Between Meltdown and Moral Hazard:

The International Monetary and Financial Policies of the Clinton Administration[1]

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May 2001

Abstract

International monetary and financial policies were at the center of the activities of the Clinton administration for two reasons: first, its own political failures destroyed the administation's ability to make large moves in domestic policy; second, ongoing globalization raised the stakes in international economic policy. From one perspective, the administration's monetary and financial policies as extraordinarily successful. The U.S. experienced one of the longest, strongest expansions in history, and largely as a result of the U.S.- and IMF-led response, the financial crises of the period did not produce more than transitory interruptions of economic growth in any advanced economy and in any emerging market except Indonesia.

A surprising number of virulent financial crises struck the world economy in the 1990s. Because these crises followed a new pattern, they surprised policy makers in Washington as in other parts of the world. The response therefore had to be assembled on the run. It can and has been criticized, but the criticisms are less important than the fact that the IMF and the U.S. Treasury did make substantial loans to crisis-affected countries, that these loans greatly eased the process of adjustment and recovery. Yet with 20-20 hindsight we can see that the causes of these crises were not in fact that new. The dangers of fickle animal spirits causing destabilizing capital flows, the vulnerability of investment to crony capitalism, how poor banking sector regulation can generate an international financial crisis, how the existence of resources to provide support and rescue funds in a crisis could lead the private sector to hold imprudent portfolios that increased the risk to the system--these were issues that John Maynard Keynes and Harry Dexter White had wrestled with in the negotiations that culminated in the Bretton Woods Agreement of 1944, that Austria's Credit-Anstalt crisis in 1931 had exhibited in classic form, that had been the subject of a classic study by Ragnar Nurkse in the 1940s.

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[1]Prepared for the conference on the Economic Policies of the Clinton Administration, Kennedy School of Government, 26-29 June. We thank, without implicating, Caroline Atkinson, Jeffrey Frankel, David Lipton, Sherman Robinson, Dani Rodrik, Larry Summers, Dan Tarullo, and Janet Yellen, among others.

1. Introduction

There was no reason at the outset for thinking that international monetary and financial questions would feature so prominently in the activities of the Clinton administration. They had absorbed far less time and attention during the presidency of George Herbert Walker Bush than the budget deficit, the trade deficit, the 1990-1 recession, and any number of other strictly economic problems.[2] International monetary and financial issues were hardly mentioned in a campaign whose final months coincided with an episode of serious currency-market instability in Europe (see Figure 1). Yet, the Mexican rescue, the Asian crisis, and reform of the "international financial architecture" turned out to be major preoccupations of the new president and his advisors.[3]

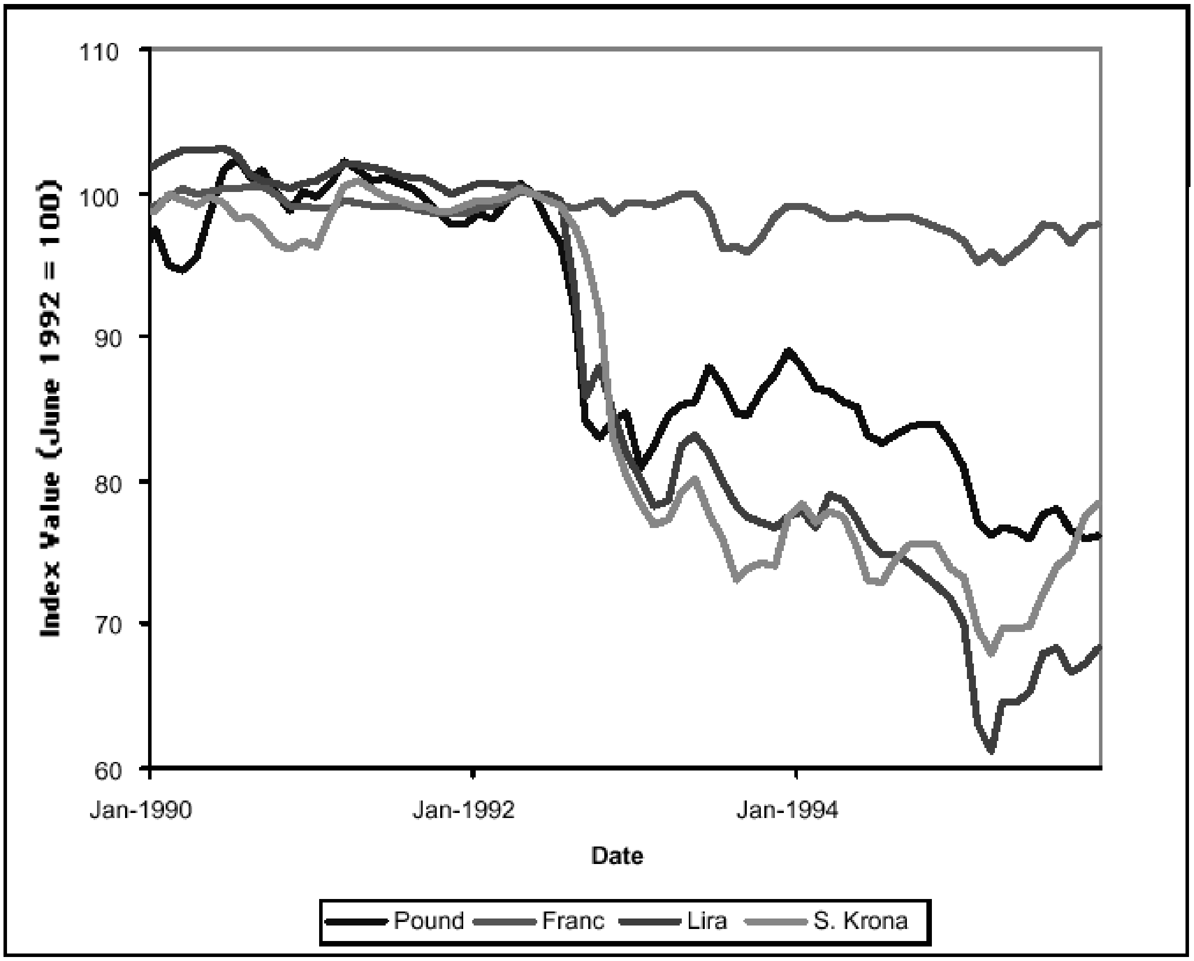
Domestic and international factors combined to bring about this unexpected turn. Although the president and his staff wanted to focus on health care, welfare, public investment, education, and the information superhighway, in its first two years the Clinton White House lacked the administrative and political competence to win the support of a divided Senate for major domestic initiatives other than the 1993 Clinton-Mitchell-Foley deficit-reduction package. And following the loss of Democratic control of the Congress in 1994, all ambitious domestic initiatives were obviously dead in the water. If this didn't exactly create a political vacuum and a demand for newspaper headlines that could only be filled by international events, it at least facilitated the efforts of Treasury and other economic agenciesto bring these issues to the attention of the president and his core political advisors.

[2]Not to mention Operation Desert Storm, German reunification, and the collapse of the Soviet Union.

[3]We would argue that this issue area ranks no less than second in the list of Clinton administration preoccupations and accomplishments, behind only the policies adopted to bring down the inherited budget deficit.

Figure 1

European Exchange Rates Around the ERM Crisis

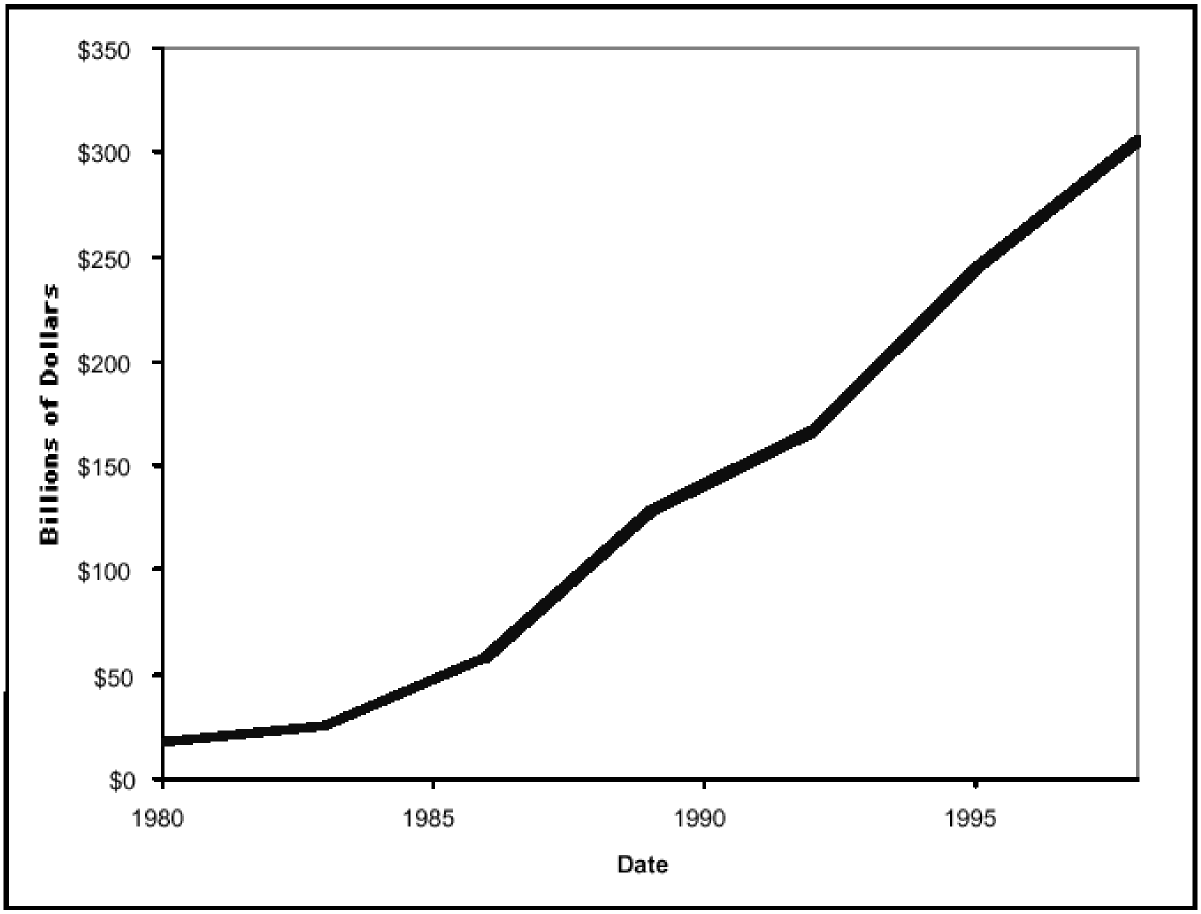


Source: Federal Reserve Board.Datafile: http://www.j-bradford-delong.net/Econ_Articles/CIEP/CIEP_data/1992crisisrates.xls

Internationally, portfolio capital flows to emerging markets had begun growing explosively in the early 1990s, reflecting the effects of the Brady Plan restructurings and the progress of economic reform in Latin America, at about the same time the Democratic candidates started spending significant amounts of time and money in New Hampshire (see Figure 2). The information and communications revolution that would be the subject of so much attention and hubris later in the decade was already quietly underway; among its effects was to greatly reduce the cost, and thereby stimulate the volume, of foreign-exchange trading and cross-border financial flows generally (Figure 3).[4]

Figure 2

Daily Turnover in U.S. Foreign Exchange Markets

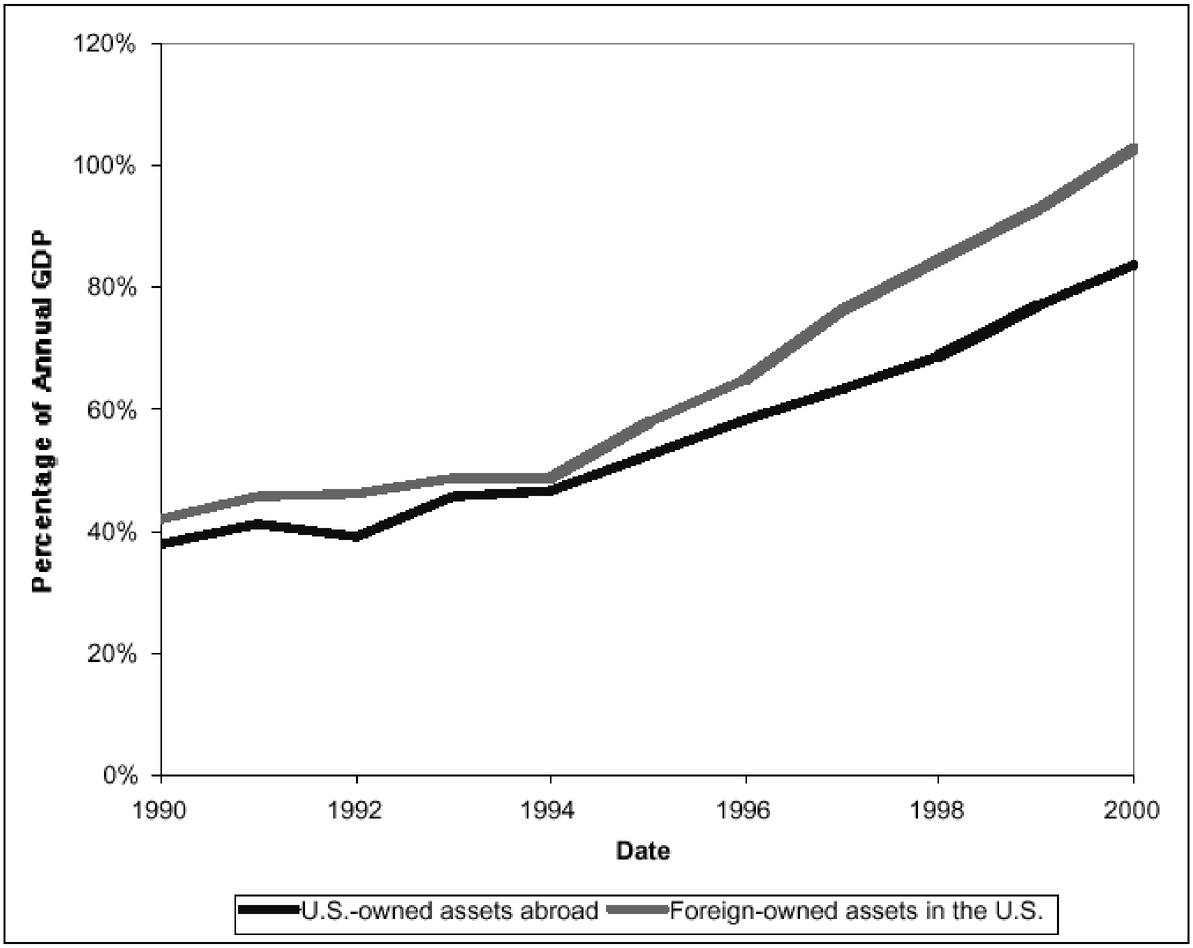


Source: Federal Reserve Bank of New York, Bank for International Settlements, Jeffrey Frankel.Datafile: http://www.j-bradford-delong.net/Econ_Articles/CIEP/CIEP_data/forex_trading.xls

[4]The Bank for International Settlements, in its triannual survey of the level of foreign exchange turnover, estimated that the volume of foreign exchange trading worldwide rose by 42 per cent between 1989 and 1992, by a further 48 per cent between 1992 and 1995, and by a slower but still substantial 25 percent between 1995 and 1998.

Figure 3

U.S. Gross International Assets and Liabilities, 1990-2000



Source: Bureau of Economic Analysis, Department of Commerce.Datafile: http://www.j-bradford-delong.net/Econ_Articles/CIEP/CIEP_data/US_gross_intl_inv.xls

Domestic deregulation had already made it more difficult to halt capital flows at the border by opening up new channels for response and evasion by financial institutions. The recognition in the 1980s that capital controls had proven better at redistributing wealth to friends of the ruling party than at allocating scarce foreign currency to the most developmentally-productive uses removed much of the raison d'etre for controls on capital flows. Reflecting both the fact and the ethos of financial liberalization, controls on capital flows in both advanced-industrial and developing countries were already well on the way to being removed.[5] As video terminals displaying real-time financial information began popping up on the desks of senior political staff all over Washington, international financial problems acquired a political salience that they had not possessed in many years.

In this paper we analyze how it was that this potential for salience became actual, review the efforts of the Clinton administration to grapple with the monetary and financial consequences, and assess the results of its policies. It is often said that this was an administration that thrived on or even was defined by crises. It is thus no surprise that our analysis of its international monetary and financial policies should focus on the Mexican peso crisis, the Asian financial crisis, and the crisis of confidence and legitimacy of the international monetary and financial system.

However, there was also a broader context for the decisions taken in response to these events. That context was an economic and political strategy that emphasized private investment, and therefore investment-friendly fiscal and financial policies, as the engine for U.S. economic growth. This commitment to creating a climate conducive to investment shaped administration policy toward the international economy for most of Clinton's two terms and conditioned its response to the international monetary and financial crises it encountered. It had implications for both domestic and foreign policy. With respect to the domestic situation, it was important that international events put no pressure on the Federal Reserve to raise interest rates, and so discourage domestic investment and undo the benefits of deficit reduction. A strong dollar -- or rather a dollar that was not expected to weaken and had a high expected long-run fundamental value -- was a key component of a policy which aimed at keeping the Fed comfortable with

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[5]Naturally, this shift first became evident in the advanced-industrial countries. There, the turning point was the Single European Act of 1986, which required its signatories to dismantle their remaining capital controls in order to forge a single financial market, something they did in the run-up to 1992. In developing countries, the prevalence of capital controls, multiple exchange rates and export surrender requirements reached a local maximum in 1991 before declining sharply and monotonically thereafter. See Eichengreen and Mussa et al. (1998), Figure 7.

relatively low interest rates. With respect to the situation in other countries, it was important that the process of increasing international integration, with respect to both trade and finance, move forward for the sake of U.S. economic growth, in the interest of economic development in emerging markets and, ultimately, to secure a peaceful world. "Open markets work. Open societies are resilient and just. And together they offer the best hope for lifting people's lives," as Secretary of State Albright pithily put it during the Asian crisis.[6].

Before proceeding, it behooves us to make a few comments on methodology. The literature on the political economy of policy making is typically organized around the distinction between ideas, interests and institutions. It asks whether policy choices are mainly shaped by intellectual outlook and ideological predisposition, by lobbying on the part of special interests, or by institutional constraints and bureaucratic inertia.

Given the difficulty of measuring their influence, quantifying their importance, and testing their significance, scholars generally attribute some role to each of these factors. For better or for worse, our analysis is subject to these same limitations and, perhaps predictably, adopts this same synthetic posture. We at least attempt to provide a sense of which of these factors played pivotal roles in the formulation of policy toward each of the international monetary and financial issues we consider. However, our focus is primarily on the elective affinity between ideas and institutions: we give interest groups short shrift. For a number of reasons, during the Clinton administration the U.S. Treasury was stronger vis-à-vis the Commerce Department and the State Department than typically happens in American bureaucratic politics. Thus the ideas that had the greatest chance of shaping Clinton administration international economic policy were those that the people who typically staff the Treasury Department find attractive and convincing.

