

CONTROLLING CURRENCIES :

**THE DYNAMICS BETWEEN STATES AND PRIVATE ACTORS IN
THE
FOREIGN EXCHANGE MARKET**

BY

BRIDGETTE A.W. ZACHARIAS

**A Thesis
Submitted to the Faculty of Graduate Studies
in Partial Fulfillment of the Requirements
for the Degree of**

MASTER OF ARTS

**Department of Political Studies
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Abstract

When the floating exchange rate regime replaced the adjustable-peg rate system after the collapse of the Bretton Woods Agreements, expectations were that exchange rates would reflect their underlying economic fundamentals and, for the most part, change gradually and smoothly as the fundamentals changed. The reality has been very different. The foreign exchange market is dominated by speculation and exchange rates determined by the activities of private foreign exchange traders have been unstable and unpredictable. Moreover, it seems that governments no longer have the ability to stabilize the market or the values of their own currencies. This thesis analyzes the period between 1985-1988 in order to expose the dynamics of the relationship between states and private actors in the foreign exchange market. During this period, the major industrial nations tried to manage exchange rates by using intervention and coordinated macroeconomic policies. It is found, however, that the growth and globalization of the foreign exchange market, due to advancing technology and the increasingly deregulated international financial and monetary system, often overwhelms the ability of states to manage exchange rates. It seems that the broad reason states are unable to manage exchange rates, or to regulate the foreign exchange market, is that the market is global while their authority is based nationally. Consequently, states need to coordinate their efforts in order to enhance their influence. However, states find it difficult to abandon their autonomy in collective action. This means that a) private foreign exchange participants are not usually constrained by government action, and b) exchange rate instability has to be severe before governments are able to overcome the political obstacles associated with coordination.

Chapter 1

The Speculative Foreign Exchange Market

Introduction

The growing importance of international economic activity for all nations has, in turn, elevated the importance of exchange rates and the process by which they are determined. During the last two decades the world has witnessed an unprecedented change in financial activity. Financial and money markets continue to be located within national borders, but the basis of their operation has become global. Computer networks and satellite communications not only connect financial markets and their participants all over the world, they also make them more complicated and difficult to control. The existence of global markets has also forced the need to be globally competitive onto the agenda of many national governments. In response to the need to be globally competitive, so many governments have felt compelled to reduce or limit the degree to which they regulate international activity that financial deregulation has become a global trend. International financial deregulation, along with the continued existence of supranational financial markets, such as the Euromarkets, has spurred the continued expansion of global financial activity, complete with an ever-expanding menu of new financial products, markets and participants. In this way, advancing technology, and the deregulation it prompted, have allowed finance capital to become extremely powerful by making it globally mobile. These developments have had a fundamental impact on the world's most pivotal market, the foreign exchange market.

When Bretton Woods collapsed and floating exchange rates became accepted, the role and power of the foreign exchange market changed.¹

¹ The foreign exchange market is actually composed of a world-wide network of foreign exchange traders rather than being located in a particular geographic area. Nevertheless, one can also refer to the New York or Hong Kong foreign exchange market which can be defined as the place from which a trader is

Before, the market acted mostly as an intermediary between buyers and sellers. Now, it also determines the value of national currencies based upon what private currency traders will pay for them. But contrary to the original predictions of their proponents, flexible exchange rates have not adjusted gradually and smoothly to reflect nations' relative underlying economic fundamentals. Since floating began, the yen, deutschemark and dollar, along with many other major currencies, have all experienced severe daily fluctuations, as well as periods when they deviated for some time from their long-term equilibrium levels.² The changes outlined above--the globalization of financial markets, the globalization of market participants such as banks, the entrance of new participants and new financial innovations, plus international deregulation--have all worked to facilitate an increase in highly speculative, short-term international capital flows. It appears that these short-term speculative capital flows now underlie most of the activity in the foreign exchange market, explaining the changed character of the foreign exchange market and the erratic behavior of exchange rates. Foreign exchange is now viewed by many market participants as an investment in its own right, making much of the

operating, or where certain transactions are "booked". These foreign exchange markets are included as part of "the" foreign exchange market.

² The long-term fundamental equilibrium exchange rate [FEER] refers to that rate which "...is expected to generate a current account surplus or deficit equal to the underlying capital flow over the cycle, given that the country is pursuing 'internal balance' as best it can and not restricting trade for balance of payments reasons." Although this rate relates to the "real", or inflation adjusted exchange rate, it goes beyond the "purchasing power parity" rate because it not only takes into account differences in inflation, but also cyclical or long-term changes in capital flows and trade patterns caused by differential productivity growth, new discoveries or technological change. Consequently, although FEERs can change over time, they do provide a relatively stable benchmark by which to compare market-determined exchanges. John Williamson, *The Exchange Rate System*, (Washington: Institute for Economics, 1983), p.14-16. It follows from the definition of the FEER, that the economic variables described as the "underlying fundamentals" include relative money growth, interest rates, the balance of payments, including the current and capital accounts, and the fiscal balance.

trading activity pure speculation. One analyst observes that the foreign exchange market "...was once a gentlemanly arena for a handful of commercial banks and their central bank counterparts,... [now it is] ...a multicurrency betting parlor."³ The way the global foreign exchange market currently operates has serious consequences for states and the world economy because it makes currencies' values unpredictable and more difficult to control.

This thesis will argue that the balance of power between states and private actors in the foreign exchange market favors the private actors and undermines a central tenet of sovereignty--the ability of a state to control the value of its currency. Traditionally, the power of governments to control the value of their currencies has often referred to their ability to manipulate currency values, regardless of the economic fundamentals.⁴ Governments have certainly lost the ability to manipulate currencies in this way, but this aspect of lost control is not the main concern of this thesis. Rather, 'loss of state control over the value of currencies' refers to governments' inability to limit the foreign exchange market's tendency to exaggerate exchange rate movements beyond what would be suggested by the underlying economic fundamentals and governments' choices of economic policies.

States' power has been constrained in two ways. First, the power of states to control exchange rates in the day-to-day operation of the foreign exchange market is increasingly limited by the power of globally-based private financial actors and the mobile finance capital they control. Second, the costs associated with states using their

³ Lenny Glynn, "The Forex Game," Institutional Investor (June, 1988) p.89.

⁴ See Walter Wriston, The Twilight of Sovereignty: How the Information Revolution is Transforming Our World, (New York: Charles Scriber's Sons, 1992) p.8-9, 45, 56-57.

power to change the way the foreign exchange market operates, in order to increase their power within the market, have become so formidable that for most purposes the power is unusable. The broad reason national governments' power has diminished in these ways is because the foreign exchange market and all the other financial markets to which it is connected have become global while official power and authority continues to be contained behind the borders of sovereign states. This inconsistency between the political structure and the economic structure weakens states' power. The private actors that operate in the globally-based financial markets can often be beyond the clear jurisdiction of any one nation-state, and therefore difficult to control. As well, the resources of the foreign exchange market, including the technology that allows it to operate non-stop around the globe and the extremely large amounts of money involved, easily overwhelm state resources, including their capacity for regulation. Consequently, the only way states can bolster their power in this area is through coordinating their activities.

Coordination increases official influence by aggregating individual state's resources and transforming authority from a national base to a more inter-national one. Nevertheless, international coordination is not a true option. The same forces that have worked to undermine individual state influence in the foreign exchange market also undermine the possibility of international coordination being used to stabilize exchange rates, or to restructure the foreign exchange market. Specifically, the exaggerated movements of market-determined exchange rates can provoke tensions in international economic relations which are not conducive for international cooperation and coordination. More

importantly, when finance capital is internationally mobile within a state system, states are induced to be competitive, in order to attract capital to their jurisdiction, rather than cooperative in designing measures to regulate and control it.

The remainder of this Chapter includes a brief discussion of how the foreign exchange market operated under the Bretton Woods system and how this system eventually collapsed. After pointing out how unstable exchange rates have been since floating began, the discussion moves to an examination of the argument that exchange rates are unstable because the foreign exchange market has come to be dominated by destabilizing speculation. The chapter ends by noting the costs of unstable exchange rates in the world economy. These issues are examined because determining whether or not the foreign exchange market is inherently destabilizing, and whether unstable exchange rates are costly, is necessary in order to appraise governments' renewed attempts at exchange rate management in the 1980s.

Focusing upon the efforts of the United States, Japan and West Germany, Chapters Two and Three analyze the plans formulated for exchange rate management during the period of 1985-88. The main focus is on the US, Japan and West Germany since their currencies are the main international currencies and account for the largest share of trading in the foreign exchange market. However, it is important to note that since many of the agreements occurred within the G-5/G-7 forums, they depended on all of the major industrial nations for their successful implementation. The Plaza Agreement, announced in September, 1985 was aimed at bringing down an over-valued dollar in a controlled and orderly way. This was followed by the Louvre Accord in February, 1987 to

stabilize exchange rates around their then-current levels. States pursued exchange rate management through the use of two distinct tools: intervention and macroeconomic policy coordination. Their use of intervention, some of which was coordinated, will be discussed in Chapter Two. To aid in the judgment of to what extent government intervention was successful in this period, the economic literature on the effectiveness of intervention for exchange rate management will also be examined. Chapter Three analyzes states' attempts to coordinate their macroeconomic policies in order to achieve the economic conditions they believed would foster exchange rate stability. Chapter Two finds that intervention is relatively ineffective for exchange rate management since its economic basis is rather tenuous. Chapter Three concludes that while policy coordination is potentially more economically effective than intervention, it is difficult for states to accomplish given their concerns with preserving autonomy. Thus, the findings of Chapters Two and Three lead to the conclusion that states do not have the ability to consistently manage exchange rates in the daily operation of the foreign exchange market.

Proceeding from this conclusion, the fourth chapter examines whether states, through the use of regulation, could increase their influence over exchange rates by changing the operation and organization of the foreign exchange market. The argument developed here is that while states retain the authoritative power to change the system, or at least their individual state's participation in it, the costs of doing so are particularly high. Consequently, their power is largely unusable. The reason the costs have become so high is because currency trading, and the broader monetary and financial system, have become

extremely complex and truly global. Any partial measures designed to regulate certain financial activity, in order to diminish the role destabilizing speculation plays in foreign exchange, would only provoke further financial innovation. Furthermore, states' regulatory efforts would have to be ubiquitous or mobile finance capital would simply manipulate the divisions between states to escape control. But as mentioned earlier, global markets and the global mobility of money force states to compete rather than cooperate. Therefore, the costs states face when contemplating a change in the current operation of foreign exchange markets include foregoing autonomy, losing competitiveness to other less-regulated centers, or suffering the negative aspects of dismantling the current system.

The conclusions reached in these chapters support the general conclusion that relatively new global economic trends and forces have eroded, and are continuing to erode, the very relevance and power of states in the global monetary and financial markets. As a result, one of the main aspects of state sovereignty, control of the value of one's currency, has very much diminished.

The Foreign Exchange Market under the Bretton Woods Agreements

There had been some discussion, during the negotiations leading up to the Bretton Woods Agreements, of guarding national control over the flow of foreign currencies by allowing only governments to act as the intermediaries through which foreign currencies could be bought and sold. However, in the end, Bretton Woods established an international monetary system that was based on official rules and institutions but

also included the operation of private markets.⁵ The foreign exchange market was composed of private traders that acted as intermediaries; but governments were also a part of the market as regulations obliged all governments to intervene in the market in order to keep exchange rates within 1% margins of their established rate.⁶

The rates of exchange between currencies did fluctuate due to changes in demand and supply, but since governments intervened in the market on all occasions when the exchange rate threatened to move beyond the 1% margins of the official rate, for most purposes the exchange rates were fixed, and certainly stable.⁷ It is important to realize that the character or particular workings of the private foreign exchange market in the Bretton Woods era did not necessarily produce stable exchange rates; rather, it was the intervention of governments that stabilized the foreign exchange market.

Another factor that was important for the stability of exchange rates during the Bretton Woods period was that the principle of currency convertibility applied only to current account transactions or, generally, those to do with trade. Capital account transactions were excluded from currency convertibility in order to prevent the destabilizing capital flows generated by large orders to buy and sell currencies. Governments feared that the capital flows released by

5 Laurence A. Krause, *Speculation and the Dollar: The Political Economy of Exchange Rates*, (Boulder: Westview Press, 1991), p.62.

6 The countries that pegged their currency to the US dollar had an obligation to intervene in the foreign exchange market to maintain the parity. The US's responsibility was to keep gold valued at \$35/ounce.

7 A revision of the official rate of exchange was allowed if a fundamental disequilibrium arose in that country's balance of payments and placed substantial pressure on the country's exchange rate. However, adjusting the exchange rate was usually seen as an embarrassment (if the currency would have to be devalued) or as a loss of competitive advantage (if the currency was to be revalued) and thus resisted.

currency convertibility on capital transactions might swamp their resources and undermine their ability to maintain exchange rates at their official rate.⁸

The nations involved in the Bretton Woods discussions believed that openness and the involvement of private actors was necessary to rebuild the international economy. Nevertheless, the rules concerning currency convertibility and the operation of the foreign exchange market can be viewed as attempts by states to balance the role of private actors in the new international monetary system with governments' need to maintain a degree of control. Krause interprets the Bretton Woods Agreement in this way, saying that the post-war international monetary system fashioned by Bretton Woods

...permitted the reprivatization of the international capital and currency markets, but at the same time established a parallel regulatory apparatus which included an informal system of joint government management over currency rates complemented by direct controls on finance.⁹

The Breakdown of Bretton Woods

The above description of the international monetary system established by the Bretton Woods Agreements did not hold true for very long. First of all, governments began loosening the controls on capital flows. Any remaining barriers to international capital movements were soon undermined by the globalization of banking and the establishment of the Euromarkets. The existence of globally based financial markets, along with advances in technology and communication, made international capital transactions easier, faster, and more difficult for governments

⁸ Krause, pp.63-65.

⁹ Ibid., p.63.

to control.¹⁰ In the immediate postwar period, when international trade and finance were at relatively low levels, governments had the capacity to intervene in the market to keep currencies pegged at their official rate, but this was no longer the case. In the changed atmosphere, the volume and volatility of capital flows and the increased foreign exchange trading that resulted from them made it doubtful that any government had the intervention resources needed to protect its currency from any protracted speculative attack.

Added to this situation was the decline of American political and economic power. American economic power and the dollar were the foundation and the key for the successful working of the international monetary system in the early post-war period. However, the growing American balance of payments deficit put the centerpiece of the international monetary system, the dollar-gold relationship, in "...constant jeopardy"¹¹ and finally led to the severance of the link between the dollar and gold in 1971. In addition, the entire period, from the mid to late 1960s, when the American budget deficit became a problem, to 1973 and the resort to flexible exchange rates, was fraught with political tensions arising from disagreements among governments about what was wrong with the system and how to fix it. This political tension continued even upon completion of the Smithsonian Agreement, leading the market to question whether the governments involved were truly prepared to take the unpopular domestic fiscal and monetary measures need to defend the new parities.¹² During this period of

10 Ibid., p.64.

11 Ibid., p.65.

12 Stephen Gill and David Law, The Global Political Economy: Perspectives, Problems and Policies, (Baltimore: John Hopkins University Press, 1988), p.173. Also, Joseph A. Whitt Jr., "Flexible

political and economic uncertainty, huge short-term capital flows were generated and every major currency came under intense speculative attack. In other words, not only had the character of global banking and national capital regulations evolved to allow short term capital flows to generate substantial pressure on the pegged exchange rate system, but also, the political and economic confusion surrounding the relative decline of American power, and the ensuing changes in relationships among the major industrial countries, provided the basis for speculation. Speculation, in turn, undercut the adjustable peg exchange rate system.

The Change to a Floating and "Deregulated" Foreign Exchange System

Towards the end of the Bretton Woods system, people were increasingly viewing the adjustable-peg exchange rate system as untenable. The massive amounts of money needed to keep exchange rates in line with their parities made intervention prohibitively expensive, and often inflationary. Constantly adjusting macroeconomic policies to reverse or stop speculative capital flows would have virtually eliminated the little national monetary autonomy that had been available under the adjustable-peg system.¹³ At the same time as doubts were growing about the current system, economists optimistically proposed that a flexible exchange rate system would eradicate many of the negatives associated with the adjustable-peg system. Specifically, they believed that external balance of payments imbalances would be eliminated, and the independence of national monetary policy would be

Exchange Rates: An Idea Whose Time Has Passed?, " Economic Review, Federal Reserve Bank of Atlanta, (September/October, 1990), p.6.

13 Gill and Law, p.174.

enhanced since it would no longer be necessary to undertake specific macroeconomic policies in order to defend a given exchange rate. Most importantly, a flexible exchange rate regime would allow exchange rates to change smoothly and gradually in response to changes in the underlying economic fundamentals, rather than to become clearly over- or under-valued before a government would concede that a large--and economically disruptive--change in parity was necessary. Any sharp changes in exchange rates caused by temporary disturbances

...would be prevented by stabilizing speculators, who would recognize the temporary nature of the disturbance, and who would buy or sell a currency before it fell or rose very much in order later to turn a profit as the currency returned to its longer run equilibrium level.¹⁴

When faced with the formidable costs involved in maintaining the adjustable-peg system and the optimistic promises of a flexible exchange rate system, the major industrial countries gave up trying to maintain the exchange rate parities and allowed their currencies' values to be determined by the private market. The division of control between government and market was dramatically altered. The formal controls on capital flows had been first lessened by government and then undermined by the market. The move to flexible exchange rates further reinforced the power of the market as currency values would now be determined by what "...investors, bankers and traders [were] willing to pay".¹⁵

Although governments would continue to intervene in extremely disorderly markets, for all intents and purposes, the foreign exchange market, and

14 Norman S. Fieleke, The International Economy Under Stress, (New York: Ballinger Publishing Company, 1988), p.174.

15 Jeffrey A. Frieden, Banking on the World: The Politics of American International Finance, (New York: Harper & Row, 1987), p.87.

by extension, international monetary relations, had been "...effectively deregulated."¹⁶

Exchange Rate Movements under the Flexible Exchange Rate Regime

Unfortunately, economists' predictions have not been fulfilled. In the almost two decades since the market has been determining exchange rates, external imbalances between countries have grown rather than shrunk, and national monetary policy autonomy is virtually nonexistent. Finally, exchange rates have not been stable, gradually and smoothly adjusting to changes in government policy and the economic fundamentals that were thought to determine exchange rates. Along with the exchange rates of most currencies, the US dollar, Japanese yen, and German deutschemark have all experienced greater instability. Day to day volatility has been very high, varying as much as 6% in a single day.¹⁷ Month-to-month exchange rate movements have also displayed greater volatility. The weighted average of monthly changes in nominal effective (or trade-weighted)¹⁸ exchange rates for seven major industrial countries between 1974-83 was 1.18% compared to 0.2% in 1961-70. The changes in real (or inflation-adjusted) effective exchange rates were about 3 times greater during the later period than in the earlier period. Quarter-to-quarter exchange rate changes exhibited about the same increase in volatility as month to month changes.¹⁹

16 Howard M. Wachtel, The Money Mandarins: The Making of a Supranational Economic Order, (New York: Pantheon Books, 1986), pp.104-105.

17 Krause, p.14.

18 In order to summarize the changing value of a currency in terms of all the other currencies it can be exchanged for a trade-weighted index is used. Changes in different exchange rates are weighted by the importance of those changes to the international trade of the country for which the index is constructed.

19 Fieleke, p.175. The seven countries are Canada, France, West Germany, Italy, Japan, the United Kingdom, and the United States.

In addition to daily or monthly volatility, exchange rates have often moved significantly in one direction over a sustained period of six months. Between June, 1973 and December, 1989, the deutschemark has had eight separate six month episodes of movement greater than 15%, and eight other periods where the movement was greater than 10%. The yen-dollar rate had 11 episodes where the movement was greater than 15% and three more where it moved more than 10%.²⁰ When the British pound was devalued in 1967 by 15% it was considered to have serious political and economic repercussions, and was done only after extreme speculative pressure. In contrast, what was considered a grievous occurrence under the adjustable-peg system is now almost the rule rather than the exception.

Further evidence that exchange rates have a tendency to become misaligned, or deviate from their fundamental equilibrium rate, is provided by Krause. Using the trade-weighted dollar, Krause found a pattern of self-reversing swings in the nominal and real exchange rate over the medium term, so that "...if the dollar depreciates (or appreciates) for any length of time the one thing that can be relied upon is that the movement will be reversed sooner or later."²¹ Since the dollar still is the center of the international monetary system and the most traded currency in the foreign exchanges, swings in the dollar produce swings in the deutschemark, the yen, and other currencies. Finally, the magnitude of these swings has increased over time, providing support for the view that exchange rate instability is not a passing phenomena but an "...endemic problem..."²² To summarize, no

²⁰ Whitt, p.9.

²¹ Krause, p.14.

²² Ibid., p.16.

matter what measure or time period is taken, exchange rates determined by the market have displayed great volatility in their day-to-day and month-to-month changes as well as misalignment in the medium term as evidenced by the periods of sustained appreciation or depreciation that were then reversed in the next period.

Explanations of the Incorrectness of Economic Theories of Flexible Exchange Rate Movements

One reason for economists' inaccurate expectations of exchange rate behavior in a free market was the use of an incorrect underlying model of exchange rate determination.²³ Previously, exchange rates had been theorized to be the relative price of goods traded in the world market. However, with capital flows now dwarfing international trade, economists now propose that exchange rates have to be treated as the relative price of assets. If the exchange rate is an asset price, it follows that exchange rates would behave just as erratically and unpredictably as other asset prices, such as stocks and bonds, as they respond to new information or changes in policy. According to this perspective there is nothing unusual or excessive or about exchange rate volatility; it occurs because it is an asset price and there is no need to look for a further explanation.²⁴

The Possible Role of Destabilizing Speculation

However, even when the exchange rate is viewed as an asset price and theorized to respond to macroeconomic variables such as interest

²³ Ibid., pp.11-12.

²⁴ Some studies have shown that compared to other asset prices such as stock prices, exchange rates are relatively less volatile. Therefore, they conclude that exchange rate volatility is not excessive. See Fieleke, p.179.

rates and other economic fundamentals, economists' exchange rate determination models cannot account for short-term changes in exchange rates.²⁵ One view is that exchange rates are excessively unstable and cannot be explained by underlying macroeconomic fundamentals because of the influence of speculation. According to this argument, speculation often dominates activity in the foreign exchange market and is destabilizing rather than stabilizing. This destabilizing speculation causes volatility and exaggerates deviations of exchange rates away from their fundamental equilibrium rate, at least in the short to medium term.²⁶

Evidence that Speculation is a Major Influence in the Current Foreign Exchange Market

Krause shows that the foreign exchange market possesses the institutional characteristics, such as low carrying costs and low transaction costs, which favor the predominance of speculative trading over nonspeculative trading. Krause argues that under the conditions of low transaction and carrying costs and small spreads between the buy and sell price, prices have the potential to be very flexible and largely responsive to changes in market psychology: a combination of the changes in market confidence and market expectations.²⁷ Another requirement of a speculative market is the existence of market makers: large

25 See Peter Isard, "Lessons from Empirical Models of Exchange Rates," IMF Staff Papers 34 (March, 1987). The fact that economists have yet to develop a widely-accepted model of exchange rate determination necessarily means that there is widespread disagreement over whether or not exchange rate movements are excessive. In fact, "...the choice of a model is far and away the most crucial step in research on the possible malfunctioning of exchange markets." This is because any test of the excessiveness of exchange rate movements or exchange rate misalignment would necessarily be a test of the "...joint hypothesis about the behavior of exchange rates and the analytical model." Ralph C. Bryant, International Financial Intermediation (Washington: The Brookings Institute, 1987), p.107.

26 See Krause.

27 Ibid., pp.65-68.

institutions that hold large inventories of foreign exchange and thus permit large trades to take place. In the current foreign exchange market, this role is served by large banks operating globally. In Krause's view, when policymakers established the principle of market convertibility under the Bretton Woods Agreements, and then succumbed to the erosion of government regulation, they "...inadvertently were setting the stage for exchange rates to become speculative prices."²⁸

Indicative of how much of the foreign exchange market's volume is speculative in nature is that in 1988 the annual volume of the foreign exchange market was estimated at between \$65 trillion and \$100 trillion, but the total of world trade was only \$4 trillion.²⁹ More recent estimates now put the *daily* net turnover in the foreign exchange market at \$900 billion.³⁰ Even if the large increase in international investment flows are taken into account, one analyst estimates that "...at least three quarters of foreign exchange action is considered pure position taking, that is betting, on the interbank market."³¹ This opinion is supported by evidence from a 1989, 3-yearly New York Federal Reserve Bank census which documents that only 4.9% of banks' trading was with a nonfinancial firm such as an exporting or importing firm; 4.4% of nonbank trading was with a nonfinancial firm and 95% of the trading was actually among banks and other financial firms.³²

28 Ibid., p.66.

29 Glynn, p.90.

30 The Economist, "The Last of the Good Times?" (August 15, 1992), p.61. According to The Economist, this figure, which is what traders now estimate their market is, is a third more than the \$650 billion estimated by a 1989 central bank survey, and double what the survey's estimate was in 1986.

31 Glynn, p.90. The interbank market is the wholesale market where banks deal with each other in units of a million and greater.

32 Quoted in Jeffrey A. Frankel and Kenneth A. Froot, "Chartists, Fundamentalists and Trading in the Foreign Exchange Market," American Economic Review 80 (May, 1990), p.182.

