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CREATOR: Nouriel Roubini ( CN=Nouriel Roubini/OU=CEA/O=EOP [ CEA ] )

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Janet, I attach the latest draft of Chapter 6.

Nouriel

===== ATTACHMENT 1 =====

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## **Chapter 6: Capital Flows in the Global Economy**

### **1. INTRODUCTION**

Last year international financial developments posed serious challenges for the world economy. What began in the summer of 1997 as a regional currency crisis in developing Southeast Asia, erupted into a deep, global economic crisis in 1998. By late summer, the crisis had extended to many other markets and to economies around the globe. The eruption of severe financial and economic turmoil in Russia in August immediately threatened contagion to Latin American markets. Interest rates in emerging market countries rose sharply and risk premia on their sovereign bonds increased as a consequence of large scale capital flight. Many countries experienced sharp depreciations of their currencies or severe strains on their foreign exchange reserves. Prices of stocks, bonds and other financial and real assets plummeted. Commodity prices continued to fall, engendering talk of global deflation. Ultimately the financial market turbulence led to a general flight from risky assets even within the United States and Western Europe. Japan's hopes for recovery from a long-standing slump were dashed.

A third of all world economies were in recession or experiencing markedly slower growth by late 1998. World economic growth is estimated by the International Monetary Fund (IMF) at only 2.2 percent in 1998 and is projected to remain at this low level in 1999, after robust growth of 4.2 percent in 1997. Projected world growth has almost declined to levels registered

during the pronounced world slowdowns of 1974-75, 1980-83, and 1990-91. The risk of a worldwide economic slowdown pose new challenges to economic policy.

This widespread financial turmoil -- arguably the most severe experienced by the world economy during the last 50 years -- followed a robust period of increasing integration of world product and financial markets. World trade has increased dramatically as trade restrictions have progressively fallen and many countries have embraced historic openness to international trade. At the same time, restrictions on capital flows have been eased and financial markets have become increasingly integrated, leading to an unprecedented volume of international capital flows.

This turbulent period should not cloud the benefits of globalization. Market integration has provided greater opportunity, faster growth, and increasing standards of living for a large share of the world's population. Trade among countries has fueled growth by harnessing the benefits of comparative advantage and providing dynamic stimulus to productivity. Financial integration also has advantages. Open capital markets have promoted growth by allocating capital to countries whose domestic investment opportunities exceed domestic saving. Portfolio flows across the world have allowed diversification of risk. The knowledge that global investors are watching over their shoulders may have helped governments achieve discipline in the pursuit of responsible monetary and fiscal policies.

In response to the widespread financial turmoil in 1997-98, the United States, together with other countries and the international financial institutions, has taken steps to contain the financial crisis, to restart the engine of growth in Asia, to minimize the impact of financial

turmoil on other nations and to foster reforms of the international financial system in order to make it less crisis-prone. Positive developments during the last quarter of 1998 include:

- reductions in interest rates by the Federal Reserve and the central banks of many other industrial and emerging market countries designed to support growth;
- Congress approval of the Administration request for an \$18 billion funding package for the IMF;
- an IMF stabilization package for Brazil aimed at preventing a crisis in that country and stemming regional contagion;
- steps toward structural banking reform and stronger fiscal stimulus in Japan;
- continued progress on structural reforms in Korea, Thailand and Indonesia and the emergence of the first, tentative, signs that their economies may be bottoming out;
- the G7 nations' strong commitment to growth, to the resolution of the current crisis and to reforms aimed at strengthening the international financial system.

These measures serve to promote confidence and improve the prospects for growth in the world economy in 1999.

This chapter starts with an analysis of the factors responsible for increased global financial integration. The causes of the Asian crisis and its contagion to other economies, the policy response to the global turmoil, and the role of Japan are considered next. The chapter concludes with an analysis of the effects of the international financial crisis on the United States.

Chapter 7 is devoted to a discussion of developments in the international financial system

and proposed reforms to its architecture to reduce the likelihood of future crises. The prospects for the monetary union in Europe and the implications of the creation of the euro for the U.S. dollar are also discussed there.

## **2. FINANCIAL GLOBALIZATION, EMERGING MARKETS, AND CRISES**

### **INCREASED INTERNATIONAL CAPITAL FLOWS**

The growth of international capital flows is one of the major economic developments in the world economy since the breakdown of the Bretton Woods system of fixed exchange rates in the early 1970s. Financial intermediation on a global scale was spurred by the first oil shock of 1973-1974: surpluses in oil exporting countries had to be invested, and deficits among oil importers had to be financed. This recycling of 'petrodollars', together with the growth of Euromarkets--offshore markets for deposits and loans denominated in key currencies, particularly the dollar--led to a surge of international capital flows. In the late 1970s, many developing countries gained access to international capital markets, enabling them to finance growing external imbalances. Most of the intermediation occurred through the banking system, leading to large exposures among industrial countries' banks to developing countries.

An excessive build-up of external liabilities, loose monetary and fiscal policies in borrowing countries, sharp declines in their terms of trade and high international interest rates triggered the debt crisis of the 1980s, which started with the Mexican crisis of 1982 and rapidly engulfed a large number of developing countries in Latin America and elsewhere. The 1980s

were a period of retrenchment with a significant slowdown of capital flows to emerging markets (especially to Latin America) as foreign debts were rescheduled, restructured, and finally reduced with the inception of the Brady Plan in 1989.

The resolution of the 1980s debt crisis led to new large-scale capital inflows to emerging markets in the 1990s. Factors encouraging the renewed surge of private capital flows included the adoption in many Latin American countries of policies emphasizing economic liberalization, privatization, market opening, and macroeconomic stability; the historic transition toward market economies in many Central and East European countries; and rapid economic growth in Asia. Net long-term private flows to developing countries increased from \$42 billion in 1990 to \$256 billion in 1997. The largest portion of these flows took the form of foreign direct investment, which totaled \$120 billion in 1997 (see Chart 6-1). However, bond flows and portfolio equity flows accounted for 34 percent of lending, registering \$54 billion and \$32 billion, respectively, in 1997. In contrast, commercial bank loans represented only 21 percent of net flows, or \$54 billion in 1997, whereas they had accounted for about two-thirds of net capital flows to developing economies in the 1970s. This massive switch from bank lending, characterized by a small number of substantial lenders, to bond flows brought with it new challenges relating to the management of financial crises, as the problem of coordinating the actions of a large number of creditors to restructure loans during a crisis is exceedingly difficult.

Table 6-1 reports gross inflows and outflows of foreign direct investment and portfolio investment (two of the main components of capital flows) for both developing and industrial countries. Two points are noteworthy. First, while net flows have been large and growing, the

magnitude of gross flows may be a better indicator of financial integration. As domestic investors diversify their portfolios by purchasing foreign assets, and foreign investors also increase their purchases of domestic assets, gross flows may increase substantially without significant changes in net flows. Gross cross-border capital inflows and outflows have in fact grown even faster than net flows. Second, the phenomenon of rising cross-border capital flows applies equally to developing and developed countries. Although the Mexican peso crisis of December 1994 led to a modest slowdown in the surge of capital to emerging markets in 1995, capital flows surged again until the explosion of the Asian crisis in the summer of 1997.

Further evidence of the strong trend towards financial integration is the sharp growth of foreign exchange trading both in spot markets and via the use of foreign exchange derivative instruments, including forward transactions; such trading is mainly related to financial transactions and has mushroomed at a much faster rate than international trade in goods over the last two decades (Box 6-1).

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**Box 6-1. The explosive growth of foreign exchange trading.**

The single statistic that perhaps best illustrates the dramatic increase in the size of international financial markets is the volume of trading in the world's foreign exchange markets. The Bank for International Settlements, which is the central banks' bank in Basle, Switzerland, released a preliminary compilation of a triennial survey of 43 foreign exchange markets in October 1998. It shows that, after correcting for the appreciation of the dollar, the volume of foreign exchange trading grew 46 percent between April 1995 and April 1998, following a 45

percent increase between 1992 and 1995. Volume now stands at \$1.5 trillion per day, after making corrections to avoid double-counting. By way of comparison, the global volume of merchandise trade in 1997 was \$5.5 trillion *per year*, or about \$22 billion per day. In other words, foreign exchange trading was more than sixty times as great as trade in goods.