2. The Strong Dollar Policy

[6]*South China Morning Post* (29 July 1998), http://special.scmp.com/AsianCrisis/

When President-Elect Clinton assembled a star-studded cast of experts in Little Rock during the interregnum between the election and the inauguration, he did not question them about the problem of managing capital flows and averting threats to international financial stability. His concerns, indicative of the times, were rather with the trade and budget deficits, and his predispositions, unsurprisingly for a Democrat, were activist. One prominent academic well known to this audience won no points with the President Elect when he responded to a question about what should be done about the trade deficit by saying, in essence, “nothing.” Clinton’s eventual choice to head the Council of Economic Advisors, Laura Tyson of the University of California, Berkeley, was an advocate of the aggressive use of trade policy to pry open foreign markets with the goal of bringing down the trade deficit.

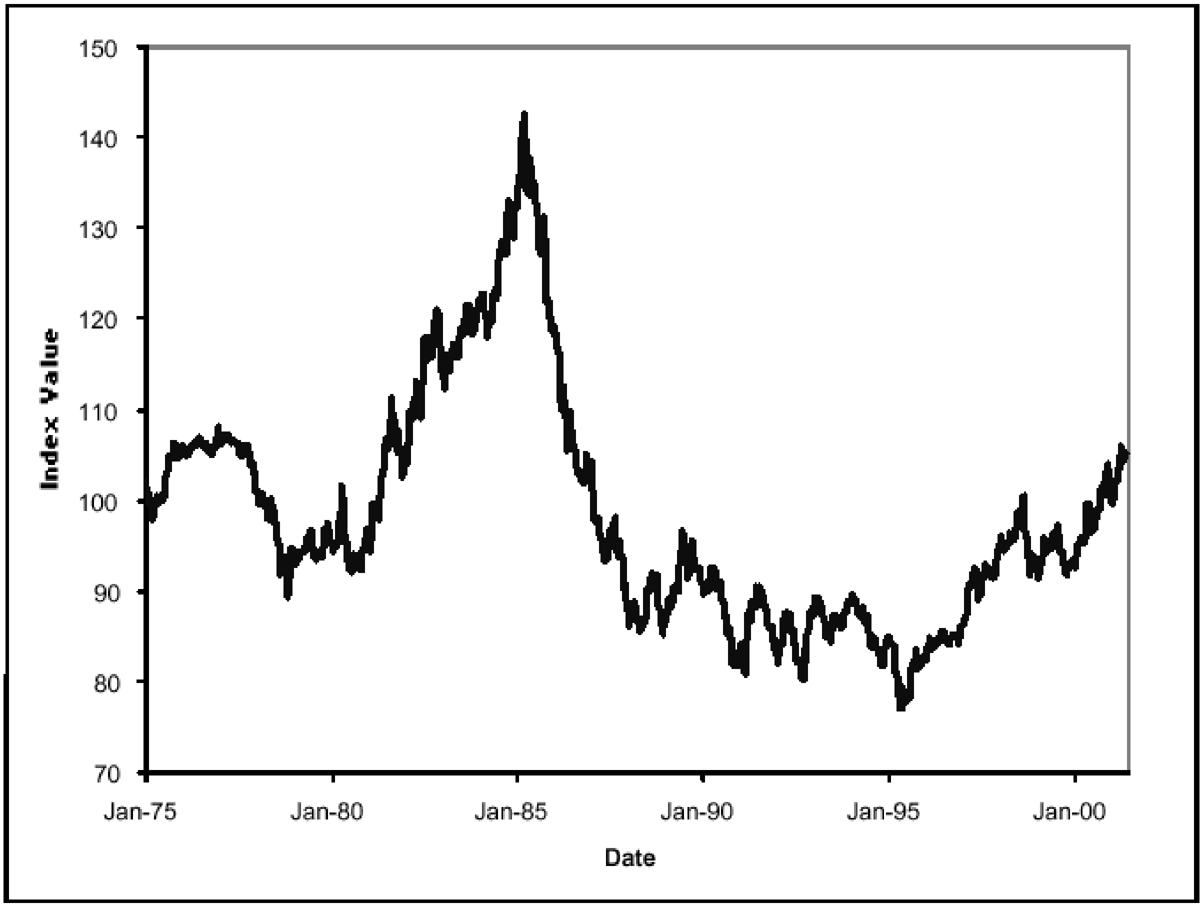
There were impediments, of course, to the aggressive use of trade policy. The United States had already concluded a major free trade agreement with Canada. It had its GATT commitments. The promise of closer trade relations were an obvious way of supporting economic liberalization and democratization in Latin America and the former Soviet bloc. Candidate Clinton had already opted to support NAFTA and the Uruguay Round during the 1992 campaign out of a conviction that the economy had to move forward and not backwards (where "forward" in part meant "globalization") and in order to define himself as a New Democrat (thereby distinguishing his views from those of the then-prevailing Congressional Democratic position). The traditional constituency for protection, the import-competing manufacturing belt, figured less importantly in the U.S. economy and therefore in the political debate than they had a decade before, while U.S. exporters of goods and services, financial services in particular, gained additional voice and were unlikely to look sympathetically on the use of trade-unfriendly measures. While the administration made heavy use of anti-dumping measures, both those to which it was entitled under the General Agreement on Tariffs and Trade and unilateral measures such as Super 301 (Section 301 of the 1988 Omnibus Trade and Competitiveness Act), its commitment to free trade was never in doubt.[7]

The one instrument obviously available for addressing the trade deficit and the concerns of import-competing producers was the level of the dollar. There were several reasons for thinking that the new administration might try to talk or push down the dollar. This had been the observed behavior, or at least the imputed temptation, of previous incoming Democratic Presidents: Franklin D. Roosevelt had depreciated the dollar to deal with the macroeconomic problems he inherited, and it was widely thought that John F. Kennedy would do the same when he took office in 1961. Treasury secretaries hailing from Texas (James Baker and John Connolly), closer to the country's commodity-producing heartland than its financial center, had a record of favoring a weak dollar; thus, Clinton's selection of Lloyd Bentsen as his treasury secretary was taken in some circles as a signal of the administration's prospective approach to the exchange rate.

[7]The incidence of antidumping actions fluctuated with the level of the dollar, falling between 1992 and 1995, along with the currency, and rising thereafter (Knetter and Prusa 2000).

Figure 4

Value of the Dollar Against Major Currencies, 1975-2000



Source: Federal Reserve Board.Datafile: http://www.j-bradford-delong.net/Econ_Articles/CIEP/CIEP_data/weekly_major_curr.xls

Nor can it be argued that anything that could remotely be called a "strong-dollar policy" was in place in the early Clinton years. The dollar declined from Y125 when Clinton took office to Y80 two years later, an exceptionally sharp swing in a short period even by the standards of the 1970s and 1980s.[8] (See Figure 4.) The "economic populists" in the White House (George Stephanopoulos, for example) saw a weaker dollar as useful for enhancing U.S. international

[8]While the dollar strengthened against the Mexican peso and the Canadian dollar, moderating the decline in the (trade-weighted) effective exchange rate, it was the yen-dollar rate that drew the attention of financial-market participants and the concern of policy makers.

competitiveness. Secretary Bentsen saw a "stronger yen" as potentially helpful for solving the trade-deficit problem.[9] U.S. Trade Representative Mickey Kantor saw a weaker dollar as giving him leverage in trade negotiations, since he could argue that it was Japan's "unfair advantage" due to barriers to imports of automobiles and parts that was responsible for the weak currency that found disfavor among foreign governments.

That said, there were several causes for concern over the weakness of the dollar. The currency's decline hurt rather than helping with the trade deficit in the short run due to the J-Curve effect (that is, the tendency for import prices to rise before import volumes began to fall). Its slide threatened to fan inflation. Fears of inflation and about the sustainability of the external deficit combined to raise the specter of higher interest rates, which unsettled the financial markets.[10] The dollar's continued decline created financial volatility and increased the cost of credit by inflicting losses on financial firms (hedge funds, among others) that had shorted the yen and deutsche mark in late 1993 and early 1994.[11] All this combined to create a desire for action to strengthen the currency.

At a deeper level, the strong dollar policy was part and parcel with the administration's overall fiscal and monetary strategy. Candidate Clinton had fought the election on the basis of a middle-class tax cut and additional public spending on infrastructure and skill formation, but his administration inherited an exploding budget deficit that left little room for such initiatives. The only hope was that deficit reduction would bring down interest rates and create an environment conducive to faster economic growth and therefore to the shared prosperity that the candidate had promised the middle and working classes. As a result of a series of internal struggles

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[9]Bentsen's reputation for favoring a weaker dollar resulted from an off-hand response to a reporter's question in which he observed that a weaker dollar would boost U.S. exports.

[10]See for example "Weaker Greenback Campaign Heats Up," *Capital Markets Report,* Dow Jones News Service, 10 December 1996.

[11]See International Monetary Fund (1994).

(colorfully recounted by Woodward 1994 and Reich 1997),[12] the decision was made to eschew substantial new spending programs and middle-class tax cuts and to focus instead on fiscal consolidation in order to create a financial environment conducive to investment and growth.

How was the level of the dollar related to this choice? Reducing the interest rates on which investment depended were the key to stimulating faster growth.[13] The Federal Reserve Board, it was hoped, would see fiscal consolidation as implying a reduction in inflationary pressure and respond by cutting rates. Its members were most likely to do so if the financial markets perceived things the same way -- that is, if bond prices responded positively. From this perspective, a weak exchange rate was a danger. In a world of international mobile capital, U.S. interest rates would inevitably exceed foreign interest rates to the extent that the dollar was expected to fall (by virtue of the arbitrage condition known as interest parity).

Moreover, since expectations of higher import prices were something at which the Federal Reserve looked when forecasting inflation, the prospect of a falling dollar fanned fears among financial-market participants of rising Federal Reserve discount rates. For these and other reasons, the belief that the administration might push the dollar down, perhaps in response to pressures emanating from domestic auto and steel producers, had to be vanquished in order to reap the full benefits of deficit reduction and to implement its investment-led growth strategy. Then-Under Secretary Summers saw the linkage between exchange rate policy and interest rate policy from his arrival at Treasury, and was the main opponent in these early days of arguments in favor of pushing down the dollar.[14] The relative strength of the Treasury Department vis-à-vis

[12] A caution: if you understand the issues, these two books--Reich's especially--provide an informative and revealing account of the debates and the personalities. If you don't understand the issues, the books are more likely to mislead than to enlighten.

[13]Within two years of the President’s inauguration, the Council of Economic Advisors was highlighting the close connection between investment and productivity growth, thus suggesting that the lower interest rates needed to boost investment were the key to faster growth. Council of Economic Advisors (1995), pp.27-28. Lower interest rates also had the ancillary advantage of addressing the problem of chronic budget deficits by reducing debt-servicing costs.

[14]Summers reportedly clashed with U.S. Trade Representative Kantor and Commerce Secretary

Commerce and others within the Clinton administration also played a powerful role, as the standard arguments put forth in every administration by Treasury staff and principals had greater weight in the 1990s.

Bold public advocacy of a strong-dollar policy was inaugurated by the transition from Secretary Bentsen to Secretary Rubin at Treasury at the beginning of 1995.[15] Rubin, while head of the National Economic Council, had been central to the campaign for lower interest rates as a way of energizing U.S. economic growth, and Summers' analytical arguments against pushing down the dollar coincided with Rubin's instincts honed by years of experience with financial markets and with the views of Treasury's career staff. In his confirmation hearings before the Senate Finance committee, Rubin stated that a strong dollar was in the best interest of the U.S. economy and warned that the exchange rate should not be used as an instrument of U.S. trade policy.

The new approach acquired a name as the result of three events in the spring of 1995. First, there was the prime-time news conference on April 19th during which Clinton stated that the U.S. "wants a strong dollar" and that it "has an interest over the long run in a strong currency." Second, there was the extraordinary statement on April 25th by G-7 finance ministers, meeting under Rubin's chairmanship, who overcame their normal reticence about addressing such delicate matters and declared that a reversal of the decline of the dollar against the yen was

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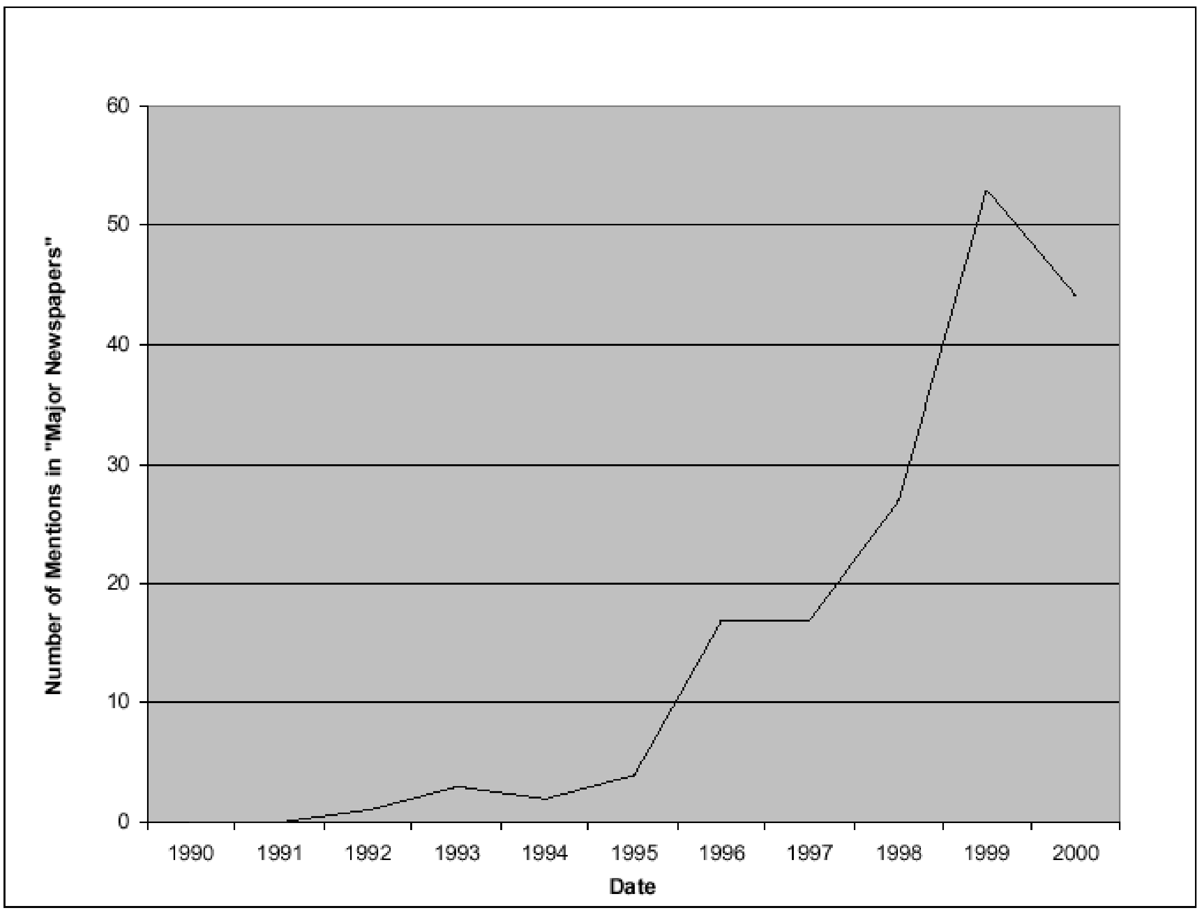
Ronald Brown in a closed-door meeting, after they had mused publicly that a weaker exchange rate might not be so bad. *Business Week* (March 20, 1995, p.45). Summers publicly stated as early as August 1993 that a strong yen (politically an easier name to attach to the phenomenon than a weak dollar) was not in the interest of the U.S. economy. All this makes it peculiar that Summers' commitment to the policy was questioned when he succeeded Rubin as Treasury Secretary in 1999.

[15]Bentsen had asserted in a July 1994 speech in New York that the administration favored "a stronger dollar," but any impact on the markets was offset by the President's statement at the G-7 summit in Naples a few days later that "it is important not to overreact" to the currency's weakness. Combined with Bentsen's jawboning of the Fed not to raise interest rates, the impression, according to financial commentary, was that the administration still favored a weaker dollar. See *Wall Street Journal Europe* (July 12, 1994), p.10; *Economist* (July 16, 1994), p.74.

now desirable. Finally there was joint intervention in the foreign exchange market by the U.S. and Japan, with the periodic support of Germany and other G-7 countries, to support the currency, starting in March and April of 1995 (accompanied by comments by Rubin that the intervention reflects "a shared commitment to a stronger dollar" and a common view that a stronger dollar "is in the most general interest of the economies of the world").[16]

Figure 5
Strong Dollar Policy



[16]*Wall Street Journal* (April 6, 1995), p.C11.

By mid-summer the currency had reversed course.[17] The Federal Reserve began lowering interest rates in a trend that similarly dates from the summer of that year.[18] The statement that the administration preferred a strong dollar became the regular mantra of officials, and discipline was imposed to ensure that pronouncements about the currency would be made by the Treasury alone. Still, it took a surprising amount of time for the existence of a new policy to be recognized (in other words, ingrained outlooks die hard). Figure 5, which shows the number of Nexis-Lexis hits on "strong dollar" and "strong-dollar policy", suggests that while this realization first dawned in 1996 (leading the National Association of Manufacturers and U.S. auto producers to complain that currency appreciation was hurting their exports), it took hold only two years later.

3. The Mexican Rescue

The North American Free Trade Agreement, negotiated and signed by the Salinas and the Bush administrations in 1992 and amended and implemented by the Salinas and Clinton administrations in 1993, offered Mexico two major benefits. It guaranteed that a wave of U.S. protectionism would not disrupt Mexican growth. And, by tying reform to an international agreement, it reduced the odds that Mexico would abandon efforts to restructure its economy.[19]

But there was also a third, unintended benefit. The violence of the political fight over NAFTA, and thus the status of the agreement as one of the Clinton administration's two significant accomplishments of 1993, meant that the administration had a considerable investment in NAFTA's success and thus in Mexico's. Winning approval for NAFTA was

[17]It had moved up to nearly Y120 (a 42 month high) by the time of the November 1996 election.

[18]The strong dollar and the anti-inflation effects of its appreciation were only one factor behind the adjustment of monetary policy; more important surely were signs of distress in financial markets and worries about an economic downturn.

[19]Ironically, NAFTA did not offer any significant increase in access to the U.S. market, since the U.S. market was already almost completely open to imports from Mexico.

supposed to be the easy -- opposition was supposed to be minimal and pro-forma -- yet somehow opposition caught fire.[20] The political fight to ratify the agreement was bitter and close. In the aftermath of the ratification vote, the White House found that it had acquired a strong political interest in seeing that the policy was a success.

The start of 1994 saw a rise in political risk. The January 1994 uprising in Chiapas, scattered incidents of terrorism in Mexico City, the forthcoming Mexican presidential election in August, and rumblings that the cadres of the then-ruling Institutional Revolutionary Party (PRI) were unhappy with the dismantlement of Mexico's corporatist system and sought a reversal of reform caused observers to wonder whether Mexico's economic future was as bright as commonly suggested. GDP growth in 1993 turned out to be a deeply disappointing 0.4 per cent. Still, there were few signs of significant capital flight in early 1994, although the peso did weaken by about eight percent in the first two months of the year. When Secretary Bentsen visited Mexico City in mid-February, he gave no public indication of concern, telling reporters that Mexico's economic policies had "become an example for all of Latin America."[21] Mexico's economic fundamentals – a balanced federal budget, a successful privatization campaign, and financial liberalization among them – were strong enough to similarly elicit a strong endorsement of the country's economic management by the IMF in the spring. In neither case were principals being more optimistic than their staffs: both Treasury and IMF staff were optimistic about the sustainability of Mexican economic reform and economic growth. March saw the assassination of the PRI's designated presidential candidate, Luis Donaldo Colosio. The announcement of the existence of

[20]Raising the minimum wage, restricting the use of replacement workers, health care reform, better ways to look for jobs, and programs to subsidize education and training each promised to do more to boost the standard of living of union members than whatever minimal Stolper-Samuelson-driven reduction in U.S. working-class wages would follow from additional competition from Mexican workers. It is difficult even in retrospect to understand why anyone would believe that retaining the U.S.'s barriers against Mexican imports were of first-order importance.