The magnitude of bank profits from foreign exchange trading also suggests that speculation is a large part of their business. In 1987, eight major US banks, earned \$2 billion (pretax) in foreign exchange profits, up almost 50% from 1986.³³ The Economist has also reported that according to the US Comptroller of the Currency, foreign exchange accounted for half of all of the profits made by New York money-center banks in the four years before 1992.³⁴ Another business writer describes foreign exchange as being banks "...most reliable earner..."³⁵ Although it is impossible to separate speculative profits from customer-orientated business, at least one economist has concluded that "...there can be no doubt that short-term speculation contributed considerably to the overall profitability of foreign exchange trading."³⁶ How these banks describe their trading activity strengthens this argument. Although some of the major players in the foreign exchange market either do not disclose details, or refuse to confirm that they speculate, one of the largest banks in the foreign exchange business, Citibank, "...acknowledges that only about half of its foreign exchange trading is on behalf of its customers..."³⁷ Additionally, when interviewed by the business press, foreign exchange traders readily admit that the market can be dominated at regular intervals by "...pure speculation..."³⁸

33 Glynn, pp.91-92. Since the 1980s, it does not appear as though foreign exchange profits have diminished. One journalist has reported that in the last three years, Citicorp earned over \$1.8 billion from foreign exchange, Barclays over \$1 billion, Bankers Trust \$994 million, NatWest \$690 million, Bank America \$596 million and JP Morgan \$385 million. Simon Brady, "The Bank's Golden Egg," Euroney (May, 1992), p.75.

34 The Economist, "The Last of the Good Times?" (August 15, 1992), p.61.

35 Brady, "The Bank's Golden Egg," p.75.

36 Stephan Schulmeister, "Currency Speculation and Dollar Fluctuations," Banca Nazionale del Lavoro Review 41 (December, 1988), p.356.

37 Glynn, pp.91-92.

38 Shlomo Naital, "The Mad, Mad World of Currency Trading," Across the Board (December, 1986), p.19.

Not all analysts share the conclusion that the major banks in the foreign exchange market speculate. To determine the magnitude of bank speculation, economist Norman Fieleke compared American banks' open or speculative positions in a currency with their total involvement in that currency, or the total of all their assets and liabilities in that currency along with contracts to buy and sell the currency. Open positions are those positions where the bank does not have a corresponding transaction to "cover" or offset the open position. Open positions could be long positions, in which the bank is holding the currencies but has no contract to resell them; or they could be short positions, in which the bank has already agreed to deliver the currency at a certain price to a client but has yet to buy it. This makes the bank a net buyer or seller of a currency, exposing it to exchange rate changes. Fieleke found that the banks' open positions never exceeded four-tenths of 1% of total involvement. Although he concluded that destabilizing speculation may be a problem, he felt that speculative positions have been so small as to have no influence whatsoever and that an increase in speculation would perhaps stabilize the market.³⁹ Furthermore, during an investigation in the late 1970s to determine whether US bank speculation had increased the speculative downward pressure on the dollar, the US Treasury drew on reports of bank's foreign currency positions, and found that there was no correlation between large position taking and dollar weakness.⁴⁰

The analysis of banks' open positions may well yield an incomplete assessment of their speculative activity. It has been found in the past

39 Fieleke, pp.179-182, 191.

40 Michael Hoffit, The World's Money: International Banking from Bretton Woods to the Brink of Insolvency, (New York: Simon & Schuster, Inc., 1983), p.159.

that banks falsely report foreign exchange information in order to disinform governments about their true open positions and evade what little regulation there is.⁴¹ Also, banks, depending upon government regulation, usually only record what their open positions are at the close of the day, week or month.⁴² But foreign exchange traders operate by "pyramiding" or buying and selling currencies constantly throughout the day so their open position at any one time does not last very long.⁴³ Consequently, using the closing positions at the end of the day, week or month to estimate bank speculation is misleading as it gives no information about positions that were open and closed repeatedly during that period.

Finally, observing only open positions may not expose all speculative activity. New financial innovations have made currency trading extremely complex. Often, reporting regulations have not been able to keep up with many of the new practices that do not fit in the traditional categories. As such, it can often be impossible to verify what transactions are speculative. This argument is especially feasible considering that even speculators in the foreign exchange market sometimes do not know what it all means. For example, in the fourth quarter of 1987, Bankers Trust's profit from foreign exchange activities, an astonishing \$338 million (pretax), was earned almost entirely from the transactions completed by one broker, Andrew Krieger. When Krieger quit his position after a dispute over compensation,

41 See Richard Dale, The Regulation of International Banking, (Cambridge: Woodhead-Paulkner (Publishers) Ltd., 1984), Appendix Two: "Citibank's 'Rinky Dink Deals', A Case Study in Regulatory Arbitrage."

42 Ibid., pp.99-137.

43 Adrian Hamilton, The Financial Revolution: The Big Bang Worldwide, (New York: Viking Penguin Inc., 1986), p.202.

Bankers Trust reported a \$19.4 million first-quarter loss (1988) because Krieger had left the bank with "...a book full of complex positions [and] Krieger's successors apparently did not know how to unwind the positions as he had intended."⁴⁴

Even though the limited evidence gleaned from open position reports can be interpreted to suggest that banks do not speculate to any great degree, this evidence is inconclusive and possibly biased as banks can alter the numbers and certain speculative transactions may not fall under the category being analyzed. Therefore, the better indicators are the large volume of the foreign exchange market, the substantial profits earned from currency trading, the large percentage of foreign exchange trading that is unexplained by international trade and investment, and the comments of those that operate in the foreign exchange market. All suggest that speculative trading for profit is a large part of banks' foreign exchange business.

Foreign exchange trading has been so profitable for the large banks that new players have joined the game. These include investment banks and brokerage house, multinational corporations and thousands of traders representing other investors such as pension funds. Not only are the transactions of these actors highly speculative,⁴⁵ but also, the increased competition they represent causes banks to decrease their spreads and forces them to make up lost commission profits through speculation rather than just act as dealers.⁴⁶

⁴⁴ Glynn, pp.92, 91.

⁴⁵ Multinational corporations that started their own trading departments in order to hedge their foreign exchange transactions coming from their international business now admit that these departments have become important profit centers and are largely speculative in nature. In fact, some have been burned by speculation, losing millions. See *Ibid.*, pp.89, 92-97. Also, Richard L. Stern, "(Dangerous) Fun and Games in the Foreign Exchange Market," *Forbes* (August 22, 1988), p.71.

⁴⁶ Stern, p.69.

The progressive deregulation of the international financial system has also allowed speculation to become the dominant activity in the foreign exchange market. With controls on short-term capital flows and currency transactions largely nonexistent, and an increasing number of short-term investment assets freely available, the possibilities for short-term capital flows and speculative buying and selling of currencies are magnified. The conclusion is that if the foreign exchange market has a predisposition towards speculation, the current deregulated international financial system has no barriers to discourage it. However, it still has to be shown that a foreign exchange market dominated by speculation destabilizes exchange rates.

Is the Speculation in the Foreign Exchange Market Destabilizing?

Milton Friedman made the influential argument in the 1950s that in order to produce profits, rational currency speculators would buy when the price was low and sell when it was high, thereby moderating, rather than exaggerating, any disturbance. Since only stabilizing speculation would be profitable, destabilizing speculation would be unprofitable, and therefore any destabilizing speculators would be driven out of the market in the long run.⁴⁷ Friedman's argument provided one reason for economists to believe that exchange rates, if allowed to float, would adjust smoothly and gradually. There are, however, weaknesses in Friedman's argument that undermine the conclusion that speculation has to be stabilizing. First of all, Friedman's assumption of rationality may not hold at all times. Kindleberger has shown in his writings regarding manias and panics in the financial markets, that speculators

⁴⁷ Krause, pp.26-28.

often act irrationally. At these times destabilizing speculation is certainly possible.⁴⁸ Furthermore, other theories have been developed that demonstrate that even if the assumption of rationality is included, conditions can exist which would make destabilizing speculation profitable and therefore possible for a rational trader.⁴⁹

The Theoretical Possibility of Rational, but Destabilizing Speculation

One point that is especially relevant for today's foreign exchange market is the observation that if speculative trading composes a large share of total trading, even some of the time, then the rules of the game will have been changed along with the behavior of the speculators. Specifically, when speculation is a large share of trading,

...speculators do not need to forecast the market's fundamentals to be successful because they can still profit by forecasting correctly the behavior of their fellow speculators.⁵⁰

Speculators need only guess correctly the psychology of the market to make profits and, in this situation, it may be rational to buy when the price is high and sell when the price is low, exaggerating exchange rate changes and contributing to exchange rate volatility. When trading decisions are based upon guesses about what the other market participants believe, exchange rates can detach themselves from the fundamentals and respond instead to extraneous variables, changes in beliefs about future occurrences, or shocks to the system. This may lead to situations where although the exchange rate is clearly over or undervalued, participants may judge that enough new players will be drawn on

48 Charles P. Kindleberger, Manias, Panics and Crashes: A History of Financial Crises, (New York, Basic Books, 1978) pp.28-41 as quoted in *Ibid.*, p.46

49 *Ibid.*, pp.33-46.

50 *Ibid.*, p.33.

to the bandwagon for a period of time sufficient for them to receive profits.⁵¹ They will therefore join, although their behavior is clearly destabilizing. In fact, a market participant would lose money if he did not jump on the bandwagon or join the "bubble".

Furthermore, in a market dominated by speculative trading, nonspeculative trading will be unable to provide any moderating influence. If most of the volume in the foreign exchange market was due to international trade and investment, when the dollar (for example) rose due to speculation, demand for dollar exports would decrease, driving the price of the dollar down again. In this way, non-speculative traders would automatically "...lean against the wind" of destabilizing price changes. Moreover, the further market prices veer[ed] from their equilibrium values, the stronger this pressure [would] be."⁵² The flip-side of this argument is that if nonspeculative trading is not dominant, there will be no counter pressure and speculative bubbles have nothing holding them back.

However, speculative bubbles can not be sustained forever. Sooner or later, another bit of news breaks, or participants start cashing in their profits (or buying) and the bubble "crashes", perhaps only to begin again in the other direction. Therefore, although some people will sustain losses, destabilizing speculation can be profitable enough for some participants to attract others and keep the bubble growing. In conclusion, according to theories of rational speculative bubbles, destabilizing speculation can be consistent with making profits.

51 Bryant, p.97.

52 See Krause, p.70, for his interpretation of this hypothesis originally suggested by Gardner Ackley, "Commodities and Capital: Prices and Quantities," American Economic Review 73 (March, 1983), pp.1-16. and Nicholas Kaldor, "Speculation and Economic Activity," in Essays in Economic Stability and Growth (London: Gerald Duckworth and Co. Ltd., 1960), pp.17-58.

Therefore, rational speculators are just as likely to act in a destabilizing fashion as in a stabilizing way.⁵³

How the Conditions in the Current Foreign Exchange Market Match the Theoretical Requirements for Speculation to be Destabilizing

It has been suggested that where speculative trading dominates non-speculative trading, destabilizing speculation will occur. Since recent estimates put foreign exchange related to underlying trade flows at only 5% of the total market activity and since trade flows may take years to adjust to changes in exchange rates, it can not be expected that foreign exchange trading done for nonspeculative purposes limits the destabilizing effects of speculation in any way.⁵⁴

It was suggested above that where speculation dominates the market it becomes destabilizing because participants "...are more likely to attempt to forecast future trends by forecasting the behavior of their fellow speculators, rather than attempting to forecast market fundamentals."⁵⁵ Given the anecdotal evidence, this proposition seems to be overwhelmingly correct. As one foreign exchange expert says, "What determines foreign exchange prices is what traders think is important, period. Trading psychology rules in the short term; trade flows take years to have effect."⁵⁶

Further evidence that indicates traders focus on short-term developments and market psychology is the growing usage of technical analysis in the foreign exchange market. When traders forecast exchange rates based on beliefs about what other traders are doing or believe,

53 Ibid., pp.35-44.

54 The Economist "The Last of the Good Times?" p.61.

55 Krause, p.71, referring to the argument of Nicholas Kaldor, "Speculation and Economic Activity," in Essays in Economic Stability and Growth (London: Gerald Duckworth and Co. Ltd., 1960) pp.17-19.

56 Lowell Bryan, McKinsey & Co. Director and foreign exchange expert as quoted by Glynn, p.90.

they are actually extrapolating current trends in the foreign exchange market. Technical analysis or charting helps traders identify these trends. "Technical analysis seeks to produce profitable buy and sell signals by isolating systematic components in the behavior of price series."⁵⁷ The results of technical analysis give foreign exchange traders rules such as "Buy (go long) when the current price exceeds the price k days ago and sell when the current price falls below the price k days ago," to guide their foreign exchange activity.⁵⁸ Technical analysis has come to be widely used in the foreign exchange market as a forecasting technique. According to a 1985 Group of Thirty report, 97% of bank respondents and 87% of security houses, the most important foreign exchange market participants, considered that the use of technical models has had an increasingly significant impact on the market.⁵⁹ Brian Marbour, an analyst who sells his forecasts to some of the leading banks and corporations, says those who use technical analysis do so for one reason:

Forecasting on the basis of fundamentals is very good for rationalizing the past; it is last year's best adviser.the fundamentalist approach is nearly always wrong. ... Technical analysis assesses the psychology of the market in a way that the economists do not. There is...no such thing as value in the market; it is only a perception of value. Likewise it is not the news itself but how the market reacts to the news.⁶⁰

Technical analysis is popular because it gives market participants information on their fellow speculators, and this information is more

57 Schulmeister, p.347.

58 Ibid., p.347.

59 Group of Thirty, The Foreign Exchange Market in the 1980s, New York, 1985. Referred to in Ibid., p.347.

60 Brian Marbour, quoted by Gavin Shreeve, "Forecasting: In Trends We Trust," The Banker (June, 1987), p.84.

crucial than any fundamentals for forecasting the correct movements of exchange rates and profiting. Even those banks that do not adhere as staunchly to technical analysis still find other ways to gauge the markets' psychology. For instance, European bankers use a "...network of personal contacts with other dealers" to form their expectations.⁶¹

Usage of technical analysis is an especially important source of destabilizing speculation because of the powerful feedback effects it produces in the market. If technical analysis is followed it will generate "...systematic speculation [that] feeds back upon the pattern of exchange rate movements, thereby strengthening its specific shape," or exaggerating its deviation.⁶² Frankel and Froot go further and propose that the shift in the foreign exchange market to forecasting using the technical analysis technique may have been a source of the appreciation and depreciation of the dollar in 1980-87 that was not explained by the macroeconomic fundamentals.⁶³

There seems to be evidence that the foreign exchange market is dominated by the speculative activities of its participants. In this situation, traders profit by basing their trading decisions and forecasts not on fundamentals, but on extrapolating trends and market psychology. Since foreign exchange transactions resulting from trade and international long-term investment are not large enough to discipline the deviations in exchange rates from equilibrium, speculative runs can develop unimpeded. The ultimate result is that the foreign exchange market is raked by destabilizing speculation that exaggerates any volatility resulting from the exchange rate being an

61 Schulmeister, p.354.

62 Ibid., p.355.

63 Frankel and Froot, pp.184-185.

asset price. The speculative character of the foreign exchange market also magnifies traders' reactions to changes in economic fundamentals such as interest rates and trade balances, causing the exchange rates to overshoot their equilibrium levels in the short to medium-term. This type of pattern is seen in the dollar rise from 1980-85. At first the dollar rise could be explained by the high dollar interest rate differentials, but subsequently the dollar continued to rise even though interest differentials shrunk and the trade and budget deficits grew. This surge in the dollar's exchange rate, an increase of 63% in the dollar's overall international value between 1980 and March 1985,⁶⁴ has been explained as a speculative bubble.⁶⁵

Currencies that are worth hundred of billions of dollars float into and out of foreign exchange markets all over the world every day. The organization and operation of the foreign exchange market encourages private foreign exchange traders to extrapolate trends and trade on the basis of extraneous variables and market psychology in order to make huge profits. Fundamentals are considered for long-term forecasting, but the bulk of the market operates in the short-term. The lack of regulation and growth of short-term capital flows have only served to increase the opportunities for speculation. The potential for volatility and misalignment in the market due to destabilizing speculation is clearly large, but should it be of major concern to governments or individuals not involved in foreign exchange? To assess this, it is necessary to look at the costs caused by exchange rate instability.

64 I.M. Destler and C. Randall Henning, Dollar Politics: Exchange Rate Policymaking in the United States, (Washington: Institute for International Economics, 1989), p.1.

65 Krause, pp.226-227.

The Costs of Exchange Rate Instability

International Trade

One of the areas where the costs are fairly obvious concerns international trade and industries that depend on exports and imports. Fluctuations in exchange rates translate into changes in costs and profits to these industries. While Krause concludes that "...increased exchange rate volatility has hampered the growth of international trade by increasing exchange risk..." he also notes that "...the increase in exchange risk has not proved to be an insurmountable barrier to trade growth."⁶⁶ This result may be due to the development of financial instruments that allow companies to hedge their foreign exchange transactions and thus avoid, or lessen, the exchange risk. Some of these hedging instruments are relatively inexpensive, but, as Fieleke has pointed out, it is impossible to remove all risk, as companies can not know the exact timing of all future payments and receipts.⁶⁷ Furthermore, the need to purchase hedging instruments still presents increased cost, directly and indirectly. Many of the hedging instruments are so complicated that most firms do not know what they are buying, if it is necessary, or if it really does offer them adequate exchange risk protection. One foreign exchange trader claims that "[b]anks are finding plenty of 'suckers'... [customers willing to buy or sell at less than competitive rates] ...beyond the Fortune 100 or so, the corporations don't know what they're doing." Another former foreign

⁶⁶ Ibid., p.239.

⁶⁷ Fieleke, p.177.

exchange trader adds that "For every major corporation that understands the currency market and is well hedged, there's a second-tier firm that suddenly has to trade currencies and gets terribly ripped off by its bank."⁶⁸ Consequently, a firm either has to run the risk of being overcharged and underprotected by the institutions selling the hedging instruments, or it must devote personnel and other resources from within the firm to deal solely with foreign exchange. This information suggests that even though world trade has continued to grow, foreign exchange volatility presents an added unnecessary cost to international business in the form of exchange risk that cuts into profits and more than likely is passed on to the consumer.

Negative Impact on World Efficiency and Competitiveness

Those who advocated floating exchange rates did so on the belief that shifts in exchange rates would act as an automatic balancing mechanism in the world economy. If a country were running a trade deficit, its currency's value would decrease, thereby making its goods cheaper. This would, in turn, increase the demand for its exports, shift resources into its export-producing industries and cause the deficit to shrink. The opposite would occur if a country had a surplus. Also, different rates of inflation and wages, for example, would be reflected in each country's exchange rate so that international trade would be fairly competitive. But the exchange rate has come to be so volatile and prone to misalignment that changes in it can no longer be looked upon as a signal to change activities or policies, since in all

68 Glynn, p.97.

probability the exchange rate will change back again in the near future.⁶⁹

By inducing inertia in this way, exchange rate uncertainty not only acts as a tax on trade and foreign investment; it also leaves many firms, as currencies fluctuate, selling the same goods at widely different prices around the world. ... Competition is stifled."⁷⁰

International trade is further skewed by initiatives by large multinational corporations to include foreign exchange rates in their long term strategy. In the case of Kodak Eastman, for example, this may mean that "...if the lower dollar means Kodak can charge less and gain an additional 20% of a market in, say, Germany, the company would take forward and options positions to keep that share even if the dollar strengthens."⁷¹ One can understand that companies would want to act in this manner in order to keep profits predictable and facilitate future planning. However, competitiveness is then judged in an artificial atmosphere and global efficiency is lost.

Increased Tensions Among Nations

Perhaps the most serious cost of unstable exchange rates is the tension they put on international economic relations through the major swings they cause in the international competitiveness of national economies. As mentioned earlier, the period of 1980-1985 was marked by a large appreciation of the US dollar. By early 1985, on a multilateral, effective basis, the dollar had appreciated over the average level in 1980 by 67% using the IMF's measure and by 88.2% using

69 Kenichi Ohmae, The Borderless World: Power and Strategy in the Interlinked Economy, (New York: Harper Business, 1990), p.167.

70 The Economist, "Time to Tether Currencies" (January 6, 1990), p.15.

71 Stern, p.71.

the Federal Reserve Bank's measure.⁷² Furthermore, since goods prices are relatively inflexible, the changes in the nominal exchange rate were not offset by changes in inflation or price levels; therefore the real exchange rate, the measure of international price competitiveness also underwent extreme fluctuation. In the United States, the ultimate result of this change in international competitiveness meant that American exports became more expensive and foreign imports became very cheap. Analysts estimate that 1 million US jobs were lost in their import-sensitive traded-goods industries such as manufactures. Long-term damage was also done to the American economy as plants that were closed and production lines that were stopped could not be easily restarted once the dollar began to depreciate. Another major cost was the particular allocation of productive resources triggered by the strong dollar that turned out to be unprofitable once the dollar weakened and returned to a value suggested by the fundamentals.⁷³

The changes induced in the American economy by the appreciating dollar had a direct impact on international economic relations. When American manufacturing and agricultural sectors were hurt by cheap Japanese and European imports flooding the market, the natural response of the American Congress, after listening to angry voters, was to raise the threat of protectionism.⁷⁴ Although benefiting from their cheaper exports, Europe and Japan were also hurt by the strong dollar as they had to keep their monetary policy tight and their interest rates high so their currencies would not depreciate any further against the dollar and

72 Destler and Henning, pp.22-23.

73 Ibid., p.5.

74 Ibid., pp.34-40.

cause inflation.⁷⁵ They also did not want Congress to follow through on their threats of protectionism as a way to combat the dollar appreciation, as it would freeze Japan and Europe out of the huge American market.

The massive deviation in the dollar exchange rate during 1980-1985 caused considerable tension in international economic relations among the major industrial countries. Fortunately, since everybody would gain by a devaluation in the dollar, and the misalignment was so great that all the G-5 members clearly saw that the dollar was out of line, the major industrial countries agreed to intervene and halt the dollar's appreciation. However, this kind of agreement is rare. Although the G-7 was able to formulate the 1987 Louvre Accord in an attempt to stabilize exchange rates, their cooperation since has not been as successful.⁷⁶ Cooperation to resolve international monetary tensions and exchange rate misalignment is only expedient when exchange rate instability is so large that it threatens the international economic system. Below this level, the international economic tension that exchange rate instability causes is more difficult to correct.

The move to floating exchange rates in 1973 effectively deregulated the foreign exchange market. Since that time, and most certainly in the 1980s, the foreign exchange market has been dominated by speculation that destabilizes exchange rates. The foreign exchange market that determines the values of national currencies operates like a global casino, has a volume approaching \$1 trillion a day and appears to

⁷⁵ Ibid., p.23.

⁷⁶ The communique that came to be known as the Louvre Accord was actually released by the G-6, the G-7 minus Italy. Italy refused to attend the G-7 meeting to protest the fact the Louvre Accord had been negotiated in the G-5 on the day previous to the G-7 meeting.

be controlled by the activities of its private participants. Since the costs of exchange rate instability are so serious, the way the foreign exchange market currently operates can hardly be in the best interests of nations. Therefore, the next chapters will determine how much control governments can exercise in the foreign exchange market and what instruments they use.

Chapter 2

Governments' Use of Intervention To Manage Exchange Rates

The previous chapter detailed the growth of the foreign exchange market over the last decade and argued that this market has become dominated by speculative activity that causes exchange rates to be volatile and to frequently overshoot their equilibrium levels. Increasingly, those who have observed the huge volume of the foreign exchange market and its technologically-aided ability to move these huge sums among different currencies, have concluded that the market has outgrown the ability of central banks to stabilize it. By extension, this means nations have little power to control the value of their currencies, if speculators are determined to drive it up or down. They conclude that "Today, in short, the markets rule, not the governments."¹ This chapter and the next will examine if, and to what extent the above conclusion may be true.

To understand the balance of influence between the foreign exchange market's private actors and the political authorities in the determination of exchange rates, this chapter and the next will judge how successful governments were in meeting their objective of exchange rate management in the last half of the 1980s. In order to do this, the means governments employed to enhance their influence in the foreign exchange market will be examined. This chapter will concentrate on governments' use of intervention, while the next chapter will review their attempts at policy coordination. Governments were more willing to use their resources in an attempt to manage exchange rates during 1985-1988 than at any other time following the end of the Bretton Woods system. Consequently, by analyzing this period one should be able to

¹ Stern, p.70.

determine how much influence governments *can* have in the system as it now operates.

After outlining some of the events that led to the Plaza Agreement in 1985 and the extent of intervention operations during the period under study, the discussion will turn to an overview of the theoretical arguments regarding the effectiveness of intervention. Theory is then compared to the actual intervention operations, which are broken into five sub-periods. The evidence presented shows that states were able to use intervention to influence exchange rates immediately after the Plaza Agreement and at the beginning of 1988. Between the Plaza Agreement and Louvre Accord, after the Louvre Accord, and after the October, 1987 stock market crash, however, intervention was largely ineffective. The conclusion drawn from these episodes is that intervention is only effective under quite specific conditions. Furthermore, these conditions are rarely met and often beyond the control of governments.

Government Actions During Previous Speculative Episodes

The usage of coordinated intervention by the G-3 reflected something of a break with official thinking and action on the subject during the first half of the 1980s. Central banks had continued to intervene in the market after the end of the fixed-rate system. Usually, in the hopes of fostering some "...semblance of stability...", their actions had consisted of "leaning against the wind" or taking action against the trends in the market to slow down and smooth out short-term exchange rate changes.² Occasionally, however, more inten-

² Krause, p.203, 205. See also Report of the Working Group on Exchange Market Intervention, Philippe Jurgensen, Chairman, (London: HM Treasury, 1983), p.60.

sive and concerted actions were needed to deal with the speculative crises that plagued the market during the 1970s, the most severe of which materialized against the dollar during 1977-79. The flight from the dollar that occurred during this period originated when the Carter administration began a unilateral dollar "talk down" campaign in order to "...improve [the US] external position while at the same time reflating domestic aggregate demand."³ This took place after West Germany and Japan refused to participate in the "locomotive strategy" that had been suggested by the U.S. to accomplish the same objectives. The talk-down policy stimulated continuous rounds of speculative flight causing the dollar to spiral downward, unchecked by belated US and foreign intervention operations and US interest rate increases. The market changed its view of the dollar and allowed it to strengthen only after the US changed its monetary policy from interest rate to money supply targeting. The money supply was then constricted so severely that interest rates rose through the 20% level.⁴

The dollar crisis in the late 1970s had threatened the international monetary system and exposed the limitations of control governments had over currency speculation and exchange rate determination. Acting alone, the Europeans and Japanese could not stabilize the situation. Thus, the speculative movement gathered momentum to the point that even the eventual American participation in coordinated interventions could not stop the dollar's fall. The lesson that the leading nations of the world should have taken home from this episode was that when the dollar becomes the object of a speculative

³ Krause, p.220.