**Spot transactions vs. Derivatives.** Foreign exchange transactions can be divided into spot and derivative, including forward, transactions. In the new survey, spot market purchases amounted to 40 percent of foreign exchange transactions, down from 44 percent in 1995. Forward instruments continued to grow in importance relative to spot sales. Over-the-counter derivatives, though still a smaller fraction of total transactions, have been the fastest-growing segment of the market.

**Customer Composition.** A striking feature of the foreign exchange market is the low percentage of trades made on behalf of non-financial customers. In the most recent survey, the share of total transactions involving non-financial customers represents 20 per cent of all turnover.

**The major forex centers.** Trading tends to be focused in major centers. Arguably there is a natural equilibrium consisting of one major center in each of the three eight-hour time zones. New York is the major center in the Western Hemisphere, with U.S. volume now equal to \$351 billion per day (18 percent of world turnover). Tokyo in the 1980s established itself as the counterpart in the Asian time zone. Its turnover, however, has fallen off recently, as Singaporean markets have gained. Average daily transactions totaled \$149 billion (8 percent of world total) in Japan and \$139 billion in Singapore. London continues to handle the greatest

volume of foreign exchange transactions, with the UK share of world turnover increasing to 32 percent, at an average daily volume of \$637 billion.

To summarize, the volume of world trade in foreign exchange has continued to grow. Derivatives far exceed spot market transactions. Most trades take place between professional traders at banks and other financial institutions; only a fraction of foreign exchange sales and purchases directly involve those who import and export goods and services.

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## **UNDERLYING CAUSES OF INCREASED INTERNATIONAL FLOWS IN INDUSTRIAL AND EMERGING MARKETS**

Several factors undoubtedly contributed to the phenomenal growth of international capital flows. First, financial markets, both domestic and international, have opened up as governments in industrial and developing economies alike have phased out restrictions on financial transactions and progressively reduced or eliminated controls on capital account transactions. In many instances, financial liberalization has been accompanied by macroeconomic stabilization, privatization, trade liberalization, and deregulation. Such structural reforms in capital-scarce developing countries have created significant investment opportunities, and a surge of foreign capital has been attracted by the promise of high rates of return. Growth of international trade has also increased the volume of trade-related financing and bolstered trade in derivative instruments to hedge exposures to currency and commercial risk.

At the same time, financial innovations in the U.S. and other advanced economies have rendered cross-border investments more accessible to international investors. Revolutionary

technological advances in information and communication technology, in conjunction with significantly lower transportation and transaction costs, have underpinned this rapid financial market development. Mutual funds, hedge funds and the emergence of derivative instruments have enabled investors both to hedge some risks and to take on others. A radical increase in the available range of instruments and assets has afforded investors unprecedented opportunities to increase returns and decrease risks through global diversification. While domestic wealth is still primarily invested in domestic assets, now international portfolio diversification is a reality for a wide range of institutions, investors and households.

## **PREVIOUS FINANCIAL CRISES**

Over the last twenty years, financial liberalization and the increase in global capital flows have also coincided with recurring financial crises, imposing serious real costs on the afflicted economies.

Three more financial crises with broad-ranging or regional impact have struck during the 1990s. The first occurred in 1992–93, when several currencies in the Exchange Rate Mechanism (ERM) of the European Monetary System experienced speculative attacks. Britain and Italy were forced to abandon the ERM in the fall of 1992 and allow their currencies depreciate, while Sweden, whose currency was effectively pegged to the ERM currencies, was forced to follow suit shortly thereafter. Sequential devaluation of several other ERM currencies ensued, and the ERM exchange rate bands for France and the other remaining members had to be widened in the summer of 1993. A second financial crisis was touched of

by the collapse of the Mexican peso in December 1994. Additional Latin American currencies came under attack via the so-called “Tequila effect.” The third crisis of the 1990s, the Asian currency and financial crisis that has now spread as far as Russia, South Africa and Latin America, was triggered by the devaluation of the Thai baht in July 1997.

While each of these crises in the 1990s had distinct characteristics and specific causes, several common elements, which factor significantly into current debates surrounding the reform of the international financial architecture, can be identified.

#### *Increasing Volume and Sophistication of International Financial Transactions*

Perhaps the most obvious element shared by all three crises during this decade is the context in which they occurred: the ongoing process of global financial integration that gained substantial momentum in the 1990s. Both the size and volatility of international capital flows have dramatically increased and the range of assets traded internationally has mushroomed.

#### *Semi-Fixed Exchange Rate Regimes*

All three crisis episodes occurred under semi-fixed exchange rate regimes: Each crisis country had attempted to stabilize the value of its currency vis-a-vis the currencies of its key trading partners, although none of the affected economies had fixed its exchange rate in a rigid way (with the exceptions of Argentina and Hong Kong, whose currency board-like exchange rate regimes have successfully withstood the crises). For example, ERM exchange rates had

been permitted to move in a band (typically plus-or-minus 2 1/4 percent) vis-a-vis one another as a step along the path towards European monetary integration. Similarly, the Mexican peso had followed a “crawling band” against the dollar, an arrangement which proved successful as a strategy for escaping the very high inflation rates of the 1980s. Finally, currencies of the Asian crisis countries were loosely pegged to currency “baskets” in which the dollar had an effective weight of around 80-90 percent. Although such arrangements may have facilitated rapid integration of the crisis countries into the world system of trade and finance, they also, in the Mexican and Asian cases, hindered the adjustment of real exchange rates in the face of large trade deficits. The sudden abandonment of relatively fixed exchange rates in these crises reinforced negative market expectations, intensifying financial market pressures and producing severe adverse contractionary effects in the presence of large foreign-currency-denominated debts.

#### *Presence of Contagion*

In all three episodes, a crisis that began in one country quickly spread beyond its borders. Often the next victims were geographic neighbors and trade partners, and countries that shared other common traits, such as similar policies or common economic shocks. At times, as in the summer of 1998, changes in investors’ sentiment and aversion to risk also contributed to contagion within and across geographical regions.

#### *Recent Financial Liberalization*

Most crisis episodes were preceded by significant capital account liberalization in the crisis country and progressive elimination of capital controls. Italy and France had fully liberalized their capital accounts in the years just prior to the onset of the 1992 ERM crisis. Mexico progressively liberalized its domestic and international financial regime in the early 1990s. Similarly, East Asian countries undertook processes of financial liberalization -- both domestic and international -- throughout the 1990s.

#### *Concurrent Banking Crises*

Currency crises of the 1990s have typically been associated with financial sector and banking crises. This is most clearly evident in the Asian and Mexican peso episodes, but weaknesses among financial institutions also played a role in the ERM devaluations. In Sweden, Finland and Italy, banking crises emerged in conjunction with the currency turmoil. The Asian crisis provides a stark example of the link between currency and banking crises, underscoring the profound vulnerability that results from fragile financial and banking sectors. The causal links between banking and currencies crises are complex, as financial weaknesses may contribute to a currency crisis while a currency crisis can exacerbate a financial crisis by increasing the burden of foreign currency liabilities.

### **3. THE ASIAN CRISIS AND THE GLOBAL FINANCIAL TURMOIL**

## **THE ASIAN ECONOMIC MODEL**

East Asian countries grew at a very rapid rate for over two decades, a phenomenon widely hailed as the “Asian Miracle.” Thirty years ago it had seemed that industrialization was a privilege reserved de facto for the European-settled regions of the world, with the sole exception of Japan. The East Asian “miracle economies” disproved this notion in a few decades. Whereas the United Kingdom took 58 years to double its income during the Industrial Revolution (starting from 1780) and the United States and Japan took almost as long (47 years, starting from 1839 and 35 years, from 1885 respectively), Korea accomplished the feat in 11 years and China in just 10 years (starting in 1966 and 1977 respectively).

The remarkable economic success achieved by many Asian economies served to greatly enhance living standards, sharply reduce poverty, and substantially expand economic opportunities for multitudes of the region’s inhabitants. At the same time, East Asian economies maintained a more equal distribution of income and wealth compared to other developing countries. East Asia’s success was achieved through a focus on the “fundamentals” that most economists consider critical to economic growth: high saving rates; substantial investments in education with particularly high rates of basic education and literacy; a pronounced work ethic; and an outward orientation characterized by heavy involvement in international trade and investment, although openness to imports and foreign investment was in some cases highly selective. The East Asian strategy also emphasized effective macroeconomic management, including the attainment of low budget deficits and inflation rates.