[21]*Washington Post* (February 13, 1995, p.A1).

a $6 billion foreign currency swap agreement with the U.S. Treasury and the rapid naming of Ernesto Zedillo to replace Colosio limited the market impact.[22] The American financial press still wrote that political risk was limited: "modernization in Mexico has developed its own momentum," Zedillo "shares the reformist vision," and the PRI would not "reverse...[its] commitment to a more open social and economic structure."[23] But following a poor showing by Zedillo in a nationally televised campaign debate, the Bank of Mexico, notwithstanding the stautory independent it had gained on April 1st, stepped up the rate of credit creation in order to "pump up the economy and ensure a PRI victory."[24] As the peso drifted down toward the lower edge of its trading band, the Bank was forced to undo its previous expansionary initiative, boosting short-term interest rates to 18 percent in order to prevent the currency from falling further.

Already in 1993 the Congressional Budget Office had issued a warning about the Mexican economy.[25] Now prominent economists such as Rudiger Dornbusch, Alejandro Werner, Guillermo Calvo, Leo Leiderman, and Carmen Reinhart added their voices.[26] While the Mexican government was doing most things right -- the budget deficit had been wound down, businesses were being privatized, and tariffs were being reduced -- they warned that growth remained disappointingly slow. Dornbusch and Werner blamed the nearly fixed peso-dollar

[22]Treasury and Fed officials had begun to discuss the need for a standing consultative mechanism to anticipate exchange rate problems within the North American free trade area, and the need for expanded swap arrangements to address them, already in late 1993.

[23]David Asman (1994), "Zedillo Follows Salinas Model for Mexico," *Wall Street Journal* (March 30, 1994). In contrast, a classified estimate by the National Intelligence Council, circulated in mid-summer, gauged the probability of a smooth election and orderly transition as less than 50 per cent.

[24]*Washington Post* (Feburary 13, 1995, p.A1). Allan Meltzer, in testimony to the Senate Committee on Banking Housing and Urban Affairs (on March 9th, 1995), traced the roots of this monetary expansion back to 1993. U.S. Senate Banking Committee (1995), p.220.

[25]See CBO (1993).

[26]In Dornbusch and Werner (1994) and Calvo, Leiderman and Reinhart (1994).

exchange rate, coupled with persistent inflation, which had saddled the country with an overvalued currency. The remedy was to devalue the peso by 20 percent and to then allow it to drift down even more, to the extent that Mexican inflation continued to exceed U.S. inflation. The counterargument was that the slowly-crawling band within which the peso was allowed to fluctuate was critical for the success of Mexico's disinflation program. To suddenly abandon the nominal exchange rate anchor, even with good reason, might revive doubts about policy credibility and rekindle inflationary expectations.

Dornbusch and Werner presented their arguments to heavily-attended seminars at the Federal Reserve Board and elsewhere around town in the spring, summer and fall of 1994. The reaction in administration circles was: "Perhaps." An internal June 1994 Federal Reserve Board staff memorandum concluded that a peso devaluation of around 20 per cent was "quite likely within the next several years -- but is not...necessarily imminent."[27] Although Mexican inflation was outrunning U.S. inflation, so too might productivity growth, assuming that the government followed through on reform.[28] That no acceleration in productivity growth was evident yet was not necessarily disturbing, since such things took time. The fundamental value of the peso was that at which Mexico's trade deficit was equal to desired long-term net investment in Mexico. To the extent that markets were expecting reform to continue and productivity to pick up, desired long-term net investment in Mexico might be large, and the true fundamental value of the peso might be high. It followed that there was no necessary reason to worry about the country's considerable current account deficit, which reached 8 per cent of GDP in 1994, to the extent that

[27]*Wall Street Journal* (July 6, 1995), p.A1.

[28]Faster productivity growth in Mexico might also help to reconcile relatively fast inflation there with the pegged rate of the peo through the operation of the Balassa-Samuelson effect. (Balassa-Samuelson predicts that the price of nontradables will rise faster in more rapidly growing countries, while most of models of exchange-rate determination take the equilibrium exchange rate as a function of the relative price of tradables in the two countries.) This argument was also trotted out in response to Dornbusch and Warner's warnings that the peso was overvalued. Dornbusch's response is in Dornbusch (2001).

this gap reflected an excess of investment over savings, reflecting in turn the attractions of investment in a country with considerable upside productivity potential.[29]

To be sure, if the current account reflected booming consumption as much as investment and the productivity payoff of the latter was still uncertain, there was more reason for concern. But "uncertain" is the operative word; in the absence of stronger evidence it was not prudent for Treasury to urge a risky devaluation on a foreign sovereign, especially one so dependent on market confidence. Treasury issued warnings of "greater urgency as the year progressed," as then-Under Secretary Summers later told a Senate panel.[30] But warnings were, understandably, not demands. The "policies that Mexico pursued...were Mexico's," as Summers put it in his testimony.

And even if Dornbusch and Werner were right, it was not clear in the spring and summer of 1994 that dire consequences would follow. The peso might have to be devalued by 20 per cent, but there the story would end. Currency crises with devastating consequences for economies only happen – or so economists thought back then – when governments run out of the resources needed to sustain unsustainable macroeconomic policies and fail to change their policies fast enough when the speculative attack begins. The Mexican budget was not in

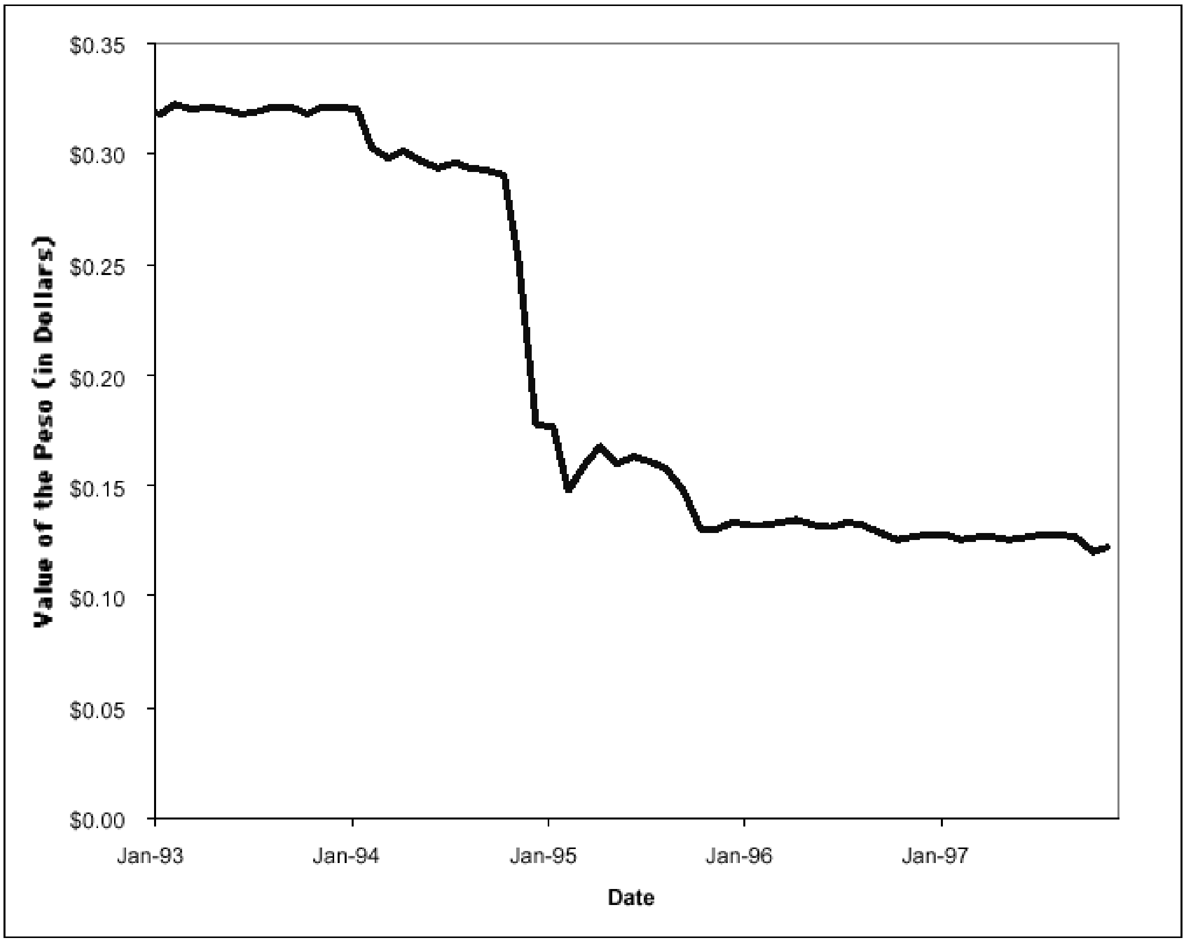
[29]The Lawson doctrine -- that a current account deficit was not a problem if it reflected the attractiveness of investment, and argument associated with one-time British Chancellor of the Exchequer Nigel Lawson -- was emphasized by Mexican Finance Minister Pedro Aspe in his discussions with U.S. officials. *Wall Street Journal* (July 6, 1995, p.A1). Jeffrey Frankel has suggested that perhaps the Lawson doctrine should be renamed the "Lawson fallacy."

[30]In particular, Summers discussed his concerns over the magnitude of the current account with Aspe's deputy, Guillermo Ortiz. Secretary Bentsen raised the issue with a number of Mexican officials. *Wall Street Journal* (July 6, 1995, p.A1). "Senator, there were many conversations between Treasury officials and Mexican officials, Treasury officials at all levels and their counterparts in the Mexican government, and between U.S. central bank officials and the Mexican central bank," Summers later told Senator D'Amato in testimony before the Senate Banking Committee. "Those conversations by the fall emphasized that Mexico's policy path was in our judgment unsustainable; that unless they were prepared to take some other substantial policy action, that it would be necessary for them to devalue, but that it was possible that with other substantial policy action, a devaluation might not be necessary." Federal News Service (March 10, 1995), p.4.

significant deficit. The central bank was not frantically printing money.

Figure 6

Value of the Mexican Peso, 1993-1997



Source: Federal Reserve Bank of St. Louis.Datafile: http://www.j-bradford-delong.net/Econ_Articles/CIEP/CIEP_data/peso*.xls

With benefit of hindsight, we now know that this model neglected a key point. Part of the Mexican government's strategy for coping with growing investor jitters had been to replace conventional short-term borrowing with the famous "tesebonos," short-term securities whose principal was indexed to the dollar, as a means of retaining the funds of investors who feared devaluation.[31]

Effectively, this was a double-or-nothing bet. While the policy succeeded in attracting and retaining some $23 billion of financing, it meant that if devaluation did come it would be an order of magnitude more dangerous and destructive. In particular, it would greatly increase the burden of dollar-denominated debt of the Mexican government. Even if the public finances were otherwise sound, the fact that so much of the debt was dollar-linked meant that they would not remain sound if the currency crashed. That this risk was inadequately appreciated is no surprise. In 1994 observers inside the U.S. government dismissed the possibility of a major financial crisis in Mexico by pointing to recent historical experience that major crises happened only when governments ran huge persistent deficits and pursued unsustainable policies. No one was preoccupied by the risk of issuing tesobonos, since everyone's worst-case scenario was a peso devaluation of 20 per cent, nowhere large enough for the balance-sheet effects to be seriously destabilizing.[32] Only in the aftermath of the devaluation did it become clear that because Mexico had floated so much short-term debt, a major crisis could materialize out of thin air, and because so much of that short-term debt was dollar linked, the macroeconomic fallout could be severe.[33]. Thus large-scale foreign-currency borrowing robs exchange rate depreciation of its usefulness as a stabilization device. A standard reaction when a country suddenly finds that foreign demand for its current-account goods and services exports has fallen, or that foreign demand for its

[31]The Mexican government acted on the advice of the Weston Group, a New York-based group of financiers that specialized in peso investments.

[32]As late as December 16th (following the devaluation but three days preceding the beginning of the currency crash), a group of nearly 50 U.S. intelligence analysts, Wall Street financiers and academic experts gathered at the State Department "for an unusual, closed-door discussion of the Mexican economy" concluded that the negative fallout would be minimal. *Washington Post* (February 13, 1995, p.A1).

[33]The best way to think about this is as, in Paul Krugman's phrase, "open-economy Bernanke-Gertler." If a country's government, banks, or operating companies have large debts denominated in foreign currency, then a depreciation of the currency may set in motion the same debt-deflation chain of bankruptcies and financial collapse modelled by Bernanke and Gertler, and have catastrophic consequences for real economic activity.

capital-account exports–for investments located on its territory–has fallen, is to allow the exchange rate to depreciate. When demand for a private business's products falls, one natural response is for the business to cut its prices. When demand for a country's products–-and that is what exports plus capital inflow are, demand for a country's products–-falls, the natural response is for a country to cut its prices. And the easiest, simplest, and most straightforward way to accomplish this is through an exchange rate depreciation. But this is not the case if the country's banks and operating corporations have borrowed abroad in hard currencies. Then a depreciation writes up the home-currency value of their debts, erodes their entrepreneurial net worth, and sets in motion the debt-deflation process. And if the political system was fragile and the financial system was opaque, these problems could erupt overnight.

In a sense, then, the basic ingredients of the Asian crisis that erupted in 1997 were already evident in Mexico in 1994. In particular, how the current account deficit was financed later became a central consideration for those attempting to forecast crises in emerging markets. 1994 was the first time this variable appeared on official radar screens. Thus, it is not surprising that the reforms of the international financial system proposed by the Clinton Administration following the outbreak of the Asian crisis were already tabled in the wake of the Mexican crisis some three years earlier.[34] What is surprising, in retrospect, is that more was not done after the Mexican crisis to head off another future crisis of a very similar sort.

But this was not the view in the middle of 1994. Rather, the assumption was that while a modest exchange rate depreciation might be a political embarrassment, it hardly signaled an economic disaster. The problem was that among those who would end up with red faces were administration officials, since a visible change in the exchange rate would give new ammunition to the old opponents of NAFTA, who already argued that low Mexican wages meant unfair competition for American workers. Thus, it is hardly surprising that the administration did not

[34]As described in Section 5 below.

place more pressure on the outgoing Salinas government to devalue.[35] Treasury did suggest that Mexico might wish to widen the band for the peso and allow the currency to fluctuate more widely in order to allow the loss of competitiveness to be made up. In other words, it might contemplate a "limited devaluation." But it was not clear that this could be done without disturbing investor confidence, since Mexico's entire disinflation strategy was anchored by the exchange rate peg.[36] It was not clear that there existed such a thing as a "limited devaluation" in the new 1990s world of high capital mobility. Not surprisingly, Treasury's gentle prodding produced no concrete result. In a sense, Mexico was the first example of another problem that would become chronic as the 1990s progressed: the dangers of not having an exit strategy from an ostensibly temporary currency peg.

The summer of 1994 saw good economic news about the pace of Mexican growth, coupled however with the beginnings of capital flight as nervous investors contemplated the aftermath of the August election. By the beginning of August, capital flight had reached perhaps $150 million a week, depressing the exchange rate to 3.4 pesos per U.S. dollar. The fear was that Zedillo might win the election in a dirty and unconvincing fashion, and that such a win would be followed by chaos. But as the election results came in and pointed to a solid and relatively fair win, administration officials breathed a sigh of relief. The peso rose 4 per cent from the bottom of its trading band in the wake of the election. Forecasters raised their estimates of Mexican growth in 1994 to 3 per cent (and of future economic growth to 4 per cent), and the stock market jumped.[37] The Bank of Mexico signaled that short-term interest rates would

[35]In addition there was the fact that the White House was sponsoring Salinas to head the newly-created World Trade Organization, and an embarrassing devaluation might be seen as raising questions about his economic competence.

[36]In particular, the role of a firm exchange rate anchor in Mexico's stabilization and adjustment program was strongly associated with Salinas' finance minister, Pedro Aspe, who threatened to resign when devaluation was contemplated in the interregnum between the election and the inauguration of the new government. This threat reportedly stymied U.S. efforts to encourage earlier action to deal with Mexico's capital outflow.

[37]Mexican export and GDP growth continued to be strong throughout the fall.

decline, as observers awaited the arrival of "...the famous investments from the NAFTA that never came because of Chiapas and the Colosio assassination..."[38]

Then the situation suddenly deteriorated again. The assassination of senior PRI member Jose F. Ruiz Massieu in October seemed to demonstrate that Mexico still had a problem of political stability, and financial capital started hemorrhaging out of the country. This came as a surprise to official Washington, which had expected capital inflows to resume following the election. The unexpected nature of this event was one reason for the deer-frozen-in-the-headlights posture of the U.S. government in October and November.[39] In addition, not only had the view that "limited adjustment" of the exchange rate was necessary gained adherents in Washington, but there was a realization that simply urging the Mexican government to undertake it would not accomplish the task. Rather, the U.S. had to make clear its unwillingness to help sustain an unsustainable currency peg. In November, Under Secretary Summers memoed his treasury colleagues that Mexico should not be allowed to borrow from the U.S. to support an overvalued peso. Chairman Greenspan's staff reportedly reached the same conclusion.[40]

With benefit of hindsight, it is often said that the Mexican government unwisely put off the inevitable day of reckoning -- that it compounded the problem by waiting too long. From nearly $30 billion before the assassination of Colosio, foreign exchange reserves had fallen to barely $5 billion when the decision was taken to abandon the pegged rate against the U.S. dollar in December. At each stage the Mexican government, preoccupied with the election campaign,

[38] Craig Torres (1994), "Mexico Could Post Its Strongest Growth in Five Years," *Wall Street Journal* (August 25, 1994).

[39] "As an official who participated in interagency meetings in Washington throughout this period recalled, 'I don't remember...any economic bells ringing.'" *Washington Post* (February 13, 1995, p.1). In addition, the administration was preoccupied by preparations for the lame-duck session of Congress at which approval of the Uruguay Round negotiation would be obtained. Although Zedillo met with Secretary of State Warren Christopher during a November 1994 visit to Washington, there was reportedly no State Department-Treasury Department joint meeting on Mexico until after the peso devaluation in December (*Ibid*).

[40] *Wall Street Journal* (July 6, 1995, p.A1).

bet that the loss of reserves was temporary -- that it reflected a temporary disturbance to market conditions rather than a permanent change in investor sentiment.

Up until late summer it was hard to say with any conviction that the Salinas government was wrong.[41] While inflows of foreign portfolio investment had stopped in the wake of political assassinations and the Chiapas rebellion, they had also stopped when the U.S. Congress looked ready to reject NAFTA, only to resume after the NAFTA implementation votes.

In December, after a year of political assassinations, a not-very-clean presidential election, and the appearance of an armed guerrilla movement in Chiapas, Mexico ran to the edge of its foreign exchange reserves. It was public knowledge that the inflows of foreign portfolio capital had not resumed. Expectations of inflows gave way to expectations of outflows. In a pattern that would be repeated in the Asian crisis two years later, each investor feared that other investors would pull their money out, leaving the last investor standing would lose the greatest amount, through either near-hyperinflation (as the Mexican government frantically printed pesos to cover its peso-denominated debts), the imposition of capital controls (which would trap foreign money in the country for an indefinite period of time), or formal default (in a repeat of 1980s-style dealings with commercial banks).

