was also relevant that Caterpillar's hometown (Peoria) had House Minority Leader Robert Michel as its Congressman.

deficit as a fixed political constraint. In the widely accepted analysis of Feldstein, measures that did not try to work through macroeconomic policies (say, capital controls, foreign exchange intervention, or public statements) -- even if effective at bringing down the dollar and reducing the trade deficit -- would reduce the capital inflow and raise U.S. interest rates. The crowding out would be borne less by exchange-rate-sensitive industries and more by interest-ratesensitive industries.

Neat theoretical distinctions regarding sector sensitivities tend to break down, however, as soon as one recognizes that many of the industries that are most sensitive to the exchange rate are the same as the ones that are the most sensitive to the interest rate: autos, aircraft, and capital goods in general. This may explain -- if one is willing to attribute enough sophistication to business leaders -- why many of them did not devote much energy to the exchange rate issue until the bubble period of late 1984 and 1985, when the dollar seemed divorced from the economic fundamentals: until then, the tradeoff between high interest rates and a high dollar had been regarded as inexorable, given the budget deficit.

The manufacturing leaders who had been complaining about Administration neglect of the dollar all praised the Plaza Agreement of September 1985. Some, like NAM, continued to call for a weaker dollar in 1986 and 1987, and in particular to call for appreciation by Taiwan, Korea, and other NICs. But in the late 1980s the exchange rate was no longer a salient enough issue to rouse most of the business community to political action.⁶⁴

2. Agriculture

The agricultural sector is quite sensitive to the exchange rate. In theory, the effect on the farmer comes directly through the price he or she receives for his or her product: a ten per cent increase in the value of the dollar causes an immediate ten per cent fall in the world price of the crop when expressed in dollars. In practice, subsidies and other distortions in almost

⁶⁴ Destler and Henning (1987, pp. 130-131.).

every country partially insulate farmers from the international market. But inflationary monetary policies, together with specific agricultural policies, encouraged American agriculture to expand output and exports in the 1970s, so that by the 1980s they had indeed become quite dependent on exports.

The switch in the monetary/fiscal policy mix in the early 1980s and the appreciation of the dollar put strong downward pressure on dollar commodity prices. Existing farm support programs reduced the impact on the farmer by buying up large quantities of unwanted crops and making support payments that in some years were as large as total net farm income. But the existence of the large accumulated government holdings of commodities kept prices depressed for some years after the macroeconomic situation began to reverse in the mid-1980s, so that the effect of the programs was to spread the negative effect out over time (not to mention inflict high costs on consumers), rather than just to dampen it. The rural sector considered the 1980s a disastrous decade for it, and there was much talk of a bifurcated economy, with service-oriented California and the Northeast doing well, and everybody in between (both the "rust belt" and the farm belt) doing poorly.

Farm lobbies came out in favor of a depreciation of the dollar, and Agriculture Secretary Block was one of the voices in Cabinet meetings in 1983-85 who were concerned about the policy mix, dollar, and trade deficit. Agrarian populists consistently favor <u>easier</u> money, lower interest rates, and a weaker dollar. Ninety years ago they were championed by Presidential candidate William Jennings Bryan, who campaigned against the "cross of gold," the commitment to the gold standard that was keeping money tight. In the early 1980s, a return to the gold standard was seen as a way of getting easier money by supply-siders like 1984 presidential candidate Jack Kemp.⁶⁵ At the beginning of 1986 agrarian populism got a champion appointed to the Federal Reserve Board: Wayne Angell, who, at the time, was considered to be in favor of easy money. One observer has included the Farm Aid movement as one of the pressure groups that successfully protested in 1985-86 the high dollar and trade deficit, leading to a switch to

⁶⁵ Frankel (1986).

policies of intervention in the foreign exchange market and easier money.⁶⁶

Although the agricultural sector was clearly in the camp opposed to the strong dollar, it did not expend a great deal of lobbying time or expense on this particular issue. Obvious explanations include that lobbying resources expended directly on farm legislation had a greater payoff, and that a serious attack on the macroeconomic source of the appreciation (the budget deficit) would likely include cut-backs on farm subsidies.⁶⁷ But there is another possible reason why efforts to bring down the dollar, even taking the budget deficit as given, may not have been clearly in the farm sector's interest: interest rates. The high real interest rates that resulted from the 1980s switch in macro policy mix were as much a source of negative pressure on commodity prices (via low inventory demand) and of financial distress for farmers (many of whom were heavily in debt) as the high dollar. Thus the commodity sector faced the same tradeoff between interest rates and the dollar as such industries as capital goods, autos, and aircraft: an effort to bring down the dollar without changing macro policies -even if successful -- would be a mixed blessing, in that it would probably lead . to even higher interest rates.

3. Labor

In classic Hecksher-Ohlin-Samuelson trade theory, the interests of labor and capital (or land), should line up on opposite sides, according to whether the manufacture of exports and imports are intensive in their use. In practice, their interests seem to fit better the "specific-factor" model. Auto workers and auto capitalists, for example, both have a lot invested in the auto industry, and thus ally themselves more closely with each other on questions of trade than with

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⁶⁶ Havrilesky (1990, p.57), who sees this episode as fitting a "public choice" theory of how monetary expansion follows after a period of redistributive policies.

⁶⁷ Destler and Henning, p. 124.

workers or capitalists, respectively, in other industries.⁶⁸ In the case of the strong 1980s dollar, this means that labor in the manufacturing sector was opposed to the strong dollar in the same way as managers and owners in that sector.