It is important to emphasize that the East Asian recipe for economic success, with its

clear focus on the fundamentals underpinning economic growth, has served and should continue to serve as an inspiration for countries seeking an escape from poverty. Indeed, as developing countries around the world increasingly opted for capitalism over state planning in the 1980s, they were reacting not just negatively to the conspicuous failures of state planning in their own economies and in the former Soviet bloc, but also positively to the inspiring example of East Asian success. Indeed, this role model is one of the reasons why the United States continues to have a major stake in East Asian stability and prosperity.

Their enormous strengths notwithstanding, it is now commonly recognized that the East Asian economies concealed structural weaknesses which are credited with contributing to the financial crisis. Arguably, Asian governments relied excessively on centralized coordination rather than decentralized market incentives. Particular examples include widespread government favoritism in promoting selected industries and exports, and anti-competitive protection of domestic industries. Practices which distorted private sector lending and investment incentives include: relationship-driven banking (see Box 6-2), hindering capital market discipline and flexibility; poor supervision and inadequate regulation of financial institutions; implicit and explicit government bailout guarantees leading to moral hazard in the financial sector (to be discussed below); heavy dependence on bank debt rather than equity (as securities markets were underdeveloped) leading to excessive leveraging of firms; lack of transparency of the activities and balance sheets of corporations and financial institutions (reflected in the lack of weak accounting and disclosure standards); and reliance on informal as opposed to formal enforcement mechanisms (as manifested in the lack of effective bankruptcy

and foreclosure laws). (See Box 6-3 for an analysis of the Asian growth model).

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**Box 6-2. Arms-length versus relationship (insider) banking**

In financial economics, a distinction has long been recognized between market-based and bank-centered financial systems, with the United States and the United Kingdom exemplifying a market-based system and Japan and many other East Asian economies exemplifying a bank-centered system. Commercial banks figure prominently in both. A crucial distinction, however, concerns the roles that they play.

Economists believe that banks play a special role in financial markets because of the superior information that they often possess about the firms to which they provide finance. Institutionally, this information results from the close ties between firms and their loan officers. In addition, banks often have superior information about their clients' cash flows, as a result of maintaining many of their accounts.

In a market-based system, banks are one of many sources of external finance for firms. In providing funds, they compete with public bond and commercial paper markets, along with well-established markets for equity. Thus, bank loans are provided through "arms-length" market transactions.

In the bank-centered system, on the other hand, firms tend to have strong ties to a single bank (or network of banks). These "main" banks are heavily involved in the management and "governance" of their clients, as a result of their status as the primary -- and often sole -- source of external finance. A decade ago, economists commonly emphasized the strengths of this

system: for example, privileged status and information enabled banks to extend loans to firms that might have difficulty obtaining funding in a market-based system, such as young firms or firms in distress. Some economists credited the financial structures of the Japanese and East Asian economies with promoting high rates of investment and growth. The bank-centered system, it was argued, overcame the short term focus inherent in the Anglo-American market system. Banks could take chances with riskier firms, since their long term relationships promised compensation in the future from the firms that succeeded (in the form of higher-than-market rates of interest).

Along with its strengths, relationship banking regimes (sometimes referred to as “insider banking” or “connected lending”) also possess serious weaknesses, which have now been dramatically exposed by the Asian crisis. Instead of making profitable decisions informed by longer horizons, many banks apparently took excessive and economically unprofitable risks. Borrowers who should have been cut off were allowed to continue borrowing, with the result that losses increased. The tightly-concealed system of financing enabled some bankers and managers to invest on the basis of personal rather than economic objectives, shielded from market constraints.

Corporate governance tended in some cases toward empire-building, that is maximizing capacity, sales, or market share, rather than maximizing profitability or firm value. It appears, for example, that Asian banks and firms developed excess capacity in sectors such as steel and electronics. Currently, many Asian economies are struggling to overcome the adverse real consequences of these misguided financial decisions.

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**Box 6-3. The Asian growth model**

The Asian crisis caught most analysts by surprise. Some had warned of economic policy flaws in Asia, but few expected them to produce a sharp slowdown and no one predicted the severe crisis that has actually materialized. Until recently many observers thought that the East Asian countries possessed the strong economic fundamentals and structural characteristics necessary for sustained long-run economic growth.

If the origins of the crisis are due to structural weaknesses in the Asian economic system, as many observers contend, a natural question is why the crisis occurred when it did. One hypothesis is that there exist natural stages of development, and the Asian financial system, with characteristics such as relationship-banking, is better suited to countries at early stages of development. After all, financial intermediation by banks (even in the context of relationship banking) is a tremendously important innovation when the alternative for a firm is to finance all investments out of family savings or retained earnings from earlier investments. Moreover, as long as growth is rapid, high leverage (that is, a high ratio of debt to equity) is sustainable. But when growth slows, the financial system needs to adapt and firms need to reduce leverage.

Some slowdown in East Asian growth was probably eventually inevitable after the breakneck pace of the preceding three decades for the simple reason that “economic convergence” served as one of the driving forces of the earlier rapid growth. An economy that

starts out behind the leaders in per capita income can close part of the gap over time by growing more rapidly, conditional, of course, on the presence of such fundamentals as an outward orientation and investment in physical and human capital. There are two reasons for convergence: the high rate of return on capital in labor-abundant economies, and the opportunity to emulate most advanced technology and management practices of the leader economies. But as the income gap closes, further impetus to growth diminishes over time. Economies encounter diminishing returns to capital, limits on the benefits of rural-urban migration, and constraints of infrastructure. Also, as they draw closer to the frontier, they have less to learn from those who have gone before. Japan had achieved convergence by the 1980s, and Hong Kong and Singapore by the 1990s. Korea and the others still had a ways to go -- a very long way in some cases. Nevertheless, the basic principle remains, that the smaller the remaining gap, the smaller is the particular source of growth represented by convergence.

One controversial view is that Asian economic growth was attributable more to the rapid accumulation of inputs of production -- labor (via increased labor participation rates) and capital (due to very high investment rates) -- rather than to growth of factor productivity. According to some studies, underlying growth rates of total factor productivity (measuring the increased efficiency in the use of factors resulting in part from the rate of growth of technological progress) were modest. An implication of this view is that the very high rates of Asian growth would not be sustainable in the long run given the projected decline in the rate of growth of employment and the expected reduction in the pace of investment. However, this view would imply a gradual slowdown of growth and not the sudden and severe crisis that hit these

economies in 1997-98.

As discussed below, it appears that the factors working to produce an eventual slowdown in growth interacted badly in mid-1997 with existing financial sector weaknesses, excessive corporate leverage, financial fragility resulting from poorly designed capital market liberalization, a slowdown in export markets, a worsening of terms of trade, and the development of overcapacity in many sectors. The crisis was the result.

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## **HISTORY OF THE CRISIS AND ITS CONTAGION**

In the summer of 1997, financial turmoil in Thailand spread to economies with outwardly similar features at similar stages of economic development: Malaysia, Indonesia and the Philippines. This “contagion” took the form of declines in both stock and currency markets. Singapore and Taiwan, concerned about the competitive effects of the currency depreciation in the original four crisis economies, decided to let their currencies float rather than resist the speculative pressure against them. By October, contagion affected Hong Kong (whose return to China in the summer of 1997 had increased the political uncertainty about the future of this region), pressuring the pegged Hong Kong dollar and sharply depressing local stock markets. The first bout of truly global contagion then ensued as stock markets in the U.S. and Europe fell sharply, and as other emerging market economies were forced to raise interest rates to prevent a run on their currencies. The spread of the crisis to Korea and further deterioration in the Indonesian economy led to a worsening crisis in the winter.