A government possessing only $5 billion in reserves to offset $23 billion of tesebono liabilities had no good choices. If it pushed interest rates sky-high in an effort to keep capital in the country, the extraordinary cost of money would strangle investment and employment and repel inward foreign investment. If, finding itself unable to borrow, it began printing money at a rapid rate, hyperinflation would do the same.

None of this was preordained, of course. If investors had been willing to roll over the country's short-term debts, contractionary policies and a moderate devaluation to reduce imports and encourage exports would have sufficed to cover the Mexican government's foreign liabilities

[41]Even in October of 1994 foreign exchange reserves were still $18 billion, nearly unchanged from April.

as they came due. While a moderate devaluation coupled with contractionary policies might cause a recession, that recession would be shorter and shallower than what faced Mexico in the absence of funds to roll over its short-term debts. Thus the peso support package: the United States, the International Monetary Fund, and other sundry and assorted contributors cobbled together a package totaling some $40 billion in dollar-denominated assets.

Initially the White House sought to get Congress to approve $50 billion in loan guarantees. The Congressional leadership agreed to support this request. The willingness of the executive and legislative branches to work together to minimize the impact of the peso crisis was unsurprising; after all, economic engagement with Mexico was the policy of both the Democratic executive and the Republican legislative majority. Moral suasion was mobilized: Chairman Greenspan telephoned Rush Limbaugh at his studio to lobby for the package.[42] But the Treasury's state-by-state analysis of how a Mexican meltdown would affect U.S. employment was apparently not brought to the attention of Congressional staffers. And the Congressional leadership overestimated its ability to overcome the reservations of the rank and file. Soon Congressional leaders as highly placed as Speaker Gingrich's lieutenant, Majority Leader Armey, began demanding that the administration gather 100 House Democratic votes for the package as a precondition for Republican support. Perennial presidential candidate Patrick Buchanan called the support package a gift to Wall Street: "not free-market economics [but] Goldman-Sachsanomics." Ralph Nader urged Congress to vote down the support package and to instead demand that Mexico raise real wages. *Wall Street Journal* columnists demanded that support be provided only if Mexico first returned the peso to its pre-December nominal parity. Isolationist Republicans and protectionist Democrats claimed that NAFTA had caused the crisis and vowed to fight the package. Almost alone on the other side of the debate was the newly-elected governor of Texas, George W. Bush, who trumpeted his firm support for the rescue on

[42]Greenspan in this period characterized the rescue package for Mexico as "the least worst of the various alternatives that confront us."

the grounds that a collapse of confidence in Mexico would be “unbelievably disastrous.”[43]

Congress’ failure to quickly pass the package meant that discussions of U.S. financial assistance did more to roil than calm the markets. Barely a month into 1995 Congressional leaders had abandoned any attempt to pass loan guarantees; instead, they wrote the President saying that they would have no objection to use of the Treasury's Exchange Stabilization Fund (ESF). The legislation governing use of the ESF had assumed that it would be used for short-term exchange market interventions to stabilize the dollar's value in terms of a basket of other major international currencies; it had never entered anyone's mind back in the 1930s when it was established that it might be used by the Executive Branch to stabilize the peso.[44] In recommending that it be so used on a large scale, the Congressional leadership effectively abandoned to the White House a substantial measure of Congress's institutional power over international economic policy. The vitriolic hearings over the Mexican rescue and the administration’s use of the ESF that followed in 1995 were to some degree Congress’ effort to undue this “mistake.”

In this way the program to support the peso through IMF and U.S. Treasury financing (secured by Mexico's oil export revenues) was put into place. As we noted at the beginning of this section, there was virtually no chance that the Clinton administration would not respond rapidly and aggressively to a Mexican financial crisis. The centrality of the debate over NAFTA in its first year, followed by the legislative disaster of its second, meant that NAFTA had become, by default, one the administration’s two signature accomplishments. The National Security team supported an aggressive U.S. response for its own reasons; national security advisor Tony Lake was among those who argued that the crisis was threatening political stability in Mexico and that political disorder might mean a wave of illegal immigration into the United

[43] *Economist* (February 4, 1995), p.24.

[44] See Schwartz (1997). The use of the ESF for the peso support package was unprecedented in the scale of the operation undertaken. However, small-scale loans had been made from the ESF to developing economies--including Mexico--since the 1930s.

States.[45] Finally, the internal judgment within the administration was that the peso support program was overwhelmingly likely to succeed. The Mexican government was already following sustainable macroeconomic policies – if it could only find the money to repay its tesebonos without having to resort to the printing press. In a matter of months or years, New York investors would calm down and recognize that there was a more than measure of truth in the optimism toward investing in Mexico that had prevailed in 1993.

This is more or less what came to pass. The restoration of external balance was all but immediate as the heavily depreciated peso boosted exports and made imports unaffordable to Mexicans. The swing in net exports between 1994 and 1995 was nearly $30 billion, allowing Mexico to register a $7 billion trade surplus in 1995. The volume of exports rose by fully 30 percent in 1995, while imports fell by more than 8 percent. The success of the expenditure-switching and expenditure-reducing mechanisms in producing such a large export surplus in such a short time were testimony to the power of the involuntarily-large devaluation and the resulting squeeze the crisis put on the Mexican economy. Real GDP fell by nearly ten per cent in the year from 1994-Q3. Monetary and fiscal policies did little to support domestic absorption and therefore Mexican GDP.

Why did the Zedillo government insist on such a rapid adjustment? After all, one purpose of a support program is to allow macroeconomic adjustment to take place in a kinder, gentler fashion and to give time for expenditure-switching to take place. In large part the Zedillo government responded in this way because of pressure from the United States. The Chair of the Senate Finance Committee, Alfonse D'Amato, spent much of 1995 hunting for the head of the person responsible for the "Mexican disaster." D'Amato believed that he had a winning case no matter what explanations Treasury officials offered: either the U.S. government had failed to foresee the Mexican crisis, in which case Treasury officials were incompetent; or they had foreseen it but failed to warn investors, in which case they had effectively stolen money from his

[45] *Washington Post* (February 13, 1995, p.A1).

constituents to prop up the PRI.[46]

How successful on balance was the U.S. led rescue of Mexico? A fully adequate answer requires a paper of its own. While the 1995 recession was deep, the recovery that commenced in 1996 was rapid and sustained.[47] Contrary to worries that Mexico, let off easy with help from its big brother to the north, would soon be back for another tourniquet, the country did not appeal again to the U.S. for financial assistance. It has not backtracked on reform. The neo-liberal model of market opening and reform was not discredited; rather, it spread to other parts of Latin America. But Mexico's financial system continues in disarray. Mexico's distribution of income appears to have taken an upward leap as a consequence of the 1994-1995 crisis.

And did countries elsewhere in the world grow overconfident that they too would receive exceptional support if they too encountered financial difficulties? Did investors act on this expectation? Perhaps to some degree they did, But the phrase "moral hazard" appeared in the newspapers in 1995 only one-fourth as often as it would appear in 1998. There were concerns about moral hazard in 1995, but it would take the Asian crisis to give them resonance.

4. Responding to the Asian Crisis

[46]See, for example, Federal News Service (1995), "Hearing Before the Senate Banking Committee: Mexico and the Exchange Stabilization Fund (July 14, 1995). From another perspective, D'Amato's lead role in the critique of policy toward Mexico was distinctly odd. He was the junior senator from New York. Whatever you thought of U.S. loans to the Mexican government, they were used to pay debts owed to D'Amato's constituents. To protest that U.S. money should not be used to make sure that New York companies were repaid was an strange move for a senator from New York to make.

[47]Pressure from the Senate Finance Committee and the fear that still-outstanding U.S. government money would become an issue in the 1996 presidential campaign led the U.S. to take part of the peso support package out of Mexico in 1996. As a domestic political strategy this was very effective: the fact that the U.S. had made a handsome profit silenced Congressional criticism. Senior IMF officials observed privately that if the U.S. had committed twice as much money to Mexico and kept it there for twice as long, then Mexico would barely have had a recession at all in 1995. But apparently the White House felt that it was already skirting the limits of what was politically possible.

Coming in the wake of Mexico, Thailand's crisis was -- or should have been -- less of a surprise. The kingdom's problems bore an eerie resemblance to those of its Latin American predecessor. The current account deficit was ballooning, raising questions about competitiveness. There were questions about whether monetary policy was too expansionary to remain consistent with the exchange rate peg maintained by the central bank. The baht, according to some estimates, was overvalued by the now customary 20 per cent.[48]

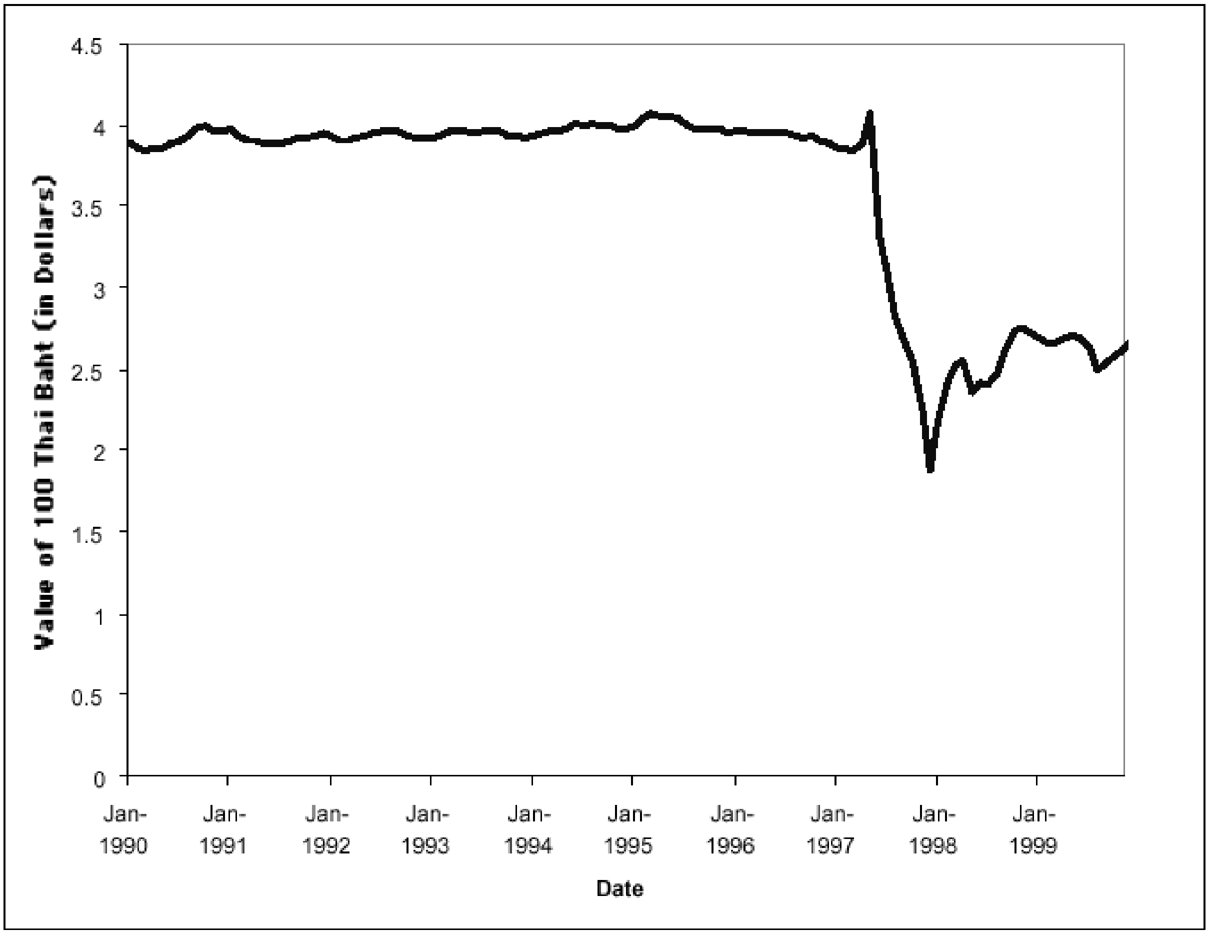
To be sure, Thailand, like Mexico before it, was not running a large budget deficit; the problem did not obviously lie in the profligacy of the government. As in Mexico, the authorities defended themselves against criticism from the multilaterals by arguing that the strength of the baht and the magnitude of the current account deficit reflected the country's high levels of investment.[49] But, even more than in Mexico, there were reasons to question the productivity of much of that investment. Valuations on the Bangkok stock exchange had been trending downward since 1996. The inefficiency of infrastructure investment and the frothiness of the real estate market were notorious.

[48]This is the retrospective estimate of Chinn (1998). Note the parallel with Mexico in 1994.

[49] An argument that Dornbusch (2001) calls "invariably suspect."

Figure 7

Value of the Thai Baht, 1990-1999



Source: Federal Reserve Bank of St. Louis via http://www.economagic.com/.Datafile: http://www.j-bradford-delong.net/Econ_Articles/CIEP/CIEP_data/baht*.xls

The IMF had been sounding warnings for more than a year that the situation in Thailand was unsustainable.[50] The existence of the problem was well known to the Fed and the U.S. Treasury: in this respect the East Asian crisis was not analogous to Mexico. But both the Federal Reserve and the U.S. Treasury saw Thailand as a problem best handled by the IMF, given the surprisingly bitter and long-lingering controversy over the Mexican rescue, and the fact that

[50]Its managing director, Michel Camdessus, had visited Thailand four times between July 1996 and July 1997, exhorting the government to "get rid of this very dangerous peg to the dollar."

Thailand was hardly in America's back yard. What came as a surprise was not that Thailand had a crisis and experienced macroeconomic distress but the severity of the fallout and the speed and scope of its spread.

The other thing that is surprising in retrospect is how long it took Thailand to hit the wall. Even before the start of 1997 there were worries that financing was too easy to get in East Asia – that much of the foreign capital flowing in was being wasted, and that companies were taking on excessive debt burdens. By 1996 companies in Thailand, excluding banks, were spending the equivalent of 18 per cent of GDP on interest. The Bank of Thailand had been revising its forecasts of economic growth downward. Non-performing loans were already alarmingly high, perhaps $20 billion by the start of 1997. The Thai government had already announced that it would make sure that depositors did not suffer when financial institutions that had gone bad were closed down. But by the start of 1997 there were whispers that the cost of bailing out insolvent financial institutions could rise as high as six per cent of GDP.

Under most circumstances this tinder box should have ignited even earlier than it did. That the conflagration only erupted in July of 1997 can perhaps be explained by the ease with which emerging markets could finance their external deficits, given the conditions prevailing on global financial markets (and the perception that they were "miracle economies"). An astounding $240 billion in private capital had flowed out of the industrial core into the developing periphery in 1996. More than a quarter of this flow of capital went to the fast-growing economies of East Asia. All signs at the start of 1997 were that this flow would continue and, if anything, increase.

In May the Bank of Thailand successfully fought off a speculative attack, using Singapore's support to engineer a bear squeeze. This manifestation of how seriously market confidence had eroded convinced the government that reform could not be further delayed. In June it initiated steps to reform the financial system, closing down sixteen insolvent finance companies. On July 2, 1997 the central bank scrapped the fixed exchange rate and watched the baht fall by one-sixth (on that day alone), closing at 29.55 to the dollar. The Bank raised short-term interest rates that day by two percentage points, to 12.5 per cent annualized, to prevent a larger, potentially-destabilizing fall. Observers feared that if the exchange rate weakened further then many Thai companies with dollar-denominated debt would see their profits vanish under the impact of higher repayment costs. The consensus estimate of Thai companies' short-term dollar-denominated debt was that $50 billion was maturing within the year, a sum more than half again as large as the perhaps $30 billion of Thai foreign exchange reserves. And no one knew how much of this dollar-denominated debt was unhedged.

Yet there was little sense at the very start of July that the Thai situation was as serious as the Mexico's had been, or that the crisis would spread to other East Asian economies. Observers pointed to the fact that the Thai government had already taken steps to begin to liquidate insolvent financial institutions and strengthen the financial system – steps that the Mexican government had failed to take. Moreover, Thailand still had large foreign exchange reserves, while Mexico had exhausted its before the crisis began. The Bank of Thailand had engaged in ill-fated bets on the forward foreign-exchange market, the losses from which would absorb a significant portion of its reserves, but was not known to the market, since the IMF's efforts to enhance transparency had not extended to the off-balance-sheet liabilities of central banks.[51] The dollar value of the Thai stock market fell on July 2, but by "only" 9 percent, a little more than half as much as the currency.

Suddenly everything changed. On July 6th the Philippine Finance Minister was quoted by the *Straits Times* as saying that his country's peso "might devalue." Five days later the Philippines, another country with chronic competitiveness problems, had abandoned its fixed

[51]Whether this is feasible remains an open question. To the extent that financial-market rocket scientists and their customers are always one step ahead of the markets, concocting new instruments ostensibly exempt from existing disclosure mandates, the IMF has increasingly focused on codes of transparency for central banks to induce voluntary disclosure and measures to strengthen corporate governance as a way of promoting disclosure by private-sector entities. We return to this below.

exchange rate, following Thailand down.[52] On July 8th the Malaysian ringgit came under heavy speculative pressure. On July 11th Indonesia announced that it was widening its exchange rate band, and then stopped defending the rate. On July 13th Korea's eighth-largest chaebol, Kia, and its creditor banks announced an urgent restructuring designed to avoid bankruptcy. And on July 14 Malaysia stopped supporting the ringgit. Now the crisis was in full swing. Before the end of July the East Asian economies had opened discussions with the IMF for support, and Malaysian Prime Minister Mahathir Muhammed had launched his denunciations of international currency speculators and of foreign exchange markets in general.

August saw the IMF assemble and approve its $17 billion support package for Thailand. The U.S. did not contribute, and partly as a result the Thai package did not feature a contingent second line of defense. IMF resources being limited, the package still had to be topped off bilaterally, but this time the backyard belonged to Japan, which contributed $4.3 billion through a pari pasu arrangement.[53] Any potentially favorable impact on market confidence was immediately destroyed by the revelation that the Bank of Thailand had $23 billion of outstanding forward dollar sales (and now associated losses) that it had to cover. This is when the absence of additional contingency finance proved devastating.[54] As the shock waves began radiating outward, Indonesia abandoned its support of the rupiah, and Malaysia began to reimpose capital controls. By the end of September the Korean chaebol Jinro and Kia had gone bankrupt, adding the third largest economy in the hemisphere to the list of those that threatened to become

[52]The Philippines' blessing, as it were, was that no one had mistaken it for an Asian "tiger" or a "miracle" economy. It had not imported capital on the same scale as Thailand. It had not experienced the same construction and real estate boom, and the problems in its banking system, while chronic, were in some sense less acute. But the Philippines exported many of the same products as Thailand (textiles and apparel, for example), and hence had good reason to follow the baht.

[53]In addition, there were contributions from the World Bank, the Asian Development Bank, Australia, China, Hong Kong, Singapore and other Asian countries.

[54]To be sure, whether a second line of defense would have prevented the crisis from spreading we will never know.

engulfed. By late November, Thailand would have returned to the IMF for a second package (the terms and targets of the first one having been rendered irrelevant by the collapse of the currency).