⁴ For an account of the speculative crisis in the foreign exchange markets after the end of Bretton Woods, and especially the dollar crisis of 1977-79 see Moffitt.

bubble that produces either a flight from the dollar, as it was in this case, or a flight to the dollar, as it was in the 1980s, "...it can be extremely difficult and costly in the current politically fragmented world to stabilize the dollar-based currency system."⁵ The run on the dollar at the end of the 1970s clearly showed that governments need to cooperate and be consistently vigilant in watching and dampening speculative movements in the foreign exchange market to prevent crisis from developing.

Exchange Rate Policy During the First Reagan Administration

Although one suspects that the Europeans and Japanese had been aware of the above lesson all along, it soon became evident that the Americans had not learned it, even after the speculative episodes in the late 1970s. In April, 1981, the Reagan administration announced that it was changing official US intervention policy to reflect the new administration's neo-conservative ideology and faith in the market.⁶ For the next four years, the Reagan administration would not allow US intervention in the market, except under extraordinary circumstances--such as the attempted assassination of the President.

The economic policies undertaken by the Reagan administration included boosting the defense budget while cutting taxes. Financing the resulting budget deficit necessitated the emergence of a long-term, real interest rate differential in order to attract a large influx of capital into dollar-denominated assets. Reaganomics and the accompanying high interest rate differential provided the spark that started a speculative

⁵ Krause, p.224.

⁶ Destler and Henning, pp.20-24, 31-32.

spiral, this time pushing the dollar up. With the Federal Reserve and Treasury prevented from intervening, the speculative bubble was allowed to grow unhindered. While the Japanese and European central banks continued to intervene to prevent the depreciation of their currencies, and the accompanying financial instability and inflation, by 1982 they realized that without US cooperation it was pointless and "...virtually stopped their collective intervention."⁷ As well, it soon became apparent that the unemployment and slow growth figures being experienced in Europe and Japan would be helped by the rising dollar since it would make their imports cheaper in the US.

While the rising dollar boosted European and Japanese exports, it also became a symbol in the United States of the correctness of the Reagan Administration's policies and the resurgence of American power. Everyone was momentarily happy, and the G-3 watched with "...remarkable detachment..."⁸ as the private traders in the foreign exchange market increased their profits by bidding national currencies further and further from their equilibriums. By following a non-interventionist policy, governments were merely endorsing "...the view then prevalent among economists that foreign exchange markets process information efficiently and should not be blamed for the policies on which they are asked to pass judgment."⁹ The view that intervention was ineffectual was also reinforced by official studies. A 1982 study commissioned by the G-7 reported that intervention could be helpful under certain

⁷ Krause, p.226.

⁸ Peter B. Kenen, Managing Exchange Rates, (London: Royal Institute of International Affairs, 1988), pp.2-3.

⁹ Peter B. Kenen, "The Coordination of Macroeconomic Policies," in William Branson, Jeffrey Frenkel and Morris Goldstein, eds., International Policy Coordination and Exchange Rate Fluctuations, (Chicago: University of Chicago Press, 1990), p.77.

circumstances, but warned that it could not be relied on to produce any medium or long-term change in exchange rates.¹⁰

G-3 Motivations for the Plaza Agreement

Notwithstanding previous official pronouncements regarding the ineffectiveness of intervention, by 1985, the G-5 nations, under the leadership of the US, Japan and West Germany, joined together and employed intervention as their main weapon to inject some official management back into the exchange rate system. Although the prolonged instability in the foreign exchange market had provoked some officials into changing their minds about the necessity of intervention, the immediate reason for the change in exchange rate policy came from the trade regime. Essentially, pending protectionist legislation in the US Congress, and the threat it presented to the international trade regime, caused all three countries to realize that their best interests would be served by a cooperative realignment of exchange rates. The Plaza Agreement evolved from bilateral talks between the US and Japan on ways to reduce the trade imbalance between them which was one of the root causes of the protectionist fervor in the United States. These talks correctly concluded that the overvalued dollar was an important contributing factor to trade imbalances. Consequently, a realignment was necessary and European involvement would be needed for the operation to be a success.¹¹ As Japan's Prime Minister Nakasone stated:

Only a tripod framework can work and therefore, Germany's participation in a new system is indispensable. ... I

¹⁰ Report of the Working Group on Exchange Market Intervention, pp.69+.

¹¹ Yoichi Funabashi, Managing the Dollar: From the Plaza to the Louvre, 2nd ed. (Washington: Institute for International Economics, 1989), pp.4, 10-13.

thought we should aim at broader zones and try to manage the exchange rate in cooperation among the United States, Japan and Western Europe. The basic premise of the zone strategy was the erosion of US economic power and the limitation of Japanese influence. The US economy is worn out temporarily, therefore, the Number Two economy should shoulder more burden. The yen, however, is still a virgin in the international monetary arena. Japan also needs help from Europe. Currency stability cannot be maintained without three poles of cooperation since the volatility of the D-mark inevitably spills over into the stability of the yen and vice versa.¹²

Nonetheless, the Europeans, and particularly West Germany, felt that they should not be expected to share the burden of correcting the unsustainable external imbalances and exchange rate misalignments that were caused, in their view, by "...US intransigence on the budget deficit and the severely strained United States-Japanese relationship..."¹³ In the end, however, they agreed to join the Plaza Agreement to bring down the dollar in order to lessen the inflationary consequences for the European economies. More importantly, the dollar was so out of line with the weak American economic fundamentals that they believed it would be only a matter of time before the speculative bubble burst and the dollar sank. Given their experience with the speculative run on the dollar at the end of the 1970s, the Europeans feared the consequences of a "hard landing" of the dollar. One West German official outlined the European concerns in the following way:

If unchecked, the dollar would have gone into a free fall. And we did not want to have its reverse consequences for the world economy. ... We also had to think of its implication on the EMS. A hard landing of the dollar would cause serious difficulties in the EMS and the future of the EMS.¹⁴

12 Ibid., quoting a personal interview with Prime Minister Yasuhiro Nakasone, p. 90.

13 Ibid., p.13.

14 Ibid., quoting a personal interview with a senior West German official, p.109.

By intervening to start the dollar on its downward path, and then continuing to be involved in the market, the Europeans hoped that cooperative efforts among the G-5 would generate a steadier and more orderly depreciation of the dollar than if the market was left to its own devices.

Given its export based economy, Japan would not normally have participated in an agreement to depreciate the dollar and appreciate the yen. However, trade tensions between the US and Japan were so hostile by 1985 that the Japanese realized they would have to live with a higher yen or face the possibility of being cut out of the US market by protectionist legislation.¹⁵

Finally, the US administration had belatedly come to realize that, contrary to its rhetoric, the strong dollar reflected massive debt rather than a strong economy. To alleviate the economic situation, American policy had three objectives. In the short term the administration wanted to combat the protectionism that was being fueled by the negative impact of a high dollar on the agricultural and manufacturing sectors. The administration's medium term goal was to maintain world growth and demand for American products by convincing Japan and West Germany to stimulate their domestic demand while the US reduced its domestic demand in order to cut its deficit. The long term objective was to ease the cost of their debt service.¹⁶ All of these objectives required a lower dollar.

15 Ibid., p.87, Other factors also supported the Japanese Plaza strategy, see Funabashi, Chapter 4.

16 Ibid., p.4.

A Brief Overview of the Intervention Operations Taken After the Plaza and Louvre Agreements

Motivated by these factors, the United States, West Germany and Japan, along with the other two G-5 nations, France and Great Britain, met at the Plaza Hotel in New York on September 22, 1985 to attempt a return to the collective management of exchange rates. The Plaza Agreement committed the G-5 to the largest (\$18 billion) and most coordinated intervention operation in the post-Bretton Woods period. The operation was judged a success as the dollar immediately fell about 5%, and then settled into a steady depreciation. Subsequent agreements reaffirmed the G-5 commitment to coordinated intervention when necessary and added macroeconomic policy coordination as an objective to bring economies more into balance so future exchange rate stability would be possible.

In the last half of the 1980s governments intervened in the foreign exchange markets on an unprecedented scale. Although only the U.S. Federal Reserve Bank publishes its official intervention figures regularly, total intervention figures for certain periods of intervention have been periodically available. For instance, although the G-5 agreed on a post-Plaza intervention amount of \$18 billion, in the six weeks following the Plaza Agreement, the actual intervention sales of dollars by the US equalled \$3.2 billion, sales by Japan, West Germany, France and Great Britain were \$5 billion and dollar sales by the remaining G-10 central banks exceeded \$2 billion.¹⁷ In the two months following the Louvre Accord in February 1987, the US purchased

¹⁷ Owen F. Humpage, "Intervention and the Dollar's Decline," Economic Review 24 Federal Reserve Bank of Cleveland. (Second Quarter, 1988), p.9. Using US intervention figures provided by Sam Cross, "Treasury and Federal Reserve Foreign Exchange Operations, August-October 1985 Interim Report" Quarterly Review Federal Reserve Bank of New York (Winter, 1985-86).

\$4.0636 billion and sold \$30 million attempting to stabilize exchange rates. While the intervention totals from the other countries involved in implementing the Louvre Accord are not known, Funabashi reports that in total, the intervention following the Louvre Accord exceeded the amount agreed to at the meeting, which started at \$4 billion, but was later raised to \$15 billion in April, 1987.¹⁸ The Economist reported that G-10 intervention for 1987, a period including interventions after the Louvre Accord and the October stock market crash, totaled more than \$100 billion.¹⁹

A cursory look at exchange rate movements during this period could lead to the conclusion that the impact of the intervention was positive: the dollar depreciated after the Plaza and then currencies stabilized after the 1987 Louvre Accord. These developments seemed to go against conventional wisdom and suggested that governments did have influence within the foreign exchange market. Authorities did have the power to make the private actors in the market reevaluate their judgments and the prices of the currencies they bought and sold. However, closer analysis of the 1985-87 period, as well as the period after the October 1987 stock market crash, raises questions regarding the balance of power between governments and private actors in the foreign exchange market. Specifically, it leads to the conclusion that only under rather rare circumstances does the balance seem to shift to allow governments more influence. To develop this argument, the next section will discuss the theoretical effectiveness of intervention, in order to determine how intervention *could* have an effect.

18 Funabashi, pp.187,189,191.

19 The Economist, "Not-So-Divine Intervention," (January 16,1988), p.66.

Theoretical Basis for the Effectiveness of Intervention²⁰

Sterilized Versus Non-Sterilized Intervention

When discussing the possible ways or "channels" through which intervention works to influence exchange rates, the first distinction that needs to be made is between non-sterilized and sterilized intervention.²¹ Intervention is the official buying or selling of the currencies with the aim of influencing the values of those currencies. The money that governments use to buy and sell these currencies, however, has to originate from either their foreign exchange reserves or domestic money supply. Consequently, intervention has the potential to alter both the home country's monetary base and the monetary base of the country of the currency they are buying or selling. For instance, if the US intervenes in the market by selling dollars and buying marks, the stock of dollars will increase and the stock of marks will decrease.²² If the central banks do not want the intervention to affect their domestic monetary base, they will "sterilize" it by undertaking offsetting transactions through domestic money market operations. By

20 It is necessary to qualify the economic theories of intervention and the resulting studies that have tested the effectiveness of intervention by stating that some of the assumptions underlying the theories may not have a good fit with reality. For instance, a large body of economics literature continues to depend on the assumptions that foreign exchange traders are rational and that the market is informationally efficient so that exchange rates reflect the rational assessment of all available relevant information. However, if deviations from these assumptions occur, as the previous chapter outlined, the real consequences of intervention can differ from those modelled by economic theory.

21 In the economics literature, intervention can theoretically have an effect on exchange rates through several different channels. Used this way, what "channel" intervention operates through refers to which variable or what sequence of variables intervention affects. The changes intervention produces in these variables, such as relative money supplies or future market expectations, will produce an effect on exchange rates.

22 Owen F. Humpage, "Exchange-Market Intervention: The Channels of Influence," Economic Review 22 Federal Reserve Bank of Cleveland. (Third Quarter, 1986), p.5.

sterilizing, a central bank insures intervention will have no effect on domestic monetary policy. In this way, exchange rate policy need not conflict with domestic policy objectives.

If, on the other hand, intervention is not offset, and is allowed to affect the monetary base it is deemed to be non-sterilized intervention. Change in the relative growth rates of nations' money stocks is one of the few factors that is widely accepted as being an important factor in exchange rate determination.²³ Since non-sterilized intervention alters the relative rates of money growth of the countries involved, this type of intervention necessarily has a strong influence on exchange rates. However, the fact that non-sterilized intervention is effective because it is allowed to change the monetary base also means that it is not considered a separate tool governments can utilize to manage the exchange rate. Rather, it is really monetary policy carried out by changing the monetary base through a change in foreign assets rather than domestic assets.²⁴ Consequently, governments are constrained in using non-sterilized intervention to accomplish their exchange rate objectives to the degree that it will change their monetary growth rates which will then affect domestic objectives such as interest rates and inflation.

The academic distinction between sterilized and non-sterilized intervention is not as clear in practice as the above theory would suggest. "Most countries claim to sterilize their interventions, however, they mean sterilize in the sense of not letting their foreign

23 Ibid., p.2.

24 Michael D. Bordo and Anna J. Schwartz, What Has Foreign Exchange Market Intervention Since the Plaza Agreement Accomplished, Working Paper No. 3562 (Cambridge, MA: National Bureau of Economic Research Inc., 1990), p.7.

exchange interventions affect their monetary policy goals, which may include an exchange rate objective."²⁵ If central banks have already adjusted their money supply targets to include intervention that may be necessary to attain a particular exchange rate, they do not have to offset their interventions unit for currency unit to comply with this other definition of sterilization. As long as intervention does not cause them to miss their money supply target, the interventions, according to this definition, have been sterilized. However, as Humpage has pointed out, using this definition of sterilization "...seems to violate the spirit of the term, because it no longer offers a means of pursuing an independent exchange rate and domestic monetary policy objective."²⁶

In the 1985-88 period, intervention did have an effect on exchange rates to the extent that governments allowed intervention considerations to be included when formulating monetary growth targets, which then had an effect on exchange rates. But beyond the allowances governments gave for intervention in their money targets, there is evidence that West Germany "...has often permitted deviations between actual money growth and targeted money growth because of exchange rate considerations." Also, in the period under study, Japan "...has allowed intervention to affect its monetary base."²⁷ Therefore, in a direct sense, Japan and West Germany have allowed non-sterilized interventions and these would

25 Owen F. Humpage, "Central-Bank Intervention: Recent Literature, Continuing Controversy," Economic Review, 27 Federal Reserve Bank of Cleveland (Second Quarter, 1991), p.13.

26 Ibid., p. 13.

27 Ibid., p.14 referring to studies by Manfred J.H. Neumann and Jurgen von Hagen, "Monetary Policy in Germany," in Michele Fratianni and Dominik Salvatore, eds., Handbook on Monetary Policy Greenwood Press, forthcoming 1991. and Shinji Takagi, "Foreign Exchange Market Intervention and Domestic Monetary Control in Japan, 1973-89," International Monetary Fund Research Department, Working Paper WP/89/101, December, 1989, respectively.

have had a direct impact on exchange rates. For the reasons mentioned earlier, this should be properly considered to be among the effects which changes in monetary policy had on exchange rates rather than intervention effects.

How Sterilized Intervention Can Theoretically Be Used to Influence Exchange Rates

The extent to which sterilized intervention is able to alter exchange rates is central to the question of whether governments are able to manage exchange rates consistently. This is because sterilized intervention offers governments the possibility of altering exchange rates without affecting monetary growth. Most importantly, by using sterilized intervention, "...any group of countries could coordinate its exchange rate goals without sacrificing monetary sovereignty."²⁸ Nations are loathe to sacrifice their sovereignty so a tool that allows nations to reach the objective of exchange rate management without foregoing domestic objectives or compromising sovereignty would have the greatest possibility of actually being used.

Economists have theorized that there are two channels through which sterilized intervention can have an effect on exchange rates: the portfolio balance channel and the expectations channel. The portfolio balance channel is based on the awareness that although sterilized intervention does not evoke changes in relative money growth rates, it does change the relative supply of bonds denominated in the different currencies. This occurs because nations often sterilize the effect of interventions by buying or selling government bonds or treasury bills. Intervention works through the expectations channel by causing traders

²⁸ Ibid., p.12.

to change their expectations and the values they subsequently assign to currencies.

The Portfolio-Balance Channel

According to the portfolio model of exchange rate determination, international investors diversify their holdings across assets that are denominated in different currencies in order to guard against exchange and political risk. The resulting demand for assets denominated in a particular currency will be an important factor in determining the exchange rate.²⁹ If differently denominated assets are imperfect substitutes for each other, the changes in the relative supply of differently denominated assets that sterilized intervention creates could cause investors to change the asset balance in their portfolios, putting pressures on exchange rates. For instance, if the supply of US issued Treasury Bills increased due to a sterilization operation, investors could view the now more abundant dollar-denominated assets as more risky (or as the literature terms it, changing relative supplies of domestic and foreign assets causes a change in the risk premia) and diversify out of dollar-denominated assets, causing a permanent depreciation in the dollar.³⁰

Studies that have attempted to find empirical backing for the portfolio-balance channel, however, have not normally succeeded. In particular, economists have failed to find a reliable measure of the risk premium or how it is related to the changes in the relative supplies of differently denominated assets created by sterilized

29 Humpage, "Exchange-Market Intervention: The Channels of Influence," p.7.

30 Humpage, "Intervention and the Dollar's Decline," p.3, See also "Exchange-Market Intervention: The Channels of Influence," pp.7-9.

intervention.³¹ One explanation of this result is that the ratio of intervention to the ratio of publicly held assets is too low to have any significant effect on portfolio determination and thus exchange rates. This is a defensible explanation since even though official interventions during the period under study were larger than ever before, publicly held government debt was also at a record high.

The total stock of publicly held US government securities, for example, was nearly \$2.3 trillion at the end of 1989. US intervention amounted to \$22 billion that year, a record volume, but it was less than 1% of the total stock of publicly held US securities. Even if dollar interventions of the other 10 major industrial countries are included, the total amount represents only about 3% of the total stock of publicly held debt.³²

One recent study did find modest empirical evidence that sterilized intervention working through the portfolio balance channel did have statistically significant effects on exchange rates during the study period of October 1984 to December 1987. Nevertheless, they also found that intervention which operates only through a portfolio channel, as opposed to working through both the portfolio and the expectations channel, has a quantitatively insignificant effect on exchange rates.³³

Given the small ratio of intervention to publicly-held government

31 Humpage, "Central-Bank Intervention: Recent Literature, Continuing Controversy," p.15, and Bordo and Schwartz, pp. 15-16.

32 Humpage, "Central-Bank Intervention: Recent Literature, Continuing Controversy," p.15, referring to studies done by Artis R. Ghosh, "Is It Signalling? Exchange Intervention and the Dollar-Deutschemark Rate," Princeton University, unpublished manuscript, September, 1989.; Michael M. Hutchison, "Intervention, Deficit Finance and Real Exchange Rates: The Case of Japan," Federal Reserve Bank of San Francisco, Economic Review, (Winter, 1984) and Bonnie E. Loopesko, "Relationships Among Exchange Rates, Intervention, and Interest Rates: An Empirical Investigation," Journal of International Money and Finance 3 (December, 1984).

33 Kathryn M. Dominguez and Jeffrey Frankel, "Does Foreign Exchange Intervention Matter? Disentangling the Portfolio and Expectations Effects for the Mark," Harvard University and National Bureau of Economic Research, unpublished manuscript, December 1989, findings reported in Wendy Dobson, Economic Policy Coordination: Requiem Or Prologue? (Washington: Institute for International Economics, 1991), p.105; Bordo and Schwartz, pp.16-17; and Humpage, "Central-Bank Intervention: Recent Literature, Continuing Controversy," p.23.

securities and the lack of strong empirical evidence, it has to be concluded that the portfolio balance channel does not offer a means through which sterilized intervention can have an impact on exchange rates.

The First Variant of the Expectations Channel: Policy-Signalling

The second channel through which sterilized intervention can have an effect, the expectations channel, actually has two variations. In the first variation, an asset-market model of exchange rate determination is employed. The model assumes that the foreign exchange market, being rational and informationally efficient, takes into account all known information, particularly present and future economic policies, when calculating exchange rates. In this context, economists have theorized that sterilized intervention could be effective if it was a source of new information for foreign exchange traders. For instance, if it is assumed that the central banks have superior information about future economic policies, and monetary policies in particular, and they then use intervention to convey this "new" information to the market, and the market then deems the intervention to be a credible signal of future policy changes, traders would adjust their expectations and the values of current and future exchange rates would change accordingly.³⁴

However, the number of "ifs" and "thens" associated with the above scenario suggest that there is a host of problems with this variation of the expectations channel. First of all, as Kenen has pointed out, for

34 Kathryn M. Dominguez, "Market Responses to Coordinated Central Bank Intervention," Carnegie-Rochester Conference Series on Public Policy 32 (Spring, 1990), p.123; and Maurice Obstfeld, "The Effectiveness of Foreign-Exchange Intervention: Recent Experience, 1985-1988," in William Branson, Jeffrey Prenkel and Morris Goldstein, eds., International Policy Coordination and Exchange Rate Fluctuations, (Chicago: University of Chicago Press, 1990), pp.218-223.

the above sequence of events to occur, not only must the assumption of rational traders hold, (since otherwise it can not be expected that the market would draw the correct conclusions about future policies changes from the observed intervention) but also, the governments must have no other reason for intervening. Otherwise, the market will not be certain that they are intervening to convey information or for some other objective.³⁵ A connected problem is if the governments are truly attempting to convey information about future policy changes that will affect the exchange rate, what is the information? The exchange rate responds to many different economic policies and indicators so it would be difficult for the market to guess accurately what future policy change was being signalled through intervention and therefore how the exchange rate would be affected.³⁶

Other questions exist regarding the hypothesis that sterilized intervention affects exchange rates through the policy-signalling variant of the expectations channel. For instance, why would intervention be more credible, and therefore more effective, than a simple verbal policy announcement in conveying to the market the government's intentions? No satisfactory answer for this question exists beyond the general awareness that by intervening, governments are "putting their money where their mouths are". Therefore, if the exchange rates do not respond in the way governments are forecasting, or if governments do not follow through on the signalled policies, they will lose their money. Supposedly this acts to constrain interventions to situations where governments intend to follow through on the signalled

35 Peter B. Kenen, "Exchange Rate Management: What Role for Intervention?," American Economic Review 77 (May, 1987), p.198.

36 Ibid., p.198.

policy action thereby making the interventions more credible than a policy announcement that could later be recanted.³⁷

Governments, however, do not seem to view these potential losses as a very serious constraint on their intervention operations. This may be because governments may view intervention losses as too small to be much of a concern.³⁸ Obstfeld quotes a US official who, in reference to American intervention after the Plaza Accord, commented that the budgetary implications of the interventions "would be very small absolutely and relative to Treasury receipts."³⁹

Probably most significant to an understanding of why intervention may not be viewed as credibly reflecting future government policy, and therefore why the policy-signalling version of the expectations channel would be ineffective, is that governments have objectives other than exchange rates. While governments most certainly would not like to lose money through foreign exchange intervention, other economic objectives such as inflation and unemployment may take precedence and prevent them from pursuing the policies that would have prevented foreign exchange losses. If market participants realize governments have these conflicting objectives, and policies may not be undertaken even though intervention signalled it, then there is no theoretically sound reason to believe that intervention will have more of an effect on exchange rates than other means used to signal policy such as verbal announcements.⁴⁰

37 Obstfeld, pp.218-220.

38 Whether this is correct or not is debatable. Economists have a number of different ways on how to measure intervention and any subsequent losses due to various changes in exchange rates and interest rates. See Ibid., pp.220-221.

39 Stephen H. Axilrod, Federal Reserve Staff Director for Monetary and Financial Policy, Federal Reserve Bulletin (January, 1986), p.17 as quoted in Ibid., p.221.

40 Ibid., p.222; Kenen, "Exchange Rate Management: What Role for Intervention," p.198

The effectiveness of intervention undertaken through the signalling version of the expectations channel requires that we rely on assumptions about the nature of the foreign exchange market that are often not accurate. Quite restrictive conditions must also be met to enable governments to send a credible signal that markets will correctly interpret. Both the assumptions and conditions required for the operation of the signalling version of the expectations channel suggest that this channel does not have much relevance for analyzing actual interventions, market responses and subsequent exchange rate changes. What finally makes this abundantly clear, is the observation that governments very seldom use intervention to signal policy changes.⁴¹ This fact does not rule out the possibility of traders being influenced by intervention because they may falsely interpret the intervention as a signalling operation of future policy.⁴²

The Second Variant of the Expectations Channel

The signalling approach, in which intervention can only be successful when it is correctly interpreted as a signal of policy change, makes sense "...if and only if markets base their own exchange rate expectations on their views about future policy fundamentals."⁴³ Nevertheless, judging from the information in the previous chapter this does not always appear to be the case. Also, in their models of foreign

41 Humpage, "Central-Bank Intervention: Recent Literature, Continuing Controversy," pp.21-22, also p.16 where he refers to studies by Kathryn M. Dominguez, "The Informational Role of Official Foreign Exchange Intervention Operations: An Empirical Investigation," Harvard University and National Bureau of Economic Research, unpublished manuscript, November, 1988; and Michael W. Klein and Eric Rosengren, "Foreign Exchange Intervention as a Signal of Monetary Policy," Federal Reserve Bank of Boston, New England Economic Review, (May/June, 1991).