Relative to the agricultural sector, labor had a head-start in the sense that the trade deficit had already been a priority concern for some time (particularly in the sectors badly hurt by import competition in the 1970s: auto, steel and textiles). The AFL-CIO, for example, came out against the Administration's neglect of the dollar and its implications for the trade deficit in early 1984. But labor representatives gave less priority to the exchange rate issue than the business community did, in part because they tended to be more enamored of industrial policy as an alternative antidote for the trade deficit.⁶⁹

4. Sectors that Benefit from a Strong Dollar

There are a number of actors in the economy who benefit from a strong dollar, most obviously consumers, firms that import inputs (such as oil and semiconductors), and the importers themselves (including shipping, marketing and retail). The entire segment of the economy composed of goods and services that are not traded internationally clearly benefits from an increase in the price of their output in terms of the price of the internationally traded segment of the economy. The strongest case, in theory, is the construction industry. In the first place, the tradeable component there is close to zero. In the second, measures to force down the dollar at the expense of a cut-off in capital flows and an increase in real interest rates would hurt the construction sector more

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⁶⁸ See Frieden (1990, pp.13-19), who argues that the steadily increasing degree of international capital mobility is detaching the interests of the "capitalist class" from sector-specific policies.

⁶⁹ Destler and Henning (p.122-24).

clearly than any other.⁷⁰

All the sectors just named during the strong-dollar period were in fact silent on the exchange rate issue. Part of the explanation is that constituents with grievances tend to speak louder in the political process than constituents who are benefiting from the current state of affairs. Much of the explanation is that the links from the exchange rate to their economic welfare are less tangible, certain, and well-understood than is the case for the sectors hurt by the strong dollar. American consumers are notoriously unaware of their own fondness for imports.

In the case of interest-sensitive industries like construction, even though their lobbying representatives did not focus on international factors, they always favored a reversal of the early-1980s pattern of monetary contraction and fiscal expansion, and high real interest rates. Furthermore, the monetary authorities were fully aware that they would become a source of political pressure in the event that a cut-off of foreign capital inflows forced up interest rates.

Banks and Other Financial Institutions

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At a large 1985 meeting sponsored by Congressman Jack Kemp and Senator Bill Bradley, some representatives of the banking and financial community were among the few defenders of a laissez-faire exchange rate regime, against the many industrial executives and other participants who had gathered to rally around efforts to bring the dollar down. Lester Thurow declared that the issue was a syndrome familiar from the United Kingdom, in which the financial community in the City of London supports a strong currency while the manufacturing cities support a weak currency. In American terms it would be "Wall Street" versus "Main Street." But John Bilson, a self-described Chicago currency speculator, responded that the issue is not a strong dollar versus a weak one, but rather a

⁷⁰ Frieden (1990, p.31) argues that the Reagan Administration's polices may have been a deliberate response to the interests of its "principal bases of support in the defense community, real estate and related sectors, and international investors, [where] pressures were for increased spending on nontradables."

highly variable dollar, from which currency traders profit, versus a stable dollar, which industry finds more conducive.

Foreign exchange trading is big business for banks, both in terms of volume (over \$110 billion a day in 1989) and profit. Econometric causality tests suggest that higher exchange rate volatility leads to higher dispersion of opinion across market participants (as reflected in survey data), and that higher dispersion in turn leads to a higher volume of trading.⁷¹ Exchange-rate volatility is also clearly in the interest of those who make their living trading foreign exchange futures and options on the Philadelphia and Chicago Mercantile Exchanges; these instruments did not even exist under the fixed exchange rate system that ended in 1973. In short, one could explain on simple self-interest grounds a tendency for the financial community to be more supportive of floating rates than the rest of the country.

Two representatives of the financial community, in particular, spoke out against the government's 1985 switch toward trying to stabilize exchange rates. In 1986 the Chicago Mercantile Exchange formed a group called the "American Coalition for Flexible Exchange Rates," to lobby against exchange rate management. In 1987 and 1988, the Economic Advisory Committee of the American Bankers' Association also offered public statements against interfering with floating rates.⁷²

The large New York banks, however, for the most part stayed away from this sort of activity, and there is no reason to believe it had much impact.⁷³ Exchange rate volatility, even though a boon to the foreign exchange trading room, can be a headache to bank divisions that deal with international borrowing and lending, in the same way as it is to the international operations of

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⁷¹ Frankel and Froot (1990).

⁷² Destler and Henning (1988, pp.131-136).

⁷³ Destler and Henning, pp.133-136. They explain that one reason that much of the banking community viewed with concern Baker's attempt to manage exchange rates (at the Louvre, in particular) is that it would threaten the independence of the Fed in setting monetary policy.

nonfinancial corporations.⁷⁴ In any case, lobbying the government in favor of volatility would be too anti-social a mode of behavior for most financial institutions to engage in.

One place where the New York financial community has secured the help of the government is in putting pressure on countries in East Asia and elsewhere to open their financial markets to greater participation by U.S. firms. Such issues would properly fall in the sphere of trade policy rather than exchange rate policy, but for the Treasury's linking them to the campaign to appreciate the yen in 1984 and the won in 1988-90. In the yen/dollar talks Don Regan put high priority, for example, on the Tokyo Stock Exchange making some seats available to American securities companies.⁷⁵

VI. COMPETING POLICY-MAKERS

A policy-making agency determines its stand on an issue based in part on the ultimate goals of its constituents (e.g., low interest rates or a low dollar) and its perceptions of the link between policy instruments and the economic goals. Actual policy is then determined by the interaction of the agencies with each other, and with the media.

1. Federal Reserve Board

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In the United States, the Treasury has primary responsibility for intervention while the Fed has official responsibility for monetary policy. Indeed, the Treasury in practice usually determines intervention in the foreign

⁷⁴ One view is that there is a relevant split <u>within</u> the financial community, between Chicago-based traders of futures and options who profit from volatility, and the New York-based investment bankers who -- exercising influence through the Secretary of the Treasury and Washington regulatory agencies -- have sought in recent years to reign in the free-wheeling ways of the Midwesterners.

⁷⁵ The first beneficiary turned out to be Merrill-Lynch, the company where Regan had previously been Chairman. (Frankel, 1984, p.47.)

exchange market, even though the Federal Reserve Bank of New York is the agent that undertakes all intervention in a mechanical sense, and even though the foreign exchange reserves that are used are the Fed's own as often as the Treasury's.⁷⁶ Economic theory says that it should be virtually impossible to determine exchange rate policy separately from monetary policy. But the politics of this attempt at decentralized responsibility have their own logic.