During the fall of 1997 proposals for an Asia-only $100 billion bailout fund were shot down by the U.S. and European governments. Critics subsequently complained that the U.S. wanted to control the rescue without having to finance it, and it could only do this if the operation was led by the IMF, in which the U.S. was the principal shareholder and over which it held effective veto power.[55] The less politically-charged way of putting the point is that an Asia-specific fund would have been dominated by Japan's Ministry of Finance and the Bank of Japan. Looking at the course of the Japanese economy from 1989 to 1997, it was impossible to have any confidence in the ability of those institutions to handle a domestic let alone an international financial crisis.[56]

In the summer of 1997, many observers believed that the Indonesian economy was not at risk of suffering a crisis like Thailand or Mexico. Its current account deficit was less than one-third as large a share of GDP as Thailand's. Indonesia had never pegged its exchange rate, and the band within which it allowed its exchange rate was relatively wide.

Yet Indonesia also suffered from politically-directed lending through state banks, tangled corporate control, a lack of easily accessible information about corporate finances, insider lending, and poor banking supervision. Most important, however, was the magnitude of

[55] See, for example, Wade and Veneroso (1998), who see as the principal advantage of an Asian Monetary Fund that it would be "better able to appreciate and build on the distinctive strengths of Asian financial systems than the IMF," and see opposition as based on a "hidden agenda… to prevent the Asians from going off on their own."

[56] The U.S. administration's counterproposal, the Manila Pact, was launched at the Asia Pacific Economic Cooperation summit in Vancouver in late November. It proposed to strengthen mutual surveillance within the region, acceded to an Asia fund with no dedicated staff and no specific funding level, and, importantly, the proviso that funds can be lent only with IMF supervision. The Chang Mai Agreement for swap lines among the ASEAN countries plus China, Japan and South Korea was the ultimate outgrowth of this initiative.

unhedged foreign hard-currency borrowing. Thus once the rupiah began to lose value, Indonesia's situation deteriorated very rapidly. Debt owed to foreign banks relative to Indonesian GDP quadrupled as the rupiah fell, reaching a peak of perhaps 1.5 times a year's GDP.

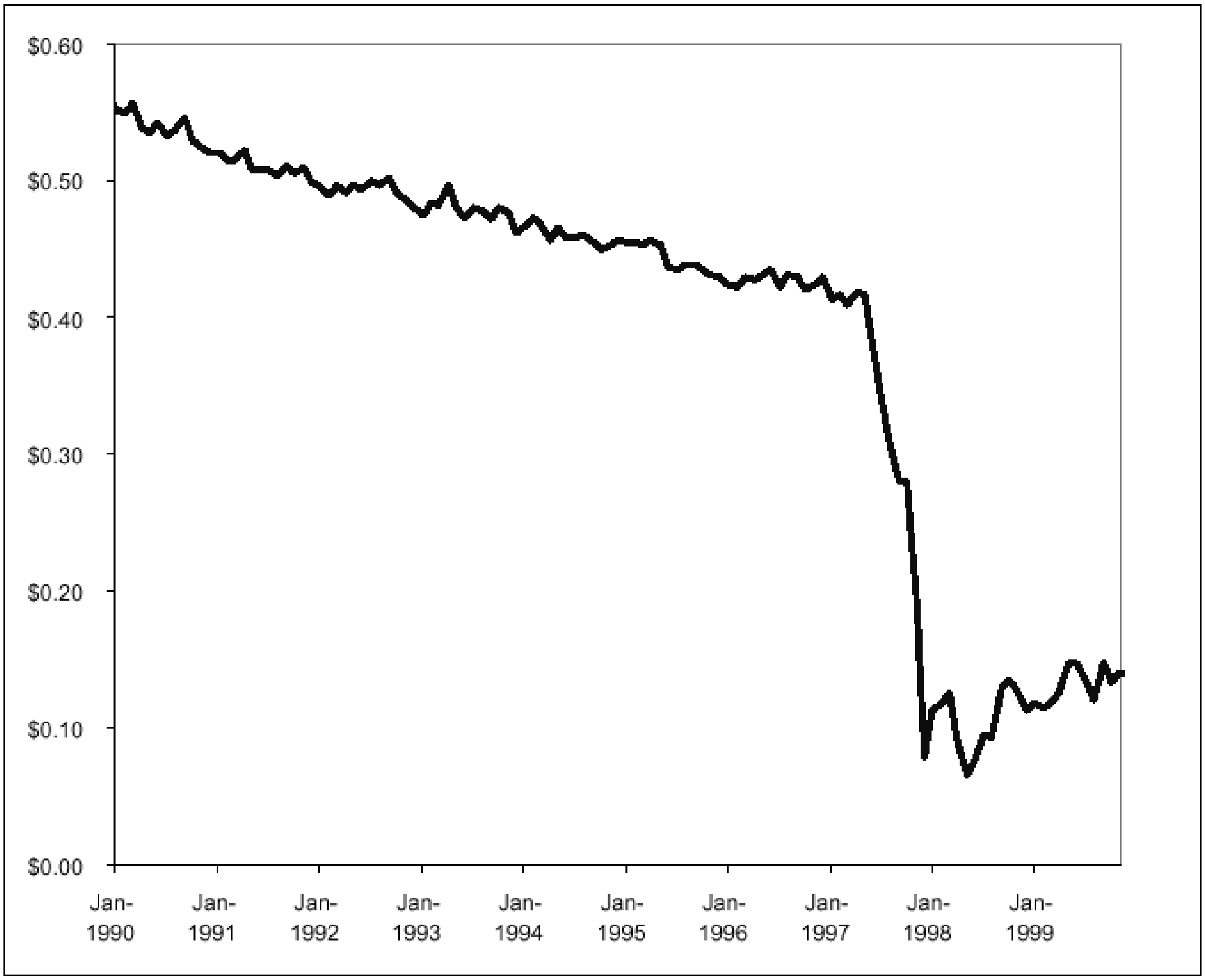
In October the Indonesian government announced that it was seeking IMF assistance, and by the end of the month a $40 billion support program had been unveiled. Having recognized that the crisis could spread from region to region like weeds from one backyard to another,[57] this time the administration (in the face of stiff Congressional opposition) committed to making available a contingent line of credit worth about $3 billion in the event that the IMF rescue package proved inadequate to stabilize the economy.

However, the Indonesian government's willingness to carry out the commitments needed to obtain IMF funding was unclear. In the late fall of 1997 the Indonesian government did close a few--but not all--potentially insolvent banks, including at least one bank owned by the Suharto family. But when Suharto's commitments to restrain government spending on infrastructure projects ran up against his eldest daughter's interests, family won. Thus it remained uncertain whether the Indonesian government truly was willing to take the policy steps that the IMF hoped would reassure foreign investors. And between the second quarter of 1997 and the second quarter of 1998, Indonesian real GDP fell by 16.5 percent.

[57] The expiration of the riders to the Treasury appropriation that contrained use of the Exchange Stabilization Fund also played a role. It is not clear to us why these riders were not renewed for fiscal 1998.

Figure 8

Value of the Indonesian Rupiah, 1990-1999



Source: Federal Reserve Bank of St. Louis via http://www.economagic.com/.Datafile: http://www.j-bradford-delong.net/Econ_Articles/CIEP/CIEP_data/rupiah*.xls

Malaysia decided to go its own way, rejecting the conditions sought by the IMF Mahathir Muhammed would claim that the financial crisis was all a western conspiracy to impoverish emerging Asian economies, and that the Indonesian economy was fundamentally sound. Yet in the summer of 1997 Malaysia's domestic bank lending was equal to more than one and two thirds of a year's GDP, and many feared that much of this lending had gone into unproductive investments. The twin Petronas Towers in Kuala Lampur--the tallest office building in the world, and the set for the Sean Connery movie "Entrapment"--became a convincing symbol of the claim that Malaysia too had suffered from an investment bubble in the mid-1990s.

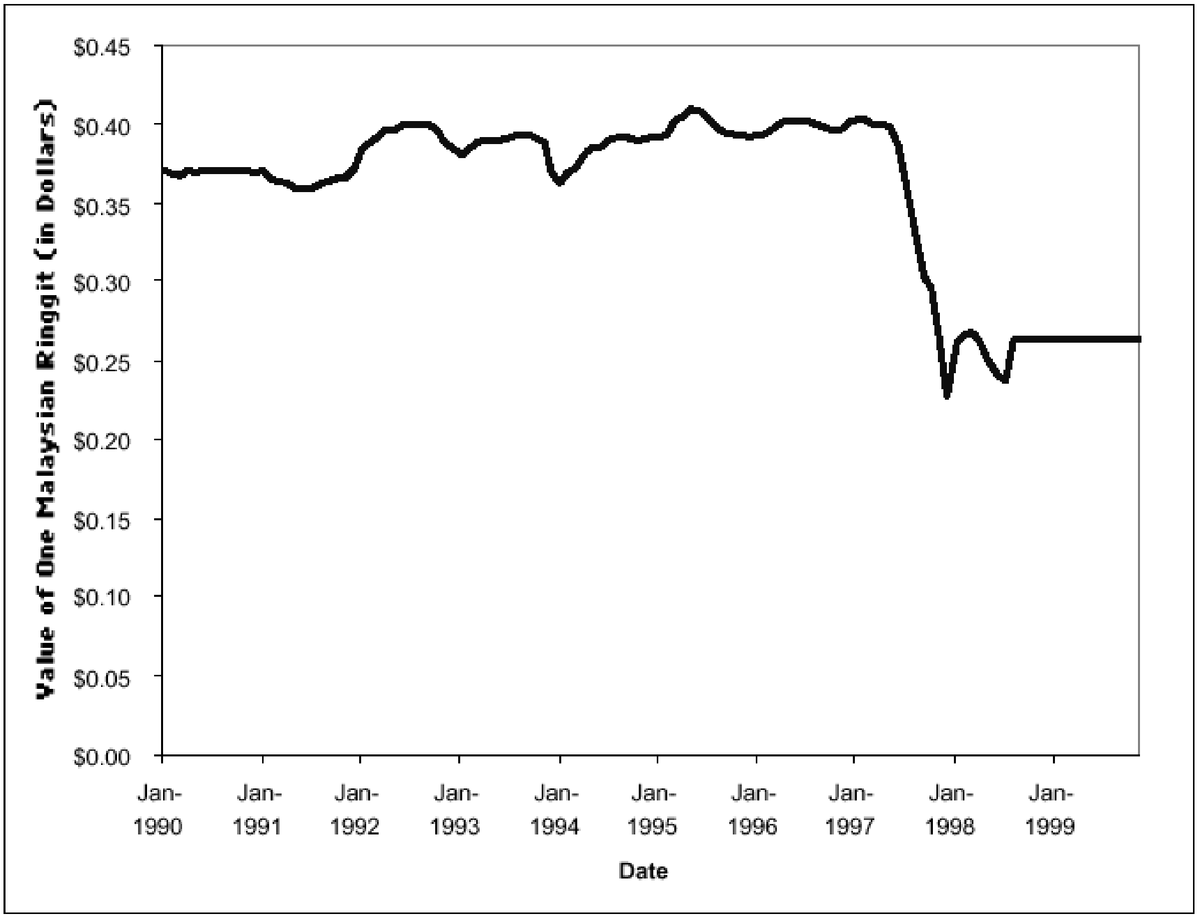
One reason Mahathir Muhammed was so desperate to keep the IMF at bay may have been his fear that the IMF would demand, as part of structural reform to promote economic efficiency, the end to the distortions and subsidies that give economic preference to those descended from Malaysia's indigenous population as opposed to those descended from Chinese immigrants. Since these policy measures are at the core of Mahathir Muhammed's political support, he may have seen his political career at an end should a structural adjustment mission land at Kuala Lampur.

Thus eventually Mahathir Muhammed would opt for capital outflow controls rather than IMF-style programs to contain the crisis, even at the price of a decisive falling-out with his long-time deputy Anwar Ibrahim.[58]

[58]According to Kaplan and Rodrik (2001), it is not clear that Malaysia lost much in terms of speed of recovery from its heterodox policies. We revisit this issue below.

Figure 9

Value of the Malaysian Ringgit, 1990-1999



Source: Federal Reserve Bank of St. Louis.Datafile: http://www.j-bradford-delong.net/Econ_Articles/CIEP/CIEP_data/ringgit*.xls

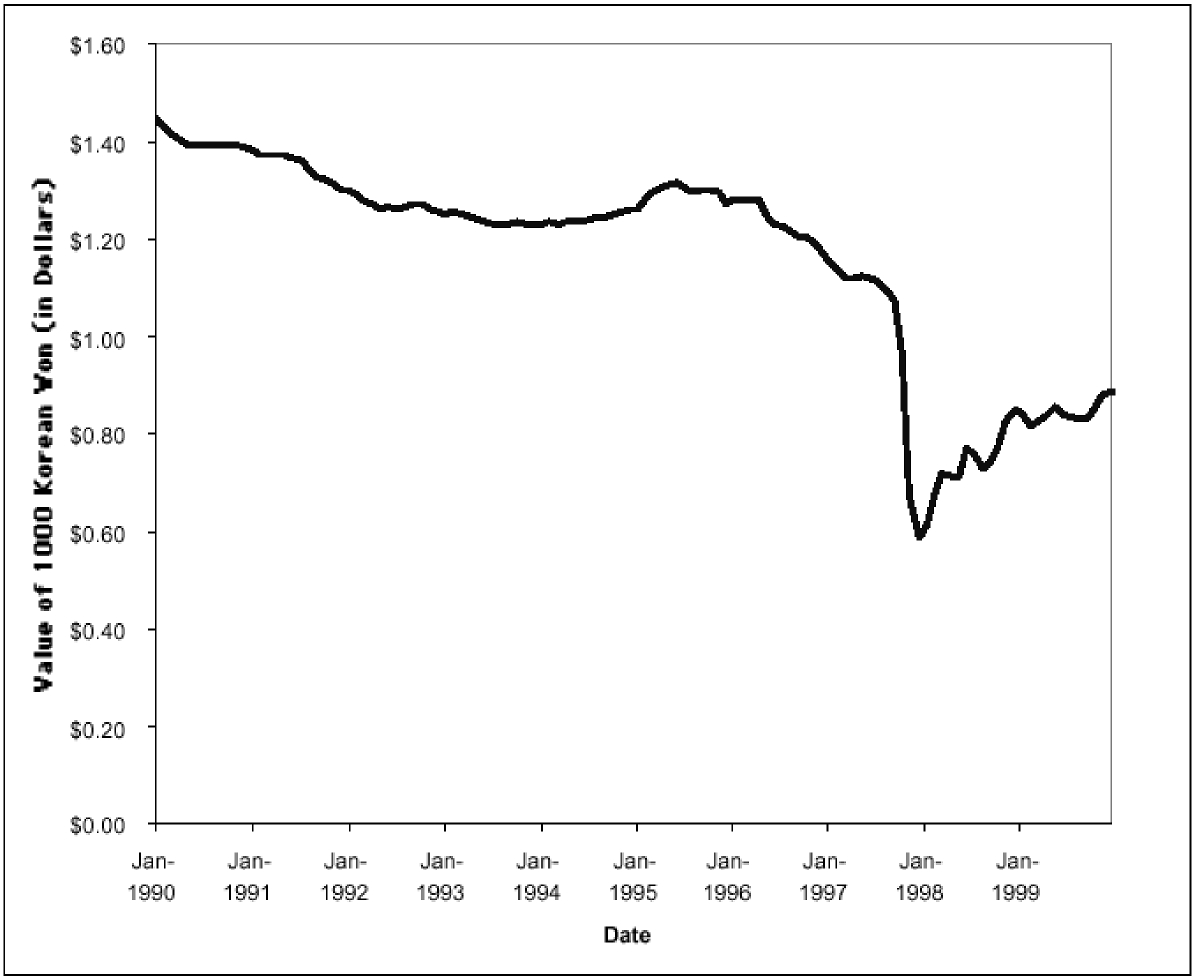
The fourth of the severely-afflicted fast-growing East Asian economies was South Korea. In South Korea, the problems were exacerbated by politically driven lending. For decades the government had directed its banks to lend to favored sectors of the economy, encouraging heavy firm borrowing and high debt-equity ratios. In 1997 eight of Korea's chaebol went bankrupt, leaving Korea's banks with a large but unknown exposure to bad loans. Even as of the end of 1996, the twenty-five largest chaebol had a debt-equity ratio of more than four to one. And, in the standard fashion, the country's banks and operating companies had unknown but staggering unhedged dollar-denominated debts. As of the fall of 1997 South Korea was thought to have $65 billion of short-term foreign debt, but we now know that the true figure was twice that large. So in the fall of 1997, Korea and the Fund agreed on a support program of $57 billion, the largest IMF-led program ever assembled.[59] But this program proved to be too small.

The failure of the super-sized Korean package to stem that country's crisis was particularly alarming. Not only was Korea one of the 12 largest economies in the world, but the inability of multilateral finance to staunch the bleeding (and even the failure of the decision by Japan and the U.S. to accelerate the disbursal of $10 billion of funding in a hastily organized "Christmas present" announced on December 24th to make a difference) cast doubt on the viability of the entire IMF-U.S. led rescue strategy, leading to the first time to dire predictions in December about the possible meltdown of the global financial system.

[59]The IMF contribution alone came to 2,000 per cent of quota, far exceeding the conventional ratios of 100 per cent of quota in a year and 300 per cent of quota over the lifetime of a program.

Figure 10

Value of the Korean Won, 1990-1999



Source: Federal Reserve Bank of St. Louis via http://www.economagic.com/.Datafile: http://www.j-bradford-delong.net/Econ_Articles/CIEP/CIEP_data/won*.xls

Korea epitomized the "bailout problem" -- that for every dollar of official money that was pumped in, a dollar of bank money could be taken out. Not only did this debilitate efforts to end the liquidity crisis, but it had adverse political consequences (Congressional critics of multilateral assistance complained of "welfare for international bankers") and heightened concerns about moral hazard (insofar as international banks that had taken on risky loans were now able to "get off scot free"). But exhorting the banks to keep their money in the country was ineffectual in a situation beset by collective action problems. Only when Korea was pushed to the brink of default at the end of the December did it the IMF and the administration successfully concert the banks, getting their agreement first to roll over $15 billion of maturing short-term claims and then to convert these and other short-term obligations into (highly remunerative) long-term bonds.

Ex post evaluations criticize officials for not having moved faster to bail in the banks. If the same steps had been taken in October or November that were taken at the end of December, it is argued, so much official money would not have been frittered away. Enabling Korea to draw back from the brink earlier would have avoided so demoralizing the markets. But whether the same steps would have been feasible earlier is uncertain. Korea was still in the interregnum between its election and the installation of a new government. It is not clear that the banks would have agreed to act in the collective interest before there was evidence of how dire the circumstances were. And it may have been necessary to allow the least patient banks to exit before it was possible to obtain the cooperation of the others. Whether the same policies could have been implemented earlier we will never know. But there is a strong argument that it should have been tried.

The winter and spring of 1998 saw the IMF programs begin to work, as the governments of Thailand and Korea began to change their economic policies in accord with IMF conditions.

Indonesia was a much harder case. The draft budget unveiled by President Suharto in early January substantially exceeded the IMF's targets. Suharto gave way following meetings in Jakarta in mid-January with IMF First Deputy Managing Director Stanley Fischer and Deputy Treasury Secretary Summers, and phone calls from President Clinton, among others. Suharto signed a revised letter of intent on January 15th, an event memorialized by the famous photograph showing IMF Managing Director Michel Camdessus, his arms folded, standing behind the Indonesian president.

President Suharto promised to axe the quietly-restored infrastructure projects dear to his eldest daughter, phase out tax breaks and loan subsidies to the Indonesian auto companies controlled by his youngest son, and eliminate his family's private monopolies. Suharto, however, continued to look for running room: promoting the regulation- and government investment-minded Bucharuddin Jusuf Habibie, and announcing plans to establish a currency board which many observers saw as a scam to enable Suharto and his family to repay their dollar-denominated debts at an artificially-high exchange rate before the currency board's collapse.