Investor sentiment seemed to improve by March as Thai and Korean currencies

stabilized, and Korea successfully converted short-term bank debt into longer term bonds. Also, higher interest rates and tighter monetary policy in Latin America following the October 1997 contagion episode helped to stabilize investors' confidence in that region. In April, however, several negative developments led to a new loss of investor confidence. Plunging commodity prices, resulting in part from the deepening recession in Asia, hurt a wide range of commodity exporters. Oil exporters such as Mexico, Venezuela, Russia and Ecuador were severely affected by plunging oil prices. Agricultural exporters such as Australia, New Zealand, Canada and Argentina were impacted (as the crisis in Asia and large global supplies of agricultural products led to a sharp fall in agricultural prices) along with mineral producers such as Chile and Peru. Violence in May surrounding the collapse of the Suharto regime devastated confidence in Indonesia and challenged remaining confidence in East Asia. Pressures upon currencies of economies as far from East Asia as South Africa, a sharp deterioration of business conditions in Japan, and the continued fall of the yen added to the pessimism. The weakness of the yen led to the concern that China might devalue its currency and that the Hong Kong peg would collapse, causing another round of currency depreciations in Asia. However, China gave assurances that it would not devalue, and the pegs held. These negative developments, however, led to another round of sharp declines in emerging market equities starting in May.

Financial turmoil spread next to Russia, due to the fall in the price of oil (the country's biggest export), a growing current account imbalance, weak tax collections, a large fiscal imbalance financed by short-term ruble debt and disappointment in the pace of structural reforms. The manifestations included a sharp fall in the Russian stock market, pressure on the

currency, and a sharp increase in the interest rate on ruble public debt. An IMF package aimed at reducing the fiscal deficit was negotiated in July. Despite the IMF package, the Russian government failed to restore confidence as it proved unable to implement its anti-crisis program in the face of opposition from the Duma, from powerful special interests represented by oligarchs, and from those who sought a return to communism. The deterioration in market conditions culminated in a comprehensive breakdown in confidence in the first weeks of August.

On August 17, the Russian government, faced with growing losses of foreign reserves triggered by capital outflows, decided to devalue the ruble, to restructure its short-term public debt unilaterally in a form that implied material default, and to impose a 90-day moratorium on Russian private sector payments of foreign liabilities. These decisions led to a severe financial crisis in Russia contributing, in turn, to a dramatic spread of investor pessimism to Latin America and other emerging markets and to a sharp downturn in equity markets in the U.S. and other industrial countries. The contagious spread of turmoil from Russia to Brazil and other Latin American countries arguably signaled a degree of financial panic as investors apparently withdrew capital indiscriminately from countries differing substantially in the strength of their economies. Investors' sharp loss of confidence in emerging markets following the Russian devaluation may have been partly caused by the perception that the IMF had few resources left and/or was not willing to use them to rescue a country that, until then, had been considered "too important to fail", or missed the lesson that conditionality would prevail. Investors apparently drew the wrong lesson from the IMF's enforcement of conditionality in the face of unsound Russian macroeconomic policies. The loss of confidence may also have been partly caused by

the perception that other countries might follow Russia on the path of unilateral defaults, debt moratoria and capital controls.

Although Latin American economies were structurally much stronger than Russia, investors increasingly sought to avoid risk everywhere. Emerging market sovereign spreads (see Box 6-4 on sovereign spreads) over Treasuries rose to about 1500 basis points (15 percentage points) by September, likely signaling an extreme increase in the risk aversion of international investors and large scale flight from emerging markets and other risky investments in favor of “safe haven assets,” notably U.S. Treasury bills. The sharp increase in the preference for liquidity and the attempt to unwind highly leveraged positions added to the pressure on the prices of a wide range of risky assets. As described in Chapter 2, capital markets within developed countries including the United States were also affected by the “flight to quality”: while yields on safe government securities fell, the spread over Treasuries of high-yield securities (junk bonds) increased sharply. Even the spreads of high-grade corporate bonds rose to some extent, reflecting the generalized increase in investors’ risk aversion. The severe losses and near-collapse of a prominent hedge fund contributed to investor panic. By early October there were hints of a possible generalized global credit crunch: rising spreads on the entire range of bond instruments from relatively safe high-quality corporate bonds to junk bonds and emerging market sovereign instruments; an interruption of access to international capital markets for most emerging economies; a drying-up of bond financing in all emerging markets and a shrinkage in new bond issues in industrial countries; evidence of a tightening of lending standards by commercial banks in the United States; a slowdown in reported earnings growth and contraction in stock markets.

However, by the middle of November, conditions in international and domestic capital markets had improved noticeably thanks to a number of positive developments.

- The Administration, as discussed in Chapter I, took the lead in proposing a comprehensive set of steps to contain and resolve the crisis, including: strong growth in the industrialized countries, as well as policy reforms in emerging markets to promote the recovery of crisis-afflicted economies; the creation of a precautionary fund within the IMF to support countries subject to speculative pressures despite good economic fundamentals; measures to support accelerated systemic restructuring of banks and corporations in Asia; significant increases in multilateral financial institutions' support of social safety nets in crisis countries; increases in trade financing to the affected countries; and reform of the architecture of the international financial system to make it as modern as the markets.
- On October 30 the leaders of the G7 nations (United States, Japan, Germany, France, United Kingdom Italy and Canada) issued a joint statement affirming their strong commitment to growth and the resolution of the current crisis; endorsing the U.S. proposal for an enhanced IMF facility to provide contingent short-term lines of credit for countries pursuing strong IMF-approved policies; presenting concrete proposals to implement initial reforms to the system; and laying out areas for further consideration in the effort to strengthen the international financial architecture.
- The Federal Reserve reduced the Federal Funds rate three times -- at the end of September, in mid-October and again in mid-November -- helping to restore confidence

and liquidity. Interest rate reductions in a number of other industrial countries, including Japan, Canada, and most European countries, provided a significant easing of monetary conditions in the world economy.

- In October, Congress approved an \$18 billion funding package for the IMF, opening the way for about \$90 billion of usable resources to be provided by all the IMF members to the liquidity strapped institution.
- In November, negotiations leading to an IMF and multilateral support and stabilization package for Brazil were concluded. The commitment of the G7 and 13 other countries to support this crucial country's adjustment efforts contributed to calm in Latin American markets.
- Japan passed legislation to address the problems of the banking sector and the Japanese government proposed a supplemental fiscal package, restoring some confidence in the Asian markets.
- The yen appreciated sharply in October, reducing the risks of a devaluation by China that might have led to another round of devaluations in Asia; the stronger yen also works to stimulate the exports of other East Asian countries to Japan and third-country markets (though it also raises debt-service costs for South-East Asian countries who have a large amount of yen-denominated debt).
- In mid-November, APEC (Asia-Pacific Economic Cooperation) Leaders embraced a comprehensive strategy to accelerate recovery and restart growth, undertaking commitments to pursue prudent, growth-oriented macroeconomic policies, strengthen

domestic financial institutions, and further liberalize trade and investment. The crisis-affected countries reaffirmed the importance of restructuring the corporate and financial sectors to help revitalize the private sector. These countries also committed to build and strengthen social safety nets to protect the poor and economically dislocated, with support from the multilateral development banks and the international community.

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**Box 6-4 Sovereign Spreads in Emerging Markets**

Many terms normally encountered only in arcane financial discussions have been added to the lexicon of popular jargon as a consequence of the Asian crisis. One such term, the “sovereign spread,” has achieved increasing prominence. What is it, and why is it significant?

Understanding the sovereign spread begins with the basics of the government bond market. The last decade has witnessed a tremendous increase in the availability of foreign debt and equity securities. Indeed, the term “emerging market” was coined to refer to those economies that gained unprecedented access to international capital markets over this period. In general, the first securities issued by the emerging markets were government bonds, and most issued bonds promising payments either in local currency or U.S. dollars.

The advent of such securities permits two very interesting comparisons. The first--called the sovereign spread--measures the difference between the yield to maturity of emerging market bonds and U.S. (or other G7) government bonds of the same maturity and currency denomination. The yield to maturity is the rate of return earned by holding a bond until it matures, taking into account all interest and principal payments. This yield differential is the

implicit risk premium the market demands to compensate for the extra *default* risk that holding the emerging market bond entails. The premium compensates only for *default* risk (the risk that the debtor would not fully pay in time principal and interest on its obligation) because payments are made in foreign currency.