42 Klein and Rosengren study, quoted in Ibid., p.16.

43 Dobson, interpreting a defect in the signalling variation of the expectations channel pointed out to her by Peter B. Kenen, p.115, footnote 7.

exchange market behavior, economists often bestow the participants with a greater degree of knowledge and rationality than can be observed from their behavior.⁴⁴ If the assumptions regarding the rational and efficient character of the foreign exchange market are dropped, then a second, and more plausible version of the expectations channel for intervention becomes possible. The volatility of exchange rates, the elusiveness of a useful model of exchange rate determination, usage of charts and market sentiment to make trading decisions and the predominance of speculative trading all suggest that the market may be swayed by intervention irrespective of whether it signals policy change because:

With no other rocks to cling to, might evidence that the authorities were prepared to "defend" a rate increase its plausibility in market eyes at least when the chosen rate fell within the zone of the market's apparent indeterminacy?⁴⁵

When traders have heterogeneous expectations for exchange rates, arrived at by utilizing different methods or information, and hold these expectations with varying degrees of confidence, knowledge that intervention is or has occurred can have a large impact. Traders will be compelled to reassess their expectations--and those of their colleagues--and try to determine whether the intervention may be followed by more, and if it is likely to have an effect on other trader's expectations. In the early 1980s, traders ignored the economic fundamentals and placed the dollar on a speculative upward drive, but intervention after the Plaza Agreement forced traders to recognize the

44 See Kenen, Managing Exchange Rates, p.22.

45 J.S. Fleming, "Comment" on Obstfeld, in William Branson, Jeffrey Frenkel and Morris Goldstein, eds., International Policy Coordination and Exchange Rate Fluctuations, (Chicago: University of Chicago Press, 1990), p.239.

inconsistency between exchange rates and the fundamentals. This suggests that intervention can burst a speculative bubble if it causes traders to "...reassess their views about the likelihood that they will have time to cover their positions before the bubble bursts."⁴⁶ In the real world then, government interventions can have an effect by changing market participants' confidence in their expectations.

Expecting intervention to work through this type of expectations channel is also supported by the actual tactics and effects of intervention. For instance, if intervention is to send information signals to the market about future policy, the intervention would have to be known. In practice, details of the intervention are often secret, more in keeping with the goal of heightening surprise and generating the most impact on market psychology. Further evidence that intervention operates through this version of the expectations channel is given by recent business journal articles. They describe the central banks as being able to influence the foreign exchange market only "...through hints and psychology..."⁴⁷ They also report that central banks are now making use of technical analysis and charts in order to choose support and resistance levels for their interventions, "...not because we [the central bankers] believe in them but because the market does."⁴⁸ In other words, central banks are attempting to influence foreign exchange traders by utilizing the same devices traders use to form their opinions. The business press has also detailed how central banks try "...to make a small incursion look like an invasion," by timing their interventions for when the currency is "topping out" and intervening in

46 Kenen, "Exchange Rate Management: What Role for Intervention?," p.198.

47 Stern, p.70.

48 Glynn, p.90, [Inset]; and The Banker "Whatever You Do, Keep 'em Guessing," (June, 1988), p.38.

the smaller markets of Singapore and Hong Kong where they will have a greater impact; and how they try to confuse the market by asking other central banks to intervene for them so traders are uncertain as to who is intervening.⁴⁹ The confidence version of the expectations channel helps explain the logic and success of these tactics. Coordinated interventions are more effective than unilateral ones, and relatively small, but, carefully timed and placed interventions can be surprisingly influential because these operations do the most to undermine market confidence.⁵⁰

Coordinated versus Unilateral Intervention

In addition to differences in the effectiveness of intervention, depending upon the channel it might operate through, there is the distinction between the effectiveness of coordinated as opposed to unilateral intervention. As a general statement, it can be said that to whatever extent intervention is influential, coordinated intervention will enhance that influence, primarily by making the authorities' actions more credible to the market. When intervention is coordinated, it is not only more likely that the underlying exchange rate objectives of each country are compatible, but also that the objectives can be reached since all countries are strongly committed to the objectives and can depend on each other for support.⁵¹ Also,

When governments give the appearance of being united and of holding their views firmly, while market participants are divided and uncertain, official pronouncements about exchange rates can have large effects, especially when

49 Peter Fuhrman, "The Fine Art of Intervention." Forbes (August, 1988), p.76.

50 Kenen, Managing Exchange Rates, p.26.

51 The Economist, "Survey: The World Economy," (September 26, 1987), p.6.

backed by intervention or the threat of intervention, and intervention can be effective even when markets are skeptical about the governments' pronouncements.⁵²

Coordinated intervention is more effective because it changes the structure of government operations so they more closely match the parameters of a global foreign exchange market. By doing this, the dynamics between the central banks and the private actors in the market are also changed. In the current foreign exchange market, the currency traders have the upper hand, they are able to exploit the weaknesses nationally-based governments have operating in an interdependent world economy and a global foreign exchange market. Unilateral intervention operations are often undermined since the global foreign exchange market has a virtually unlimited supply of funds, and the economic policies of other nations may not be compatible with the exchange rate objective of the particular intervention operation. However, if nations coordinate their interventions, the number of actors, the supply of funds, and the compatibility of their intervention actions, as well as of their broader economic policies, all increase. Under these circumstances, nations are better positioned to match the global foreign exchange market, as their operating base and objectives have also been constructed to have a global character.

Although the possibility that governments use intervention to signal policy was largely dismissed earlier, the possibility still exists that the market may initially view such intervention as a signal and consequently change their expectations. Coordinated intervention will have a larger impact in these situations than unilateral intervention. This is possible because coordinated intervention will

⁵² Kenen, Managing Exchange Rates, p.26.

increase the total amount of "inside" information conveyed by the intervention, increase the importance of any given signal, and increase the probability that the signal is true.⁵³ All of these factors increase the credibility of the intervention, and the possibility that the market will be influenced by it.

Economic theory allows sterilized intervention to have a very limited and often temporary influence on exchange rates. Intervention will have an effect only when the market is operating inefficiently and exchange rates are far from their long-term equilibrium paths. In these cases, intervention can change exchange rates if it causes traders to reassess their expectations, or undermines the confidence with which they hold those expectations. Finally, to the degree that intervention is effective, it is made more effective when governments are able to coordinate their efforts. These are conclusions based on economic theories, which may have little relevance for the real world, and empirical studies, which are limited by the fact that intervention effects can not be directly measured. Therefore, before making a conclusion about the effectiveness of intervention, intervention theory needs to be compared to its actual practice and impact during the mid-1980s.

The Actual Impact of Intervention from 1985-1988

As mentioned previously, central bankers reversed their aversion to intervention at the Plaza and implemented a coordinated intervention package aimed at lowering the dollar by 10-12% against the yen and deutschemark over a six week period. The agreement stated that after

⁵³ Dominguez, p.127.

the dollar declined by the target amount, countries would be relieved of their obligations to intervene, although further collective and individual operations might continue as further downward movement in the dollar "...would be desirable over the long term."⁵⁴

The above agreements were not made public, the only reference to intervention in the actual Plaza Agreement communique was that governments agreed that "...some further orderly appreciation of the main non-dollar currencies against the dollar is desirable. They stand ready to cooperate more closely to encourage this when to do so would be helpful."⁵⁵ Nevertheless, the market correctly interpreted this as a reversal of previous policy and reacted by selling dollars even before any actual intervention occurred.

The Plaza Agreement was announced on a Friday, when markets opened on Monday the dollar fell 5% against the deutschemark and 4.6% against the yen.⁵⁶ By the first week in October the US had already sold \$199 million against the deutschemark and \$262 million against the yen, and the dollar had declined 8.7% against the mark and 12.1% against the yen.⁵⁷ When the dollar then started to show signs of strengthening, based on the fact that the IMF annual meeting in Seoul had concluded without any new announcements about further measures to support the dollar's decline, the G-5 further intensified their efforts.⁵⁸ In the

54 Funabashi, p.17, referring to the secret agreement, or "nonpaper", reached at the Plaza meeting that was not made public.

55 Group of Five, "Announcement of the Ministers of Finance and Central Bank Governors of France, Germany, Japan, the United Kingdom and the United States," (Plaza Agreement) New York, (September 22, 1985), Section 8.

56 Humpage, "Intervention and the Dollar's Decline," p.8

57 Ibid., p.8. Using US intervention figures provided by Sam Cross, "Treasury and Federal Reserve Foreign Exchange Operations, August-October 1985 Interim Report" Quarterly Review Federal Reserve Bank of New York (Winter, 1985-86).

58 Funabashi, p.22.

following two weeks the US increased its intervention, selling nearly \$1.6 billion against marks and \$617.6 million against the yen.⁵⁹ By the time intervention ceased in November, total US intervention had been 3.2 billion, the other G-5 nations had sold 5 billion and other large industrial countries sold \$2 billion. At the end of the intervention period, the dollar was down 13% against the yen and 10.5% against the DM, meeting the target set in the Plaza meeting.⁶⁰ By most measures, the interventions after the Plaza meeting were a success: the target levels had been reached, and the decline had been managed and relatively gradual. Was intervention the cause of this decline and if so why?

The Role of the Plaza Intervention in the Dollar's Decline

Although the movements in the dollar after the Plaza were dramatic, some analysts do not believe the Plaza interventions were the cause. Feldstein, for example, has concluded that the rate of the dollar's decline, which had started before the Plaza Agreement in February 1985, was the same as the rate of its decline after the Plaza interventions. In his estimation, the dollar was already on a decline, the fundamentals were clearly pointed in that direction and therefore the dollar would have continued declining with or without the Plaza.⁶¹ Nevertheless, a stronger argument can be made that the Plaza Agreement and interventions did have an impact on exchange rates. Although the

59 Humpage, "Intervention and the Dollar's Decline," p.9. Using US intervention figures provided by Sam Cross, "Treasury and Federal Reserve Foreign Exchange Operations, August-October 1985 Interim Report" Quarterly Review Federal Reserve Bank of New York (Winter, 1985-86).

60 Punabashi, pp.22-23.

61 Martin Feldstein, "Rethinking International Economic Coordination," Oxford Economic Papers 40 (June, 1988), p.214. See Martin Feldstein, New Evidence on the Effects of Exchange Rate Intervention, NBER Working Paper, no.2052 (Cambridge, MA: National Bureau of Economic Research, 1986), for his actual study.

fundamentals clearly supported a declining dollar, and the dollar had begun to reverse its appreciation pattern in February, there had been several instances during the summer when it had rebounded. Furthermore, even during the Plaza interventions, "...upward pressure on the dollar frequently cancelled the effects of mutual intervention and did not subside easily."⁶² Actually, the foreign exchange market had been defying the fundamentals for several years, and the continued rise of the US dollar, relative to the mark and yen, "...despite narrowing interest rate differentials was indeed anomalous."⁶³ There is no reason to assume that if the Plaza had not occurred, traders would have necessarily begun to follow the fundamentals and sell the dollar. Therefore, it is reasonable to assume that the Plaza communique and subsequent interventions did have an impact on the market.

Reasons for the Effectiveness of the Plaza Intervention

Intervention following the Plaza was effective because it was a complete surprise to the market, it was coordinated, it represented a real change in US policy, and it was seen to be a precursor to further coordinated action to adjust policy. All of these combined to change market expectations which then led to the changes in exchange rates. In this episode, intervention influenced exchange rates through the expectations channel.

The press reported that the Plaza Accord had been initiated by the US and that the US was heavily involved in the intervention operations that occurred immediately after the announcement of the agreement [on

62 Funabashi, p.219.

63 International Monetary Fund, Annual Report 1986, (Washington: April, 1987), p.20.

the next business day]. These actions were interpreted by the market as a sign that the US was departing from its previous "no intervention" policy and approval of the high dollar. Also, the intervention operations were seen as eliminating the possibility that the US was going to tighten its money supply in the future as had been speculated.⁶⁴ In the market's perception, these changes in policy stance and probable future policy removed the final barriers to a decline in the dollar.

The unprecedented nature of the highly coordinated intervention convinced the market of the commitment of the G-5 to both a lower dollar and the policy adjustments outlined in the communique. The market interpreted the intervention as representing a real turning point. The accompanying communique seemed to show that the G-5 countries were in agreement regarding the imbalances in the world economy, the required policy adjustments and exchange rate realignment, and were willing to tackle them cooperatively.⁶⁵ Consequently, the market viewed coordinated intervention as the first item in a new plan of coordinated action to adjust policy and manage exchange rates, and adjusted their expectations about future exchange rates accordingly.

Finally, the intervention was effective because it was "leaning with the wind."⁶⁶ The dollar was clearly overvalued, and had been for some time. Moreover, the dollar had already started depreciating from its highs in February. Once officials indicated they wanted exchange rates to be more in line with the fundamentals, and undertook intervention that not only aimed at a lower dollar but also removed the

64 Dominguez, p.131.

65 Ibid., pp.131-132.

66 Humpage, "Intervention and the Dollar's Decline," p.10.

possibility of future policies that would support a high dollar, the market began to sell dollars, realizing there was nothing left to support it.

The Ineffectiveness of Intervention Operations During the Period Between the Post-Plaza Operations and the Louvre Accord

Intervention operations were largely nonexistent through 1986 even though the dollar continued its decline. At the beginning of 1986, a sharply narrowed interest rate differential in favor of the dollar reduced the attractiveness of dollar-denominated assets and contributed to the dollar's decline.⁶⁷ But with the steadily appreciating yen and deutschemark hurting their economies, the Bank of Japan, beginning in March, and the Bundesbank, beginning in September, undertook unilateral interventions in an attempt to ease the upward pressure on their currencies. Even though these interventions were often very large, particularly in the case of Japan, they had little effect. The G-3 had not yet affected any major policy adjustments; therefore, the fundamentals did not support a stabilizing dollar. Consequently, actions to slow its decline were operating against the fundamentals. Also cited as a reason for the ineffectiveness of intervention during this period is that the interventions were sterilized; therefore, there was also no change in monetary policy to support stabilizing exchange rates.⁶⁸

The final factor undermining the effectiveness of intervention was the lack of coordination and US involvement. Actually, the actions of the governments were more than uncoordinated, they were operating at

67 Dobson, p.107.

68 Obstfeld, p.226.

cross purposes with the US accused of "talking down the dollar", rather than trying to mitigate its fall.⁶⁹ The lack of agreement on whether the dollar had fallen far enough was a continuation of the problems encountered at the Plaza meeting regarding the end result of exchange rate realignment. The participants at the Plaza meeting had agreed to an initial 10-12% devaluation of the dollar, but they could not reach agreement beyond this. The lack of agreement continued to derail attempts at coordinated intervention and exchange rate management until the Louvre Accord. To summarize, in the period between the Plaza Agreement and the Louvre Accord, intervention had no perceptible effect on exchange rates. Intervention was uncoordinated, statements from the G-3 gave mixed signals to the market and there were no policy adjustments to support the intervention. As a result, the dollar continued its decline.

Exchange Rate Movements and Intervention Operations Following the Louvre Accord

At the beginning of 1987, the dollar came under especially heavy selling pressure. This led to a realignment within the EMS and elicited heavy Japanese and West German intervention, which was often coordinated. Interest rates in Japan and West Germany were cut, and the US re-entered the market at the end of the month, all to stabilize the dollar.⁷⁰ At the end of February, the Louvre Accord, containing the governments' assertion that exchange rates could now stabilize and a list of policy intentions that would be undertaken to maintain exchange rates at their present levels, was announced. Rumors also swept the

⁶⁹ See passage from Report of the Deutsche Bundesbank for the Year 1986, p.63, quoted by Obstfeld, p.227.

⁷⁰ Dominguez, p.136.

markets that the governments had agreed to a set of reference ranges for their currencies and would use intervention to defend them, as indeed they had. The communique seemed to give "confidence" to the markets and the dollar stabilized against the yen and actually rose against the deutschemark to the extent that it went through its upper margin against the mark on March 11, forcing the Federal Reserve to demonstrate its commitment to the ranges by selling \$30 million against marks to bring it back down.⁷¹

Soon after, however, the market began to lose confidence in the dollar based on continuing trade problems and the lack of implementation of the Louvre policy intentions. The dollar dropped rapidly through the bottom of its range against the yen, inducing massive intervention on the part of Japan, the US and several European central banks, including the Bundesbank in late April, to stop it. Between the end of March and mid-April the US reportedly bought \$3.5 billion against yen, while estimates of Japanese intervention during the first quarter of 1987 total \$16 billion.⁷² Despite these large scale operations, the authorities could not push the yen/dollar rate back within its range, and instead rebased the yen/dollar rate at the April G-7 meeting, in effect legitimizing the market's view of what exchange rates should be.⁷³ The dollar continued its decline despite further intervention operations in April and May until changes in monetary policy widened the interest rate differential in favor of the dollar and led to a rough

71 Funabashi, p.187.

72 Obstfeld, p.227, using figures from the Federal Reserve Bulletin (July,1987); and Funabashi, p.188.

73 According to Funabashi's account, the G-7 rebased the yen's central rate against the dollar from 153.5 to 146--the rate the yen had been trading at in the market on the previous night, April 6, 1987. See p.189.

stability. This stability lasted until the next period of dollar weakness, which followed the October stock market crash.⁷⁴

Reasons for the Ineffectiveness of the Post-Louvre Intervention Operations

Although the intervention following the Louvre Accord was just as coordinated, visible and heavy as that following the Plaza Agreement, it was not nearly as successful in accomplishing its objectives. The dollar did not stabilize but continued its decline until changes in monetary policy finally gave some relief. Studies undertaken by both Humpage and Dominguez found that intervention had little effect on exchange rates during this period. In fact, they found some evidence that to the extent intervention did influence exchange rates, the dollar actually depreciated rather than stabilized following intervention operations to support it.⁷⁵

It appears that intervention was not effective because, in contrast to the circumstances surrounding the Plaza, the interventions were now leaning against the wind. The dollar had been declining for over a year when the G-7 proposed that it could now stabilize due to the changed fundamentals that their policy adjustments would bring about. But these did not materialize, as will be discussed in Chapter 3. Furthermore, although the dollar dropped precariously against the yen before the April G-7 meeting, the G-7 announced no new measures to support their calls for stability, but rather changed their target rates to match the market's sentiment. Through this action the G-7 appeared to be diluting the strength of their earlier commitment to stability and

⁷⁴ Obstfeld, p.227.

⁷⁵ Humpage, "Intervention and the Dollar's Decline," p. 12; and Dominguez, pp.156-157.

"seemed to be accepting the current level of the dollar and the downward direction."⁷⁶ Intervention in the post-Louvre period was not effective in stabilizing exchange rates because it did not succeed in altering the market's previous expectations of a lower dollar. The market perceived that the G-7's resolve to stabilize exchange rates at their February levels was weakening. Consequently, the market expected the dollar to drop and continued to sell it until changes in monetary policy did change their expectations.

The Ineffectiveness of Intervention Following the October 1987 Stock Market Crash

Despite substantial intervention, the dollar soon resumed its slide after the October stock market crash. By November it was at DM1.68 and Y135, down from DM1.80 and Y143 in September/October.⁷⁷ Intervention in the final quarter of 1987 totaled over \$3.8 billion for the US and \$2.7 billion for West Germany, with Japan, as usual, not releasing any figures.⁷⁸ These interventions also did not influence market expectations because they were again viewed as not being credible. Rather, the market correctly "...perceived the US commitment to averting a post-crash liquidity crisis as stronger than its commitment to supporting the dollar".⁷⁹ A widening interest rate differential in favor of the dollar would have been consistent with a monetary policy designed to support the interventions. However, the interest rate differential narrowed following the stock market crash, as the US monetary policy loosened relative to West Germany and Japan.

76 Funabashi, p.190. quoting James S. Vick, Senior Corporate trader at Manufacturers Hanover Trust Company from the Wall Street Journal (April 10, 1987).

77 Dobson, p.108.

78 Dominguez, p.137.

79 Ibid., p.139.

When a further package of policy adjustments designed to stabilize rates was finally announced the end of December, it was not taken seriously due to past inaction on implementation.

The 1988 'New Year Massacre': An Episode of Effective Intervention

Notwithstanding their lack of success in the last quarter of 1987, the central banks again hit the markets in the first few days of 1988 with a large and concerted intervention operation. This operation came to be referred to by stunned foreign exchange traders as the "New Year's Massacre".⁸⁰ This time the central banks were successful in arresting the dollar's decline and "...restoring the authorities' credibility" which "...may in turn have been a factor influencing stability in markets in subsequent months."⁸¹ In the week preceding January 4, the dollar had been trading to postwar lows against the deutschemark, yen and pound sterling. Central banks world wide then pumped an estimated \$7.5 billion to \$10 billion into the markets within days.⁸² One market participant estimated that the intervention forced the dollar up 5 to 7 percent.⁸³

Once again, this intervention operation was successful because it altered the market's expectations. Although the economic fundamentals had been supportive of a continued decline in the dollar, at the time of the intervention operation, the market's conviction that the dollar had further to fall was weaker than it had been previously.⁸⁴ Traders had begun to question whether, and for how long, the declining trend would

⁸⁰ Glynn, p.90, [Inset].

⁸¹ Dobson, p.116.

⁸² Glynn, p.90, [Inset].

⁸³ Ibid., quoting a Swiss bank trader, p.90.

⁸⁴ The Economist, "Not-So-Divine Intervention," p.66.

continue. In this atmosphere, the sign that the central banks were willing to take such a concerted and forceful stand further undermined their confidence. The Economist has observed that "As doubts about the safety of selling dollars begin to creep in, the influence that the central banks can exert on the markets grows."⁸⁵ Also, the heavy participation of the US Federal Reserve in the intervention operation was interpreted by the market as an indication that the US was worried about the dollar's decline and "...signalled, if not a future tightening of American monetary policy, at least a higher probability of a tightening than the markets had allowed for hitherto."⁸⁶ This was borne out by the increase in American interest rates in March.

The "New Year's Massacre" was successful because it caught the foreign exchange market off-guard and uncertain of its own predictions. The highly coordinated and intense central bank intervention projected a conviction that stood in sharp contrast to the market's indecisiveness and division of opinion regarding the future movement of exchange rates. In this atmosphere, the intervention had a great impact on changing market expectations. The market also changed its expectations regarding exchange rates because of its changed expectations regarding future American monetary policy. Notwithstanding these points, it is questionable whether exchange rate stability would have continued beyond the period immediately following the intervention if the fundamentals had not supported them. In effect, the intervention became a "...bridge to anticipated improvements in the US trade figures..." which began to improve in February, and March movements in interest rates which

⁸⁵ Ibid., p.66.

⁸⁶ Ibid., p.66.

contributed to exchange rate stability.⁸⁷ This lasted until June when a new phase of instability was generated by rapid appreciation in the dollar.

Necessary Conditions for the Effective Use of Intervention to Manage Exchange Rates

The above descriptions of official intervention and its effectiveness in managing exchange rates implies that intervention is successful in influencing exchange rates when it is able to influence the market's expectations. The usefulness of intervention for managing exchange rates is undermined to the extent that the expectations channel is probably "...the most difficult channel for a central bank to navigate."⁸⁸ This is because the actual buying and selling of currencies do not affect exchange rates; rather, it is the information traders glean from the intervention and how this new information affects their expectations, confidence and actions which, in turn, affects exchange rates. Consequently,

...it is not a macroeconomic policy instrument in the same sense that monetary and fiscal policy are. ...it derives its power in this case entirely from its ability to influence market perceptions or expectations about other economic factors.⁸⁹

Moreover, since intervention is in competition with all the other factors that influence market expectations, it will only be effective when it is the most credible. Consequently, the effectiveness of intervention depends on whether or not it coincides with the existence of other phenomena, such as coordination with other nations, uncertainty

⁸⁷ Dobson, p.110.

⁸⁸ Humpage, "Exchange-Market Intervention: The Channels of Influence," p.11.

⁸⁹ Obstfeld, p.218.

in the foreign exchange market and the backing of the underlying fundamentals, which bolster its credibility. However, these phenomena, and therefore the effectiveness of intervention, are often beyond government control. For instance, economists have not yet constructed a definitive model of exchange rate determination. This not only makes exchange rate equilibrium levels difficult to recognize, but also makes it difficult to separate speculative movements from real ones in the foreign exchange market without the benefit of hindsight. This lack of information contributes to the problems nations experience when attempting to reach agreement on coordinated intervention, and when negotiating the exchange rate objectives of the intervention.⁹⁰

Based on the above economic theories and the impact of official intervention between 1985-1988, there does not seem to be any evidence that intervention can control exchange rates with any degree of precision or consistency. Intervention's influence is limited because it has no real economic impact and has to rely on its ability to affect market expectations for its effectiveness. One factor that has often been identified as contributing to the success of intervention, as well as influencing market expectations, is the underlying economic fundamentals. Managing the economic fundamentals has often been seen as key to managing exchange rates. The next chapter will examine the motives that drove the G-3 to use macroeconomic policy coordination to manage exchange rates, and how successful they were in employing this instrument.

⁹⁰ For a detailed account of the obstacles nations had to overcome, and a list of the many they did not overcome, when formulating plans for coordinated intervention operations see Funabashi and Dobson.