Nevertheless, even in Indonesia the direction of policy began to shift in the way advocated by the IMF.

Were these policy shifts a good idea? As Joseph Stiglitz (1998) pointed out in February in the *Wall Street Journal*, the East Asian crisis was very different from the crises that the IMF was used to handling. Asian countries had high saving rates. Asian governments had run budget surpluses. Asian central banks had inflation under control. Hence, the standard conditions attached to IMF lending – increase taxes and cut government spending to shift the budget toward surplus and reassure observers that the government would not resort to the printing press to finance its expenditures, curb demand in order to compress imports and generate a trade surplus, establish a monetary regime that would create confidence that inflation would remain under control – were of questionable relevance, aside perhaps from Thailand..

Some were to claim that the origin of the East Asian crisis lay in New York and the other major money centers, that the East Asian economies were fundamentally sound, and that the true source of crisis was exclusively or nearly exclusively an investor panic – a collapse of animal spirits in Lower Manhattan. We are more inclined to the position staked out by Summers (1999a): while there would have been no crisis of this magnitude in the absence of investor panic, an investor panic would not have produced a crisis of this magnitude in the absence of serious problems of non-performing loans, inadequate and weak financial regulation, and currency and maturity mismatches. Both the fundamental financial problems of East Asian economies and investor panic were needed for the situation to develop as it did, and it was their interaction that was key. The buildup of short-term, foreign-currency-denominated debt left East Asia's economies vulnerable to a sudden collapse of confidence. Depreciating currencies and falling asset prices exacerbated the strains on private-sector balance sheets and unleashed a vicious spiral.

Governments finding themselves in this situation have no good options (as Mexico had learned in 1995). If they keep interest rates low, the currency may collapse, raising the burden of hard-currency debt on firms and financial institutions with unhedged hard-currency exposures, in the worst case generating near-universal bankruptcy, financial collapse, and deep depression. But if they raise interest rates to keep the currency high (and the domestic-currency value of hard-currency debt low), those high interest rates will choke off investment, and the burden of short-term debt on firms and financial institutions with unhedged short-term exposure again has the potential to generate near-universal bankruptcy, financial collapse, and deep depression. It is not clear whether the "sweet spot" in the middle avoids the problems of the extremes or combines them.[60] The IMF's gamble was that high interest rates would restore confidence quickly, stabilizing the currency and enabling the cost of credit to be brought down to customary levels quickly, before widespread bankruptcy ensued.[61] In addition, IMF-led financial support clearly allowed governments to have higher exchange rates (and thus lower hard-currency debt burdens) and lower interest rates (and thus higher domestic investment) than otherwise, while giving time to put in place financial-sector reforms and industrial-sector restructurings while awaiting the return of investor confidence.

If the fundamental imbalances underlying old-style crises were the result of bad government decisions, the fundamental imbalances underlying new-style crises were more likely to be the result of bad private-sector decisions: unproductive investments, excessive reliance on short-term borrowing that was not hedged either with respect to maturity or currency, and excessively high debt-equity ratios. These were private-sector failures; the government failures

[60]Velasco (2001) provides the relevant framework for analysis.

[61]The Fund's insistence on fiscal retrenchment at this early stage, notwithstanding the fact that the East Asian countries had not entered their crises with significant fiscal imbalances, can be understood in a similar (confidence-restoring) light.

were by and large failures of omission rather than commission, above all a failure to properly regulate the financial sector.[62]

Awareness of this fact led IMF conditionality to take a new and unprecedented turn, in the direction of structural reform, with the active support of the Clinton Administration.[63] Not surprisingly, financial reforms -- closing bad banks, recapitalizing the survivors, and strengthening prudential supervision -- were key elements of the IMF's crisis programs in Asia. But these bad private-sector decisions reflected more than simply the weakness of prudential supervision and regulation. In addition they reflected a pattern of close ties between government and powerful corporations, typically family led, in countries otherwise as different as Indonesia and South Korea. It was not just the ready availability of finance from poorly regulated banks but also the expectation that the borrowers themselves would be bailed out rather than closed

[62]The major failure of commission, in our view, was to continue pegging exchange rates to the dollar too firmly for too long, providing implicit insurance against currency risk to the private sector and thereby encouraging accumulation of the unhedged exposures that so aggravated the crisis when it finally came (and inadvertently aggravating problems of competitiveness in a period when the dollar was appreciating against the yen). At a deeper level, the entire Asian development strategy of government-led investment, relying on the banks as the instrument of industrial policy, can be implicated under this heading for having encouraged the extension to the financial sector of implicit guarantees that encouraged lending (by, inter alia, foreigners) without due regard to the underlying risks. But this discussion takes us beyond the parameters of the present paper.

[63]Although the number of structural conditions attached to IMF programs peaked in 1997, the increase in such measures was not specific to Asia or its crisis. The number of structural conditions per program more than doubled between the late 1980s and early 1990s and doubled again between the first and second half of the most recent decade (Goldstein 2000). Explanations for the trend include the priority that came to be attached to restoring growth in highly-indebted countries in the 1980s (complaints that the Fund placed too much weight on stabilization and therefore was too tolerant of recession led to this emphasis on growth, which in turn required structural reform) and the emphasis on structural transformation and institution building in formerly centrally planned economies in the 1990s. While these experiences help to explain why the Fund became accustomed to giving growth-related advice and applying structural conditions, they do not justify its preoccupation with micro- and sectoral reforms in East Asia, a region with an admirable record of growth and no history of deep structural problems. They do not explain why the conditions attached to the Fund's 1997 and 1998 programs with Indonesia, South Korea and Thailand were so numerous and detailed.

down when things went wrong that weakened market discipline and encouraged lax investment decision making. This was the “crony capitalism hypothesis” that led the IMF by November to regularly festoon its Asian programs with a host of structural conditions.[64] Like interest rate policy, the efficacy of this new structural policy was questioned: it was not clear that conditions which pointed to weaknesses in a country’s economic system did more to undermine or restore confidence. To a considerable extent the skeptical view has prevailed. Goldstein (2000), in his definitive analysis of the issue, concludes that as far as structural reforms were concerned, the IMF had "bitten off more... than either it or its member countries can chew." By 1999 the Clinton Administration was advocating a somewhat streamlined and simplified loan conditionality that focused more narrowly on macroeconomic and financial problems.[65]

As late as the summer of 1998 it was not clear that the crisis had been surmounted. The U.S. Treasury was relieved that the IMF-led programs had avoided a potentially catastrophic default in Korea, had led to a substantial strengthening of the Thai stock market and currency, and had not spread beyond East Asia. But there were no signs of improvement in Indonesia, where it was not at all clear that the stabilization program would be implemented.

Moreover, even though forecasters were anticipating a rapid turnaround in East Asian current accounts in 1998, they had pushed expectations of a resumption of rapid economic growth back to the start of 1999. Disappointing export growth, especially exports to Japan, were at the heart of beliefs that recovery would not come as rapidly as had been expected. But poor export performance was assisted by the fact that the magnitude of dollar-denominated liabilities and non-performing loans had turned out to be larger than even the most pessimistic estimates as of mid 1997. In Indonesia real GDP was expected to shrink by as much as 10 per cent (a

[64]The 1997 Indonesian program is seen as typifying the phenomenon: its conditions dealt with reforestation, the national car program, local content programs for motor vehicles, the compulsory 2 per cent after-tax charitable contribution, restrictive market agreements for cement and paper, the forced planting of sugar cane, the introduction of a micro-credit scheme for small businesses, and the elimination of the Clove Marketing Board.

[65]As we analyze at more length in the next section.

forecast that turned out to be too optimistic). In Thailand real GDP was expected to fall by as much as 6 per cent (a forecast that turned out to be too pessimistic). In Korea the economy was expected to shrink by as much as 4 per cent. And in Malaysia real GDP growth in 1998 was expected to be zero.

As news continued to be mixed in the spring and summer of 1998, policymakers at the IMF, in the U.S. Treasury, and elsewhere took the fact that the news was not worse as evidence of the positive impact of their policies. There had been no meltdown. The spectre of a slide into the depths of a great depression like that started in 1931 with the collapse of Austria's Credit Anstalt had no parallels in the spring and summer of 1998, notwithstanding the warnings of the Cassandras (Krugman 1999). But the slowness of Asia’s recovery was worrisome. The IMF therefore, lobbied the Federal Reserve in the spring and summer of 1998 to take risks on the expansionary side and to delay the interest rate increases that others thought desirable for the health of the U.S. economy. IMF officials pointed out that swift recovery from the Mexican crisis had come because the main focus of Mexican exports – the United States – had was growing rapidly, while recovery from the East Asian crisis was likely to be slow because the main focus of East Asian exports – Japan – was stagnating and unprepared to do anything to solve its problem. In the IMF's view, the success of East Asia's recovery required that the Federal Reserve risk some possible rise in inflation in the U.S. It would have been unseemly for such lobbying of an independent central bank to have come from the U.S. Treasury. But the fact that high Treasury and Fed officials were in almost continuous contact, on the tennis court and elsewhere, surely helped alert the Fed to the gravity with which Treasury viewed the Asian situation.

Substantial easing of monetary policy in the industrial core, led by the Fed, came at the end of the summer. But continued stagnation in Asia combined with Russia's default to produce a large rise in yield spreads throughout the world. This sharp rise in spreads led to the bankruptcy of Long Term Capital Management. The financial press wrote of a "financial firestorm" that had generated the "most baffling currency cris[i]s since the system of fixed exchange rates crumbled a quarter of a century ago."[66] Doubts spread about whether the IMF had sufficient resources to contain its further spread. In response the Federal Reserve concluded that a lowering of interest rates was desirable despite the fact that its staff saw substantial inflationary pressures building in the United States.

Before time, looser credit conditions began to work their magic, and the innate productive potential of the Asian economies began to reassert itself. Against this background, recovery commenced almost regardless of national conditions. By the end of 1998 there were clear signs of recovery in Korea and Thailand, countries that had basically followed IMF prescriptions, curbing domestic demand, restructuring their financial systems (even if more slowly, hesitantly, and incompletely than the IMF had wished), and keeping interest rates high enough to avoid the extremes of depreciation. But there were also clear signs of recovery in Malaysia, which had followed its own very different course. Only Indonesia, where the East Asian financial crisis had segued into the Suharto succession crisis, remained in severe distress.

By early 1999 – save for Indonesia – the East Asian financial crisis was over.

5. Strengthening the International Financial Architecture

But not so the post mortem. The Asian crisis ignited a debate which still simmers about how to better prevent and manage financial crises. Treasury was quick off the mark with speeches by Secretary Rubin at Georgetown and Brookings in February 1998 on the need to "strengthen...the architecture of the international financial system."[67] But Rubin's speech was not the administration's first foray into this area. Although the Mexican rescue had not provoked an equally contentious debate, it had created concerns, both inside and outside the administration, about moral hazard. And it had raised red flags about inadequate transparency and weak financial systems. In response, the international policy community, with impetus from

[66]Davis, Friedland, and Moffett, *Wall Street Journal* (August 24, 1998).

[67]See Rubin (1998a).

the Clinton Treasury, started down the path it has been following ever since.

Mexico's crisis had highlighted problems of inadequate monetary and fiscal transparency. Published data on the Banco de Mexico's reserves had come to the market late (in 1994 as much as six months late), and deficits had been hidden in the accounts of the development banks. The market reaction was abrupt and violent, the conclusion followed, because deterioration of underlying conditions had been hidden, rendering the devaluation of the peso an unpleasant surprise. There was an argument for encouraging countries to release such information in more timely fashion so that investors would ration credit more gradually and ratchet up the pressure for corrective action without precipitating a crisis. Moreover, the magnitude of the assistance extended to Mexico was unprecedented, reflecting the increased scope for funds to flow over the capital account, in turn forcing the administration to resort to the Exchange Stabilization Fund on a large scale to obtain the necessary finance. In response, the Congress convened hearings and Representative Bernie Sanders of Vermont submitted a bill designed to make it more difficult for the Treasury to again draw on the ESF for Mexico-style operations.[68] If rescue operations were to be repeated, therefore, their financial basis had to be regularized. And this required international agreement.

America's G-7 partners had been ambivalent about the Mexican rescue. The crisis had not erupted in their backyards. Tesobonos were not prominent in the portfolios of their investors. European governments and central banks had always interpreted the lender-of-last-resort doctrine conservatively and taken the moral-hazard problem seriously.[69] For all these reasons, it was not clear that they would support future Mexico-style rescue operations.

[68] The fiscal 1996 Treasury appropriations bill contained a rider requiring that the president certify that any use of the ESF would not cost the United States any money--that repayment was guaranteed. In addition, it required that except in an emergency the president obtain congressional approval for any loan of more than $1 billion for more than six months. These conditions effectively prevented any use of the ESF in 1997 during the first, Thai, stage of the crisis. The riders were not renewed and did not apply after September 30, 1997.

[69]Germany, for example, had a tradition of dealing with distressed financial institutions by organizing lifeboat operations rather than with the liberal extension of credit.

The first time these issues were formally addressed was the G-7 summit in Halifax in June 1995, at the conclusion of which the heads of state released an unusually detailed analytical document (G-7 1995). This document reflected each of the lessons drawn by the Clinton administration from the crisis. Reflecting the belief that Mexico's many of Mexico's monetary, fiscal and financial problems had been hidden, it recommended greater transparency and requested that the IMF should sharpen its surveillance, issue franker assessments of country conditions, and establish templates for data dissemination. This last request led to the creation of the IMF's Special Data Dissemination Standard in March of 1996.[70] The underlying premise was that market discipline could be relied on to rein in financial excesses before they got out of hand. Future countries would not be allowed to get into a Mexican-style bind, in which they found themselves with $23 billion of short-term foreign-currency liabilities but only $5 billion of reserves, since the markets would curtail the provision of short-term credit before things got out of hand, and the government would feel the pressure sooner to undertake the necessary adjustments. With benefit of hindsight we can say that the emphasis placed by the Treasury's "financial architects" at this early stage on the risks of inadequate financial transparency and excessive reliance on short-term foreign debt were squarely on the mark; these were the problems that would return, with a vengeance, in Thailand, South Korea and Indonesia two years later. But, aided by our unparalleled 20-20 hindsight, we would argue that too much was asked of transparency and market discipline. Investors' attention span is limited, causing the application of market discipline to be uneven.[71] Market discipline does not function well in an environment where other distortions -- implicit guarantees for banks and corporations, for

[70]It is important to recall, in other words, that this standard was not simply a child of the Asian crisis. Subscription to the SDSS remains voluntary (that is, IMF members are not obliged to subscribe).

[71] Indeed, the example of Long-Term Capital Management suggests that the application of market discipline is uneven even where the stakes are large, distortions are absent, and the way that the institutions work is well known. See Lowenstein (2000).

example -- are pervasive. Nor did market discipline prevent Asian governments from pursuing policies (like the Bangkok International Banking Facility and the Korean government's decision to free bank-to-bank borrowing before permitting foreigners access to Korean stock and bond markets) that greatly heightened their susceptibility to capital-flow reversals.[72]

To allow the IMF to respond more adequately to capital account crises, the administration called for the G-10 (together with other countries not previously involved) to double the credits they made available to the Fund through the General Agreements to Borrow and the newly-created New Agreements to Borrow (the new name was needed because the expanded arrangement was to include additional countries). It recommended the creation of a new quick-disbursing Emergency Financing Mechanism. Here, too, its recommendations were adopted (although it took until 1998 and the lesson of the Asian crisis for the Congress to agree to fund the NAB). While the Europeans continued to warn of moral hazard, they apparently concluded that it was better that such rescue operations as were mounted should be arranged through the IMF where they could have a say.

In addition, the G-7 asked finance ministers and central bank governors to review procedures for crisis resolution. The result was the Rey Report (G-10 1996), which addressed concerns that large-scale rescue packages were an engine of moral hazard and discussed the feasibility of alternatives ranging from limited changes in contractual provisions to the creation of ambitious new institutions (such as an international bankruptcy court for sovereign debts). The report concluded that moral hazard was best addressed by modest changes in the institutional framework. While there could be occasions when officials, rather than extending emergency financing, might want to allow the country and its creditors to restructure their debts, the feasibility of this should not be taken for granted. It was something that needed to be facilitated by limited institution changes, such as IMF lending into arrears (to provide the crisis

[72] As more than one very senior U.S. Treasury official has pointed out, crises had a much higher chance of striking countries that had significant non-neutralities in favor of hot-money capital flows.

country the equivalent of "debtor-in-possession financing") and the introduction of collective action clauses into bond indentures (as a way of preventing restructuring from being blocked by opportunistic creditors).[73]

To a considerable extent, then, the main issues raised by the Asian crisis were already tabled in 1995. The Clinton Treasury was a prime mover behind the push for greater transparency and larger IMF facilities. Although rejecting ambitious schemes for an international bankruptcy procedure on grounds of political feasibility and worries that doing so would simply substitute one source of moral hazard for another, it acknowledged the need for modest institutional changes that would permit market-based restructuring as an alternative to large-scale financial rescues of crisis countries.[74]

But if the Tequila highlighted the need for institutional changes to cope with the rapid growth of capital flows, it did not lead the administration to rethink its fundamental strategy of encouraging the deeper integration of countries into global financial markets as a way of promoting faster growth.[75] There was a good deal of attention to the importance of strengthening financial systems as part of the "Halifax" process that followed the Mexican crisis, but never enough to lead the administration to fundamentally reassess its strategy. Its support for capital account liberalization flowed naturally from its belief in free and open markets. It reflected the experience and predisposition of a Treasury Secretary with extensive experience in the markets.[76]

[73]The IMF Board quickly agreed that its long-standing policy of lending into sovereign arrears on loans from banks should be applied also to bonded debt. However, no official steps were taken to sharpen the incentives for the adoption of collective action clauses. We return to this point below.

[74] See Summers (1996).

[75]As Rubin put it in a speech timed to coincide with the 1999 spring Bank-Fund meetings, "Our approach to this work [of strengthening the international financial architecture] has been informed by the fundamental belief that a market-based system provides the best prospect for creating jobs, spurring economic activity, and raising living standards in the U.S. and around the world." Rubin (1999), p.1.

[76]As Rubin expressed this, "Any discussion of changes to the global financial system should be, from my perspective, grounded in a fundamental belief that a market-based global economic

And it followed from the administration's commitment to trade liberalization, insofar as trade in merchandise was increasingly superseded by trade in services, and efforts to liberalize trade in services and to enhance the foreign market access of U.S. banks pointed toward the desirability of capital account liberalization.[77] Politically, Treasury could not be less aggressive in attempting to secure national treatment for American banks than USTR was in pursuing market access for other U.S. exporters. But whether what was in the interest of U.S. banks was also in the interest of international financial stability, especially in the short run, was another question.

This approach reached its pinnacle (some would say its nadir) with efforts to secure an amendment to the IMF Articles of Agreement to oblige the members to establish the convertibility of their currencies on capital account.[78] Although this initiative did not originate in Washington (it emanated from the British and French Treasuries, as we understand it, and was enthusiastically received by Camdessus' IMF at both the staff and the principal level), neither did the administration oppose it. The idea resonated with the faith of high-level Treasury officials in the wisdom of the market. The administration owed IMF Managing Diretor Michel Camdessus and his staff one after Mexico: the administration's life had been made much easier by the willingness of the IMF Managing Director to turn on a dime and instantly contribute the lion's share of money for the peso support package in spite of the opposition of the British and

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system, based on the relatively free flow of goods, services and capital between nations around the world, will bet promote global economic well being in the decades ahead." Rubin (1998b), p.2.