In 1984 and 1985, Volcker, concerned about the trade deficit, supported the idea of some amount of foreign exchange intervention to try to bring the dollar down. This put him in conflict with the Treasury, particularly with Regan and Sprinkel in 1984. There was little question of the Fed Chairman trying to overcome Treasury objections to intervention; Volcker was well-advised to save most of his ammunition to protect Fed independence on monetary policy (and a bit to snipe at the fiscal policies that were at the root of the trade deficit). But Volcker clearly welcomed Baker's 1985 abandonment of the position that the strong dollar was a good thing. He did not view the Plaza as putting undesirable constraints on monetary policy.

Soon after the Plaza, the positions had switched, with the Treasury in favor of further depreciation of the dollar and Volcker warning of the dangers of a speculative run. The Fed had no choice but to go along when the Treasury wanted to intervene. But during the remainder of the decade, the central bank played the traditional role of the party more concerned about the dangers of a free-fall of the currency and an increase in inflation.

By February 24, 1986, the balance of power at the Federal Reserve Board had swung away from Volcker, in favor of the recent easy-money Reagan appointees, who voted a reduction in the discount rate against the opposition of the Chairman in a famous "palace coup." Volcker then managed to persuade Governors Preston

⁷⁶ Over the years, some Treasury officials have taken the position that the Secretary of the Treasury, as the chief financial officer of the government, has the ultimate legal authority over intervention even when it is conducted with the Federal Reserve's own money. Fed officials like Paul Volcker point out that such claims are not based in any legal statute, such as the Federal Reserve Act which gives the central bank its independence, but agree that the Fed has never challenged Treasury supremacy in this area in practice, and is unlikely to do so in the future.

Martin and Wayne Angell to defer the discount-rate cut until he could arrange similar coordinated cuts by the Bundesbank and Bank of Japan. The explanation offered by Volcker was that a unilateral U.S. monetary expansion would cause the Plaza-depreciation to turn into an uncontrolled free-fall of the dollar.⁷⁷ But it appears clear that Volcker was also looking for a way to avoid having been outvoted by his Board, a way to save face and thereby retain the effective leadership. The Chairman retreated into the complexities of international finance, knowing that this was unfamiliar territory to the others. One lesson here is that the bonds of fraternity that existed between Volcker and his counterparts at the German and Japanese central banks were stronger than the relationship between him and the recent Reagan appointees. It was not long thereafter that Vice-Governor Martin resigned from the Board.

Greenspan in 1987 inherited Volcker's concern that a weak-dollar policy would be an inflationary policy, while Nicholas Brady in 1988 inherited Baker's concern that a strong-dollar policy would be bad for growth and bad for the trade balance. Indeed, these actors were playing out the age-old conflict between central bankers and treasury ministers over whether or not money should be tight.

Vice-Chairman Manuel Johnson had responsibility at the Fed for dealing with other countries' central banks (after the death of Henry Wallich, and especially after the resignation of Wallich's replacement, Robert Heller). Johnson and Mulford reportedly came into more open conflict over the dollar than did Greenspan and Brady. One story has it that after a failure of Johnson and Mulford to iron out differences in 1989,⁷⁸ Johnson in protest registered a technical objection to the way the Treasury was running exchange rate policy: a disproportionately large share of the intervention was being conducted with the Fed's reserves fund, rather than with the Treasury's own Exchange Stabilization Fund. Later, in the aftermath of the Japanese stock market crash of early 1990,

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⁷⁷ Funabashi (pp.48-49) accepts the explanation that Volcker both knew more and cared more about the exchange rate implications of such actions than did the other, more domestically-oriented governors.

⁷⁸ Redburn (1990, p. 63).

the Johnson-Mulford conflict resurfaced over whether the Fed or the Bank of Japan should be the one to ease. Johnson resigned in mid-1990, however.

Most other countries, to a greater extent than the United States, vest responsibility for exchange rate policy and monetary policy with the same But when it comes to international discussions, the U.S. authority. "schizophrenia" seems to prevail. As noted above, the G-5 Ministers at the Plaza and subsequently did not discuss sterilization of intervention, or even monetary policy, when deciding to take action to try to affect the exchange rate. Whether or not intervention in reality offers a tool for affecting the exchange rate that is independent of monetary policy, the policy-making apparatus is set up as if it does: exchange rate policy is discussed by the G-5 and G-7 Finance Ministers while monetary policy is discussed by central bankers, for example, at G-10 meetings ten times a year at the Bank for International Settlements in Basel. Although the G-7 meetings would probably benefit from the attendance of the Central Bankers, the latter are not entirely sure they want to be included. A system in which the politicians can be seen engaging in international economic diplomacy in the public eye, without binding the monetary authorities to the policies that would logically be required if the commitments to manage exchange rates were interpreted literally, is a system that has attractions for both sets of actors.

2. The rest of the Administration

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In the years 1983-84, the press contained many reports to the effect that CEA Chairman Feldstein was a lone voice of dissent within the Administration, that the White House and the rest of the Cabinet sided with the Treasury in maintaining that the deficit-dollar problem was not a problem. In reality, Secretary of Commerce Malcolm Baldridge, Secretary of Agriculture John Block, Special Trade Representative (later Labor Secretary) William Brock, and Budget Director David Stockman were all by 1984 speaking in cabinet and sub-

cabinet meetings on the damage done by the strong dollar.⁷⁹ The President did not himself deal with policy issues as detailed as the value of the dollar, in the sense of running or attending Cabinet meetings on the subject.

Secretary of State Shultz occasionally expressed a view in private, based on his own background as an economist. In a very low-key way, he argued within the Administration for dollar depreciation as early as July 1983, including even investigation of a possible "interest equalization tax" on capital inflow.⁸⁰ But UnderSecretary for International Affairs Allen Wallis, the State Department representative at Cabinet-level meetings on the dollar and the trade deficit, sided with the Treasury position that the strong dollar was good rather than bad. In any case, as already noted, Shultz recognized that dollar issues were the Treasury's turf, not his. After 1985, with the depreciation underway, the tendency for other agencies to cede primacy on this issue to the Treasury was reinforced.