During the periods of extreme market turbulence following the Mexican peso crisis and the Russian default, sovereign spreads rose sharply. By mid-September 1998, such spreads had reached about 1500 basis points. Estimates of the default probabilities incorporated in emerging market bond prices can be derived, fairly easily, from measures of their sovereign spreads under the assumption that U.S. government bonds are default-risk free. At their heights, prevailing sovereign spreads implied very high default probabilities for many countries, leading to the conclusion either that markets were exceptionally pessimistic or that investors were becoming exceedingly risk averse (See Chart 6-2).

A second interesting comparison relates to the difference in yields on dollar- and local currency-denominated bonds. This differential measures the market's assessment of currency risk, i.e. the risk deriving from changes in the external value of the currency. Interestingly, even under most "fixed" exchange rate regimes, a positive currency risk premium can be observed suggesting either that investors either expect a devaluation or that they require an implicit "insurance" premium to compensate for the possibility that one might occur.

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## **CAUSES OF THE CRISIS**

Identifying the cause of the 1997–98 Asian crisis has engendered heated debate.

Countries experiencing currency and debt crises in the past as, for example, in Latin America in the 1980s, typically shared several common characteristics including large budget deficits and high public debt, high inflation as a result of deficit monetization, low economic growth, and low saving and investment rates. In Asia, in contrast, most crisis countries enjoyed low budget deficits, low public debt, single digit inflation rates, high economic growth and high saving and investment rates.

The absence of the macroeconomic imbalances typical of past crises has led some to argue that the Asian crisis was due not to structural weaknesses. These analysts contend that the crisis represented an essentially irrational, but nevertheless self-fulfilling panic, akin to a “bank run”, fueled by hot money and fickle international investors (see Box 6-5 and chapter 7 for a discussion of domestic and international bank runs). Although the crisis was exacerbated by speculative capital flight, it is now commonly agreed that, along with their many strong economic fundamentals, East Asian crisis countries also possessed some severe structural distortions and institutional weaknesses. These vulnerabilities eventually led to the crisis in the summer of 1997.

First, financial sectors of the crisis countries were prone to fragility due to the prevalence of corrupt credit practices with loans often politically directed to favored firms and sectors. In addition, regulation and supervision of crisis country banking systems were notably weak. Moreover, moral hazard derived from implicit or explicit government bailout

guarantees of financial institutions (See Box 6-5 on moral hazard). Such financial sector weaknesses contributed to a lending boom and overinvestment in projects and sectors that often were risky and of low profitability, such as real estate and other non-traded sectors; excessive capacity accumulated in some traded goods sectors. Prior to the crisis, speculative purchases of assets in fixed supply fed an asset price bubble, with equity and real estate prices rising beyond levels warranted by fundamentals. Poor corporate governance and what has now come to be called “crony capitalism” exacerbated the distortions in this system and fueled the investment boom. Domestic and international capital liberalization may have aggravated the original distortions by allowing banks and firms to borrow more and at lower rates in international capital markets.

In Thailand, regulations restricting entrance in the banking system led to the growth of unregulated, non-bank finance companies. Excessive borrowing by these firms fueled a boom in the real estate sector. Liberalization of capital account regulations, for example through the establishment of the Bangkok International Banking Facility, enabled Thai banks and firms to borrow heavily abroad, in foreign currency, at very short maturities. Fifty-six of these finance companies who had borrowed excessively from abroad in foreign currency were distressed even before the Thai baht crisis, and were eventually closed after the onset of the crisis.

In Korea, excessive investment was concentrated among the chaebols, the large

conglomerates dominating the economy. The chaebols' control of financial institutions, together with government policies of directed lending to favored sectors, led to excessive and low profitability investment in such traded goods sectors as autos, steel, shipbuilding and semiconductors. By early 1997, well before the onset of the won crisis, seven out of the thirty main chaebols were effectively bankrupt.

In Indonesia, a large amount of all bank credit consisted of directed credit, channeled to politically favored firms and sectors. Although Indonesia had already suffered a banking crisis in the early 1990s such practices remained prevalent. Moreover, most of the borrowing took place in foreign currency terms, compounding debtors' inability to repay when the local currency depreciated. In Indonesia, a large fraction of foreign banks' lending was directly to the corporate sector rather than being intermediated through the domestic banking system.

Empirical studies confirm that the return to capital fell sharply in the East Asia region as the result of excessive investment. Studies document a rapid build-up of fixed assets throughout Asia between 1992 and 1996 with particularly rapid growth in Indonesia and Thailand. With most of the growth financed with debt (especially in Thailand and Korea), high levels of corporate leverage were already prevalent in 1996, well before the currency crisis increased the burden of foreign debt. At the same time, moderate to low profitability severely impaired the ability of many Asian firms to meet their interest payment obligations. In Korea, the average debt to equity ratio of the top thirty chaebols was over 300% by the end of 1996;

and by 1997 the return on invested capital was below the cost of capital for two thirds of the top chaebols.

In spite of high saving rates, the investment boom in the East Asian region led to large and growing current account deficits financed primarily through the accumulation of short-term, foreign currency-denominated and unhedged liabilities by the banking system. Exchange rate regimes entailing semi-fixed pegs to the dollar exacerbated the problem in two ways. First, they led to real currency appreciations (as a result of the 1995-98 appreciation of the dollar) that worsened current account deficits. Second, the promise of fixed exchange rates led borrowers to discount the possibility of future devaluation, and thereby led them to underestimate the cost of foreign capital. Also, while budget deficits were apparently low, the implicit and explicit government guarantees of a bailout of the financial system in a crisis implied large and growing unfunded public liabilities that emerged once the currency crisis triggered a wider banking crisis.

Moreover, exogenous disturbances made the East Asian countries vulnerable to crisis. These included a slowdown of export growth among many Asian countries in 1996 and a worsening of the terms of trade, partly associated with a slump in the world price of semiconductors; the persistent stagnation of the Japanese economy in the 1990s; the weakness of the yen that caused a real appreciation of Asian currencies (i.e. a fall in the relative price of imported goods relative to that of exported goods) that were effectively

pegged to the U.S. dollar; and the emergence of China as a major regional competitor.

In 1997, the bubble started to burst. Stock markets dropped (in some cases accelerating a reversal that had started before 1997) and the emergence of wide losses and/or outright corporate sector defaults revealed the low profitability of past investment projects; non-performing loans, already on the rise prior to the currency crisis, escalated threatening bankruptcy of many East Asian financial institutions. In addition, the firms, banks and investors that had heavily relied on external borrowing were left with a large stock of short-term, foreign currency-denominated and unhedged foreign debt that could not be easily repaid. The ensuing exchange rate crisis exacerbated this problem, as currency depreciation dramatically increased the domestic-currency value of the debt denominated in foreign currency, provoking further financial crisis for banks and firms. The free fall of currencies was intensified by the sudden rush of firms, banks and investors to cover their previously unhedged liabilities in foreign currency. Thus, accelerated depreciation aggravated the original foreign currency debt problem, creating a vicious circle.

Concern among investors about the commitment of governments to structural reforms intensified policy uncertainty, contributing to widespread capital outflows. Although fundamentals likely triggered the crisis, currency and stock markets may also have overreacted, with panic, herd behavior and a generalized increase in risk aversion producing a sudden reversal of capital flows, exacerbating the crisis.

The sharp reversal of capital flows to the East Asian region in the second half of 1997 is clearly evident in the data. Table 6-2 shows that net private flows to five Asian crisis countries (Thailand, Korea, Indonesia, Malaysia and the Philippines), which averaged \$89 billion per year in 1995-96, reversed dramatically in 1997, which saw a net outflow of \$6 billion. This sharp reversal, amounting to more than 10 percent of the GDP of the five crisis countries, occurred in the second half of 1997 as foreign investors fled and international banks sharply contracted their short term loans. Commercial banks accounted for three quarters of this reversal, withdrawing \$29 billion in 1997. While equity investments also fell in 1997, the decisions by international commercial banks not to roll over their loans to Korea, Thailand and Indonesia severely exacerbated the financial crisis and the currency collapse. In 1998, it is estimated that net private outflows were even larger than in 1997, about \$25 billion, driven again by large scale bank withdrawals.