Chapter 3

Governments' Use of Macroeconomic Policy Coordination To Manage Exchange Rates

It was recognized fairly early on that macroeconomic coordination would have to be part of the process of first realigning and then stabilizing exchange rates. In fact, during one preliminary meeting before the Plaza Agreement, US Treasury Secretary James Baker "...stressed that macroeconomic policy coordination, not market intervention, was the key to currency realignment."¹ Consequently, beginning in 1985, the G-5/G-7 forums were used to reach agreements among the leading industrial countries aimed at

...preventing excessive volatility in foreign exchange markets by controlling the market determinants, especially real interest rate differentials and accumulated current account imbalances, through international coordinated monetary and fiscal policy management.²

The G-5/G-7 turned to coordinated economic policies as a means for managing exchange rates because they believed that ultimately, stable exchange rates rested on stable underlying economic fundamentals. The economic fundamentals which affect exchange rates, such as interest rate differentials and current account positions are, however, not determined by one nation alone. Like the exchange rates they influence, they are affected by other nations' economies and the degree of interdependence among them. Therefore, to the extent that the world's economy is interdependent, governments need to coordinate their economic policies, taking the possible spillovers and linkages into account, so the aggregate of all individual policies provide the stable global

1 Funabashi, p.11.

2 Shuntaro Namba, "Comment" on Obstfeld, in William Branson, Jeffrey Frankel and Morris Goldstein, eds., International Policy Coordination and Exchange Rate Fluctuations, (Chicago: University of Chicago Press, 1990), p.243.

fundamentals needed to sustain stable exchange rates.³ The argument of this chapter is that while macroeconomic policy coordination has the potential of being economically effective for exchange rate management, its power as a tool for states is diminished by the obstacles that must be overcome before it is achieved. When the various G-3 policy commitments for the 1985-1987 period are outlined and compared to their actual implementation, it becomes evident that the chief obstacle to the effectiveness of policy coordination during this period was states' natural interest in preserving what they perceived as their autonomy and sovereignty. Differences among the G-3 in domestic priorities, opinions, and their ability and willingness to cede autonomy in their policy-making, weakened the coordination process at every juncture. As the discussion will show, these differences often resulted in vague and relatively unsubstantial coordinated policy commitments and implementation. This leads to the conclusion that while it is economically possible for governments to manage exchange rates through coordinated economic policy, politically, it is difficult for them to do so.

The view that fundamentals are an important factor for determining exchange rates is not incompatible with the one advanced earlier that exchange rates are often at levels that have little to do with the fundamentals, since speculative activity often takes the market far from the underlying fundamentals. Speculative activity in the exchange market does cause great volatility and overshooting of exchange rates. In addition, events such as an economic shock or political crisis are

³ J.A. Frenkel, M. Goldstein and P.R. Masson, "International Economic Policy Coordination," in William Branson, Jeffrey Frankel and Morris Goldstein, eds., International Policy Coordination and Exchange Rate Fluctuations, (Chicago: University of Chicago Press, 1990), p.10.

often needed to start it off. In the early 1980s, the catalyst was the wide divergence in economic policy between the United States on the one hand and Japan and West Germany on the other. In the mid-1980s, governments looked to macroeconomic policy coordination to correct the economic imbalances and inhibit any future economic incompatibilities that could produce the instability and uncertainty foreign exchange traders exploit and speculation thrives on. Furthermore, governments believed that macroeconomic policy coordination would provide the market with a more "stable focus for exchange rate expectations" and hoped that the coordination process would produce "[m]ore disciplined policies [that] would go a long way toward more disciplined exchange markets."⁴ The next section will give a brief overview of the economic policies taken by the G-3 in the early 1980s and how the correction of the resulting economic imbalances was seen to be connected to the stabilization of exchange rates in the later half of the decade.

The Development of Economic Imbalances during the 1980s

The argument for economic policy coordination as a tool for exchange rate management centered on the existence of historically large imbalances between the G-3 countries in the mid-1980s and the interaction between these imbalances and exchange rates. While the US pursued fiscal expansion and deficit spending as a way out of the 1980-82 recession, Europe and Japan had undergone fiscal consolidation and restrained government spending. This divergence in fiscal policy led to a large interest rate differential in favor of the dollar to attract

⁴ J.A. Frenkel, M. Goldstein and P.R. Masson. Characteristics of a Successful Exchange Rate System, (Washington: International Monetary Fund, 1991), p.15.

money into dollar assets and finance American spending. The high interest rate differential also sparked the speculative rise of the dollar. Therefore, in order for the dollar to be brought down from its 1985 highs, and then stabilized, "...the fiscal imbalance, and consequent high interest rates, [that were], in one sense, a root cause of the dollar's rise"⁵ had to be reversed. To do this it was imperative for the US to cut its deficit so its need for capital inflows would be diminished. Conversely, for world growth to continue, Europe and Japan would have to inflate their economies to compensate for the reduction in American spending.

The high American interest rates also forced West Germany and Japan to tighten their monetary policy, and keep their interest rates higher than would have been desirable for economic recovery, so as not to open up an even bigger interest rate differential with the United States. As a result of the combined effects of fiscal and monetary restraint, growth rates for Europe and Japan, compared to the United States, were extremely sluggish. By 1984, two years into the recovery, the US was growing at a rate nearly three times that of Europe and a full percentage point more than Japan.⁶ These unbalanced growth rates caused a further imbalance in the current account positions of the three countries. The relatively high growth in the US translated into increased imports, while the high dollar decreased exports. As a result, the US budget deficit was accompanied by a large and growing external deficit. Meanwhile, Japan and West Germany experienced large and growing current account surpluses because not only did their slower

⁵ Michael Artis and Sylvia Ostry, International Economic Policy Coordination, (London: Royal Institute for International Affairs, 1986), p.57.

⁶ Ibid., p.56.

growth rate translate into a lower volume of imports, but also their cheaper currencies made their exports more attractive. The end effects of these divergent policies and growth rates were potentially destabilizing external imbalances and a set of economic fundamentals that showed that the prevailing exchange rates were clearly unsustainable: the dollar would have to fall eventually to bring the American current account back into balance, and West German and Japanese currencies would have to rise to reflect their strong current accounts. The realization that the dollar was grossly overvalued and would have to fall eventually led to the Plaza Accord and the subsequent coordinated intervention engineered to burst the dollar's speculative bubble and manage its decline. Nevertheless, the underlying economic fundamentals still had to be changed if any medium or long-term stability was to be brought back to the international monetary system.

The Necessary Coordinated Economic Policy Adjustments for Exchange Rate Stability

First, fiscal policy adjustment was needed to slow the need for capital flows into the US, as well as to restore the external balance between the US, Japan and West Germany. Secondly, exchange rate stability depended on correcting the current account imbalances. The current account imbalances could be decreased through a decline in the dollar and an appreciation in the yen and deutschemark which would restore the competitiveness of American exports. However, the size of the imbalances meant that the degree of currency realignment needed to balance the current accounts of the three countries would also have to be extremely large, but also economically destabilizing and politically unacceptable to all the countries concerned. Consequently, it was

necessary to coordinate fiscal policy to relieve exchange rates of some of the burden of adjustment in the current account. Or as a G-7 communique later expressed it, coordinating the adjustment of fiscal policies was "...necessary so that [external] imbalances [could] be reduced sufficiently without further significant exchange rate adjustment."⁷

The Lack of Fiscal Policy Coordination Commitments in the Plaza Accord

Even though effective exchange rate management dictated that the above fiscal policy adjustments were necessary, the actual Plaza Accord included only vague commitments. Indeed, the common denominator of each country's statement of policy intentions was that they would continue doing what they had been doing. West Germany's section of the Plaza Accord highlighted their continued commitment to government expenditure control and tax reform, and reaffirmed "The fiscal policy of the Federal Government and the monetary policy of the Deutsche Bundesbank will continue to ensure a stable environment..."⁸ Japan said that their "Fiscal policy will continue to focus on the twin goals of reducing the central government deficit and providing a pro-growth environment for the private sector."⁹ Finally, the policy intentions of the US included reductions in government spending and implementing the deficit reduction package previously passed by Congress for fiscal year 1986.¹⁰ The overwhelming reason the Plaza Accord contained no real policy coordination was that Japan, West Germany and the US were not ready to

7 Group of Seven, "Statement of the Group of Seven Finance Ministers," Washington, (September 27, 1986), Section 6. Reprinted in Funabashi.

8 Group of Five, "Announcement of the Ministers of Finance and Central Bank Governors of France, Germany, Japan, the United Kingdom and the United States," New York, (September 22, 1985).

9 Ibid.

10 Ibid.

subject domestic fiscal policy to exchange rate objectives. In his detailed examination of government attempts to manage exchange rates from the Plaza Agreement to the Louvre Accord, Funabashi underscores that the US administration was hesitant to relate the overvalued dollar to the misalignment in fundamentals caused largely by misguided American policies, and Japan and West Germany both resisted a return to the "locomotive" fiscal approach of the 1970s.¹¹ Apparently, West Germany believed that only modest currency realignment was necessary and "...rejected out of hand the notion that coordination of macroeconomic policies beyond that extent was required" on their part. Instead, they blamed the current currency misalignment and external imbalances on the hostile trade relationship between the US and Japan.¹²

Monetary Policy Coordination after the Plaza

Along with the lack of agreement on appropriate fiscal policy coordination, or even whether or not it was needed, the Plaza Accord left the area of monetary policy coordination largely untouched. According to Funabashi, the issue of coordinated interest rate cuts had been discussed, but there was no agreement as West Germany's Bundesbank refused to go along.¹³ In the final document, only Japan included "Flexible management of monetary policy with due attention to the yen rate" as a policy intention.¹⁴ This lack of commitment on what type of monetary policy would be complimentary to the coordinated intervention and to the managed decline of the dollar that had been agreed to was a

11 Funabashi, pp.37, 39-40.

12 Ibid., p.110.

13 Ibid., p.32.

14 Group of Five, "Announcement of the Ministers of Finance and Central Bank Governors of France, Germany, Japan, the United Kingdom and the United States," New York, (September 22, 1985).

serious omission. Coordination of monetary policy was central to managing the exchange rate realignment because any narrowing of the interest rate differential between the US, Japan and West Germany could cause the dollar to fall too rapidly, spiralling beyond government control, to a "hard landing". Conversely, a widening of the interest differential might cause the depreciation to stall as dollar assets became more attractive. Furthermore, changes in monetary policy would also affect economic growth and domestic demand which would have implications for the correction of the external imbalances.

The types of problems generated by a lack of monetary cooperation became apparent when the Bank of Japan unexpectedly raised its interest rates a month after the Plaza Agreement. The Japanese raised interest rates, even though it ran against domestic preferences, in order to help intervention efforts and appreciate the yen as agreed to at the Plaza.¹⁵ The Chairman of the US Federal Reserve, Paul Volcker, however, called the move "unnecessary and unwise" and feared it would send the already declining dollar into a tailspin.¹⁶ Perhaps this episode served as a wake-up call, for in the following months, the G-3 became much more sensitive to the impact of monetary policy on exchange rates and coordinated several interest rate cuts.

To accomplish even this limited example of monetary coordination, the traditional independence of each country's central bank had to be overcome. Central banks have the primary authority for monetary policy and usually resist politicians' attempts to dictate policy. The policy coordination initiative, however, operated through the G-5/G-7 process

15 Dobson, p.86.

16 Funabashi, p.33.

which was controlled by finance ministers and heads of state. Therefore, to achieve coordination of both fiscal and monetary policies, bridges had to be built between the politicians and the central banks. Overcoming central bank resistance to coordination was especially difficult in the case of the Bundesbank, the most independent central bank and the one which takes its primary objective of controlling inflation the most seriously. Indeed, it took pressure from the EMS countries, whose currencies were being pushed out of their ranges as the declining dollar produced an appreciating deutschemark, along with direct US and Japanese pressure, to produce some of the coordinated interest rate cuts agreed to by the Bundesbank.¹⁷ In any event, the G-5/G-7 process was able to elicit at least a degree of cooperation from the central bank governors, and starting in March, 1986, West Germany, Japan and the US coordinated several rounds of interest rate cuts with the aim of taking advantage of lower global inflation and to stimulate growth, but without upsetting the on-going exchange rate realignment.

The Tokyo Summit and the Unveiling of Multilateral Surveillance

The G-7 Economic Summit in Tokyo in May, 1986 produced an attempt to construct a more serious and formal version of economic policy coordination. At the Summit, the Heads of State and Government of the seven leading industrial countries agreed that the examples of coordinated intervention at the Plaza Accord and the coordinated interest rate cuts had to be augmented. As a result, they agreed that

¹⁷ Ibid., p.59. The EMS countries wanted the West German interest rate cut because the realignment process after the Plaza was pushing the mark very high and the other EMS countries were having difficulty keeping their currencies in range. Although Funabashi concludes that German concern with the mark/dollar rate was not the basis for their interest rate cuts, in an indirect way it was because the Bundesbank action was undertaken so the Plaza realignment could be compatible with the EMS system.

"...additional measures should be taken to ensure that procedures for effective coordination of international economic policy are strengthened further" and stated that along with promoting growth and openness in international trade and investment, "...the purposes of improved coordination should explicitly include...fostering greater stability in exchange rates."¹⁸ In order to accomplish greater coordination, a Group of Seven finance ministers was formed and instructed to meet at least once a year to

...review their individual economic objectives and forecasts collectively...with a particular view to examining their mutual compatibility; ... [and] ...to make their best efforts to reach an understanding on appropriate remedial measures whenever there are significant deviations from an intended course...¹⁹

To facilitate "mutual surveillance" it was decided that the IMF would collect statistics on a number of economic variables, including interest rates, GNP, inflation, and unemployment, and make them available to the G-7 which would then use them to judge the economic performance of the countries involved and as indicators for needed policy adjustment.

Weaknesses in the Multilateral Surveillance Mechanism

The multilateral surveillance procedure appeared to be a significant step towards macroeconomic coordination, but there were reasons to suspect that it would exist only on paper. First of all, two of the three major countries at the table, Japan and West Germany, were extremely skeptical of the entire process. They believed that it was politically unrealistic to expect that any country, and especially the

¹⁸ Group of Seven, "Tokyo Economic Declaration," Tokyo, (May 6, 1986), Section 7. Reprinted in Funabashi.

¹⁹ Ibid.

United States, would change its economic policy because the G-7 ministers, after comparing some economic indicators, judged their economic performance to be incompatible or unsatisfactory to the others.²⁰ Indeed, Japan's Vice Minister of Finance for International Affairs, Tomositsu Oba probably spoke for most of the participants when he said: "We're not going to allow indicators to meddle into the domestic politics and sovereignty."²¹ At a minimum, the surveillance process would be a public relations exercise, or an information exchange; but it would be ignored as a basis for serious adjustments in policy.

Japan and West Germany also feared that the US, the strongest backer of the economic indicator system, would use it "...to pressure them into automatic policy changes (in particular to increase their domestic demand) in the absence of changes in the United States' own policies."²² In light of these fears, it was not surprising that during the negotiations to arrive at the final document, the language of the agreement was consistently modified at every strategic point to remove even an implication of the mandatory action that successful coordination would require.²³ Coordination needs "...some degree of automaticity, so it challenges the state's traditional ordering of priorities and puts pressure on the decision-making processes that reflect them."²⁴ The G-7 nations correctly feared that multilateral surveillance would impinge on their sovereignty, or their right to undertake any policy perceived to

20 Dobson, p.40; See also Funabashi, pp.134-135.

21 Tomomitsu Oba, "Two Focuses and Accomplishments at the Tokyo Summit," Kinyu Zaisei Ji jo (Monetary and Fiscal Report), (May, 1986), as quoted in Funabashi, p.135.

22 Dobson, p.40.

23 Funabashi, p.135.

24 Ibid., p.145.

be in their nation's interests. Not surprisingly then, they removed from the agreement anything that would have a disciplinary effect on their actions. This robbed the agreement of its ability to further the cause of economic coordination. Fear of the multilateral surveillance mechanism reflected the fact that the participating nations had not yet fully accepted that the benefits of exchange rate management, attainable only through macroeconomic coordination, outweighed the losses one could expect from abandoning the requisite degree of sovereignty. Ironically, the sovereignty nations were concerned with protecting, and the autonomy they wished to preserve, had become "...increasingly *nominal*...", as opposed to real, in this "...age of economic interdependence".²⁵

A Year After the Plaza Agreement, But No Progress on Policy Coordination

As could be expected, nothing substantial was accomplished at the first multilateral surveillance meeting held in September, 1986. In the year since the Plaza, a significant realignment of currencies had occurred. The IMF reported that by April, 1986, the exchange rate realignment had brought the "real effective exchange rates of the yen and the deutschemark back to the levels prevailing in the first quarter of 1981, shortly after the sustained appreciation of the US dollar began."²⁶ But between April and September, the dollar continued to drop. The appreciation of their currencies had been hurting West German and Japanese exports significantly and they looked to the US to slow down the decline of the dollar, and again called for a reduction in the US deficit. The American officials, however, warned they "...would be

²⁵ Ibid., p.145, Emphasis added.

²⁶ International Monetary Fund, Annual Report 1986 (April, 1987), p.18.

happy to see the dollar drop much further"²⁷ unless West Germany and Japan agreed to expand their economies more rapidly. None of the three countries was willing to agree to changes in their domestic policies which would accomplish these objectives. The United States said it was working on reducing the budget deficit. West Germany, ever fearful of inflation, felt that their economy was already expanding too rapidly, monetary policy was already too loose, and a tax cut had already been scheduled for 1988 as part of their fiscal policy adjustments. Finally, Japan said they were making progress on previously announced changes to the foundations of their economy that would eventually make them less export-dependent and increase domestic demand.²⁸ Once again, as one commentator observed, "In short, every country said that it would go on doing just what it had been doing."²⁹ Clearly, actual international economic policy coordination would have to wait for a day when circumstances pushed it higher on each country's agenda of national interests.

Motivations For The Louvre Accord

It appeared this day had come in February 1987 at the Louvre when the G-7 agreed that the exchange rate realignment initiated at the Plaza had gone far enough and that it was now time for currency stabilization. Actually, since September officials had been announcing to the markets that currencies were "...now broadly consistent with the present underlying fundamentals..." and therefore, could stabilize.³⁰ The

27 The Economist, "Survey: The World Economy," p.10.

28 Feldstein, p.215.

29 Ibid., p.215.

30 "Baker-Miyazawa Joint Communique," October 31, 1986, referring specifically to the Yen/Dollar exchange rate. Reprinted in Funabashi, p.274-275. However, the earlier G-7 communique in September, 1986 also noted that current economic conditions and further coordinated adjustment "...should help

problem was that the markets were not listening. In the absence of policy coordination, there was no reason to assume that the economic fundamentals now supported stabilization, so the markets kept on selling the dollar. Between October 1986 and February 1987, the dollar depreciated 13.0% further against the deutschemark and another 5.5% against the yen.³¹

By February, 1987 the G-3 were all sufficiently affected by the continuing drop in the dollar to come to an agreement. On Japan's part, the declining dollar/rising yen had hurt their export-led economy from the beginning. Ever since the Tokyo Summit, the Japanese had been pressing the United States for currency stabilization.³² In the US, higher yields at US Treasury bill auctions and the accompanying higher interest rates were taken as a sign that foreign investors, alarmed by the continuing dollar depreciation, were increasingly reluctant to invest in dollar assets. The US, nevertheless, continued to have a great need for capital inflows to finance the deficit; policymakers therefore had an interest in stabilizing the dollar in the hopes of again attracting foreign investors.³³ In Europe, the flip side of the declining dollar was a rising mark which was continuing to put stress on the grid of European currencies in the EMS. The tensions generated by the declining dollar/rising mark had already caused one EMS realignment in January 1987. Consequently, the Europeans regarded currency

stabilize exchange rates..." The coordinated adjustment, however, never did materialize. see Group of Seven, "Statement of the Group of Seven Finance Ministers," Washington, (September 27, 1986).

31 Obstfeld, p.202.

32 Funabashi, pp.151-161. This pressure eventually produced the October, 1986 Baker-Miyazawa Accord, in which the U.S. publicly stated currencies should stabilize. Notwithstanding the agreement, the US did nothing to stabilize exchange rates when the yen continued to appreciate.

33 Ibid., pp.179-180.

stabilization between the US, West Germany and Japan as a necessary condition for the future stability of the EMS.³⁴

The Louvre Accord: Targeting Exchange Rates and Policy Commitments

The Louvre Accord called for the stabilization of currencies within a range of plus or minus 5% of the nominal exchange rates as they had been the previous day in the market, Y153.5 and DM1.8250 to the dollar. To accomplish the stabilization, intervention along with policy adjustment, was to be used. The basis for the agreement, as expressed in the communique, was that

The Ministers and Governors agreed that the substantial exchange rate changes since the Plaza Agreement...have now brought their currencies within ranges broadly consistent with underlying economic fundamentals, given the policy commitments summarized in this statement. Further substantial exchange rate shifts among their currencies could damage growth and adjustment prospects in their countries. In current circumstances, therefore, they agreed to cooperate closely to foster stability of exchange rates around current levels.³⁵

It is important to realize that the statement noted that exchange rates were broadly consistent with the fundamentals "given the policy commitments summarized in this statement." These commitments, aimed at fiscal policy, included demand-strengthening policies on behalf of the surplus countries: for Japan this included tax reform, fiscal stimulus measures, and .5% cut in its discount rate; for West Germany it included increasing the size of already proposed tax cuts and undertaking further tax reform. The major deficit country, the US, pledged to cut its federal deficit to 2.3% of GNP in 1988.³⁶ These fiscal policy

34 Kenen, Managing Exchange Rates, pp.16-17.

35 Group of Seven, "G-6 Communique," Paris, (February 22, 1987), Section 10. Reprinted in Funabashi.

36 Ibid., Section 7.

intentions were largely what the market had called for, beginning with the initial G-7 declaration of policy coordination as a means to exchange rate management.³⁷

The Lack of Implementation of the Louvre Accord and Subsequent Exchange Rate Movements

Between April and September, the G-7 continued to meet and issue statements in which they reiterated the basic theme:

...that around current levels their currencies are within ranges broadly consistent with economic fundamentals and the basic policy intentions outlined at the Louvre meeting. ... They concluded that present and prospective progress in implementing the policy undertakings at the Louvre and in this statement provided a basis for continuing close cooperation to foster the stability of exchange rates."³⁸

Nevertheless, the governments continued to change their view of what the "current levels" of exchange rates should be to match what level the market was trading at. This was especially true of the yen/dollar rate. Although the market had initially stabilized after the Louvre Accord, between mid-March and mid-April, the dollar started falling again against the yen. This latest decline had apparently been set off by US trade problems and market perceptions that Japan's ability to successfully cut its trade surplus and increase domestic demand had been undermined.³⁹ By the April 1987 G-7 meeting, the dollar had fallen another 7% against the yen since the Louvre--beyond the 5% range within which the G-7 agreed to stabilize currencies. Instead of taking substantial policy measures to preserve the rate agreed to at the Louvre, the G-7 rebased the central rate for the yen according to the

³⁷ See The Economist, "Survey: The World Economy," p.10.

³⁸ Group of Seven, "Statement of the Group of Seven," Washington, (April 8, 1987), Section 3. Reprinted in Funabashi, Emphasis added.

³⁹ Funabashi, p.188.

dollar/yen rate in the market the day before.⁴⁰ Then, in an attempt to convince the market that its Louvre commitments to policy adjustment were being taken seriously, and currencies could therefore stabilize, the Japanese also announced at the April meeting that it would propose a Y5 trillion/\$35 billion (increased to Y6 trillion in June) fiscal stimulus program to the Diet.⁴¹ However, there were no new announcements of measures by West Germany and the US to support the dollar and it continued to fall, so that by the end of April the dollar was trading at times below Y140 and DM1.8.⁴²

Relative stability was achieved after the period of volatility in April partly due to monetary policy. This occurred even though, beyond Japan announcing that it would again cut its discount rate, there was no significant monetary coordination designed to support the exchange rate reference ranges designed at the Louvre. Interest rate trends at the time of the Louvre Accord were broadly consistent with the declared objective to stop the dollar's decline and stabilize rates, even though "...central bankers [had] refrained from discussing how they would use monetary policy to support the commitments made. [or] ...to maintain rates within the agreed ranges."⁴³ In the post-Louvre period, American, Japanese and West German interest rates and monetary policy continued to move in opposite directions. The United States monetary policy became more restrictive: money growth was held below its target interval and

40 Ibid., p.189.

41 Feldstein argues that the Japanese undertook this fiscal stimulus and also eased interest rates not because of international coordination, but for purely domestic reasons: they feared that without it their economy would slide into recession. Nevertheless, since these policy adjustments were announced in the context of G-7 economic coordination meetings, they can be seen as a signal to markets that economic coordination was occurring and that currency stabilization should follow. See Feldstein, p.215.