3. Congress

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Throughout the 1980s, Congress evinced far more concern with the U.S. trade deficit than did the White House. In the political environment of Capitol Hill, denying that a problem like the trade deficit or the strong dollar is really a problem provokes strong attacks. Many hearings were held to underscore that these were in fact serious problems. Studies were commissioned.⁸¹ The November 11-13, 1985, conference on the dollar organized by Congressman Jack Kemp

⁸⁰ Shultz gave a speech at Princeton in the Spring of 1985 that some considered an important public reversal of the benign neglect policy of the first Reagan Administration, setting the stage for the Plaza.

⁸¹ As was hinted in Section II.4 above, some of Caterpillar Tractor Chairman Lee Morgan's impact on exchange rate issues was exercised via his Congressmen. For example, he persuaded Senator Charles Percy to ask the GAO to investigate charges of exchange rate manipulation on the part of Japan's Ministry of Finance.

⁷⁹ Nor did the President ever "discipline" Feldstein in any way for failing to toe the line. This would simply not have been consistent with Reagan's temperament. (David Stockman (1986), for example, reveals that his own celebrated "trip to the woodshed" for speaking out on the budget deficit never in fact took place.) This allowed Feldstein to claim, truthfully, that he had as much right to claim to be speaking for the Administration as Regan did.

and Senator Bill Bradley (or, more accurately, entrepreneured by their former staffers Smick and Medley) was billed as a "U.S. Congressional Summit," and had pretentions even more far-reaching in scope: legislators and other representatives from foreign countries were invited, and the organizers also sought to associate Baker and Darman with the conference's views on world monetary reform. Such activities had the effect of raising public consciousness of the exchange rate as an issue.

The Congress was much more limited in the specific policy actions it could take, however. The one relevant sphere in which the Congress did have primacy was trade legislation. Although this alternative (perceived) means of addressing the trade deficit was not directly relevant to the exchange rate, there were important political links. In April of 1985 Senators John Danforth (R) and Lloyd Bentsen (D) took the position that the Congress should insist on plans for addressing the exchange-rate problem as a pre-requisite for granting the Administration the "fast-track authority" it had requested for (what was to become) the Uruguay Round of multilateral trade negotiations.⁸²

This case of specifically tying trade policy to the exchange rate issue was relatively rare. More often, Congressmen simply responded to the record trade deficits by proposing trade legislation which free-traders in the Administration found unpalatable, unintentionally exerting pressure on the Treasury to try to bring down the dollar and thereby the trade deficit. The threat of mounting protectionism on Capitol Hill was certainly one of the major motivations for the Treasury's 1985 turnaround on the dollar. The success of the Plaza initiative at forestalling protectionist legislation is the major respect in which Baker deserves credit for a political triumph, notwithstanding the open question whether the Plaza was in fact responsible for the dollar depreciation, and notwithstanding that the trade deficit did not in fact improve in dollar terms until 1988 (and did not fall below its 1985 level until 1989).

The Congress also began to pass resolutions and consider bills that required specific action on exchange rate policy. Of several bills submitted in

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⁸² Destler and Henning, pp. 104-105.

mid-1985, a proposal by Senator Bradley was the most specific. It would have required the creation of a "warchest" of intervention funds to be used according to the following rule: every time four consecutive quarters show a current account deficit in excess of 1.5 per cent of GNP and a dollar at least 15 percent above the level corresponding to current account balance, the Treasury would be required to purchase at least \$3 billion in foreign currency over the subsequent quarter. Needless to say, the Treasury was disturbed by these open assaults on its right to make exchange rate policy. This threat from the Congress was another of the factors that contributed to Baker's reversal of policy in 1985.

Even after the Plaza, skeptical Congressmen continued to press for systematic reform of exchange rate policy. More bills were proposed by others, including Representative Stan Lundine (D) (who, in the original version of his bill, proposed an explict link between the exchange rate and negotiating authority for the Uruguay Round). The House Banking Committee in December 1985 passed a compromise bill that did not quantitatively mandate intervention like the Bradley proposal, but did require the Secretary of the Treasury twice a year . to report to Congress on exchange rates, among other provisions. As Congress debated various bills to deal with the still-widening trade deficit over the subsequent three years, with the twist of increasing emphasis on the East Asian NICs rather than just Japan, proposals regarding exchange rates remained part of the debate.⁸³

The outcome, the Omnibus Trade and Competitiveness Act of 1988, included a large sub-section on exchange rate policy. In four areas it called for Treasury activism and, as in the House Banking Committee bill, required regular Treasury reports to the Congress: "An assessment of the impact of the exchange rate on the current account and trade balance, overall economic performance, competitive position, and indebtedness of the United States; recommendations for policy changes necessary to achieve a `more appropriate and sustainable' current account balance; reporting of the results of bilateral negotiations with countries that manipulated their currencies; and analyses of exchange-market

⁸³ Destler and Henning pp.99-111.

developments and their causes, including capital flows, and of intervention, among other things."⁸⁴ In the first four reports submitted subsequently, the Treasury understandably evaded as much as possible the injunction to specify exchange rate and current account targets. But it took up with relish the mandate regarding countries that "manipulate" their exchange rate, spending a very high percentage of the reports on Korea and Taiwan.⁸⁵

4. The IMF and other international agencies

The International Monetary Fund has always conducted reviews of U.S. policy in annual "Article IV" consultations, as it does for any country. But the U.S. pays no attention whatsoever to these reviews.⁸⁶

The IMF did in the 1980s become involved in the G-7 process. When the G-7 leaders at the 1982 Versailles Summit instructed the G-5 Finance Ministers to undertake at their regular meetings multilateral surveillance of the international implications of the member countries' policies, the Managing Director of the IMF was invited to participate.