The drastic reversal of capital flows has necessitated a severe adjustment of the current accounts of the affected countries. Current account deficits can only be sustained as long as foreign lending is available to finance them. The withdrawal of needed financing has therefore resulted in higher domestic interest rates, depreciated currencies, and sharp economic contraction, producing a substantial decline in imports and large current account swings in the crisis countries. The aggregate current account balance of the five crisis countries moved from a deficit of \$55 billion in 1996 to a deficit of \$26 billion in 1997 (with

most of the adjustment in the second half of the year) and an estimated surplus of \$59 billion in 1998. As private capital flows have fallen sharply, the role of financing external obligations has been transferred to the official sector (IMF, multilateral and bilateral official creditors) and to foreign reserves: while in 1996 the Asian five made small net transfers to official creditors, they received net official flows of \$31 billion and \$28 billion in 1997 and 1998 respectively. Moreover, while in 1995 and 1996, net private inflows in excess of current account imbalances led to sharp increases in foreign exchange reserves, the turnaround of capital flows in 1997 led to a loss of foreign exchange reserves equaling \$31 billion.

While the reversal of capital flows in 1997 was partly explained by the fundamentals and policies followed by the crisis countries, its size and concentration in the second half of 1997 suggest that [, in addition to the debtors' excessive reliance on short-term bank debt,] investor flight, especially by commercial banks, contributed to the severity of the crisis. The calls for greater private sector involvement in crisis resolution, enshrined in the reports of the G22 working groups (discussed in Chapter 7), recognize that the private sector needs to be involved in preventing financial crises and, if they do occur, needs to contribute constructively to their containment and orderly resolution. Collective mechanisms to coordinate creditor behavior in periods of acute borrower distress are also needed. Indeed, the Korean crisis eased in early 1998 when[, in an agreement mediated by the U.S. Treasury,] commercial banks agreed to roll over about \$20 billion of loans to Korean banks by turning them into medium

term bonds.

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**Box 6-5. Moral Hazard in Financial Institutions**

“Moral hazard” is a key concept in the economics of “asymmetric” information, the study of transactions in which buyers and sellers have differential access to relevant information. It occurs whenever individuals covered by insurance pursue riskier behavior as a consequence. Examples of “moral hazard” abound: insured homeowners, for instance, are more likely to build homes in a flood plain or in an areas prone to wildfires and may avoid installing alarms and anti-theft system; insured drivers might drive more recklessly. If insurance companies can observe such behavior, they can penalize it through higher premiums. But if they can’t, they may try to regulate and monitor their clients’ behavior, and make sure that the insured also bear a portion of any losses they sustain. Sometimes these strategies mitigate moral hazard; in severe cases, moral hazard may cause insurance markets to disappear entirely.

Banks are subject to a rather unique risk that both requires insurance and creates the possibility of moral hazard. Insurance is needed to stem the systemic risk that can result if depositors of a bank suddenly lose confidence in the institution and seek to withdraw their funds *en masse*. In the face of a bank run, even a well-run bank will quickly exhaust its cash reserves.

Since most bank investments are illiquid, the attempt to liquidate them prematurely will diminish their value. As a result, even strong banks can fail if a bank run occurs. And the failure of one bank can cause runs on others.

Given the pivotal role that banks play within all modern economies, most governments provide deposit insurance to discourage bank runs and “lender of last resort” facilities to assure banks ample access to liquidity. In addition, governments frequently rescue troubled financial institutions that are deemed “too big to fail” in order to mitigate the potential economic consequences of their bankruptcy.

By reducing risk, such insurance mechanisms, however, create moral hazard on the part of banks. Since loans are largely funded from insured deposits, banks have an incentive to “gamble” by purchasing excessively risky assets. When things turn out well, shareholders reap the rewards. If things turn out badly, the cost is borne disproportionately by the government. Bank depositors are similarly subject to moral hazard: if they stand to lose nothing in the event of a bank failure, they have little incentive to monitor the bank’s risk taking.

Insurance against bank runs comes at the inevitable expense of increased moral hazard. Even so, its provision may still be justified. What is clear, however, is that the provision of either implicit or explicit government insurance necessitates effective prudential supervision and regulation of banks and the maintenance of strong capital adequacy standards to mitigate the effects of moral hazard.

In East Asia, implicit and explicit government guarantees to bail out financial institutions were coupled with inadequate prudential supervision and regulation. Perceived government guarantees may have encouraged foreign investors to lend more to Asian banks and monitor their loans less than they otherwise would have. Moral hazard problems thus

contributed to Asian banks' borrowing too much from abroad and investing at home in projects that were too risky.

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## **THE CAUSES OF CONTAGION**

The spread of market dislocations from one country to the next -- the so-called contagion effect -- has been observed in the behavior of exchange rates, stock markets, and emerging market sovereign debt spreads. As with explanations for the crisis itself, some observers interpret this contagion as proof that markets are irrational and prone to unjustified panic.

Various explanations based on economic fundamentals also exist, however.

### **Common Shocks**

Contagion may be due to common shocks or policies. For example, falling commodity prices hurt commodity exporter countries. Thus, the same economic shocks affected countries as distant as Indonesia, Russia, Mexico, Canada, Australia, New Zealand, Chile, Peru and Argentina.

### **Trade Linkages**

When one country devalues its currency, its competitive position improves relative to that of its major trading partners. Trading partner currencies may experience pressure when speculators recognize the likely increase of their trade deficits. Another channel of contagion occurs through income effects: a downturn in Japan depresses Asian exports to Japan and vice

versa. Trade linkages fostered the spread of the currency crisis within East Asia in 1997.

Evidence suggests that contagion is related to strength of trade links and regional factors.

### **Competitive Devaluations**

Contagion may also have resulted from the real or simply feared possibility of competitive devaluations among countries competing in third-country markets. For example, the first wave of currency declines in Asia in the summer of 1997 worsened the cost-competitiveness of all countries in the region that initially maintained their nominal exchange rates fixed, causing attacks on many of these currencies. Concerns about loss of competitiveness help to explain, for example, the decisions of Taiwan and Singapore to allow their currencies to fall as the other regional currencies were depreciating. The weakness of the yen throughout 1997 and 1998 may also have provoked fears of competitiveness-related devaluations in the East Asian region.

### **Other Real and Financial Linkages**

Other real and financial links may also serve as a conduit for contagion. If an economy invests in and lends heavily to another, negative economic news in the latter will negatively affect markets in the former. Pressures in the financial and currency markets of Korea, Hong Kong and Singapore, for example, were related to the fact that these economies had heavily lent to, invested in and traded with Indonesia and other Asian economies in crisis. Such losses also affected banking institutions and other financial firms in Japan, Europe and the U.S.

that had invested in East Asia and Russia, partly explaining the contagion to industrial countries' financial markets.

### **Imperfect Information, Investor Expectations and Illiquidity**

A final channel of contagion involves alterations in investors' perceptions concerning common structural conditions or likely policy responses. For example, the failure of financial institutions in one country may have signaled to investors that financial institutions in similar countries in the same region shared common problems (such as overinvestment, weak financial institutions, external imbalances, insufficient foreign reserves or high short-term foreign debt). Similarly, the unwillingness or inability of several Asian countries to defend exchange rate parities more aggressively may have altered investor views concerning the policy preferences of other East Asian countries.

Contagion may also have resulted from changed expectations concerning the odds of official bailouts. The news in mid-August of 1998 that Russia – the example of a country deemed too-big-to-fail – would not receive further official assistance given its inability to meet the conditions of its IMF program and its decision to devalue, default on its debt, and impose exchange controls, shook international investors' confidence and increased their concern that other emerging markets might follow similar policies and/or might not be bailed out. Spreads on emerging market sovereign instruments had not previously priced in this possibility, and the spread of contagion to Brazil and Latin America was rapid and sharp.

Also, large highly leveraged financial institutions (such as hedge funds) that lost money in one market (Russia) faced margin calls that forced them to liquidate their positions in other markets, adding to the contagious effects of the Russian default. This point to the role played also by market illiquidity when investors are imperfectly informed or uncertain about the value of assets in propagating contagion.