42 Funabashi, p.190.

43 Ibid., p.209.

interest rates rose. In contrast, Japanese and West German monetary policy was relatively expansionary with money growth high and interest rates moving downwards.⁴⁴ This combination of monetary policy among the G-3 helped to stop the dollar's fall and stabilize currencies "...despite continuing pressure for further dollar depreciation due, in part, to the persistence of a large US current account deficit."⁴⁵

At the Louvre and all the subsequent meetings, the G-7 agreed that the underlying economic fundamentals *given* the type of coordinated policy adjustment included in the statements provided a basis for exchange rate stabilization. But months continued to pass without any country except Japan following through on the fiscal measures that would have decreased the need for a continued US dollar decline. Nevertheless, stabilization was achieved through the particular combination of monetary policy among the three largest nations. Monetary coordination had never been part of the Louvre agreement; therefore, no plan and no real obligation existed to direct central banks to use monetary policy to maintain the ranges agreed to. Consequently, currency stability following the Louvre Accord rested rather precariously on a set of monetary policies that could be changed at any time by central bankers who had been careful to preserve their policy independence at the Louvre negotiations.⁴⁶

44 Obstfeld, p.207.

45 Ibid., p.207.

46 Funabashi, pp.209-210.

A 'Breakdown' in Coordination and the October Stock Market Crash

In September 1987, interest rates rose in all three countries in response to domestic concerns about inflation. The raising of foreign interest rates, especially by West Germany, was seen by the US to be "...contrary to the spirit of the Louvre..."⁴⁷ and caused the US Treasury to "...publicly worry about the breakdown in coordination."⁴⁸ The combination of higher interest rates and market fears that coordination had indeed broken down is seen by some as the immediate trigger of the October stock market crash.⁴⁹ In response to the stock market crash, interest rates fell world wide, the interest differential in favor of the dollar declined, and the dollar soon resumed its fall. At the end of 1987, the dollar was down sharply, "...shattering the lower limit specified by the Louvre Accord," in spite of continued interest rate reductions in Japan and Europe.⁵⁰

A New Attempt at Coordinated Policy Adjustment and Exchange Rate Targeting

In another attempt at exchange rate management, the G-7 issued a further statement on December 22, 1987. The ministers re-emphasized "...their common interest in more stable exchange rates..." and warned that continuing volatility would be destabilizing.⁵¹ The fact that they were still calling for stability was interpreted as representing a new exchange rate agreement, in which rates would once again be rebased to the levels prevailing in the market.⁵² The statement also included the

47 Ibid., quoting a Reagan Administration official, p.210.

48 Dobson, p.108.

49 See Obstfeld, pp.207-208; and Dobson, p.118.

50 Obstfeld, p.208.

51 Group of Seven, "Statement of the Group of Seven," (December 22, 1987), Section 8. Reprinted in Funabashi.

52 Dobson, p.120.

familiar policy pledges of fiscal stimulus in Japan and West Germany and fiscal consolidation in the United States. US fiscal consolidation had been seen by many observers as the "...missing ingredient..." in the period since the Louvre for exchange rate stability.⁵³ In this regard, the December statement marked a fundamental change: the US administration had finally reached an agreement with Congress on deficit reduction, with savings totaling \$76 billion in FY 1988 and FY 1989.⁵⁴ Nevertheless, the market remained unimpressed and the dollar continued to weaken until very strong and very coordinated central bank intervention operations in January 1988 broke its fall and improved US trade figures released in February caused it to strengthen on its own.⁵⁵

The Weaknesses of Macroeconomic Policy Coordination As An Instrument for Exchange Rate Management

The objectives of the US, Japan and West Germany for exchange rate management during 1985 to early 1988 were to first manage a gradual realignment of currencies and then stabilize them within the agreed range. They had only limited success: the dollar did begin declining immediately after the Plaza Accord and was broadly stabilized after the Louvre Accord, although the reference ranges for currencies had to be rebased in April, 1987 and then again after the October stock market crash. Nevertheless, it would be a gross exaggeration to conclude that the policy coordination agreed to and implemented by the G-3 had a fundamental impact on the foreign exchange market or caused it to

53 Ibid., p.119.

54 Group of Seven, "Statement of the Group of Seven," Annex: Policy Intentions and Understandings, (December 22, 1987).

55 Obstfeld, pp. 203, 208; and Dobson, p.120.

operate in a way that would lead to greater exchange rate stability and less speculation-driven volatility and misalignment.

Upon reviewing the attempts of the US, Japan and West Germany to use policy coordination to manage exchange rates it becomes clear that it was not the economic ineffectiveness of policy coordination that failed to stabilize exchange rates. Rather, it was the inability of governments to use the tool of policy coordination more effectively that led them to realize only the most limited goals of exchange rate management. Although it is difficult to be specific about what effect policy coordination had or could have had on exchange rates, at least one observer has noted "The most violent reactions in the currency market occurred whenever it sensed a stall or a lack of coordination in policy adjustment efforts."⁵⁶ This was because officials had been calling for exchange rate stabilization based on coordinated policy adjustments but when they failed to deliver, the market realized that exchange rates, rather than policies, were going to have to change to reconcile the differences between national economic performance. Once again, the market's speculative and volatile character magnified the needed rate adjustments and produced the violent changes in exchange rates policy coordination was to have prevented.

Basically, the economic policy coordination used during the period under study simply was not extensive enough to have a significant or long term impact on the foreign exchange market. This review of attempted policy coordination illustrates the vagueness of the agreements, the scarcity and slow pace of policy adjustment implementation and the unwillingness of the governments involved to

⁵⁶ Funabashi, p.230.

abandon what they viewed as their sovereignty or to forgo domestic goals in order to achieve the global goal of exchange rate management. Even the agreements that were reached for coordinating economic policy, and coordinated intervention, papered over some of the very basic issues and technical weakness of the overall plan for exchange rate management.⁵⁷ For example, as the nations could not agree on the levels for exchange rates, they either delayed the decision as at the Plaza, or used the market-established rates as the basis for subsequent rebasements. When ministers could not agree on how their economies were linked, they often refused to refer to the more objective conclusions of economic simulations, and "...prefer[ed] to rely on firsthand experience and back-of-the-envelope judgments about linkages."⁵⁸ Finally, a long running disagreement regarding the correct mix between policy adjustment and intervention to manage exchange rates often divided the participants and led to different interpretations and implementations of the agreements that were reached.⁵⁹

While it is difficult for governments to even attempt economic policy coordination knowing that some of their autonomy will be compromised, often the fruits of coordination are limited further by the domestic political structures of the countries concerned. For instance, even though US fiscal policy adjustment, primarily deficit reduction, was seen as critical to exchange rate stabilization, the US Treasury minister could not deliver any promises to the other G-7 ministers as the budget was not under his control, but under that of the US Congress.

57 See *Ibid.*, 227-229; Also, see Kenen, Managing Exchange Rates, for a discussion of the necessary components, or issues to be resolved when constructing an exchange rate regime.

58 Dobson, p.72.

59 *Ibid.*, pp.59-62,140-141; Also, Funabashi, pp.234-236, 239-240.

The difficulty in obtaining cooperation from central banks in any plan for exchange rate management was further exacerbated by the constitutionally guaranteed independence of the West German central bank. Finally, Japan's structurally weak leadership, and bottom-to-top consensus style decision-making meant that fiscal stimulus packages proposed by the Finance Minister did not always pass quickly or unchanged.⁶⁰ The market often interpreted this as stalling on pledged policy adjustments.

The indicator system was designed to facilitate coordination by making it more non-political: it was to analyze economic performance and policies objectively, judge if they were compatible and recommend changes if they were not. Still, it was too much of a threat to traditional notions of national sovereignty and entrenched interests in each country's domestic economy to ever have a serious impact on policy-making. It also remained true that national economic policies, arrived at independently, were not automatically compatible in a global context. Consequently, if stable exchange rates depend on stable global fundamentals, they are not likely to be achieved with any consistency unless governments find a reliable way to overcome the obstacles discussed earlier.

Conclusions Regarding Government Influence within the Day-to-Day Operation of the Foreign Exchange Market

In the day-to-day operation of the foreign exchange market, the tools governments have used to exert their influence have been largely ineffective. During the period under study, the effectiveness of both intervention and policy coordination were undermined by governments'

⁶⁰ Funabashi, p.239

inability to coordinate their efforts consistently. The previous chapter argued that members of the G-3 used the tool of coordinated intervention, even though it generally had only the shortest effect on exchange rates, because they did not have to forego any sovereignty. Even with intervention, however, nations often had problems reaching agreement on how to coordinate their activities. The assertion of this chapter has been that states' use of macroeconomic policy coordination to manage exchange rates would have been more economically effective than intervention, but was under-used because it also would have undermined their national autonomy. In their attempts to preserve their sovereignty, governments missed the opportunity to exert more influence in the foreign exchange market. This failure of cooperative international action allowed private traders, who usually operate in accordance with speculative, profit-driven objectives, to remain the dominant influence in the determination of currency values. By allowing a small segment of the world's community to dominate and distort a market that forms the basis of the global economy, and every nation's share of it, governments undermined their own and every nation's sovereignty .

Chapter 4

Regulating the Foreign Exchange
Market
To Increase Government Influence

The power of the market, or the lack of power of states, can also be seen in what the authorities have not done to control the market. In their attempts to manage exchange rates, governments have not rearranged the organization or the operation of the foreign exchange market to better serve their goal of exchange rate management. Rather, they have attempted to restructure the relationships among themselves, in the hopes of increasing their power within the peculiar workings of the current foreign exchange market. The argument of chapters two and three, that states are not very powerful players vis a vis private actors in the day-to-day operation of the foreign exchange market is only one aspect of their lost power. This chapter will argue that the second, and perhaps, ultimately, the more important aspect of the changed relationship between states and private actors in the foreign exchange market, (and the broader financial system), is that states' power to change or restructure the "rules" under which the private actors in the foreign exchange market operate, has been compromised.

The next section examines whether governments could increase their influence within the foreign exchange market, and their ability to manage exchange rates, by using regulation to minimize the dominance of short-term capital movements and speculative activity within the market. Whether exchange and capital controls could be used effectively in the current financial and monetary system to contain speculative capital movements and foreign exchange transactions is then considered. Since the effectiveness and feasibility of these controls is doubtful, the discussion turns toward the possibility of regulating the participants that trade currencies, and the products and markets they use. Once

again, however, it is found that the complexity of the current foreign exchange market would present regulators with many obstacles.

Primarily, the globalization of financial and capital markets, and advances in technology, communication and financial innovation, facilitate the mobility of international finance capital and increase the costs to states of controlling it. To a degree, some of the difficulties inherent in regulating a global market from national bases could be overcome through international agreement and coordination. However, using the insights provided by public choice theory, it is found that the ease with which finance capital moves across borders induces states to compete in order to attract capital to its jurisdiction, rather than to cooperate to restrict or regulate its movement. These factors lead to the conclusion that states' authority to implement and enforce the changes that would be necessary to transform the foreign exchange market, and the wider financial system, is of limited utility. This is because the possible costs that would be incurred in increasing regulation, such as driving finance capital to another center, sacrificing autonomy by coordinating policy with other states, or dismantling the current, open economic system, are perceived to be intolerable.

How Increased Regulation of Foreign Exchange Activity Would Make Exchange Rate Management More Successful

Over the last few decades, private actors in the global financial system have taken advantage of advances in technology and communication, and have exploited the gaps and contradictions present in a regulatory system based on sovereign nations, to increase the efficiency of moving money around the globe. The market's ability to move billions very fast

and at little cost has turned the foreign exchange market into an asset-like market where exchange rates can become detached from the fundamentals, speculation is rampant, and currency instability is inevitable. This situation is further exacerbated because the foreign exchange market is also virtually unregulated, accessible to anyone, and profits made there are taxed at lower levels than other investments. One of consequences of a foreign exchange market embellished with these characteristics is that banks, corporations and institutional investors such as pension funds now treat the foreign exchange market as "...an extremely attractive arena for investment in its own right"¹. This has induced even more speculative, short-term capital to flow into and through the foreign exchange market.

One argument is that these unregulated capital flows are the key problem in the current exchange rate system. Economist James Tobin has characterized the debate between floating or fixed exchange rate regimes as pointless in the face of excessive inter-currency capital flows that make either regime unworkable, transmit disturbances originating in international financial markets, and, along with exchange rate speculation, "...have serious and frequently painful real internal economic consequences" for all nations.² Furthermore, as discussed previously, these destabilizing short-term capital movements, and the resulting huge volume of foreign exchange transactions, lead to exchange rate volatility and misalignment, and often overwhelm government attempts to manage the situation. Increasingly, governments have been

1 Ohmae, p.159.

2 James Tobin, "A Proposal for International Monetary Reform," reprinted from The Eastern Economic Journal, (July/October, 1978) in James Tobin, Essays in Economics: Theory and Practice. (Cambridge, MA: MIT Press, 1982), pp.488-489.

left with one very weak instrument for exchange rate management: trying to impress and change the market's sentiment with cooperative and coordinated intervention and economic policy. In a market dominated by speculative capital flows, the power of governments is not great.

Alternatively, if international capital mobility was restricted and/or the deregulated international financial system that facilitates it was re-regulated, governments could increase their power vis a vis the foreign exchange market and decrease the variability of exchange rates caused by speculative transactions. Reducing international capital mobility and increasing regulation would cause a reduction in the number of foreign exchange transactions not done for underlying economic reasons, such as for trade or longer term investment. This would cause a transformation in the structure and operation of the foreign exchange market as it would be less likely to be used as a speculative investment. In turn, the clout of states vis a vis the foreign exchange market's private actors would increase. The instruments available to governments to restrict destabilizing capital flows include capital and exchange controls as well as implementing regulation and supervision aimed at controlling certain foreign exchange transactions or making them more expensive and therefore less attractive to do.

The argument for a restructured foreign exchange market is not weakened even if one believes that much of the volatility and exchange rate misalignment in the foreign exchange market originates in uncoordinated and improper government policies, rather than being inherent in the particular way the foreign exchange market operates. It can still be argued that the volume of the market, the short-term

outlook of many of its participants and its extreme efficiency exaggerate exchange rate movements and make the resulting situation more difficult and costly to correct. We have seen that it is ludicrous to expect governments to coordinate faithfully their macroeconomic policies to ensure global economic stability and exchange rates, or that policies reached independently will naturally be consistent with exchange rate stability. Therefore, the foreign exchange market should be restructured so exchange rate movements that are due to the incompatibilities that are sure to arise between states' policies and interests would not be overly exaggerated. Even in this scenario, exchange rate stability would be advanced by restructuring the foreign exchange market so as to minimize the role played by speculative transactions.

The Feasibility of Using Exchange and Capital Controls to Decrease the Role of Speculative Capital Movements in Foreign Exchange: Technical and Political Aspects

Presumably, capital and exchange controls could be used to diminish the role speculative short-term capital flows and foreign exchange transactions play in exchange rate determination, and thereby enhance the influence of any government action to manage exchange rates. Nevertheless, the actual utility of these types of controls is diminished by the complexity and integration of the financial system. One obstacle to using exchange and capital controls that would have to be overcome is the need to formulate controls that distinguish between desirable and undesirable financial transactions. This would be difficult, not only because it is extremely subjective, but also because it could change over time as a nation's economic conditions, or set of

values changed. Furthermore, since unilateral controls are not effective, to achieve the maximum degree of effectiveness, controls would have to be universally accepted and applied. However, as Bryant points out: "To design and implement internationally agreed guidelines would be still more difficult since what would be judged undesirable by some nations would be deemed helpful by others."³ Even if these problems were overcome, the effectiveness of any resulting controls would still be dependent upon whether governments, even acting together, would have the knowledge and resources to formulate regulations that would have the intended effect, while eliminating the possibility that they could be evaded. As Strange points out, however, even today, governments are relatively ignorant. They do not have even the most basic information on some types of financial activity, that are, nevertheless, central to the way the financial and monetary systems operate.⁴ In the meantime, financial innovation continues to widen the gap between what governments do know, and what they would have to know, to regulate it effectively.

Even when the financial markets were less complex and integrated than they are today, exchange and capital controls had a very limited, if any effect on stopping capital flows. In the 1960s and 1970s, limited capital controls in the US proved ineffective as capital outflows were not contained, but simply moved through other channels. This convinced officials that "...only a politically undesirable system of total and comprehensive financial controls would be effective in

³ Bryant, p.156.

⁴ Susan Strange, Casino Capitalism. (Oxford: Basil Blackwell, 1986), Chapter 5.

stemming financial flows."⁵ In the 1970s, European countries also found that their more extensive system of financial controls was of marginal utility as the Euromarkets continued to be used for speculative capital flows that eventually undermined the system of fixed exchange rates.⁶ Finally, in 1979, Britain dropped its remaining exchange controls as "...efforts to evade them were growing in scale and sophistication, [making] the effects of the controls...increasingly unpredictable."⁷ Eventually, most European countries followed the British example.

Since then, the integration of financial markets and sophistication of their participants has only grown; consequently, reinstating effective exchange or capital controls is increasingly implausible. Today, the global financial system is composed of both highly integrated national financial markets, as well as truly supranational, virtually non-regulated Euromarkets.⁸ Accordingly, this international financial system provides many possible channels through which any exchange and capital controls could be evaded, and further financial innovation would certainly occur to aide the evasion of any new rules. Closing all the possible channels may also require the effective dissolution of the global financial system as it now exists. Partial measures would be hopelessly inadequate.

Monitoring compliance with any controls is complicated further by the global network of multinational banks and other private financial operators, and their infrastructure of computers, satellite

5 Eric Helleiner, "States and the Future of Global Finance" Review of International Studies, 18 (January, 1992), p.33.

6 Ibid., p.33.

7 The Economist, "Whatever became of the Thatcher Miracle" (June 23, 1990), p.17.

8 Bryant believes that the world's national financial and capital markets are now about two-thirds or three-quarters of the way to being a single global market. p.75.

communications and transborder data flows. With the growth of the foreign exchange market and advancing technology, it is difficult to see how the adherence to any controls could be monitored effectively and comprehensively unless states were willing and able to take drastic measures. For instance, how would the authorities distinguish and decode the electronic messages that carry data on foreign exchange transactions from the growing amount of other transborder data flows. Monitoring compliance to eliminate evasion would be difficult without "...decoding and reading [all] the data, in effect the equivalent of steaming open electronic mail. In countries with a long tradition of privacy, such actions [would] not sit well with the populace."⁹

Given these technological difficulties alone, one would have to agree with Bryant's conclusion that "...governments simply may not have the capacity to prevent international movement of funds."¹⁰ These difficulties, and the ones mentioned earlier regarding the design and aim of the regulations, suggest that the only measure that might ensure that exchange and capital controls were controlling speculative capital movements would be the complete dismantling of world financial markets.

Barring any outbreak of hostilities, however, complete financial dissolution is politically untenable. Such a move would require state control of all previously open markets. Consequently, participants in those markets and individuals who have worked towards and accepted open markets in the belief that they encourage peace and higher standards of living would not be supportive. Furthermore, although reinstating capital and exchange controls would further state interests in

⁹ Wriston, p.151.

¹⁰ Bryant, p.156.

stabilizing exchange rates, they would undermine other state interests. While international capital flows are often responsible for the foreign exchange market's speculative and volatile tendencies, they are also crucial to the operation of many governments. States have become very dependent on international capital flows. They provide governments with added flexibility when formulating their macroeconomic and budget policies by allowing them to continue their current account deficits and surpluses "...for extended periods of time."¹¹ In fact, in recent years, countries that have traditionally been more restrictive towards capital movements and international banking have responded to pressure to liberalize their financial markets so capital will flow more freely and multinational banks will have greater access. It appears that stopping speculative capital flows with exchange and capital controls would be either futile or extremely costly. Anything less than complete closure would be so prone to evasion that it would have limited effect. But dismantling international financial markets is a drastic move, with high costs in terms of economic stability and world development. This is particularly true for a world that, for the most part, has been committed to an open, liberal international economy.

Increasing State Influence in Foreign Exchange Through Re-Regulation and Supervision

An alternative to using exchange and capital controls would be to reorganize the operation of the foreign exchange market through other types of regulation and increased supervision. One such proposal is a tax on all foreign exchange transactions.¹² By making all foreign

¹¹ International Monetary Fund, Annual Report 1985 (April, 1986), p.32.

¹² Tobin, pp.490-494.

exchange transactions more expensive, the tax would encourage a decrease in transactions that were not done for an underlying economic reason, such as trade. With fewer speculative transactions, the influence of speculation on exchange rates would be reduced. As we shall see, however, increased regulation and supervision face many of the same problems outlined above in respect to implementing exchange and capital controls. The next sections will examine how the multitude of actors, products and markets involved in currency trading make any attempt to use regulation and supervision to change the foreign exchange market very complicated, and success remote.

An Example of New International Regulation: Capital-Adequacy Regulations for International Banks

As an introduction to the difficulties inherent in regulating foreign exchange activity, the distinction between the possible and probable impact of the new capital adequacy regulation on international banking will be examined. The new regulation, which will come into force in 1993, will have an effect vaguely similar to the foreign exchange tax mentioned above as it will make certain foreign exchange transactions more expensive. The new regulation, agreed to by the members of the Bank For International Settlements (BIS), requires banks to bring the ratio between their capital base and their assets up to a minimum of 8%, as a precaution against future economic downturns and bank failure due to under-capitalization.¹³ The unique feature of this regulation is that for the first time, capital adequacy standards will be applicable to foreign exchange. Currency trades do not normally appear on a bank's

¹³ Keith Schap, "Bank Capital Rules: A Boon for Exchanges?" Futures: The Magazine of Commodities and Options 21 (May, 1992), p.40.

balance sheet as they do not fit the traditional definitions of an asset, liability or capital. The new regulations, however, contain valuation formulas, or "risk-based capital guidelines [that] offer balance sheet equivalence and risk-adjusted asset values for currency trades...", so they can be subjected to the capital adequacy standards.¹⁴ The BIS made its guidelines applicable to currency trades because banks are increasingly turning to currency trading, and incurring larger risks, to bolster their profits in the wake of slumping profits in their traditional banking activity.¹⁵ Consequently, the BIS felt that inclusion of at least some of the foreign exchange transactions in the capital/asset ratio would be necessary to represent each international bank's true financial status. Generally, the amount of capital a bank will require for each currency trade will, reflecting the fact that the regulation is aimed at credit risk, depend on its maturity (for instance, in the United States, transactions with under 14 days maturity, such as spot transactions are not included), and the type of counterparty to a trade, (those with corporate clients require more than those with other banks and governments).

The Probability that the Capital-Adequacy Regulations Will be Followed

Although it is always possible that banks may take steps to evade regulation, it is less likely in this case. The BIS capital adequacy rules affect all assets, and banks would not want to run the risk of it even being rumored that they did not meet the capital adequacy rules in one area, as their investors might then question whether there were also troubles elsewhere. In an international banking system dependent upon

¹⁴ Ibid., p.41, [Inset].

¹⁵ Ibid., p.40.

credit and access to the wholesale markets that operate solely between banks, an inability to meet an international guideline for capital adequacy would jeopardize a bank's continued financial viability. Moreover, according to a May, 1991 article in the international banking magazine, Euromoney, credit quality has become the dominant issue in the foreign exchange market. Some US banks had been rumored to be "...too close to the Bank for International Settlements guidelines on capital adequacy and their ratings [had been] sliding."¹⁶ To have one's credit rating slide is very serious in the foreign exchange market as banks all have credit lines with one another to facilitate trading, but "[w]hen a bank reaches the limit of its exposure to another bank, no more deals. When all the banks mark down a fellow institution, his source of funds dries up within minutes."¹⁷ It appears that the first requirement for the new BIS regulation to have an effect on currency trading, that it be followed, will be met. Banks have a strong interest in visibly applying the capital adequacy regulations to the applicable foreign exchange transactions. The important point here is that because following the capital adequacy rules is perceived to be important to guarding a bank's reputation, which in turn is vital to a bank's continued viability, the rules will be followed. The regulations are followed not so much because governments say that banks have to do so, but because of industry peer pressure.

The Possible Impact of the Capital Adequacy Regulation on Foreign Exchange

16 Simon Brady, "American Banks Last Stand" Euromoney (May, 1991), p.81.

17 Hamilton, p.63.

The BIS regulations could have an effect on bank's currency trading because the cost of the capital that will have to be reserved for each transaction will have to be added to the cost of the trade, making some foreign exchange business unprofitable. The Euromoney article referred to above observes that whereas "Forward trading used to be big business, ... [now] trading forwards is unprofitable because of the BIS capital adequacy requirements which impose a capital charge of .001% of the value of the forward."¹⁸ Another estimate is that the new regulations would add \$5000 to the cost of a typical 10 million deutschemark/dollar trade.¹⁹ Even though the additional costs are tiny, the spreads between the buy and sell prices of contracts are also small, so a .001% increase in costs can turn a profit into a loss. Also, under conditions of capital scarcity, banks will have to allocate capital among their various departments according to where it will bring the most return. Thus, "very low-margin [foreign exchange] trading activities are the first casualties".²⁰

Market analysts expect that capital adequacy requirements will make foreign exchange forwards and futures more expensive, and banks will withdraw from this portion of the foreign exchange market, or pass along the increases in the price of providing these products to their customers. Engaging in these types of foreign exchange transactions will become less profitable to the banks and more expensive to their clients, who then may be less inclined to buy them. This suggests that the new international regulation could lead to a reduction of speculative transactions in the foreign exchange market. There is more

18 Brady, "American Banks Last Stand" p.86, [Inset].

19 Schap, p.41.

20 Brady, "American Banks Last Stand" p.86.

reason to believe, however, that the new regulations will probably not make a significant difference in the overall level of foreign exchange speculative activity.

The Probable Impact of the Capital Adequacy Regulation on Foreign Exchange

Indications are that the types of foreign exchange transactions that come under the new regulations are now being done through different products, participants and markets, to which the regulations do not apply.²¹ For example, instead of banks being directly involved in foreign exchange futures and options, they can operate in the administrative or "fee driven" side of the market such as drawing up the foreign exchange contracts, which are then traded in the futures markets such as the Chicago Mercantile Exchange. In this way, banks can still derive income and be involved in the growing markets in these foreign exchange derivatives, but since theirs is an administrative role, and the capital adequacy standards do not apply to exchange-traded contracts, they do not have to "use" their balance sheet and can conserve capital to back other assets.²² Also, now that the BIS capital regulations have heightened awareness about credit risks, some analysts expect banks, corporations and pension funds to transfer some of their currency trading from the traditional foreign exchange market to exchange markets like the futures markets. The credit risks are perceived to be lower in these markets, and whereas the costs were believed to be higher in these markets, now, their costs are comparable

21 Schap, p.41.

22 Stephen Kindel and Amy Barrett, "Superbank: How the Bank for International Settlements Became the World Central Bank" Financial World (March 5, 1991), p.28.

to the higher costs associated with traditional forward trades because of the new regulation.²³

Obstacles To Regulation Illustrated by the Probable Impact of the Capital Adequacy Regulation

The new regulation has the potential to make certain types of foreign exchange transactions less or not profitable for banks, but this does not mean that the business will not get done. Banks are no longer the only players in the foreign exchange market, and the traditional "over the counter" business carried out between banks or between banks and their non-financial clients is now only one segment of a much broader foreign exchange market. In this setting, transactions that are no longer as profitable for banks, or which are regulated through banks, will simply be transferred to a portion of the market that is governed by different rules, done by different actors, or accomplished through different products. This situation presents several challenges to authorities that will make any attempt to restructure the foreign exchange market infinitely more difficult.