Previously the OECD had been the body that had seen itself as providing the technical background for G-7 Economic Summits. This input in theory took place through a succession of meetings of country officials that began with Working Party 3. In WP 3, Beryl Sprinkel in 1981-84 patiently explained to other countries' finance vice-ministers and central bank governors (as well as to his own country's delegation) the errors in their view of the chain of causality that ran: budget - interest rate - capital flow - dollar - trade deficit. WP 3 reported to the Economic Policy Committee, which normally designated as its chair the U.S. Chairman of the Council of Economic Advisors, in a mostly-futile attempt

⁸⁴ Destler and Henning, pp.111-113.

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⁸⁵ The results are described in Frankel (1990) and more briefly in Section II.11 above.

⁸⁶ In the 1984 consultation, when the IMF staff wrote a report that subscribed to the widely accepted view that the strong dollar and trade deficit were problems caused by the budget deficit and high real interest rates, Sprinkel responded in terms that suggested that it was the report, rather than U.S. policies, that needed to be evaluated.

to get the American team interested in the deliberations. The EPC in turn reported to Ministerial meetings, who reported to the G-7 Summit leaders.⁸⁷

The Americans (as well as the British) were reportedly unhappy with "Keynesian" tendencies at the OECD, and so began to place more emphasis on the IMF.⁸⁸ Since 1986 when the G-7 leaders formalized surveillance with a system of indicators at the Tokyo Summit, the IMF Research Department has been entrusted with compiling the countries' numbers. The G-7 Ministers' meetings begin with a presentation by the IMF Managing Director, providing an overview of the issues and his recommendations. Exchange rate issues, however, are mostly treated outside of this "surveillance" context.⁸⁹

As noted above, the BIS in Basel is the venue for regular meetings among the G-10 central bankers. While the tight-knit group of central bankers operates at a distance from the bright lights of macroeconomic policy coordination and public pronouncements on exchange rates, they are able by telephone to coordinate the timing of intervention operations or changes in the discount rate more precisely than the finance ministers are able to coordinate anything.

VII. THEORIES OF THE POLITICAL ECONOMY OF EXCHANGE RATE POLICY-MAKING

A number of generalizations have been, or can be, hazarded regarding the making of exchange rate policy.

⁸⁸ Putnam and Bayne (1987, p.161) and Dobson (1990, p.13).

⁸⁹ Dobson (1990, pages 3.5, 3.24 and 3.28).

⁸⁷ As CEA Chairman in 1982-84, Feldstein was chairman of the Economic Policy Committee. He shared with many of the other countries a belief in the deficitdollar chain of causality, in opposition to Regan and Sprinkel. But Feldstein did not view the apparatus of international cooperation (the OECD, G-5 or G-7, and Summit meetings) as a particularly useful forum in which to mobilize support for correction of the U.S. fiscal deficit. He may have thought that, within the U.S. policy debate, allying with other countries' governments was more likely to undermine one's stance politically than to reinforce it. (Also, see Feldstein, 1988ab, on reasons to be skeptical of coordination.)

1. The switch from benign neglect to activism as a political cycle

The 1985 switch in Reagan Administration attitudes toward the dollar was a complete about-face. (Administration spokesmen initially denied that there had been such a 180-degree change in course, but as public approval of the Plaza grew, Baker accepted credit for it as a new policy initiative.) It would be good to have an explanation for such a shift in policy that went beyond the specifics of the change in personnel.

A benign view of the switch has been offered by Cohen (1988): the political process worked in the way it should, as the Administration eventually responded to the grievances of groups adversely affected, by adopting policies to bring down the dollar. A less benign view would ask, first, whether the Administration should not have recognized the dollar as a problem much sooner, and second whether even the Plaza switch was indeed an adequate way to address the trade deficit, given the lack of simultaneous progress on the budget deficit and national saving.

It has been suggested by others that there is a regular cycle within the term of a given political leader, for many countries, but especially large countries like the United States for which international trade historically makes up a relatively small proportion of GNP. In his initial vision for the country, the leader ignores concerns of international trade, finance and exchange rates. In part this is because he has usually won his office by courting exclusively domestic constituencies. In part it is because he is not fully aware of economic relationships such as that between excessive spending and trade deficits or such as constraints placed on his country by the need to maintain the confidence of international financial markets. Later in his term, problems develop and he switches to international activism, either because unpleasant international deficits demand a response, or because the prospect of international economic diplomacy offers a pleasant diversion of popular attention from domestic problems. Bergsten (1986) has argued that when the Reagan Administration switched abruptly from benign neglect of the dollar to activism in 1985, it was following a pattern traced by Johnson in the late 1960s, Nixon in 1971, and

2. Proposals for Reform of the Policy-making Structure

For those who think that the difficulties stemming from the large swings in the dollar in the 1980s could have been handled better by policy-makers, it is natural to ask if there are not some inherent flaws in the structure of the policy-making process that could be addressed by institutional reform.

One view is that the difficulty with the 1981-85 dollar appreciation, indeed the difficulty with the overall macroeconomic policy mix of the decade, was lack of coordination between the United States and its trading partners. In this view, the U.S. government deliberately chose a policy mix that would give high real interest rates and a strong dollar, in order to reduce import prices, thereby "exporting inflation" to its neighbors. In technical terms, the noncooperative equilibrium is characterized by competitive appreciation, each country afraid to lower real interest rates on its own because of the inflationary consequences of currency depreciation. If this diagnosis is correct, the solution would simply be to strengthen the G-7 coordination process, and use it to agree to simultaneous reductions in real interest rates.90 The difficulty with this theory as an interpretation of the 1980s is that (1) only the U.S., not its major trading partners, adopted a policy mix featuring fiscal expansion; and (2) if currency appreciation is such an advantageous means of reducing inflation, then the U.S. policy of the early 1980s was optimal (from a selfish viewpoint), which would tend to undercut the case for reform.