[77]Undersecretary Summers, in a speech delivered soon after the outbreak of the Asian crisis, insisted capital account liberalization "is logically separable from the degree of domestic market access enjoyed by foreign financial institutions" but then went on to acknowledge that in practice the two tend to be linked (Summers 1997, p.3).

[78]In the language of the declaration of the Interim Committee of the IMF, the amendment would have made the liberalization of capital movements "one of the purposes" of the Fund. By analogy to the provision in the Articles of Agreement obliging members to establish the convertibility of their currencies on current account, governments would still have been able to delay this step for a transitional period, during which supportive measures were put in place. Still, the amendment would have ratcheted up the pressure for them to move in this direction.

German Executive Directors. High Treasury officials firmly believed that capital controls were a seed-bed for corruption and economic stagnation. And in th aftermath of the peso crisis, which reflected imprudent debt management by an emerging market, they saw the merit in extending multilateral surveillance to the process of capital account liberalization.

With benefit of hindsight we can say that this initiative was at best poorly timed and at worst fundamentally misconceived.[79] If there is one lesson of the Asian crisis, it is that premature capital account liberalization, initiated before prudential supervision is upgraded, corporate governance is strengthened, and government guarantees for domestic financial intermediaries are removed, creates conditions that can be described as an accident waiting to happen. However carefully the amendment to the Articles might have been worded, and however long actual implementation of capital-account liberalization were to be delayed--viewed as an ultimate goal rather than a current policy--nevertheless the pressure to adopt it sent the wrong signal. Learning from the experience, the administration gradually drew back from this position following the Hong Kong Bank-Fund meetings, adopting a more careful and nuanced position emphasizing the benefits of "properly sequenced and supported" capital account liberalization.[80] It became "quietly sympathetic" to the use of Chilean-style taxes designed to limit short-term interbank borrowing.[81]

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[79]Much later then former-Secretary Rubin acknowledged in an interview that "With the benefit of hindsight I would say that we should have put more of an emphasis earlier on getting the rest of it right..." which the *New York Times* December 12, 2000, p.1) interpreted as "making sure countries had a regulatory structure and an understanding of what could befall them if the world picked up its money and moved it elsewhere."

[80]But what is striking is how slowly the administration, wedded to the idea of financial liberalization, corrected course; as late as 1997, China's reluctance to open adequately to foreign financial institutions was put forward as the ostensible reason for the failure to reach an agreement with China on WTO accession.

[81]In the words of a *Wall Street Journal* report (April 5, 1999, p.A22). The new approach is incapsulated in the report of G-7 finance ministers to the June 1999 Cologne Summit, which concluded that "the use of controls on capital inflows may be justified for a transitional period as countries strengthen the institutional and regulatory environment in their domestic financial systems. Where financial sectors and supervisory regimes are weak, safeguards may be

By the winter of 1997-8 the amendment to the Articles was off the table, as policy makers became preoccupied by the Asian crisis. The recognition that a backlash was brewing against financial globalization and the need to head off radical proposals for reform were presumably what prompted Secretary Rubin to deliver his high-profile speeches on the subject of architecture in advance of the spring 1998 meetings of the Fund and the Bank.[82] Rubin laid out the three-pronged approach to strengthening the international financial system that was to characterize Treasury's efforts in this area for the remainder of the administration: initiatives to enhance disclosure and transparency, initiatives to strengthen national financial sectors, and mechanisms to ensure that the market more fully bore the consequences of its credit and investment decisions (that rather than being "bailed out" it was "bailed in"). While these recommendations echoed the conclusions of the Halifax and Lyons Summits, they also transcended them. On data and disclosure Rubin pointed to the problems, raised by the Asian crisis, of obtaining a complete picture of the forward and derivative liabilities of central banks and the foreign currency liabilities of commercial banks and corporations. He called for promoting "new, more flexible forms of debt agreements and indentures" to provide a framework for direct negotiations between debtors and credits.[83] And he proposed the development of "a more complete range of global standards" to guide governments' efforts to strengthen their domestic financial systems, loosing a hare that has not stopped running.

This was a more completely articulated agenda for strengthening the international financial architecture than had been developed by other governments or the IMF. The Fund's

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appropriate to limit foreign currency exposure of the banking system." G-7 (1999), p.10.

[82]Indeed, discussions had begun, within Treasury and between the Treasury and Fed, on the need for fundamental measures to strengthen the international financial system (a "Halifax II") almost immediately following the outbreak of the crisis.

[83]While not mentioning collective action clauses by name. Actually, the Brookings speech as printed referred to direct negotiations between "creditors and investors" where it presumably meant "debtors and investors."

Managing Director, Michel Camdessus, was immediately receptive to the argument for encouraging transparency and promulgating international standards as a way of structuring international efforts to strengthen emerging economies' financial systems. Camdessus saw standards and codes as a vehicle for exerting pressure on member countries to upgrade their national financial policies and practices while at the same time providing an objective basis for IMF surveillance and conditionality and freeing the institution from criticism that its interventions were arbitrary and capricious. He and his staff recognized that, by placing the Fund at the center of these efforts to strengthen financial systems, it might be possible to further expand the mission of the institution. Thus, the Fund's plunge into the promulgation of standards and codes as a way of organizing the effort to upgrade national financial practices was very much a response to Rubin's architecture speeches.[84] And the decision of the international policy community to place international standards at the center of its crisis-prevention efforts similarly amounted to pursuing an agenda set by the Clinton administration.[85] The G-22, an outgrowth of the so-called Willard Group (an earlier effort by the administration to bring together the developed and developing countries around a single set of policy recommendations) quickly issued reports on transparency and disclosure, strengthening national financial systems,

[84]To be sure, the Fund had already crafted (partly in response to Morris Goldstein's proposal for an international banking standard) a "Framework for Financial Stability" that essentially described standards for the supervision and regulation of banks and securities markets, and it had developed a code for fiscal transparency in response to impetus from the UK Treasury. But there was considerable resistance in its higher echelons to widening the focus of surveillance from the Fund's key competencies of monetary, fiscal and exchange rate policies, resistance that was only overcome in the wake of Rubin's architecture speeches. Compare, for example, the absence of any reference to standards in Camdessus's February 1998 speech to the Bretton Woods Committee (Camdessus 1998a) with the emphasis placed on this initiative in his May speech to the Royal Institute (Camdessus 1998b).

[85]To be sure, this standards-centered approach had other precedents, notably the Basle Standards for Capital Adequacy for International Banks promulgated by the Basle Committee of Banking Supervisors. But this too had been a U.S. initiative (we understand it as a U.S. response to the debt crisis of the 1980s, and specifically to Paul Volcker's concern that this crisis had revealed the tendency for international competition to exert competitive pressures that undermined the capital adequacy of international banks).

and private sector burden sharing that were very much in line with Treasury thinking.[86]

It was in the area of crisis resolution that the administration was least successful in clearing a path. Its role was largely one of vetoing schemes, which it viewed as counterproductive or worse, to contain and resolve crises by giving national governments or multilaterals power to override the markets.[87] Administration officials played a role in the rejection by the G-10 in 1996 of a mechanism akin to an international bankruptcy court for resolving sovereign debt problems. They torpedoed France's proposal in 1998 for a "financial safeguard clause" (analogous to the safeguard clauses that exist in international trade) under whose umbrella countries might impose temporary capital controls. They resisted Canadian and British calls for an international standstill mechanism for sovereign debts. If debt standstills and restructurings were to emerge as an alternative to large-scale financial rescues, they insisted, their feasibility would have to be demonstrated by the markets.

But administration officials did not offer specific suggestions for institutional changes to facilitate this process. In particular, they backed away from their earlier endorsement of collective action clauses as a means to this end. In 1996 then Deputy Secretary Summers had described the case for collective action clauses as "obvious," and it was anticipated that the U.S. would support some kind of official action to encourage their adoption.[88] But by 1998 the administration had distanced itself from the idea of providing official incentives for the more widespread adoption of these provisions. The G-22 Working Group on International Financial

[86]See G-22 (1998a,b,c). President Clinton had first offered to organize a meeting bringing together finance ministers and central bankers from emerging markets and industrial countries at the November 1997 APEC meeting in Vancouver. The G-22 was later expanded into the G-33 before being slimmed down into the present G-20, which held its first ministerial meeting in December 1999.

[87]The same can be said of its role in vetoing calls from emerging markets and from more dirigiste G-7 economies like France for direct regulation of highly-leveraged institutions. Coeure and Pisani-Ferry (2000, p.28) attribute this theme to "pressures from the (U.S.) financial industry," a view to which we return to below.

[88]Summers (1996), p.6.

Crises (G-22 1998c), led by David Lipton, recommended only that governments engage in "educational efforts" in the major financial centers and that they "examine" the use of such clauses; it did not suggest that the IMF should key its lending rates and disbursements on their willingness to do so. There were worries that contractual innovation would be viewed as a panacea and sap energy to pursue other important reforms. Rubin's faith in the markets encouraged in him the belief that if changes in contractual arrangements were desirable, they would come of their own volition.[89] Coure and Pisani-Ferry (2000, p.23) observe that the administration "was under considerable pressure from the US financial community," which was typically suspicious of official interference in the design of its contracts and vocal in its insistence that any such measures should be purely voluntary (Institute of International Finance 1999).

Was there any positive result in terms of creating an alternative to large-scale financial rescues as a way of addressing crisis problems? A scholarly answer would be that it is still too early to tell. When the IMF lends there is now a presumption that it will ask for a contribution from the private sector, or at least for a commitment from investors not to withdraw funds as quickly as the official sector pumps them in. But whether or not the markets can manage the process of debt restructuring smoothly enough to relieve the IMF of pressure to intervene still remains unclear. Institutional innovations like exit consents (pioneered in the case of Ecuador) provide some grounds for thinking that the markets are up to the challenge. In any case, the transition from the Clinton administration to the Bush administration clearly increases the likelihood that we will have an experiment to see how this works. But if the process is difficult

[89] Some would argue that official intervention is needed because countries are reluctant to embrace collective action clauses for the same reasons that they hesitate to apply to the IMF for a Contingent Credit Line: if only some borrowers do so, those who are first are effectively signaling that they anticipate financial problems. Adverse selection then prevents the new instrument from being adopted. The results in Eichengreen and Mody (2000) are actually more consistent with the Rubin-Summers views: their evidence suggests that the markets can distinguish borrowers with a high and low risk of financial problems and price CACs accordingly. But not everyone would agree.

and proves highly disruptive to the markets, the pressure for IMF intervention in the event of future crises will only intensify again, reviving the case for institutional changes to facilitate an alternative.

The exchange rate issue played surprisingly little role in these early architecture debates.[90] This neglect reflected the extent to which the Asian crisis was seen as reflecting weaknesses in financial (as opposed to exchange-rate and macroeconomic) policies. The gap is curious in retrospect, given the association of crises with currency pegs starting with Europe in 1992 and proceeding through Mexico in 1994 before arriving in Asia in 1997, and spilling over to Brazil in 1998. Indeed, it seems remarkable in retrospect that it was only in April 1999 that a G-7 leader, Rubin, stated that the IMF should no longer support shaky currency pegs and that emerging markets should move away from such arrangements in favor of hard pegs or, in most cases, more flexible rates.[91] Rubin's faith in the markets informed the Treasury view that currency pegs were fragile and accident prone in a world of democratic politics and internationally mobile capital. And the interpretation of the crisis that emphasized unhedged foreign exposures and imprudently managed balance sheets had focused on the role of the exchange rate as a source of implicit insurance against currency movements that encouraged the accumulation of such unhedged exposures.[92]

This was a coherent intellectual position, but the U.S. was not able to assemble the coalition needed to operationalize it. The Europeans, given their history and their plan to create a monetary union, were not sympathetic to the case for floating rates, while Asian governments were reluctant to entrust their currency values to the market. The IMF, being an institution of many members, continued to offer weak advice to the effect that "no one size fits all" and "what

[90]For example, there was no substantive discussion of it in the three G-22 reports of late 1998.

[91]Rubin (1999), p.4.

[92]Particularly influential in this regard was the first systematic independent post mortem on the Asian crisis by Goldstein (1998). It was echoed subsequently in a number of official statements (viz. Greenspan 1999).

matters above all is consistency between exchange rate and other policies."

Here, moreover, the failure to develop alternative mechanisms of crisis resolution came home to haunt the administration. For countries with balance-sheet mismatches, abandoning a currency peg could create serious financial difficulties and even widespread bankruptcies, as the experience of Indonesia had shown. The cost of servicing dollar- and yen-denominated loans would soar if the exchange rate fell by a significant amount, leaving firms, many of whose earnings were in local currency, no way of keeping current on their debts. Widespread bankruptcy was the unavoidable result.[93] Absent creditors committees, collective action clauses and other mechanisms for speedily resolving these problems, this was not an option that anyone was prepared to contemplate. Not surprisingly, when push came to shove, as in Brazil in 1998 and Turkey in 1999, the Fund, backed by its principal shareholders, continued to intervene in support of governments' efforts to maintain those pegs. And knowing that they still stood to receive international support, governments were understandably slow to move to greater flexibility.

The final item on the architecture agenda was IMF reform. A first issue was the structure of conditionality. The Fund had been attaching additional structural conditions to its loans since the early 1990s. In Asia these conditions were intended to precipitate "a vast change in domestic business practices, corporate culture, and government behavior."[94] The 1997 Indonesian program typified both the aspiration and the excesses: the conditions attached to the IMF program dealt with, among with other items, reforestation, the national car program, local content programs for motor vehicles, the compulsory 2 per cent after-tax charitable contribution, restrictive market agreements for cement and paper, the forced planting of sugar cane, the introduction of a micro-credit scheme for small businesses, and the elimination of the Clove Marketing Board. While the "Christmas-tree" nature of this program was a product of the IMF

[93]As described in more detail in Section 4 above.

[94]Camdessus (1998), p.3.

bureaucracy and not of the U.S. Treasury, we are not aware of strong Treasury warnings of the dangers. The U.S., like virtually all other IMF members (creditors and debtors alike), saw IMF conditionality as a way of advancing its national agenda, which in this case included opening up sheltered markets to international competition and giving U.S. commercial and investment banks improved markets access. On the intrinsic merits of structural conditionality, it would appear that Treasury was torn. On the one hand its own approach to prudential supervision and regulation emphasized the need for competition, transparency, and arms-length dealing, and it instinctively wished to export these features of U.S. market structure and organization with the help of the IMF. At the same time it could not help but appreciate that many program countries saw IMF conditionality as invasive and insensitive to local tradition and politics, creating the danger of a policy backlash and fueling popular resentment of the Fund, and of the U.S. government to the extent that the IMF was viewed as its agent. Eventually, the administration concluded that the expansion of structural conditionality had gone too far and came out in favor of a simplified and streamlined process (Summers 1999b).[95]

Russia's default and the near-collapse of the Greenwich, Connecticut based hedge fund, Long-Term Capital Management, by impressing upon the G-7 that financial fragility was not just an emerging-market problem, lent additional urgency to the architecture debate. Once again the administration took the lead in setting the international agenda. Clinton's speech at the Council on Foreign Relations on 28 September 1998 called ambitiously for a "new Bretton Woods agreement." His substantive innovation, designed to combat the suddenly pressing problem of contagion, was the idea of a new facility to provide short-term lines of credit for countries pursuing strong policies but nonetheless vulnerable to financial problems occurring elsewhere in the world. Reflecting the severity of the threat posed by the crisis (or at least the perception of that severity), the concept was quickly endorsed by the G-7 in extraordinary out-of-cycle

[95]Although it never went as far as recommended by such critics as Feldstein (1998) and Meltzer et al. (2000).

declaration of October 1998 (G-7 1998), and that endorsement led to creation of the IMF's new Contingent Credit Line (CCL) in 1999. The CCL was a quick disbursing facility intended to prevent collateral damage to innocent bystanders in the event of crises. Limiting access to countries with strong policies addressed the moral hazard concern, while prequalifying them for assistance promised to shorten the delay between requests for assistance and their disbursal.

Unfortunately, the new facility delivered less than hoped. Rather than seeing the CCL as an additional line of defense against market turbulence, governments feared that it would be seen as evidence that they were worried about crisis problems. And because strong policies could weaken, access to the CCL was never automatic; even countries that prequalified were subject to a further review by the IMF Board upon their request to actually draw. For both reasons, the CCL had no obvious advantage over a normal IMF program. At the time of writing, no country has applied for one.[96]

The Asian crisis, like the Mexican crisis before it, underscored the extent to which the growth of market liquidity had outpaced the growth of IMF resources. This created an obvious argument for a quota increase. Given Republican control of the Congress and the firestorm of criticism surrounding the expansion of IMF financial activities, the administration's success in pushing through a quota increase in late 1998 was nothing short of miraculous.[97] (Officials testified at least 11 times on the Hill on IMF funding, more than three times as often as on dommestic issues such as tobacco legislation and reform of the Internal Revenue Service.) The price was agreement to the demand to establish a bipartisan commission (ultimately chaired by

[96]Although rumor has it that this may have finally changed by the time our audience receives this paper. The IMF has subsequently attempted to make the CCL more attractive by simplifying access at the point of disbursal and by reducing the associated interest charges.

[97]This increase raised the Fund's lending capacity from about \$130 billion to some \$195 billion (not counting the expansion of the General Arrangements to Borrow into the New Arrangements to Borrow, something that had been proposed by the administration following the Mexican crisis and was finally acted upon by the Congress in 1998). The U.S. contribution was \$14.5 billion for the quota increase and \$3.4 billion for the New Arrangements to Borrow.

Allan Meltzer) to recommend reforms of the international financial institutions.[98]

The Meltzer Commission came back with a recommendation that IMF assistance be extended only to countries with strong policies and at risk of destabilization through no fault of their own,[99] that such loans should be contingent on prior actions rather than conditions regarding subsequent policies, and that the terms and conditions of IMF loans should be tightened to discourage countries from taking excessive resource to the Fund.[100] The Treasury's response challenged the realism of a policy of benign neglect of crises in countries whose policies were less than impeccably strong, questioned the feasibility of prequalifying countries for assistance, and rejected the notion that policy conditionality could be eliminated.[101] Treasury was in a position to dismiss some of the more extreme recommendations of the Commission because it had already conceded the moderate ones, like the desirability of higher interest rates and shorter terms to maturity on IMF loans (notably in a speech by Secretary Summers to the London Business School in December 1999).[102]

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[98]In addition, the IMF Authorization and Appropriations Act of 1998 required an annual report and testimony by the Secretary of the Treasury on the IMF and that the GAO prepare an annual report on IMF programs and policies.

[99] Which would seem to exclude Mexico, Thailand, Indonesia, and Korea, for in all these cases weaknesses in government policy played some role in setting the stage for the crisis.

[100]See International Financial Institution Advisory Commission (2000).

[101]See U.S. Treasury (2000).

[102]See Summers (1999). This led the U.S. to table proposals for raising interest charges on Fund borrowing and reducing the term of loans at the time of the IMF's spring meetings in 2000, most of which were then adopted. Space limitations prevent us from discussing the efficacy of these changes in any detail. One question is whether higher interest rates and shorter terms to maturity are efficiency enhancing. Here, reasonable people (like the two present authors) can disagree; one's answer depends on whether one things that the main problem with the status quo ante was moral hazard (in which case higher interest rates and shorter terms may be desirable) or that governments are often too focused on how to pay back their loans to the IMF in the next 24 months (in which case they are not). Another question is whether modest changes in the term and cost of borrowing will significantly affect the behavior of crisis countries desperate for external finance.