First, regulatory efforts in one area will be consistently eclipsed and challenged by the development of new foreign exchange products and markets and the entry of new players into the currency trading game. Every regulatory restraint presents an incentive to financial actors to find a way to circumvent the restriction. Every financial innovation will represent a challenge to authorities to institute further regulations. "In retrospect the process of interaction may seem like a disorderly scramble, with the private

²³ Schap, p. 40.

institutions and the authorities vainly trying to get one step ahead of the other."²⁴

Second, as currency trading continues to evolve, expand, and become more intertwined with the wider international financial system, it will be less likely that authorities will have the skills to determine how a new innovation affects the foreign exchange market. Furthermore, the growing complexity of the interconnectedness between the foreign exchange market and the rest of the international financial system and the world economy makes it difficult for regulators to foresee if a regulation will have the intended effect, where reverberations will be felt, and whether there will be any negative side-effects. The next section will further examine the relationship between the addition of new players, new foreign exchange products and new markets in foreign exchange and the likelihood that governments can restructure the foreign exchange market.

Regulating The New Actors in Foreign Exchange

The possibility of enormous profits to be had, weak regulation, accessibility and a broader range of products to choose from have combined to draw an increasing number of actors and different types of actors into the foreign exchange market. Foreign exchange is viewed as an investment in itself, as well as key to accessing a growing number of international investment instruments. Even more than before, this implies that the activity of the market is dominated by speculation because the possibility of speculative profits and the ease of completing these "investments" are the main incentives for most of the

²⁴ Bryant, p.128.

new actors. We saw evidence in chapter one that many companies that do business internationally are viewing currency trading not simply as necessary for facilitating their traditional business, but as an additional way to boost their profits. The Economist reports that the fastest growing sector of the foreign exchange market is no longer interbank transactions but customer-driven transactions, as institutional fund managers and corporations increase their involvement.²⁵ Investment banks--as opposed to the commercial banks that have traditionally been at the center of currency trading--have been challenging the commercial banks for the right to service the foreign exchange market participants that are speculatively inclined. One investment bank sees its role in the foreign exchange market in the following way:

Our emphasis is proprietary trading... Our customers are a small number of large, high volume clients that aggressively use risk in managing their portfolio. They are probably also motivated by proprietary trading. ... Commercial banks have generally been in the business of identifying risk, helping their clients understand those risks and then close them down--hedge them out. Our clients want to evaluate risks and then take them.²⁶

The addition of more and different types of actors to the foreign exchange market means that, increasingly, the regulation of banks will not be enough to reorganize how the foreign exchange market works. Those that want to continue to speculate will merely turn to the other players in the market. But the potential for regulating or supervising these other actors on an international--or even national--basis is diminished by the increased variation among the actors, and the fact

25 The Economist "The Last of the Good Times?", p.61.

26 Brady, "The Banks' Golden Egg," pp.70, 77.

that different actors may be using different products and different markets in their currency trading.

One example of the problems hindering the regulation of different actors in the financial system is that, while on the one hand there is a need for equitable regulations among all actors that are engaged in the same financial activity; on the other hand, there are differences in financial institutions that make it necessary for them to be regulated differently. As one BIS official states: "The way you follow insurance companies is different from the way you supervise banks, and the way you regulate the securities industry is yet again different."²⁷ The challenge to regulators is designing rules that will be different for each type of actor but will have the same effect for all of them. The important point is that while all the problems mentioned here exist now, they are becoming more difficult to solve as each day passes. As financial activity grows in complexity and the blurring of familiar--but increasingly meaningless--distinctions between different financial institutions picks up momentum, authorities are being left farther and farther behind, and any future regulatory action becomes more problematic.

Weak International Banking Regulation

In many ways, international banks are easier to regulate than the other financial actors discussed above. The necessity of government regulation of banks is generally accepted, an international regulatory body, the BIS, is already in existence, and there exists a foundation of international regulation, formulated through the BIS, to build upon.

²⁷ Kindel and Barrett, p.28.

However, once one appreciates that even in international banking the basis for effective regulation is weak, and that the BIS "...falls far short of being an effective regulatory body,"²⁸ the problems posed by regulating the new participants become even clearer.

When a standing committee of bank supervisors was first set up under the auspices of the BIS, its focus was "...not to harmonize national laws and practices, but rather to interlink disparate regulatory regimes with a view to ensuring that all banks are supervised according to certain broad principles."²⁹ This was a pragmatic focus as harmonizing national laws, while more desirable from a supervisory point of view, would have been politically impossible. When international banking presented more challenges to the national authorities, however, the BIS developed more of a joint rule-making capacity by "publishing papers for its members on what it considers "best practice" in the field of supervision, such as the capital adequacy standards. While the BIS' rules do not have any legal authority, they have a "moral force," that as we saw above can be quite persuasive.³⁰ Nevertheless, the lack of legal authority and necessary vagueness of its principles does make the BIS a rather weak body for organizing the regulation of international banking, as does the fact that their membership is confined to only the central banks of the G-10 nations plus Switzerland. This means that many areas that are hosts to international banking, and have the most lax regulations, are not subject to BIS standards. On the plus side, it does exist, its directives are taken seriously by its member countries

²⁸ Franklin R. Edwards and Hugh T. Patrick, "Introduction" Franklin R. Edwards and Hugh T. Patrick eds., Regulating International Financial Markets: Issues and Policies. (Boston: Kluwer Academic Publishers, 1992), p.4.

²⁹ Dale, p.172.

³⁰ Kindel and Barret, p.28.

and the international banking community, and it has been used in the past to make international banking supervision more effective by coordinating national banking regulations. But, as stated above, the BIS has limited utility for re-regulating or restructuring the foreign exchange market because banks are no longer the only actors that would have to be regulated and controlled.

The fact that there is no organization like the BIS to coordinate the regulation of the other participants, or the other parts of the international financial system involved in trading currencies, can also be expected to undermine any future BIS efforts to control banks. For instance, banks complained that the new BIS capital adequacy standards put them at a disadvantage, since many of their competitors, including insurance companies, investment banks, and a whole host of other entities that now perform and provide many financial services that used to be the sole domain of banks, are not governed by the requirements.³¹ If authorities do not have the means to place the same regulations on other financial actors that they do on banks, authorities sensitive to the banking community will be apprehensive about increasing international banking regulations for fear of constantly putting banks at a disadvantage or not providing "a level playing field". But any action to develop an international body or standardized international regulations to cover the new actors in the foreign exchange markets will undoubtedly be frustrated by the vast differences among each countries' definitions of different financial activity and their styles of regulation.³² Even the principles outlined by the BIS for regulating

³¹ Ibid., p.28.

³² See Hamilton, pp.205, 215, 226-227, 236.

international banking, and agreed to by its members, continue to suffer from these problems. For instance, one of the main principles of international banking regulation, parental responsibility, states that the home country supervisors should have access to information about their banks' foreign branches. Nevertheless, in practice, most countries do not carry out examinations of foreign branches, and even if they wished to, they are often prevented from doing so since some countries do not allow access to foreign inspectors, nor do they allow a free flow of information between foreign-owned banks and their parent institutions.³³

New Products

In addition to the new players in the foreign exchange market, there are new products. However, these can not begin to be regulated in an international way since most national governments do not know how to treat them domestically. Financial innovations such as foreign exchange swaps, options, futures and other derivatives, and the markets that trade them, may be overlooked when it comes to national supervision, or otherwise escape national regulation. Financial innovations often fall between the "stools" of regulating agencies whose mandates were established when the dividing lines between the different parts of the financial system were much more clear. One financial periodical reports that in the American case,

Many currency transactions and instruments exist with no clear, direct oversight. The way these products have germinated throughout the securities, commodities and banking areas has caused the area to fall under the auspices

³³ Dale, p.97.

of four separate government entities--the Commodity Futures and Trading Commission (CFTC) and Securities and Exchange Commission (SEC) plus the Federal Reserve Board and the Comptroller of the Currency.³⁴

The rules used to establish which agency will supervise which products were written when these products did not exist, and many of the new products combine characteristics that are usually the unique domain of one of the agencies. Consequently, there are often "regulatory turf battles," and much confusion and consideration before the matter of jurisdiction is settled, and then often appealed.³⁵ Of course, while supervisory agencies are busy attempting to understand today's different products and markets, how they should be regulated, and by whom, financial innovation is producing newer and more complex products for tomorrow.

The non-regulation of these new products is especially relevant for the topic at hand because the design or characteristics of the new foreign exchange products are often not only a response to, but also a contributing factor to the increased volatility in the foreign exchange market. As an example, foreign exchange options give their holder a safeguard against future exchange rate movements because they have purchased an "option" to buy or sell a currency at a certain price on or before a certain date in the future, but they do not have an obligation to, in which case the contract simply lapses. This is a good way for companies to hedge their future sales and purchases, allowing them to plan ahead with confidence. Not unexpectedly, holders of options use "trigger figures" that, when reached, induce them to exercise their

³⁴ Futures: The Magazine of Commodities and Options, "Regulatory Fog over Forex Battlefield" (December, 1988), p.36.

³⁵ *Ibid.*, p.36.

option. In practice, however, the way options are actually used and their effect on the market leads to the very volatility they are a hedge against. General use of trigger figures often leads to the exercising of options en masse, generating an avalanche of buy or sell orders and causing the

...curious tendency for prices in today's markets to leap to artificial but somehow agreed-on-breakpoints... Once the market goes through a break-point, it tends to go straight on to the next assumed point, wherever that may be. Equally, it can reverse itself quite rapidly if it goes too far beyond a perceived limit, inducing the dealers to take their profits. (or bursting the speculative "bubble" as it was called in Chapter 1) ³⁶

Governments Have Conflicting Interests in Foreign Exchange Regulation

Even if governments, convinced that foreign exchange derivatives were exaggerating the volatility of the foreign exchange market and were being used speculatively, could somehow stop their use, there are strong incentives not to. Many of these products were created in response to the needs of entities that do "real" business internationally in order to isolate and diminish the risks of exchange rate change for their business. In this respect, products that diminish exchange rate risk are crucial to the continued growth of international economic activity. Consequently, if governments restrict the foreign exchange products that companies utilize for hedging strategies, they would also have to simultaneously reestablish a stable foreign exchange market, in order to ensure a stable and growth-oriented international economy.

The use of foreign exchange derivatives, for hedging *and* speculation, has become an integral and complicated part of many large

³⁶ Hamilton, pp.202-203.

companies' financial management. Therefore, changes in government regulation that initially may have been intended to target and limit speculation can have unwanted side effects if they affect the real side of a companies business instead of just the speculative sideline. This is what happened in 1992 when the American Securities and Exchange Commission disallowed the previous practice of companies deferring gains and losses from a type of currency option they had purchased to hedge their anticipated foreign sales, until the sales occurred. The new rules stated that these options would now have to be valued quarterly-- using the then-current exchange rates. Although the SEC did not explain the rule change as a measure to curb speculation, those affected by the change interpreted it as such.³⁷ Companies see this regulation as badly flawed, however, as it will increase the impact of exchange rate changes on their quarterly earnings reports, making them volatile and unpredictable. As an example, Forbes reported that if the new rules had been in effect the previous year, a company called Storage Technology Corp. with \$1.6 billion in revenues, a third of which came from overseas sales, would have recorded an artificial gain of \$162 000 in the second quarter and a \$227 000 loss in the third quarter from hedging only one month of German sales. Forbes quotes the company's foreign exchange expert as saying "We made our second quarter look better, our third quarter look worse, and the sale doesn't even happen until the fourth quarter."³⁸ The issue is not truly resolved however, because while the SEC's ruling is being reconsidered by the Financial Accounting Standards

37 Roula Khalaf, "Confusion Compounded: How the S.E.C. Has Made it More Difficult for U.S. Companies to Compete in Overseas Markets" Forbes (August 17, 1992), p.86.

38 Ibid., p.86.

Board (FASB), companies are turning to their bankers to invent products that will skirt the new regulations.

Obviously, skewed financial reports were not the intended effect of the changed rule, and they could be harmful to a companies' stock prices, financing and future planning. Nevertheless, companies are using currency speculation to bolster their profits, and speculation is becoming increasingly acceptable as a legitimate part of business, even though it has nothing to do with a company's real product or service.³⁹ But because it is difficult to distinguish between speculation and a legitimate hedge, and difficult to untangle their respective roles in a company's financial position, governments will continually find that they have conflicting interests when formulating regulation for this area.

Currently, the foreign exchange market is not directly subject to any regulation or supervision, at most its participants are subject to the regulation and rules of their home countries or the countries where the foreign exchange transactions occur.⁴⁰ In this sort of environment, where there is no history of regulation or supervision on an international basis, any attempt to initiate more governmental control would be very difficult. Moreover, formulating international regulation and supervision standards for a market composed of such diverse participants and products is seemingly impossible. The global structure of the foreign exchange market and the diversity of its participants and instruments provide many loopholes for evading possible regulation.

39 Ibid., p.86. In the article, the author refers to the rule changes in the Federal Accounting Standards Board in 1981 that eventually led to the 1992 ruling as based on "...some outdated idea that currency speculation was somehow immoral."

40 Edwards and Patrick, p.3.

Authorities can be unaware of financial innovations or their implications until well after the fact and then, in some cases, have conflicting interests in regulating them because the international economy has become so dependent on them. All the technical difficulties in regulating and supervising the foreign exchange markets are, however, compounded by the multi-jurisdictional nature of the state-based system. To this end, greater international cooperation would help to increase the possibility that increased regulation and supervision would be effective in reorganizing the foreign exchange market.

The Added Burden the State System Puts on Efforts to Regulate a Global Foreign Exchange Market: Loopholes in Existing Regulation

In order to demonstrate the importance of international cooperation, consider the problems that have plagued the few regulations that have been in place in the foreign exchange market and how banks used the divisions and differences among states to evade these rules. One regulation that does exist with regard to bank's foreign exchange transactions is aimed at prudential concerns. In other words, the regulation is concerned with guarding against a bank sustaining such large losses on its foreign exchange exposure that it would jeopardize its financial viability, rather than limiting speculative activity. Nevertheless, these limits indirectly work to decrease speculation to the extent that because limits are placed on a bank's exposure or open position, the total amount or aggregate of all speculative positions a bank could carry in anticipation of exchange rate movements is restricted.

In the revised Concordat of 1983, the members of the Bank for International Settlements outlined their principles for the supervision

of international banking. The section pertaining to foreign exchange operations was quite vague, but established that the first responsibility for the establishment of exposure guidelines, rested with a bank's parent bank.⁴¹ Banks were to set limits for their own foreign exchange exposure, and then the parent bank's authorities would monitor whatever self-regulating system they had set up for themselves. The authorities in the areas where branches or subsidiaries were located were to monitor their exposure, and be aware of whether or not, or to what degree, the parent bank's home authorities also supervised their limits. The result of the generality of the above principle is that there is no universal system of foreign exchange exposure limits or monitoring, undermining its impact. Countries have different formulas for foreign exchange limits and some countries such as Canada, France and the United States don't have any formal or fixed limits at all.⁴² Furthermore, other than the US, most countries don't monitor or apply their limits on foreign exchange exposure on a consolidated basis, or they don't unite banks' various branch activity in other jurisdictions when applying the limits. Also, the treatment of foreign subsidiaries, foreign branches and local branches of foreign banks all differ from country to country.⁴³

The relatively limited effects of this regulation help to demonstrate the main challenges of regulating a market that is based multinationally. When the different regulatory styles of national governments are combined with the large banks multinational

41 The Revised Basle Concordat: The Principles for the Supervision of Banks' Foreign Establishments. Committee on Banking Regulations and Supervisory Practices. Basle: Bank for International Settlements. May, 1983. Reprinted in Dale.

42 Dale, p.94.

43 Ibid., p.94.

organizational structure and a little technology, the limits on foreign exchange exposure are circumvented quite easily, and seemingly routinely.

'Regulatory Arbitrage': An Example of the Exploitation of the Gaps in Government Regulation by Foreign Exchange Participants

The details unearthed by an U.S. Securities and Exchange Commission investigation into the 1973-80 international transactions of Citibank, a large multinational bank that often heads the list of the top international foreign exchange banks, and later made public during Congressional hearings, makes this last point abundantly clear.⁴⁴ Citibank, following practices one observer described as "endemic to multinational banking" used its multinational banking network, including its shell offices in little or non-regulated offshore centers such as Nassau, Monaco, the Channel Islands and Panama, in a scheme that was designed to evade exchange controls, tax laws and limits on foreign exchange exposure.⁴⁵ One technique, called "parking" was used to avoid both taxes and the foreign exposure limits. "Parking" is accomplished when a transaction is recorded at a branch different from the one that actually initiates and controls the transaction. For example, Citibank could transfer a foreign exchange position from its Frankfurt branch to its Nassau branch by doing an offsetting transaction. By doing this, Citibank could divert its foreign exchange transactions from a highly regulated jurisdiction to one where the regulations were more favorable. Then, depending on where Citibank wished to record the profit or loss from the foreign exchange exposure to take advantage of the best tax

⁴⁴ The following draws extensively from Dale, pp.194-204. Appendix 2: "Rinky Dink Deals" A Case Study in Regulatory Arbitrage."

⁴⁵ Ibid., p.204.

laws, it could reverse the parked position at the original exchange rate (leaving Nassau with no profit or loss), at the subsequent exchange rate (leaving Nassau with a profit or loss) or at a contrived off-market rate.

Of course, the transaction did not actually "go" to Nassau, it was simply entered in the Nassau "book" in the Frankfurt office and controlled from Frankfurt. Nonetheless, since the position was officially held by Citibank's Nassau branch, it did not have to be included as part of Frankfurt's total foreign exposure, on which Germany's limits applied. Citibank's evasion of the rules was carried out in varying degree from all its European branches, the following are just a few examples. At the time, the Bank of England had a overnight limit of \$1 million on short sterling positions, so Citibank booked their short sterling positions, which were \$2-4 million, in Nassau. Germany had a limit on bank's overnight foreign exchange positions equal to 30% of their capital, which in Citibank's case would have been about DM28 million. Citibank by-passed this restriction by routinely, (2 or 3 times a week), parking their positions that were in excess of this limit, on the order of about \$40 million per transaction, in Nassau. At Citibank's Swiss branch, their internal limit, or the limit they set for themselves, was between \$50 and \$75 million, but the limit the Swiss government set for them was \$16 million. The excess was entered in the Nassau books. In the Swiss case, however, there was one added step because Switzerland had a counterparty limit that restricted deals between banks to \$20 million, limiting the amount of transactions between Citibank branches. As a result, transactions that had their

origin in Switzerland were first booked in the name of other European branches before their "trip" on to Nassau.

In addition to passing transactions between branches to evade national regulations, Citibank exploited the fact that they had branches around the world, and in different time zones. This allowed them to keep foreign exchange positions off the closing books of *any* branch by following the sun through successive time zones. As the sun set in one location, the position would be passed to a branch where the sun was up. As Dale has observed, this latest evasion technique is especially significant from a regulatory point of view because unlike the parking technique, "...it would not necessarily be picked up by regulatory authorities even if they were monitoring the banks activities on a fully consolidated basis."⁴⁶ Since the Citibank case came to light, moreover, it does not seem as if this practice has abated. Other authors also make reference to the fact that technology and the development of a global 24-hour market have allowed banks to circle the globe, passing their foreign exchange positions from one branch to another. Powell quotes the managing director of a British-Japanese foreign exchange brokerage firm describing a typical foreign exchange traders day in New York as beginning at 4 A.M. when London opens, then passing on foreign exchange orders to L.A. at 6 PM when New York closes. Los Angeles "...may continue trading till 8 PM their time, by then Tokyo, Singapore, Hong Kong and Sydney are trading, so positions can be passed to our offices in those markets."⁴⁷ Whereas once this practice was viewed as

⁴⁶ Ibid., p.203.

⁴⁷ Jim Powell, The Gnomes of Tokyo: The Positive Impact of Foreign Investment in North America. (New York: American Management Association, 1989), p.189, quoting Peter McLachlan, Managing Director of Tullet a foreign exchange brokerage firm. See also Bryant, p.65.

stretching the bounds of what was acceptable from a regulatory point of view, the fact that governments have no means of effectively controlling or even monitoring it has resulted in the situation where it is now an openly common practice and an inherent part of the global foreign exchange game.

The Lesson From the Citibank Case: Government Cooperation and Coordination is Crucial for Foreign Exchange Regulation

A few additional conclusions can be drawn from this case that have relevancy for the possibility that authorities can restructure the foreign exchange market. Firstly, not one regulatory authority discovered what Citibank was doing. It was a former employee whose allegations provoked the investigation by the SEC. Clearly, nationally based regulatory and supervisory authorities provide little challenge to a foreign exchange market that is comprised of large multinational banks and other participants, completing hundreds of billions worth of foreign exchange transactions everyday, primarily with each other. The effectiveness of what little resources governments have to monitor the foreign exchange business of the major players in the market are further diminished by the fact that they are nationally based and the market and most of its players are multinational. This largely prevents the implementation of rules and their monitoring on a consolidated basis.

Also, the players in the foreign exchange market have a strong incentive and the means to book their business through less regulated centers. As a result, any regulation that is not applied by every nation, including even the off-shore centers, will be circumvented. In the above case, international standards that pressured all centers to impose the same regulations, and cooperative monitoring would have

helped. Some transactions and financial activity, aided by ever-advancing technology, may be truly beyond governmental control, with or without international cooperation. Nevertheless, it is hard to completely dismiss the belief that if governments cooperated and coordinated their efforts, regulations and supervision would be more effective than if they did not. Paradoxically, the factors that make cooperation imperative also provide governments with strong incentives to compete rather than cooperate.

How the Current System Induces States to Compete Rather than Cooperate

Economic factors that usually come into play when firms decide where to do business, such as transportation and communication costs, are relatively unimportant when banks and other financial institutions decide where to locate since communication and computer systems allow business to be done, and money to be "transported" anywhere, at negligible cost. Consequently, where financial institutions are located and where business will be done, or at least booked, is "...highly sensitive to regulatory differences between national jurisdictions."⁴⁸ The fact that international finance capital is highly sensitive to regulatory differences between countries, and at the same time very mobile, leads to two conclusions about government behavior. First, governments, wanting to ensure that they, and their financial institutions, keep and attract financial activity, must be very competitive vis a vis other states in granting financial institutions and finance capital in their jurisdiction a large degree of freedom. This reality has given rise to what one analyst has labelled a

⁴⁸ Dale, p.12.

"competition in laxity" among governments with regard to financial regulation and supervision.⁴⁹

The second conclusion is that if governments want to increase regulation or supervision of the foreign exchange market, collective action is absolutely essential or else the foreign exchange transactions will simply be done through the less regulated centers. The current competition in laxity, however, suggests that the free-rider problem that is inherent in any attempted collective action, would be particularly acute, and perhaps impossible to overcome, in this case.

The Basis for the Power of Internationally Mobile Finance Capital

Public choice theorists have argued that when governments formulate policies they face some of the same restrictions that firms face when determining the prices for their goods. The prices governments charge for their "goods" are the taxes and regulations they impose on their citizens. When determining prices, firm's face a demand constraint--the point at which charging a higher price reduces demand so total income actually falls. The parallel restraint government faces when determining their tax and regulatory policies is that they cannot increase taxes and regulation beyond a certain level or else their citizens--or their citizens assets--will leave the country, and the net benefit to the government of the increased tax or regulation will decrease. What the highest level of taxation and regulation can be before governments face the "demand constraint" depends upon people's responsiveness to the policy change. People's responsiveness, in turn, depends upon their ability to escape the tax or regulation. When

⁴⁹ Bryant, p.139.

capital is mobile, people, banks and companies can be more responsive to government policies, and governments will be restrained in raising taxes and regulations if they wish to keep or attract capital.⁵⁰ Now, because of advances in technology, the globalization of many financial institutions, and past deregulation, finance capital is very mobile and governments are more much constrained than in the past when increasing regulations in their jurisdiction. However, not only are governments prevented from increasing regulations, they are also induced by internationally mobile capital to deregulate in order to grab a bigger share of the world's financial activity. Actually, some analysts go much farther and argue that transnationally mobile capital forces nations to compete with each other, not just to secure a bigger share of international financial activity, but to *keep* their current share: "Governments must respond to this new reality...and must concede to the implied threats of quicksilver capital...or they can relegate their countries to the backwaters of the world economy..."⁵¹ While the mobility of transnational capital is forcing governments into competitive deregulation, seemingly for their own economic survival, the obvious flip side is that it also undermines any possibility that governments will cooperate to implement currency trading regulations that would limit short-term capital movements.

Euromarket Regulation: An Example of How Mobile Finance Capital Undermines Regulation and State Cooperation

50 Richard B. McKenzie and Dwight R. Lee. Quicksilver Capital: How the Rapid Movement of Wealth Has Changed the World. (New York: The Free Press, 1991), pp.89-90; referring to Geoffrey Brennan and James M. Buchanan, The Power to Tax Cambridge: Cambridge University Press 1985, as the originators of the theory.

51 Ibid., p.12.

For an illustration of the how international capital mobility thwarts attempts that would try to regulate it through cooperative measures, consider the case of American attempts to regulate the Euromarket markets in the late 1970s. The Euromarkets had first been allowed by the UK and then actively encouraged as the banks doing business in foreign-currency deposits were offered the incentive of little regulation. As the Euromarket markets became more important, other centers such as Luxembourg and Switzerland offered regulatory concessions, and in the Swiss case, privacy.⁵² What made the Euromarkets grow, however, were successive American regulations aimed at controlling the outflow of capital through the 1960s and 1970s. These regulations stimulated the Euromarkets' growth as American banks eluded their home country's regulations by transferring their international banking business to the Euromarkets.⁵³ In this way, unilateral American regulations were ultimately responsible for the Euromarkets becoming such an integral part of the international financial system. The very existence of the Euromarkets provides evidence that the forces that support and facilitate internationally mobile capital do react to unilateral controls as theorized above: they innovate and relocate to less regulated centers, and, in the process, international capital continues to become even more mobile and harder for states to control.