A second view is that the difficulty with the 1981-85 dollar appreciation, and the overall U.S. macroeconomic policy mix, was lack of coordination between the <u>Treasury</u> and the <u>Fed</u>. The Fed refused to expand the

⁹⁰ Sachs (1985). Another version of the view that the problem is a lack of international coordination involves beggar-thy-neighbor "competitive depreciation," just the reverse of competitive appreciation. Here the problem with the Nash non-cooperative equilibrium is that each country is tempted to follow an overly expansionary monetary policy in order to depreciate its currency and improve its trade balance, thereby exporting unemployment to its trading partners. One could view the Louvre Accord as an attempt by U.S. trading partners to address this problem.

money supply in the absence of a commitment on the part of the Administration to raise taxes and cut the budget deficit, because it would be inflationary. The Administration (together with Congress) refused to raise taxes and cut the budget deficit in the absence of a commitment on the part of the Fed to allow interest rates to fall sufficiently, because it would be recessionary. In this view, the high real interest rates and high dollar occurred simply because the two sides never could get together on the policy mix.

The relevance of this view to actual events is doubtful. It is true that Fed officials tended to be included in interagency meetings on international economic topics less often in the Reagan Administration than in previous Administrations. Paul Volcker and Don Regan, in particular, were often at odds in the press. Nevertheless, communication was regular, and there is no evidence that, but for the right institutional arrangement to promote cooperation, a deal could have been struck. Rather, disagreements stemmed either from differing priorities (the Fed more concerned about inflation, the Treasury about growth), or from differing perceptions as to the right model.⁹¹

The leading recent proposal for systematic reform of the U.S. institutional structure of exchange rate policy-making is that of Destler and Henning. They argue that exchange rate policy is made by a very small circle of senior government officials in the Treasury and Fed, is dangerously divorced from fiscal and monetary policy, and is frequently unresponsive to the legitimate concerns of private economic actors. They recommend a broadening of the process, particularly through three important changes: (1) the creation in both the House and Senate of new Select Oversight Committees on the Dollar and the National Economy; (2) the establishment of a new private-sector Advisory Group on Exchange Rates to counsel the secretary of the Treasury; and (3) more active involvement

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⁹¹ If the monetary authority believes that an increase in government spending would appreciate the dollar while the fiscal authority believes that it would not, the two agencies may seek to cooperate optimally, and yet still end up with a harmful policy mix. Frankel (1988b).

of agencies such as the CEA, USTR, and Agriculture and Commerce Departments.⁹²

The view of this author is that, during the period July 1984 - February 1985, the dollar had appreciated so far that some action such as foreign exchange intervention to try to bring it down was indeed warranted, even taking the budget deficit as given. Since all the groups that Destler and Henning would like to bring in to the policy-making process were more worried about the dollar and the trade deficit at this time than the Regan Treasury, it follows that exchange rate policy during this eight-month period might have been better had their proposed institutional reforms already been in place. Under most other circumstances, however, a broadening of the policy process in this way, in the sensitive and relatively technical area of exchange rates, could make things worse rather than better.

Exchange rate policy, like monetary and fiscal policy, is potentially vulnerable to populist pressures. Policy-makers in the public eye -- lacking forbearance, and sometimes lacking awareness -- might succumb to the temptation to tinker with international financial gimmickry so as to seem to be addressing the exchange rate issue, in place of making hard macroeconomic policy decisions. Sometimes they will refuse to devalue a currency that needs to be devalued, out of a stubborn unwillingness to admit publicly that their past policies have failed. Other times they will seek to devalue a currency that should not be, in order to gain the short-term advantage of higher output and employment, figuring that the costs in terms of higher inflation will not show up until after the next For such reasons, I am skeptical of proposals to democratize the election. policy-making process for exchange rates and would, if anything, prefer to see more power concentrated with the Federal Reserve. The Fed tends to have more of the historical memory, technical expertise, and insulation from politics, that are so lacking elsewhere.

3. The Bandwagon as paradigm

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⁹² Destler and Henning, pp.145-164. One of their, quite valid, purposes in making the proposals was to make the exchange rate a deliberate policy instrument consistent with macroeconomic policy, rather than treating it as a residual.

I would like to propose a common paradigm to fit the markets, the media, and the makers of policy. The paradigm is the Bandwagon, by which I mean that the typical resident of each of the three worlds bases his actions more on what seems to be "in" at the moment, than on what makes the most sense viewed in longer-term perspective.

Consider first the markets. In theory, speculators should base their actions on an evaluation of the true worth of the currency as determined by macroeconomic fundamentals. In practice, by 1985, only 5 out of 24 foreign exchange forecasting services were relying on fundamentals. (Fifteen relied on technical analysis, 3 used both, and 1 did not specify). This is as compared to 1978 when 19 of 23 services surveyed relied on fundamentals (3 on technical analysis). This lack of attention to long-term fundamentals and increasing reliance on time-series extrapolations may explain the apparent speculative bubble of 1984-85.⁹³

A speculative bubble would seem to offer some scope for useful intervention by policy-makers. It is for this reason that the Plaza and other 1985 policy moves to try to bring down the dollar could be viewed as a success. But to favor government intervention as a regular matter of course, one would have to believe that the policy-making process is systematically less liable to bandwagons than the markets, and this may not be the case.

Historical memory in both the Treasury and the Congress is notoriously short. Official views do not evolve gradually over time as more information becomes available. Rather views change sharply with the personnel, who turn over every few years, and with their economic philosophy or perception of political advantage. The non-interventionist dogmatism of Beryl Sprinkel has come in for much criticism; the political pragmatism of a Jim Baker will usually win out in a popularity contest among newspapermen or Congressmen, and in 1985 it happened to give what may have been the right answer as economic policy as well. But

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⁹³ One could explain the continued appreciation of the dollar simply by international investors putting less weight on the fundamentalist forecasts of dollar depreciation, and consequently becoming increasingly attracted to the high rates of return offered on dollar assets. Frankel and Froot (1990).

pragmatism can often give the wrong answer. Trade policy is an example where the stubbornness of the Treasury and White House in the 1980s was fortunate, and where greater accommodation to the Congress or outside interests would have given a less satisfactory outcome, from an economic viewpoint.