### **Shifting Risk Aversion and Investor Sentiment**

Against explanations of contagion relating to fundamentals stand alternative hypotheses based on irrational investor behavior. Some argue that as volatility increased in financial markets, investors simply withdrew en masse without drawing careful distinctions concerning the strength of economic fundamentals in the various emerging markets. Phenomena such as financial panic, herd behavior, loss of confidence and a generalized increase in risk aversion may have played some role in the spread of the crisis in 1997–98 within Asia, from Asia to Russia, from Russia to Latin America and other emerging markets and eventually to G7 capital markets.

The increase in investors' risk aversion is indicated by the sharp increase in sovereign spreads in the summer of 1998 (see Box 6–4). To explain such a large increase in spreads without resort to increased risk aversion requires the unlikely assumption of a perceived increase in the probability of sovereign defaults to very high values in many emerging markets. The sharp increase in spreads experienced by Argentina and Chile, countries where it was

unlikely that the probability of default was nearly that high, provides evidence of a sharp increase in the risk aversion of investors.

## **POLICY RESPONSE TO THE CRISIS**

### **Role of the international community**

The international community (the IMF, World Bank, Asian Development Bank and the G7) moved quickly to stem the financial crisis. The United States encouraged rapid development of packages to respond to requests for support from Thailand, then Indonesia and Korea. As a condition for financial assistance, the IMF has generally required substantial economic reforms, including banking sector restructuring and, initially, fiscal discipline and the maintenance of high interest rates to stem capital outflows and currency attacks. The objective of the reform programs has been to restore investor confidence by tackling the root causes of the crisis in each country. For this reason, the programs went beyond addressing major fiscal, monetary or external imbalances, aiming to strengthen financial systems, improve government and corporate governance, enhance transparency, restore economic competitiveness, and modernize the legal and regulatory environment. The IMF's practice of negotiating, monitoring, and enforcing such policy requirements is termed *conditionality*. Every effort is made to work with countries to identify reforms consistent with their individual circumstances, and conditionality can be altered over time if the economy does not respond as expected.

The targets and the tactics of the IMF evolved as the dimensions of the crisis became clearer. The Indonesian case provides a striking example of such modifications. Whereas the first

aid package of October 1997 required strict fiscal discipline, the agreement of June 1998 allowed the country to run a budget deficit of as much as 8.5% of GDP. In Indonesia, economic performance deteriorated and budget deficits automatically rose as policy uncertainty, political turmoil and violence worsened the economic outlook through the summer of 1998. The IMF recognized that, in this context, the additional fiscal stringency needed to counter such passive deterioration of the budget deficit, would prove counterproductive for the economy.

In countries that implemented IMF policy reforms most assiduously, particularly Korea and Thailand, the packages were successful in stabilizing financial markets and creating the basis for a resumption of economic growth. Following the financial turmoil in the second half of 1997, a measure of financial stability returned in these countries in 1998 as the stabilization packages were implemented. Both countries saw their currencies appreciate in the first half of 1998 after sharp drops in 1997; domestic interest rates fell back to pre-crisis levels by the summer; trade balances significantly improved; and foreign reserves began to increase again. The financial crisis produced severe real consequences in both countries, however, as economic activity dropped sharply in 1998 and severe recessions began. However, by the fall of 1998 some signals suggested that both economies may have bottomed out and economic recovery might start in 1999. In particular, both economies saw an increase in real exports [and signs of a recovery of industrial production.]

### **The logic of the IMF packages**

The severity of the economic crisis in East Asia has led some critics to challenge the IMF's approach and the wisdom of the particular packages. Several criticisms can be distinguished.

### *Structural Reforms*

One criticism relates to the breadth of the restructuring efforts required by the IMF. Critics contend that the Fund has played an excessively intrusive role in the domestic affairs of crisis countries by including in its programs structural reforms beyond its traditional macro-adjustment related areas of competence. However, an effective rescue strategy had to address the issues responsible for the crisis and these issues were primarily structural rather than macroeconomic. IMF lending would have served little purpose if the financial sector weaknesses (ranging from poor bank supervision and regulation to murky relations among governments, banks and corporations) responsible for the crisis were not addressed. Similarly, the insistence on improved corporate governance and the avoidance of "crony capitalism" would help to avoid future crises. Commentary from market analysts made it plain that halfhearted reform efforts would do little to re-establish market confidence.

The IMF's approach to crisis management has always evolved over time in response to the changing problems faced by the world economy. For example, after 1973, the Fund turned its attention from the balance of payments problems of industrialized countries, which by then had abandoned fixed exchange rates, to the problems of developing countries, many newly independent. Similarly, it adopted new approaches in response to the international debt crisis of the 1980s, and adapted its policies to aid the transition of Soviet bloc countries to market

economies after 1990. It is appropriate and desirable that an international agency adapt and evolve in response to the developments in the world economic system.

#### *The Prescription of Tight Monetary Policies*

A second criticism of the IMF's tactics relates to its insistence on high interest rates to limit currency depreciation. Critics correctly contend that high interest rates stifle growth and lead to the bankruptcy of many otherwise viable firms. The logic of the IMF's high interest rate strategy was to contain the extent of currency depreciation. Currency depreciation, like high interest rates, also stifles growth of countries with large net external liabilities by increasing the burden of the foreign currency-denominated debts of banks and firms, producing financial distress, bankruptcy, and economic contraction. Arguably, the failure of Malaysia and Indonesia to raise interest rates sufficiently following the runs on the Thai baht were responsible for the destabilizing depreciations of their currencies. Moreover, a loose monetary policy can ignite inflationary expectations, as the experience of Indonesia illustrates.

#### *Restrictive Fiscal Policies*

A third criticism which has been voiced concerning IMF policy is that the fiscal policy requirements included in the IMF plans were unnecessarily strict. At the onset of the crisis, the Asian countries under attack were running low budget deficits or even fiscal surpluses, and had achieved relatively low ratios of public debt to GDP. Loose fiscal policies at the onset of the crisis would most likely have raised doubts about policy-makers' commitment to reduce the outstanding current account imbalances, jeopardizing the credibility of their plans. Also, while fiscal deficits and debt were typically low before the crisis, the projected fiscal costs of

post-crisis financial bail-outs in several Asian countries were estimated in the range of 20 to 30% of GDP. Extra public spending of this magnitude translates into a permanent increase in the interest bill paid by Asian governments amounting to 2-4% of GDP per year. IMF fiscal plans, on a country-by-country basis, were targeted to raise the necessary revenues to meet these extra interest costs. However, when recessions in the crisis countries materialized during 1998, the IMF progressively loosened its fiscal conditions to permit cyclical fiscal deficits to accommodate programs to address the social consequences of the crisis. It must be acknowledged too that the year's revelations about the size and depth of the recessionary effects of the crisis surprised not only the Asian governments and the IMF, but also the vast majority of country analysts.

*The "moral hazard" of international rescue packages.*

A fourth criticism of IMF-led rescue packages relates to their potential to create moral hazard by leading international investors, expecting bailouts, to lend carelessly and inducing domestic governments to engage in risky policies. Several objections can be raised against a simplistic view that IMF "bail-out" plans cause moral hazard through such mechanisms. For example, it is hard to imagine that the availability of international support in the event of a crisis does much to induce moral hazard on the part of governments. Governments have strong incentives to avoid both the economic turmoil which a crisis produces and the strict and politically unpopular conditions which attach to IMF support. Moreover, in reality, a majority of private creditors, especially bond-holders and equity investors, have sustained huge losses in crisis situations where official assistance was provided. By the end of 1997, foreign equity investors had lost nearly three quarters of their equity holdings in some Asian markets. Only

commercial banks were spared and even there, only partially. For example, foreign banks operating in Korea demanded public guarantees on bank loans as a precondition for rolling over existing loans. However, the conditions for these rollovers entailed a burden on creditors as short-term loans were converted into medium-term bonds at interest rates only a few hundred basis points above U.S. Treasury rates. Finally, there is no direct evidence to support the charge that the surge in capital flows to Asia after 1995 was related to expectations of international bailouts in the aftermath of the Mexican rescue package.