At the end of the 1970s, the United States linked the instability in its dollar to the existence of the unregulated Euromarket market. As mentioned earlier, the end of 1978 and 1979 saw the dollar come under extreme downward pressure with some speculative episodes causing near

⁵² Hamilton, p.55.

⁵³ James P. Hawley, Dollars and Borders: US Government Attempts to Restrict Capital Flows, 1960-1980. (London: H.E. Sharpe Inc., 1987, p.62.

panic. These episodes provoked a realization in the United States that the massive amounts of "stateless" dollars held in the Euromarkets were causing--or at least adding to--the crisis in its currency. They reasoned, therefore, that if the Euromarket system "...could be stabilized and its growth rate substantially reduced, the offshore production and circulation of stateless dollars could be curtailed, in turn stabilizing the dollar."⁵⁴ To accomplish this end, the U.S. attempted to get support from other governments to undertake coordinated regulation of the Euromarket markets. Specifically, by implementing a system of multilateral reserve regulations, they wished to slow the growth rate in the Euromarkets, and remove one of the incentives that had traditionally drawn financial activity to the Euromarkets.

However, the Euromarkets are big business for the centers where they are located. For example, The City of London, the UK's financial center and home to three-quarters of the Euromarkets' stock and bond issues, "...contributes more to Britain's gross national product than all its oil in the North Sea."⁵⁵ Of course, one of the reasons London is such an integral part of the Euromarket markets is because the Bank of England has traditionally not interfered with the foreign financial actors that operate there. Countries opposed to the American plan explained their lack of support by citing legal difficulties and other problems. However, the fact of the matter was that locations that were benefiting from being a Euromarket center were not about to cooperate with the United States to impose regulations that would either cause a drop in the overall Euromarket action, or cause it to move to the

⁵⁴ Ibid., p.125.

⁵⁵ Powell, p.11.

'exotic' centers where regulations would be either more difficult or impossible to implement and enforce.⁵⁶ The American initiative finally came to an end when West Germany, the only supporter of the American initiative, dropped its support when it realized that it did not have the "...legal authority to impose extraterritorial reserve requirements on West German banks' foreign subsidiaries."⁵⁷

When their plan for multilateral regulation of the Euromarkets came to nothing, the United States was still left with a policy dilemma. The United States had wanted the Euromarkets regulated not just as a means to calm the foreign exchange market, but also to equalize regulatory standards between their markets and the off-shore markets. This was necessary to attract back business that had gone to the Euromarkets, and to keep the American banking industry competitive. When multilateral regulatory coordination did not happen, the United States was left with two choices to guarantee the competitiveness of its banking industry. The U.S. could deregulate its banking industry, or it could establish its own "off-shore" banking areas where regulation would be decreased to the level of regulation in the Euromarkets. In reality, the United States did both, establishing in 1981 International Banking Facilitates (IBFs) that operate like off-shore centers, but on American soil, and implementing successive rounds of domestic banking deregulation that continue today.

Ironically, the US initially established IBFs as a ploy to pressure the other major industrial countries that had Euromarket markets into collective regulatory measures. The measure was also

⁵⁶ Hawley, p.142; and Dale, p.28.

⁵⁷ Dale, p.127.

directed at containing the spread of the Euromarkets. By increasing the attractiveness of the U.S. for financial activity, the Americans hoped to limit the growth of non-European off-shore banking centers such as the Caribbean shell bank centers and the Asian markets.⁵⁸ In a letter written by Anthony Solomon, President of the New York Federal Reserve Bank, to Paul Volcker, Chairman of the Federal Reserve System, Solomon argued that establishing IBFs in the US would draw a large amount of business back to the American market,

When a substantial share of what is now Euromarket business is done from a US base, it will be made transparent to others that the US has tangible, unassailable interest in sharing a common approach to regulation. Sooner or later, a consensus will be built recognizing the need for negotiations to achieve uniform treatment of international banking markets. ... our position in those negotiations can only be strengthened when, through IBFs, one important part of the overall Euromarkets is located within this country.⁵⁹

The Americans, however, badly misread the situation, and since no consensus was reached on the need for negotiations to formulate international banking regulations, the establishment of IBFs provided the US with no additional leverage. The IBFs, however, did represent a wedge American transnational banks could use to foster further domestic deregulation.⁶⁰ Thus, the establishment of IBFs was both a victory for international banking and internationally mobile capital, and another marker along the continuing trend toward increasingly deregulated financial systems, both nationally and internationally. The launch of domestic deregulation in the American banking industry has led to

⁵⁸ Hawley, p.139.

⁵⁹ Letter from Anthony Solomon to Paul Volcker, Chairman of the Board of Governors of the Federal Reserve System, Dated November 7, 1980. As quoted in Dale. pp.30-31. The letter was also reprinted in International Currency Review 12, No.4 1980

⁶⁰ Hawley, p.139.

successive rounds of innovation and the creation of new products and markets, which, among other things, add up to more ways to trade currencies for speculative reasons.

The failed American attempt to initiate multilateral regulation of the Euromarket markets and their establishment of IBFs illustrate the philosophy that almost all countries follow in response to the advent and growth of internationalized banking and internationally mobile finance capital. Each nation extensively regulates the domestic aspects of financial activity that they expect will affect their domestic economy most directly. But nations then apply a less stringent regulatory system to financial institutions that operate outside their borders, or inside their borders but in a foreign currency, to guarantee their share of international financial activity.⁶¹ Bryant has observed that "No nation has developed a systemic, global view about the regulation, taxation and supervision of financial intermediation."⁶² This view does not apply just to financial intermediation--deposit taking and loan granting--but to all international financial activity and all the ways and means through which money changes hands and currency denomination. In the international financial system, due to the power and dynamics of internationally mobile capital and the multi-jurisdictional regulatory regime, there is among governments "...an inbuilt tendency towards competitive deregulation."⁶³ Again, this serves to enhance the influence of internationally mobile capital because it makes the cooperative measures that would be necessary to regulate it harder to achieve. If international markets are not

61 Bryant, p.140; and Dale, pp.12-13.

62 Bryant, p.140.

63 Dale, p.172.

regulated, states then come under more pressure to deregulate their domestic markets in order to keep them competitive. In turn, this further undermines the possibility of regulating international markets because before states can hope to regulate internationally, they often have to have increased national control.⁶⁴

Conclusion

The *raison d'etre* for a large percentage of foreign exchange activity is speculation and the movement of speculative short-term capital. If states could regulate the speculative components of the foreign exchange market, with the aim of lessening their dominance in the market, the market's volatility and volume would be less. Hence, governments' influence within the market, and their ability prevent or moderate exchange rate instability would be increased. But states have not attempted to change the way the foreign exchange market operates. This chapter has argued that states have not reorganized the foreign exchange market through regulation because of the large costs that would be encountered in pursuing such a policy. Nations are unwilling to incur the costs, in time, money and other resources, that would be associated with understanding, regulating and monitoring the extremely complex and integrated system of financial and monetary markets that is interconnected with the foreign exchange market. Regulating the global foreign exchange market would also require international coordination. Consequently, a further cost states are unwilling to bear is the one they associate with the loss of autonomy and sovereignty that would accompany collective action. Furthermore, in this case, the intrinsic

⁶⁴ Hawley, p.143.

threat posed by internationally mobile capital manipulates the divisions between states and heightens the costs associated with regulation. In this environment, the costs states associate with sacrificing their regulatory power, with respect to internationally mobile capital, seem to be less than those they would bear, such as lost sovereignty and competitiveness, if they participated in coordinated regulation. However, the effect of internationally mobile capital on state regulatory power *does* compromise states' sovereignty. If the participants, products and markets involved in currency trading are not regulated with respect to speculative transactions, the influence of speculation within the foreign exchange market and in the determination of exchange rates can not be controlled. Consequently, if one aspect of sovereignty is the ability of a state to control the value of its currency, as it has been defined here, then an unregulated foreign exchange market undermines that sovereignty.

Chapter 5

Conclusions Regarding the Dynamics Between States and Private Actors In the Foreign Exchange Market

The conclusions reached in this thesis regarding the power relationship between states and private actors in one area of the international political economy, the foreign exchange market and the determination of exchange rates, are not often reached in the traditional international relations or international political economy literature. In the traditional IR/IPE literature, analysts typically focus on how inter-state dynamics and relative state power relations determine and affect change in the organization and operation of the international monetary system. In defining the organization of the international monetary system, they often include only the basic elements such as the type of exchange rate regime--fixed or floating, how liquidity is created and controlled and how balance of payments disequilibrium between countries are resolved.¹ But it is here that the analysis usually stops. It is assumed that once the system is agreed to and arranged among the states, it operates according to plan--and the private market benignly plays whatever role it has been given. Any change in the system, or how well it operates, is assumed to be determined by the changing power relations among states.

This framework for understanding the workings of the international monetary and financial system, or its parts like the foreign exchange market, may have been useful for the period immediately following World War II. However, as the importance of markets and private financial actors, that are also increasingly global and beyond the control of

¹ See Robert Gilpin, The Political Economy of International Relations (Princeton: Princeton University Press, 1987); Benjamin J. Cohen, Organizing the World's Money (New York: Basic Books, Inc., 1977); and others who share the perspective and research agenda most recently labeled "Orthodox" international political economy. See Craig W. Murphy and Roger Tooze, "Getting Beyond the Common Sense of the IPE Orthodoxy" in The New International Political Economy, International Political Economy Yearbook Vol. 6 eds. Craig W. Murphy and Roger Tooze (Boulder: Lynne Rienner publisher, Inc., 1991).

authorities, increases, the relevancy of a framework that overlooks these factors has to be questioned.

Nevertheless, it does not need to be discarded. The current power structure of the international system, and the fact that there is no hegemon--or at least not a very powerful one, does provide further explanation as to why the cooperation needed to perform collective action, such as to coordinate policy or to jointly increase supervision and regulation of the financial system, is so weak and rare. The existence of a very powerful hegemon, that included stable exchange rates and the control of mobile finance capital among its interests, might be able to achieve the degree of international cooperation needed for their accomplishment, regardless of the differences among states' domestic priorities, and the incentives internationally mobile finance capital offers states to remain competitive. Nevertheless, by being state-centric, the traditionalist framework ignores some of the most important dynamics of the current international monetary and financial system.

The weakness of this approach can be appreciated by realizing that the problem of exchange rate instability can not simply be treated as one of the ill effects of economic interdependence that must be managed among states. This approach ignores the possibility, indeed the probability, that the particular character of this interdependence, and the success of states' attempts to manage it, are increasingly dependent upon the actions of private actors in the global financial markets.² As has become apparent in this thesis, state-state relations are only

² This is one aspect that Robert Keohane, After Hegemony: Cooperation and Discord in the World Political Economy (Princeton: Princeton University Press, 1984), and others miss when proposing that regimes based upon states or international organizations can manage the world economy.

meaningful if one recognizes that all states have lost power relative to private actors and their internationally mobile finance capital.

Even writers that are generally more sensitive to the growing transnationalism of the world economy and the role of private actors in the international monetary and financial system, have defined the power relationship between states and private actors in a way that can be misleading and of limited utility. For instance, Susan Strange, in Casino Capitalism, implies that states continue to hold decisive power vis a vis the private market because "...markets exist under the authority and by permission of the state, and are conducted on whatever terms the state may choose to dictate or allow."³ Strange reaches this conclusion because she confers power depending on who has made the "key decisions" that have resulted in the type of world economy we have today.⁴ Although she admits that changes can originate from market or authority actions, she maintains

But whatever the origin, whether the change originates with the market or with the authority, *the decision will be made by a political authority*. It may be a positive decision-- for example to intervene with rules or with resources to influence or restrain the market. Or it may be a negative decision (ie a non-decision) to leave the market alone and allow it more freedom, not less.⁵

Since states still have the authority to make decisions, and since who makes decisions has power, it follows that states have power vis a vis the private market in the international political economy. Strange does concede that authorities will probably make non-decisions more often than positive decisions because the globalization of the financial

³ Strange, Casino Capitalism, p.29; See also Susan Strange, States and Markets. (London: Pinter Publishers, 1988), p.23, for a similar statement.

⁴ Strange, Casino Capitalism, p.25.

⁵ *Ibid.*, p.26. Emphasis added.

system now requires positive decisions to be reached collectively, which is more difficult; and technological innovation often outpaces the ability of governments to be effective regulators. However, defining the power relationship between states and private markets this way, or saying as another author does that "Political consent made the global financial integration of the past thirty years possible and political consent will be needed for this integration to advance,"⁶ glosses over some of the more important considerations. For instance, it does not help to explain enigmas like why did authorities consent to the decisions that brought about a financial system that is largely beyond their control, and a foreign exchange market that determines exchange rates on the basis of speculation?

Technically, of course, Strange is correct. States are the fundamental unit of authority and they do have the power to allow or disallow markets to operate, and to make the rules by which markets must abide. Furthermore, markets do depend on states for the type of "...context or surrounding conditions within which the market functions."⁷ The way an international market functions, or if it functions at all, will depend on whether there are generally peaceful conditions between states and on whether or not most of those countries are committed to an open, liberal global economy. The reason Strange's statement and origin-decision/non-decision guide to understanding the private market-state power relationship is misleading is because it does not emphasize the costs of the different options states face when making a decision or non-decision, or when formulating the rules under which

⁶ Frieden, p.165.

⁷ Strange, States and Markets, p.23.

the market must operate once states have decided to allow them to operate, have become committed to a market system and have established the basic conditions for their operation. States' power is not absolute but is dependent upon whether or not the costs associated with exercising that power, in the pursuit of certain options, are so high that for most intents and purposes the power is unusable. For instance, an authority does have the power to close down a market or subject it to a greater amount of state control, but, for a state that values its place in the world economy, the cost of doing so may only be worthwhile under extreme circumstances--such as during wartime, or after the complete collapse of a market threatens the economic stability of the country or the world. It is true, as Frieden has pointed out, that in the past, and even today, the Euromarkets could be closed down or severely constricted if the US (and/or possibly other major industrial countries) had prohibited their banks from establishing foreign offices and doing business internationally, and had blocked the use of the US dollar offshore.⁸ The cost of taking this action, however, would have been, and still is, severe: it would have produced the contraction and probable closure of the open world economy.

Rather than concluding that the state has power vis a vis the market because it has the ultimate basis of authority, one must look for who or what determines the costs associated with each decision, and who or what is responsible for changing the costs of different options over time. The evidence presented thus far suggests that the balance of power between states and markets has tilted toward the market. This is because it is the particular character of the market that increases the

⁸ Frieden, p.116.

costs to states of making the decisions that would place the foreign exchange market, and the greater international financial system, under greater governmental control. The market, which in this case is composed of the private financial operators that dominate the markets that trade currency and is characterized by the growing mobility of international finance capital, has power over states because it has made positive decisions harder, and non-decisions easier.

The currency markets have become more complex and globally integrated. The changed character of the currency markets, and new financial innovations, along with the technology that facilitates their evolution and operation, represent increased costs to governments in any unilateral or coordinated attempt to undertake a positive decision to control them. Furthermore, since these innovations make international capital more mobile, they also make governments more competitive. Governments are pressured to undertake competitive measures to attract finance capital to their jurisdiction at a time when a positive-decision to change the market necessitates more cooperation. The important aspect about the current state-market balance is not so much that states' non-decisions have resulted in increased market power, but that by increasing their costs, market forces have constricted states' range of other options, especially those requiring a positive decision. The costs associated with taking a positive decision to regulate and supervise the foreign exchange markets that states consider too high include: losing financial activity to a less regulated center; lessening the competitiveness and flexibility of companies and governments by restricting the foreign exchange products and markets that contribute to speculation, but also help companies and government

operate during unpredictable times; and damaging the operation of the world economy.

The market has power not only because they have changed the costs of changing the system, but also because they control the costs of operating in the system. For instance, governments do not have to respond to attacks on their currency, but if they do not they face the costs the international markets decide they must bear. To protect their currencies, states undertake policies that the international markets want. In essence, governments have to coordinate their policies with the market's judgments about what are correct and incorrect policies. In this way, the market works to constrain the set of options governments have to choose from, and this limits their sovereignty. Economic policies demanded by international markets are usually seen objectively. It is forgotten that they have attached value judgments. If a currency is weak, interest rates have to be raised, or spending has to be cut--'there is no other way'. But these policies are demanded by the international markets because these policies will produce the values the international markets want, primarily those associated with wealth. These values could be very different from the ones the state wants, but the state will usually sacrifice its values for the ones wanted by the international markets as the costs of doing otherwise are too high. By setting the costs, markets can establish both the structure of the system and the values that states will pursue within that system.

Strange's argument in subsequent writings, in which she proposes that the key to understanding all the "major who-gets-what questions of politics, both within the state and in the world economy" is determining who exercises structural power in any particular situation, provides a

much more complete framework for understanding the developments in the international financial system discussed in this paper. For Strange, the possessor of structural power is able to

...change the range of choices open to others, without apparently putting pressure directly on them to take one decision or to make one choice rather than the others. Such power is less visible. The range of options open to the others will be extended by giving them opportunities they would not otherwise have had. And it may be restricted by imposing costs or risks upon them larger than they would otherwise have faced, thus making it less easy to make some choices while making it more easy to make others.⁹

Clearly, according to Strange's definition of structural power, the market--or those forces that operate in the market to give it its particular characteristics--have structural power. Strange does conclude that in the current capitalist-based financial structure, the "whoever or whatever" that determined it, and therefore the whoever or whatever that has structural power, "...may well be a market rather than a government or international organization."¹⁰ Nevertheless, she then goes on to say that "...it then raises the question of who made (or unmade) the rules for the buyers and sellers and the intermediaries in that market." This passage suggests that her argument still is that even though the market may have structural power in the financial system now, it was states (she singles out the US and UK particularly) that allowed it to happen.¹¹ Again, this may be technically true, however, viewing the development of the international financial system this way continues to imply that another decision could have been taken just as

9 Strange, *States and Markets*, p.31, Emphasis added.

10 Susan Strange, "An Eclectic Approach," in Craig W. Murphy and Roger Tooze, eds., *The New International Political Economy*, International Political Economy Yearbook Vol. 6 (Boulder: Lynne Rienner Publisher, Inc., 1991), p.35. Also, in her diagrams, Strange places markets, along with technology and states on the same level as having determining power in the global political economy.

11 Ibid., p.35.

easily, or at the same cost as the one governments did (or did not take in the case of a non-decision). This is again misleading because it ignores how the market, and particularly internationally mobile capital, have always made certain decisions more costly for governments to take in a capitalist system.

Gill and Law, applying Charles Lindbloom's discussion of the privileged place of business in polyarchic societies to the international scene, argue that internationally mobile capital has structural power.¹² Lindbloom's argument was that because in market-oriented or free-enterprise societies many public policy decisions, particularly those that are economic, are made and implemented by business, governments must provide business with the conditions and inducements necessary for them to perform their "job".¹³ Consequently, while governments have broad authority over business,

...the *exercise* of that authority is curbed and shaped by the concern of government officials for its possible adverse effects on business, since adverse effects can cause unemployment and other consequences that government officials are unwilling to accept. ...even the unspoken possibility of adversity for business operates as an all-pervasive constraint on government authority.¹⁴

When this principle of the privileged place of business is applied to the international system, we can see that the power of business, in the form of currency traders and internationally mobile capital, to raise the costs of certain actions while making others more attractive is based to an important degree on the state structure of the international system. Gill and Law recognize this as they observe that "The

¹² Gill and Law, Chapter 7.

¹³ Charles Lindbloom, Politics and Markets. (New York: Basic Books, 1977), pp.172-173.

¹⁴ *Ibid.*, p.170.

separation of the world into nation-states...creates a central condition for the power of internationally mobile forms of capital."¹⁵ Gill and Law, using transnational corporations as an example of internationally mobile capital, conclude that the power of internationally mobile capital is enhanced in a global system composed of sovereign nation-states because they can play states off against each other in their search for concessions.¹⁶ As discussed above, internationally mobile financial capital uses its structural power in the same type of way to get concessions with regard to regulation and supervision of both the global financial system and individual, domestic financial systems.

Strange also hints that non-states have power because of the weakness in the state-based international structure, but she fails to apply her conclusion from a specific example more generally. Strange uses the example of the Mafia to illustrate that it is not only states that possess structural power. She concludes that the Mafia would not possess this power "...if there had not been weaknesses in the state-based structure for the control of drugs and arms deals or the regulation of financial transactions across frontiers."¹⁷

This conclusion is also applicable to the foreign exchange market. There are examples of financial actors that are truly beyond the reach of any regulatory authority, and instances of this kind may become more frequent as technology continues to advance, but, for the most part, private actors hold structural power in the foreign exchange market because they have been able to exploit the gaps between the state-based political structure and the transnational economic structure of the

15 Gill and Law, p.84.

16 Ibid., p.92.

17 Strange, States and Markets, p.33.

global economy. In order for nation-states to fortify their influence in the global foreign exchange market, they must act in coordination. However, to do so means that they must forgo a degree of autonomy and sovereignty. In this way, global markets and internationally mobile finance capital are able to impose the greatest cost of all on sovereign states acting to control them: states must cede their autonomy and sovereignty in coordinated efforts.

Without an understanding of the fundamental nature of the power relationship between states and markets, it is impossible to understand why states do or do not take action in the foreign exchange market and the broader international financial system. It is impossible to understand why the financial system has evolved into a more deregulated and supranationally based structure and why governments have seemingly been allowing it more freedom, rather than less, even though the negatives of such a system: volatility, rampant speculation and increased risk are well known and generally harmful to the "real" economy. When it is appreciated that the only way governments can attempt to retain or regain even minimal control of currency values is through cooperation and coordinated effort, their lack of action and the resulting evolution of the foreign exchange market becomes more understandable. Collective action among sovereign nations is inherently tenuous, the current operation of the foreign exchange market and other financial markets makes it even more so.

If governments could coordinate their economic policies, they would reduce the policy incompatibilities which markets exploit and which generate speculative trading. With speculation moderated and economic policies stable and predictable, exchange rates would also be

more likely to be stable and predictable. Nevertheless, as seen in the period from 1985-1988, governments find it very difficult politically to overcome their fragmented structures, nationally and internationally, and cooperate to the extent that is necessary to manage exchange rates. Coordination is made even more difficult because the large distortions produced in economies by overshooting exchange rates necessitates larger and more painful policy changes to restore balance than would have been necessary if exchange rates had not been misaligned. Often the most coordinated action governments can muster is coordinated intervention. Intervention is, however, difficult to use successfully, necessarily making its effect unpredictable. While governments could change the system to magnify their influence within the foreign exchange market, the administrative and political costs of doing so are heightened by the complexity of the current market. Moreover, the incentives offered by internationally mobile capital for nations to deregulate competitively are often too great to make collective regulatory action likely, especially when nations have so many conflicting interests with respect to the way the current system operates.

In the foreign exchange market, and in the determination of exchange rates, states do not "rule". States gave private traders in the foreign exchange market the power to determine exchange rates in the 1970s, but when states attempted to reassert their authority a little more than a decade later, circumstances had changed so dramatically that they found themselves largely powerless. In the intervening years, financial markets, as well as national economies, had become more interconnected. These two factors, the interconnectedness of the foreign exchange market and of national economies limits the amount of

control a single government can have over the value of its currency. The way the market is currently organized and operates *forces* governments to find a way to transform their influence from a national base to a global one. Consequently, the paradoxical solution to states' loss of sovereignty vis a vis the private actors of the foreign exchange market is for nations to coordinate their actions with other nations.

The current foreign exchange market is part of a post-Bretton Woods international monetary system that has been widely labeled a non-system; this non-system has now presented governments with a non-solution for its current problems of volatile and misaligned exchange rates. A greater degree of coordination among the largest governments is a non-solution for managing or changing the foreign exchange market because it ultimately contradicts national governments' instincts to protect their autonomy in order to achieve their individual objectives. Nations may be able to overcome their aversion to coordination and compromise when the foreign exchange market becomes so disorderly that it is apparent that a crisis is looming, but they will not be able to use coordination to manage exchange rates or change the operation of the market so a crisis does not start. Within the fairly wide parameters of a non-crisis, the private actors in the foreign exchange market have the power.

One way to solve the problems inherent in managing a supranationally based and operated foreign exchange market from a nationally-based authority structure is to disconnect the world economy, throw up the barricades that would prevent internationally mobile capital and reinstate the power and autonomy of national governments. Such a measure would be accompanied by great pain and severe dislocation

as the world adjusted to what would be a drastic reversal of the economic and political trends that have been in effect for many years.

A second option would be the development of a world currency. While the idea currently seems to be preposterous, it could come to be seen as the most economically painless remedy for a market dominated and distorted by the speculative activity of private actors. While a world currency would reduce the influence of speculative actors in the market as it now operates, it would also be, of course, the ultimate loss of sovereignty and state power.

But, more than likely, the system will keep operating as it has: continuing to marginalize states' power and continuing to integrate the global economy. In this case a world currency could emerge as just another financial innovation. In Europe, as cross-border activity flourished, banks began to provide their customers with their own private version of the ECU, before the official ECU came into existence.

Another outcome is, however, equally plausible. If the foreign exchange market continues to become more and more volatile, unpredictable and unstable, so that financial collapse occurs or becomes eminent, states could cooperate to salvage and reorder the system. In this situation, states' common interests in pursuing international cooperation and coordination to prevent collapse and disorder would coincide with their individual interests, so the obstacle of sovereignty would not be as troublesome. Also, states' interests in rescuing the system would not be opposed or undermined by those of the market's private participants and internationally mobile capital. All of these options suggest that the instability in the foreign exchange market will continue to worsen before the power relationship between states and

markets, and their respective interests, change to favor a solution that will produce a greater degree of exchange rate stability than can be expected from the current system.

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