It may sound undemocratic to reserve exchange-rate policy-making for a small elite like the Federal Reserve Board. But democracy does not mean putting every issue up for a vote every day. Our system places some policy-makers under the relatively frequent and direct control of the electorate, such as the twoyear-termed Congress, and others farther removed, such as the members of the Supreme Court. The question is whether exchange rate policy is a more fitting topic for the former approach or the latter. Exchange rate policy would seem to be the sort of topic that is best reserved for specialists removed from political pressures.

Although the media were not considered above as a separate interest group or policy-maker, they are in fact the ultimate arbiter of policy (until the historians get their turn). Most critics of the tremendous power of the media phrase their criticism in terms of the particular bias that they think the media have. But the real problem with the media is that, in its efforts to escape charges of bias, it does not undertake enough analysis. Journalists cover the stories that other journalists are covering (so-called "pack journalism"). The goal is to describe current trends, rather than to give opinions. The arbiters of policy can end up being arbitrary in their evaluations.

Success in Washington is often judged in a rather superficial way. The system in the aggregate works a bit like trial by fire or water in medieval times. A policy operation is a success if it is a political success; it is a political success if it is a media success; it is a media success if it is a success in the public opinion polls. The opinion polls often resemble cointosses, because the respondents are not well-acquainted with the issues that the questions concern.

It is of course true that the dollar began to depreciate in 1985, as desired. But the policy-makers may have just been lucky. The initiatives taken

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by Jim Baker at the Plaza and other G-7 meetings were, at the time, so tentative that he could, and would, have disavowed that there had been any change in policy if they had not been received well. These initiatives <u>were</u> received well, in large part because Baker's style was such a welcome relief (especially to the press) after Don Regan. Regardless whether one believes that the dollar would have come down in 1985-87 even without the initiatives, it is certain that favorable reviews, such as those in newspaper editorials and congressional testimony, made them a political success.

The enhanced stature of Baker and the G-7 in turn meant that their pronouncements carried more weight with the markets. Foreign exchange traders in 1986 and 1987 would leap for their terminals every time a report came out that Baker had said something. G-7 meetings after 1985 replaced trade balance announcements (or, in the early 1980s, money supply announcements) as the current fad variable that the markets followed.

By 1984 the market bandwagon had carried the dollar far away from a sensible equilibrium. In 1985 the interdependent bandwagons ridden by the media and the makers of policy carried the dollar back. Next time, the media/policymaker bandwagons could as easily be the ones to carry the dollar away from equilibrium.

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References

Bergsten, C.Fred, 1982, "What to do About the U.S.-Japan Economic Conflict, Foreign Affairs, Summer.

Bergsten, C.Fred, 1984. "The United States Trade Deficit and the Dollar," Statement before the Senate Committee on Banking, Housing and Urban Affairs, Subcommittee on International Finance and Monetary Policy, Washington, June 6.

Bergsten, C.Fred, 1986, "America's Unilateralism," in <u>Conditions for Partnership</u> <u>in International Economic Management</u>, C.F. Bergsten, E.Davignon, and I.Miyazaki, Trilateral Commission Report 32.

Bovenberg, A. Lans, 1989, "The Effects of Capital Income Taxation on International Competitiveness and Trade Flows," <u>American Economic Review</u> 79, no.5, December, 1045-1064.

Branson, William, and Love, James, 1988, "U.S. Manufacturing and the Real Exchange Rate," in Richard Marston, ed., <u>Misalignment of Exchange Rates: Effects</u> on Trade and Industry, NBER and University of Chicago Press, Chicago.

Cohen, Stephen, 1988, The Making of U.S. International Economic Policy, Praeger Press, New York.

Cooper, Richard, 1985, "The U.S. Payments Deficit and the Strong Dollar: Policy Options." In <u>The U.S. Dollar -- Recent Developments, Outlook, and Policy Options</u>. Kansas City: Federal Reserve Bank of Kansas City.

Corden, W.Maxwell, 1983, "The Logic of the International Monetary Non-System." In F.Machlup et al, eds., <u>Reflections on a troubled World Economy</u>, MacMillan, London.

Council of Economic Advisers, 1984, <u>Economic Report of the President</u>, Chapter 2, February, Washington, D.C.

Department of the Treasury, 1989, "Report to the Congress on International Economic and Exchange Rate Policy," October.

Destler, I. Mac, and C. Randall Henning, 1989, <u>Dollar Politics: Exchange Rate</u> <u>Policymaking in the United States</u>, Institute for International Economics, Washington, D.C.

Dobson, Wendy. 1990. <u>Economic Policy Coordination: Requiem or First Step?</u>, draft, Institute for International Economics, June.

Dominguez, Kathryn, and Jeffrey Frankel, "Does Foreign Exchange Intervention Matter? Disentangling the Portfolio and Expectation Effects for the Mark," NBER Working Paper No. 3299, May 1990. Revised, October.

Dooley, Michael, and Peter Isard, 1985, "tax Avoidance and Exchange Rate Determination," Research Department, International Monetary Fund, Washington, D. C., November.

Dornbusch, Rudiger, 1976, "Expectations and Exchange Rate Dynamics," <u>Journal of</u> <u>Political Economy</u> 84, Dec., pp.1161-74.

Dornbusch, Rudiger, 1986, "Flexible Exchange Rates and Excess Capital Mobility," Brookings Papers on Economic Activity 1: 209-226.

Feldstein, Martin, 1984, "The Dollar Exchange Rate," Remarks before the World Affairs Council of Philadelphia, Feb. 29.

Feldstein, Martin, 1986, "New Evidence on the Effects of Exchange Rate Intervention," NBER Working Paper No. 2052, October.

Feldstein, Martin, 1988a, "International Economic Cooperation: Introduction," in <u>International Economic Cooperation</u>, Feldstein, ed., University of Chicago Press: Chicago.