The final issue under this subheading, governance of the international monetary and financial system, was a delicate one, given the need to give emerging markets greater voice in order to enhance the legitimacy of the process (and give them "ownership" of the reform agenda) but also the fact that changes in IMF governance might jeopardize the "U.S. veto" (the fact that important decisions require agreement by countries accounting for at least 85 per cent of IMF quotas and that the U.S. possesses more than 15 per cent of those quota rights). Predictably, it was easier to make changes outside the IMF where financial commitments were not involved.[103] The impetus the Clinton administration provided for the creation of the Willard Group and the G-22 responded to a real need but also limited the pressure for a fundamental reform of IMF quotas. In addition, the administration -- and the Fund itself -- emphasized the need for more transparency in IMF decision making and documentation as a way of holding the Fund more accountable to its ultimate constituents. It made progress in this direction despite the hesitations of a number of European and emerging-market members. And it acceded, with less than full enthusiasm, to the French proposal to final transform the Interim Committee into a decision-making council of ministers (leading to the creation of the International Financial and Monetary Committee), again as a step in the direction of greater political accountability.

To what extent, in summary, did the Clinton administration guide the course of the architecture debate? Our assessment is "quite considerably."[104] The presumption of the benefits of international financial liberalization that infused the Rubin-Summers Treasury remained a given, notwithstanding the reservations of foreign governments and the fact of emerging-market crises. The enhanced transparency and international financial standards advocated by the administration became the centerpieces of efforts to upgrade financial policies and financial

[103]Thus, the U.S. sought in 1999 to build support for a realignment of the constituency system, reducing the number of Europe-led constituencies in order to free up seats for Asian, African and Latin American countries, but without success.

[104]Coeure and Pisani-Ferry (2000, p.34), agree: they write "Over the last three years, the discussions on reforming the international financial architecture have been by and large an exercise in American leadership."

systems. It played an important role in encouraging the IMF to upgrade its surveillance of financial markets. It provided the impetus for creating the Group of 22. It proposed the establishment of a “Market Conditions Advisory Group” composed of private-sector experts, which was the seed from which sprang the Capital Markets Consultative Group in which the Fund now takes such pride. Its recommendations had flaws and were not always clearly successful (witness the Contingent Credit Line and the muddle over exchange rate arrangements). Nor were its damage-control efforts always successful.[105] But it possessed the loudest and most articulate voice.

This was the easy part, since these initiatives all had the strong support of the U.S. financial community. In contrast, where the administration had less support from its financial constituency, such as in developing new approaches to crisis resolution, it was less successful in setting the agenda for reform. By moving away from its early advocacy institutional changes to facilitate orderly debt workouts in response to opposition from U.S. financial interests, and by adopting a more ad hoc approach to involving the private sector in the resolution of crises, it heightened uncertainty about the process of crisis resolution and reinforced worries about the moral hazard caused by a pattern of financial rescues, two problems that linger to this day. To the extent that bailing-in senior creditors--and thus making them no longer senior--is a political necessity in assembling a legislative majority to back action during financial crises, it is hard to see why one would wish such bailing-in to be carried out on an ad hoc basis via telephone calls from the Treasury Secretary rather than in some more formal, more certain, and more transparent form.

6. Conclusion

International economic problems and policies occupied the Clinton White House and

[105]Thus, it was not able to head off European insistence that the IMF expand its poverty-reduction activities, something that was not obviously consistent with its mandate or core competency.

Treasury to a greater extent than had been true of any previous 20th century administration. In part this reflected the failure of the president and his staff to develop domestic initiatives other than deficit reduction that could win the support of swing votes in the Senate. But to some extent it was also the result of the opportunities and challenges posed by far-reaching changes in the world economy. Falling transport costs raised the benefits of international trade for developed and developing countries alike, and not least for the United States. Financial market liberalization and the information revolution combined to deepen capital market integration, creating new opportunities for those on both sides of the international investment equation but at the same time heightening the risks of economic and financial instability.

From one perspective, the administration's monetary and financial policies as extraordinarily successful. On the domestic side, deficit reduction created space for monetary ease, facilitating the investment-led recovery that ended a two decade-long productivity slowdown and powered one of the longest, strongest expansions in history. On the international side, U.S. demand was the locomotive that pulled the world economy along behind it. And largely as a result of the U.S.- and IMF-led response, the financial crises of the period did not produce more than transitory interruptions of economic growth in any advanced economy and in any emerging market except Indonesia.[106] Successful international monetary and financial policies thereby supported the processes of growth and development that pulled more than four billion people past the take-off stage and onto the escalator that leads to modern industrial and post-industrial living standards.

The productivity revolution and the growth surge of the 1990s are not the subject of our paper.[107] What is clear is that these events played a positive role in the rest of the world.

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[106]Where it can be argued that deep political problems rendered the patient immune to the conventional economic treatment (and even rendered the tender ministrations of the international money doctors counterproductive). It seems probable that most of Indonesia's current economic problems are the result of the Suharto succession crisis, and thus are analytically distinct from the East Asian crisis--even if the second did trigger the first.

[107]The story by which the 1990 Bush-Mitchell-Foley and 1993 Clinton-Mitchell-Foley deficit

European policymakers spent much of the 1990s preparing for monetary union and grappling with the chronic fiscal problems that were the principle obstacle to achieving it. They had little wiggle room in which to adjust aggregate demand in the interest of global growth and stability. Japanese policymakers spent the decade trying to minimize the embarrassment of executives and organizations who had made bad choices in the Bubble Economy years; they paid little attention to managing aggregate demand even to support their own growth. Only U.S. policymakers worried about global demand and sought to do something about it. In this context, they deserve more credit than blame for their willingness to risk the growth of the U.S. trade deficit and for thereby allowing the U.S. to be the importer of last resort.

A surprising number of virulent financial crises struck the world economy in the 1990s. These crises came as a surprise because economists' models and half a century of historical experience both suggested that crises arise when it becomes impossible to sustain unsustainable policies. The symptoms of such unsustainability are clear, as is the medicine appropriate for treating them. But while the Thai, Russian and, arguably, the Brazilian crises fit this mold, most of the other crises of the 1990s did not. The collapse of Europe’s Exchange Rate Mechanism in 1992, capital flight from Mexico in 1994-1995, and the Asian crisis of 1997-1998 all hit countries that were in broad macroeconomic balance and had been following broadly sustainable

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reduction packages broke the back of the Reagan-Baker deficits, allowed the Federal Reserve to reduce interest rates, and thus boosted the share of investment spending in GDP in the United States in the 1990s is well-known. The links between the investment boom and the rapid pace of productivity growth achieved in the United States in the 1990s are probable, but less certain. A large component of rapid productivity growth came from the technological revolutions in data processing and data communications. But such productivity growth does not fall from the air. It is built from the ground up as businesses slowly and methodically install and learn how to use the capital goods that embody the new revolutionary technologies. Budget deficits that raise interest rates discourage this process of investment, and increase the gap between the standard-installed and the innovative best-practice levels of technology. It is not clear how long the acceleration in United States productivity growth was delayed by the Reagan-Baker deficits in the 1980s. It is clear that productivity growth in the 1990s would have been significantly slower had the U.S. federal budget deficit remained high. Here the Clinton administration pursued good policies, and also got lucky as the economic payoff to deficit reduction turned out to be much larger than anyone had imagined.

policies.[108]

Each of these crises had structural roots: in Europe a political reluctance on the part of countries to have interest rates set (high) by the Bundesbank, given a chronic problem of unemployment; in Mexico an overhang of dollar-denominated and dollar-indexed debt coupled with fears of political instability that rendered policy commitments (including the exchange rate commitment) fragile; and in East Asia a large amount of short-term debt to foreign banks, whose investment was often guided as much by political as economic criteria, coupled with weak systems of corporate government and opaque forms of financial organization that made it hard for outsiders to influence and even determine what was going on. But, in each of these cases, the afflicted countries' sins against the gods of macroeconomics seemed minor compared to the punishment, which was harsh and swift.

Because these crises followed a new pattern, they surprised policy makers in Washington as in other parts of the world. The response therefore had to be assembled on the run. Unsurprisingly, it can and has been criticized: too much reliance on the standard monetary and fiscal instruments in addressing crises whose roots were not fundamentally monetary or fiscal, too little attention early on to making sure that international banks were "bailed in" rather than “bailed out,” too much well-meant but ill-timed advice on how affected countries should reform their economies, too much pressure for the affected countries to repay their loans so that political victory could be declared, and too little recognition that financial reform could not be done piecemeal. But these criticisms are less important than the fact that the IMF and the U.S.

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[108]This statement may be too unconditional, but neither is it our purpose here to write a detailed history of the causes of global financial crises. Thus, Italy and -- according some observers -- Spain and the UK had problems of real overvaluation in 1992. There were deficits hiding in the accounts of Mexico’s development banks in 1994, and pre-election monetary policies were arguably too expansionary to remain compatible with the exchange rate constraint for long. Similarly, Thailand if not the other Asian crisis countries had a serious problem of real exchange rate overvaluation and unsustainable monetary and fiscal policies in 1996-7. But these special cases and qualifications do not much weaken our point that these crises had less to do with macroeconomics and more to do with structural problems than had their predecessors, where it was those predecessors that framed the outlook of policy makers.

Treasury did make substantial loans to crisis-affected countries, that these loans greatly eased the process of adjustment and recovery, and that as a result only one country (Indonesia) suffered more than a short (albeit sharp) interruption to its growth.

In this view, fundamentally sound international monetary and financial policies helped to sustain growth and development worldwide. Compared to the problems of the dollar cycle and the Latin American debt crisis in the 1980s, or of the oil shocks and the breakdown of the Bretton Woods system in the 1970s, the 1990s have to count as a very good decade – perhaps the best since before World War I.

Others would describe the Clinton administration as blind-sided by a series of international monetary and financial problems that it should have seen coming. While global disaster was averted, workers in Mexico, Korea, and Indonesia paid a heavy price. That price was avoidable because the crises in whose course it was incurred were not in fact that new. During the crises of the 1990s observers rediscovered the dangers of fickle animal spirits causing destabilizing capital flows, of the vulnerability of investment to crony capitalism, of how poor banking sector regulation can generate an international financial crisis, and of how the existence of resources to provide support and rescue funds in a crisis could lead the private sector to hold imprudent portfolios that increased the risk to the system. But these were issues that had been raised by John Maynard Keynes and Harry Dexter White in the negotiations that culminated in the Bretton Woods Agreement of 1944.

Austria in 1931 had provided a fine example of how the combination of implicit guarantees for domestic banks (extended in return for agreement by the latter to be the government's agent of industrial policy) could attract unsustainable short-term capital inflows and, in combination with a less than credible exchange rate commitment, of how this can sow the seeds of a major international crisis. The suicide in 1932 of Ivar Kreuger, the Swedish match king who had lent money to governments in return for the grant of match monopolies and who the BIS had actually contemplated working with in an attempt to rehabilitate international financial markets, had provided a powerful lesson in the dangers of crony capitalism and inadequate financial transparency. The work of Ragnar Nurkse on behalf of the League of Nations had said everything that needed to be said about the volatility of international financial markets.[109]

It is not as though those responsible for the international monetary and financial policies of the Clinton administration were blind to these risks. U.S. Treasury Secretary Robert Rubin had spent his career at Goldman Sachs making money from the failure of the rest of the private market to accurately value securities. U.S. Treasury Secretary Lawrence Summers had long been an intellectual opponent of casual reliance on the efficient markets hypothesis. IMF First Deputy Managing Director Stanley Fischer had always in the classroom been able to draw on an extraordinarily broad knowledge of historical episodes to illustrate principles of monetary theory.

So what explains their headlong dash for international financial liberalization? It may be that everyone believed that the problems of the 1930s were not only well understood but that they had actually been solved. The IMF was the result of Keynes's and White's analysis of what had gone wrong in the 1930s, and its existence was supposed to provide investors with confidence that crises would be successfully handled -- that there was no need to run for the exits. The increased thickness of financial markets was supposed to diminish the extent to which herd behavior could cause self-fulfilling attacks. Sophisticated tools of financial management were supposed to make profit opportunities more visible and to better manage the risks.

Yet sophisticated tools have sometimes simply made panic selling an automatic process. Better communication means that rumors can travel and herd behavior arise more quickly today than when telegraph messages had to be delivered by messenger. And there is the fear of moral hazard – that successful handling of this crisis encourages financiers to hold portfolios that make the next crisis more likely.

So although the forces that caused the crises of the 1990s were not really a surprise to those who live in the shadow of the Bretton Woods conference, their strength and speed was

[109] See Nurkse (1944).

unprecedented, and they came close to overwhelming the institutional mechanisms available for dealing with them. The task for the future is thus to improve the international financial architecture so that it can deal with shocks that may again exceed even well-informed expectations. It is to improve on George Santayana's dictum: even though we remember the past, we may still have to repeat it.

References

Camdessus, Michel (1998a), “The Role of the IMF: Past, Present and Future,” Remarks at the Annual Meeting of the Bretton Woods Committee (13 February).

Camdessus, Michel (1998b), “Toward a New Financial Architecture for a Globalized World,” Address to the Royal Institute of International Affairs (8 May).

Chinn, Menzie (1998), “Before the Fall: Were the East Asian Currencies Overvalued?” NBER Working Paper 6491 (April).

Clinton, W.J. (1998), “Address to the Council on Foreign Relations” (28 September), www.whitehouse.gov.

Council of Economic Advisors (1995), *Economic Report of the President 1995,* Washington, D.C.: GPO (February).

Coure, Benoit and Jean Pisani-Ferry (2000), “Events, Ideas and Actions: An Intellectual and Institutional Retrospective on the Reform of the International Financial Architecture,” Conseil D’Aanalyse Economique Working Paper No. 04-2000 (July).

Davis, Bob, Jonathan Friedland, and Matt Moffett (1998), "Epidemic?: As Currency Crisis Spreads, Need of a Cure Grows More Pressing," *Wall Street Journal* (August 24, 1998).
Dornbusch, Rudiger (2001), “A Primer on Emerging Market Crises,” unpublished manuscript, www.mit.edu.

Eichengreen, Barry and Michael Mussa, with Giovanni Dell’Ariccia, Enrica Detragiache, Gian Maria Milesi-Ferretti and Andrew Tweedie (1998), *Capital Account Liberalization: Theoretical and Practical Aspects,* Occasional Paper no. 172, Washington, D.C.: IMF (September).

Eichengreen, Barry and Ashoka Mody (2000), “Would Collective Action Clauses Raise Borrowing Costs?” NBER Working Paper no. 7452 (January).

Federal News Service (1995), "Hearing Before the Senate Banking Committee: Mexico and the Exchange Stabilization Fund (July 14, 1995).

Feldstein, Martin (1998), “Refocusing the IMF,” *Foreign Affairs* 77, pp.20-33.

Goldstein, Morris (1998), *The Asian Financial Crisis,* Washington, D.C.: Institute for International Economics.

Goldstein, Morris (2000), “IMF Structural Programs,” in Martin Feldstein (ed.), *Economic and Financial Crises in Emerging Market Economies,* Chicago: University of Chicago Press (forthcoming).

Greenspan, Alan (1999), “Efforts to Improve the ‘Architecture’ of the International Financial

System," Testimony Before the Committee on Banking and Financial Services, U.S. House of Representatives, 20 May, http://www.bog.frb.fed.us.
G-7 Finance Ministers (1999), "Strengthening the International Financial Architecture," Report of G7 Finance Ministers to the Cologne Economic Summit, Cologne, 18-20 June, http://www.ustreas.gov.

G-7 Heads (1995), "Examination of the International Financial Institutions," Information of the Halifax Summit (June).

G-7 Heads (1998), "Declaration of G-7 Finance Ministers and Central Bank Governors" (30 October), http://www.imf.org/external/np/g7/103098dc.htm.

G-10 (1996), *The Resolution of Sovereign Liquidity Crises*, Basle: BIS (May).

G-22 (1998a), *Report of the Working Group on Transparency and Accountability,* Washington, D.C.: G-22.

G-22 (1998b), *Report of the Working Group on Strengthening Financial Systems,* Washington, D.C.: G-22.

G-22 (1998c), *Report of the Working Group on International Financial Crises,* Washington, D.C.: G-22.

Institute of International Finance (1999), "Report of the Working Group on Financial Crises in Emerging Markets," Washington, D.C.: Institute of International Finance.

International Financial Institution Advisory Commission (2000), *Report*, Washington, D.C.: IFAC.

International Monetary Fund (1994), *International Capital Markets Report,* Washington, D.C.: IMF (October).

Kaplan, Ethan, and Dani Rodrik, "Did the Malaysian Capital Controls Work?" NBER Working Paper no. 8182 (January).

Knetter, Michael M. and Thomas J. Prusa (2000), "Macroeconomic Factors and Antidumping Filings: Evidence from Four Countries," NBER Working Paper no. 8010 (November).

Krugman, Paul (1999), *The Return of Depression Economics*, New York: Norton.

Lowenstein, Roger (2000), *When Genius Failed: The Rise and Fall of Long-Term Capital Management* (New York: Random House: 037550317X).

Meltzer, Allan et al. (2000), *Report,* Washington, D.C.: International Financial Institutional Advisory Commission.

Nurkse, Ragnar (1944), *International Currency Experience,* Geneva: League of Nations.

Reich, Robert B. (1997), *Locked in the Cabinet,* New York: Alfred A. Knopf.

Rubin, Robert (1998a), "Strengthening the Architecture of the International Financial System," Speech delivered at the Brookings Institution, 14 April, http://www.brook.edu/comm/transcripts /rubin/htm.

Rubin, Robert (1998b), "Remarks to the Dow Jones/Wall Street Journal Annual Conference on the Americas," 1 October, http://ibreaudigilib.usia.gov/aug99/usiaweb/regional/ea/asiafin/ rubin101/htm.

Rubin, Robert (1999), "Remarks on Reform of the International Financial Architecture," *Treasury News* RR-3093, 21 April.

Schwartz, Anna J. (1997), "From Obscurity to Notoriety: A Biography of the Exchange Stabilization Fund," *Journal of Money, Credit, and Banking* 29:2 (May), pp. 135-153.

Summers, Lawrence H. (1996), "Introduction," in Peter B. Kenen (ed.), *From Halifax to Lyons: What Has Been Done About Crisis Management?* Essays in International Finance 200, International Finance Section, Department of Economics, Princeton University, pp.1-6.

Summers, Lawrence H. (1997), "Building a Global Financial System for the 21st Century," speech to the Congressional Economic Leadership Institute, 12 August, http://www.celi.org/summers.htm.

Summers, Lawrence H. (1999a), "Reflections on Managing Global Integration," *Journal of Economic Perspectives* 13, pp.3-18.

Summers, Lawrence H. (1999b), "The Right Kind of IMF for a Stable Global Financial System," Remarks to the London Business School (14 Deember).

U.S. Senate Banking Committee (1995), *The Mexican Peso Crisis,* Heraings Before the Committee on Banking, Housing and Urban Affairs, S. Hrg. 104-164, Washington, D.C.: GPO.

Velasco, Andres (2001), "The Impossible Duo? Globalization and Monetary Independence in Emerging Markets," unpublished manuscript, Harvard University.

Wade, Robert, and Frank Veneroso (1998), "The Resources Lie Within," *Economist* (November 5, 1998).

Woodward, Bob (1994), *The Agenda: Inside the Clinton White House,* New York: Simon & Schuster.