Feldstein, Martin, 1988b, "Distinguished Lecture on Economics in Government: Thinking about International Economic Coordination," <u>Journal of Economic Perspectives</u> 2, Spring, pp.3-13.

Frankel, Jeffrey, 1984, <u>The Yen/Dollar Agreement: Liberalizing Japanese Financial</u> <u>Markets</u>, Policy Analyses in International Economics No.9, Institute for International Economics, Washington, D.C..

Frankel, Jeffrey, 1985, "Six Possible Meanings of `Overvaluation': The 1981-85 Dollar," <u>Essays in International Finance</u> No. 159, International Finance Section, Princeton University (December).

Frankel, Jeffrey, 1986, "Comments on Overshooting, Agricultural Commodity Markets, and Public Policy," <u>American Journal of Agricultural Economics</u>, 68, no. 2, May.

Frankel, Jeffrey, 1988a, "Ambiguous Macroeconomic Policy Multipliers in Theory and in Twelve Econometric Models," In <u>Empirical Macroeconomics for</u> <u>Interdependent Economies</u>, eds., Ralph Bryant, et al., Brookings Institution: Washington, D.C..

Frankel, Jeffrey, 1988b, "The Implications of Conflicting Models for Coordination Between Monetary and Fiscal Policy-Makers," In <u>Empirical Macroeconomics for</u> <u>Interdependent Economies</u>, eds., Ralph Bryant, et al., Brookings Institution: Washington, D.C..

Frankel, Jeffrey, 1990, "And Now Won/Dollar Negotiations? Lessons From the Yen/Dollar Agreement of 1984." In <u>Korea's Macroeconomic and Financial Policies</u>, Korean Development Institute, December 1989. Forthcoming in <u>Economic Relations</u> <u>Between the U.S. and Korea: Conflict or Cooperation?</u>, edited by T.Bayard and S.Young, Institute for International Economics, Washington, D.C., 2nd. edition, 1990.

Frankel, Jeffrey and Kenneth Froot, 1990, "Exchange Rate Forecasting Techniques, Survey Data, and Implications for the Foreign Exchange Market," IMF Working Paper No. 90/43, May. Greatly abridged in <u>American Economic Review</u> 80, no.2, May, pp.181-185.

Frieden, Jeffry. 1990. "International Finance, National Governments, and Economic Interest Groups: Can They Co-exist?" Department of Political Science, University of California, Los Angeles.

Friedman, Milton. 1953. "The Case for Flexible Exchange Rates." In <u>Essays in</u> <u>Positive Economics</u>, ed. Milton Friedman, Chicago: University of Chicago Press, 157-203.

Funabashi, Yoichi. 1988. <u>Managing the Dollar: From the Plaza to the Louvre</u>. Institute for International Economic: Washington, D.C.

Hale, David, 1989, "The Japanese Ministry of Finance and Dollar Diplomacy During the Late 1980's, Or How the University of Tokyo Law School Saved America From the University of Chicago Economics Department," Kemper Financial Services, Inc., July.

Havrilesky, Thomas, 1990, "Distributive Conflict and Monetary Policy,"

: : بر 4

Contemporary Policy Issues, pp.50-61.

Koo, Richard, 1988, "Japanese Investment in Dollar Securities after the Plaza Accord," Statement Submitted to the Joint Economic Committee of the U.S. Congress, October 17. Published March 1989.

Krugman, Paul, 1985. "Is the Strong Dollar Sustainable?" In <u>The U.S. Dollar --</u> <u>Recent Developments, Outlook, and Policy Options</u>. Kansas City: Federal Reserve Bank of Kansas City.

Marris, Stephen, 1985, "Deficits and the Dollar: The World Economy at Risk," <u>Policy Analyses in International Economics</u> No. 14, December, Institute for International Economics, Washington, D.C.

McKinnon, Ronald, 1988, "Monetary and Exchange Rate Policies for International Financial Stability: A Proposal," <u>Journal of Economic Perspectives</u> 2, Winter, 83-103.

Murchison, David, and Ezra Solomon, 1983, "The Misalignment of the United States Dollar and the Japanese Yen: The Problem and Its Solution," September 19.

Mussa, Michael, 1981, <u>The Role of Official Intervention</u>. Group of Thirty Occasional Papers, No. 6. New York: Group of Thirty.

Nollen, Stanley, "Business Costs and Business Policy For Export Controls," Journal of International Business Studies, Spring 1987.

Obstfeld, Maurice, 1988, "The Effectiveness of Foreign-Exchange Intervention: Recent Experience," NBER Working Paper No. 2796.

Putnam, Robert and Nicholas Bayne. 1987. <u>Hanging Together: The Seven-Power</u> <u>Summits</u>. Cambridge, Ma.: Harvard University Press (2nd edition).

Redburn, Tom, 1990 "The Fed Has the Edge on the Economic Policy Front," in <u>The</u> <u>International Economy</u>, June/July, pp.61-63

Regan, Donald, 1988, For the Record: From Wall Street to Washington. St.Martin's Press, New York.

Report of the Working Group on Exchange Market Intervention ["Jurgensen Report"], March 1983 (U.S. Treasury: Washington, D.C.).

Sachs, Jeffrey, 1985, "The Dollar and the Policy Mix: 1985," <u>Brookings Papers on</u> Economic Activity 1, 117-186.

Stockman, David, 1986, The Triumph of Politics: Why the Reagan Revolution Failed, Harper and Row, New York.

Tobin, James, 1978, "A Proposal for Monetary Reform," <u>Eastern Economic Journal</u> 4, 3-4, pp.153-59.

Williamson, John. 1983. The exchange rate system. Washington, D.C.: Institute for International Economics.

Williamson, John, and Marcus Miller, 1987, "Targets and Indicators: A Blueprint for the International Coordination of Economic Policy," <u>Policy Analyses in</u> <u>International Economics</u> No. 22, September, Institute for International Economics, Washington, D.C.

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