Even if the moral hazard concerns relating to international rescues were judged to have some validity, such concerns would still need to be balanced against the heavy economic and human costs attached to inaction in the event of a crisis. The alternative of non-response in crisis situations leaves countries and creditors to sort out their debts on their own, a strategy that may well result in extraordinary costs for the residents of the domestic and world economies. A lesson from the debt crises of the interwar period and the 1980s is that such a strategy requires complex negotiations over a long period of time, during which access to international markets is curtailed, long-term growth is drastically reduced, and the human toll may be exorbitant. The experience of the 1990s suggests that highly interdependent economies can be subject to the rapid transmission and the 'contagious' spread of speculative waves of financial panic across regions so that the failure to address a local crisis with an appropriate program of international assistance, restoring market confidence promptly, may greatly increase the chances of a systemic chain reaction across countries.

## **U. S. Support of the IMF Role**

Since the onset of the crisis, the United States has supported the IMF's role in extending financial support to crisis countries conditional on their implementation of strong reform programs. However, as the crisis progressed, it became apparent that it threatened even those countries that had made great progress in implementing sound macroeconomic and structural policies and had worked to strengthen the fundamentals of their economies. To deal with such threats, the United States was joined by other G7 countries in proposing an enhanced IMF facility to support countries with good economic fundamentals and sound, IMF-approved policies, thereby helping them fight off the contagious impact of crises. This initiative builds on the establishment in late 1997 of a new IMF facility to provide large-scale financing in exceptional circumstances at shorter maturities and higher interest rates than normal IMF financing.

For the International Monetary Fund to play its critical role in countering contagion, the United States also recognized that its resources needed to be expanded. As an international institution with broad experience and appropriate skills, the IMF is the right organization to play a lead role in handling the crisis. And through the IMF, the U.S. succeeds in leveraging its own contributions toward crisis resolution. The U.S. could not expect to play a leadership role in the resolution of the crisis without meeting its own fair-share obligations. Therefore, the President requested, and Congress agreed this year, to provide \$18 billion of much-needed new funding to the IMF. \$14.6 billion of this amount represents the U.S. share of a quota increase applying to all IMF members. The additional \$3.4 billion represents the U.S. contribution to a new backup source of financing called the New Arrangements to Borrow (NAB).

Many observers have been confused about the consequences of IMF funding legislation for the Federal budget. Funds provided to the IMF are treated like other asset exchanges or loans and are not considered expenditures in the Federal budget.

The President urged the major economies to stand ready to activate the \$15 billion remaining in the existing emergency fund of the IMF--the General Arrangements to Borrow (GAB) -- to ensure the IMF's continued ability to support reform and fight contagion. Such emergency funds were doubled with the approval of the New Arrangements to Borrow (NAB). Under the NAB, as under the GAB, IMF members whose currencies are relatively strong will be prepared to make loans to the IMF when supplementary resources are needed to forestall or cope with an impairment of the international monetary system or to deal with an exceptional situation that poses a threat to the stability of that system. The potential amount of resources available to the IMF under the GAB and NAB combined will be up to \$46 billion. The NAB was activated, shortly after it entered into effect on November 17, to help finance the IMF arrangement for Brazil, which the Executive Board approved on December 2.

### **New Initiatives to Restore Growth and Recovery in East Asia**

In addition to its support of the IMF, the United States has recognized the need to do more to help crisis countries get back on their feet, to restore growth, and to mitigate the suffering which has been inflicted on so many citizens in the affected countries.

The Asian Growth and Recovery Initiative, jointly announced by the U.S. and Japan at the APEC Summit in November, includes innovative financing schemes aimed at accelerating

efficient bank and corporate restructuring in the crisis-afflicted countries in East Asia. In Indonesia, Korea and Thailand, for example, the combination of initial high interest rates and illiquidity has led to harsh economic contraction and a vast overhang of bad debt. Debt to equity ratios that were already very high before the crisis subsequently became unsustainable due real currency depreciation and the burden of initial high real interest rates. When highly leveraged companies cannot service their debt, a self re-enforcing spiral is created in which banks' cash flows are squeezed, forcing them to contract new lending not only to illiquid corporations but even to those in better health. The object of bank and corporate restructuring is to restore the flow of credit and restructure balance sheets so that firms in these countries can get back to the business of producing output and to strengthen the system of corporate governance in these firms.

In an effort to ensure access of crisis-impacted countries to critical imports and to help American businesses continue selling abroad, the Export-Import Bank will establish new short-term credit facilities for critical Asian and Latin American markets. The United States will coordinate its efforts with those of our counterparts in other leading industrial nations to ensure that trade credit continues to flow during this period of financial stress. Moreover, the Overseas Private Investment Corporation (OPIC) has developed a new instrument to help emerging economies raise money from international capital markets. The aim is to keep private capital flowing to crisis-impacted but deserving economies.

The severe economic downturns experienced by the crisis countries in East Asia have caused sharp increases in unemployment and poverty, jeopardizing the substantial strides those

countries had made in alleviating poverty and raising real incomes over previous decades. The social costs of the crisis have been severe and the lack of developed social safety nets, such as unemployment insurance and efficient welfare programs, has exacerbated the social costs of the crisis. The President has therefore asked the World Bank and Asian Development Bank to double their aid through an expanded Social Compact initiative with a focus on strengthening the social safety net in crisis affected countries. The focus would be on job assistance, basic needs, children, the elderly and groups in the affected countries who are most vulnerable to economic distress.

#### **Reform of the International Financial Architecture**

Even as it worked to mitigate the impact and contain the spread of the current crisis, the Administration collaborated with other countries to find ways to strengthen the architecture of the financial system so that it is less crisis prone going forward. Discussions in 1998 concerning the reform of the international financial architecture culminated in the publication in October 1998 of reports by three working groups formed by the G22, a group of systemically significant industrial and emerging market countries which had first been brought together in April 1998. These G-22 reports are discussed in chapter 7.

#### **4. JAPAN'S ECONOMIC AND FINANCIAL CRISIS**

Japan, Asia's leading economy, has inadvertently played an unfortunate role in the emergence and spread of the Asian crisis. Since the start of the 1990s, Japan has suffered a hangover from the bursting of the stock and land bubbles of the preceding decade. In 1996, after four years of disappointing growth, it appeared that the Japanese economy was finally recovering. But a large increase in the Japanese consumption tax in April 1997, implemented to address Japan's large fiscal deficit and longer term demographic pressures on its budget, caused the country to lapse into recession. The level of activity began to decline in the second quarter of 1997.

Japan's economic weakness likely contributed to the Asian crisis through several channels. Weak Japanese growth reduced Japan's demand for imports from the East Asian region. Low Japanese interest rates also fueled heavy lending by Japanese banks in East Asia in the precrisis period. Japanese banks, in fragile condition after the bursting of the 1980s bubble, weakened by a stagnant economy in the 1990s, and facing low interest rates at home, sought higher returns through large-scale lending to the fast-growing East Asian countries. While U.S. and European banks had also significantly lent in the region, Japanese banks had the largest cross-border and foreign currency lending of any OECD-country banks to the Asian crisis countries; thus, Japanese banks and securities firms were particularly hard hit when the crisis erupted. As the Asian crisis escalated, and as Japan's own economic crisis deepened in 1997-1998, many Japanese banks, faced with significant losses, recalled foreign loans in order to avoid a domestic lending squeeze.

Compared to the American role in the Mexican crisis of 1995 -- when the U.S. economy was in the midst of a strong expansion -- the weakness of Japan's economy and financial institutions has undoubtedly exacerbated the severity of the Asian crisis. At the same time, however, the significant decline in Japan's own exports to the crisis countries, along with the losses suffered by Japan's financial institutions on their Asian loans, have hit Japan's vulnerable economy hard, adding to Japan's own domestic difficulties.

Japan has now entered a full-fledged recession. Real growth over the four quarters of 1997 amounted to -0.4%. In the first half of 1998, Japanese real GDP was down 3.8% at an annual rate and by late 1998 there were still few if any signs of recovery. Japan risks descent into a deflationary spiral in which falling prices raise real interest rates, further discouraging spending.

In response to a deepening economic contraction and a growing credit crunch, the Japanese government has taken several significant policy steps. In the fall of 1998, legislation was approved providing public funds to address the problems of the Japanese banking system. Of the 60 trillion yen (about \$500 billion) in the financial package, about 30 percent has been earmarked for protection of depositors, 40 percent to recapitalize weak banks, and 30 percent to purchase the shares of nationalized banks. While questions remain concerning the implementation and effectiveness of the package, the banking reform bill is a necessary step towards restructuring Japan's financial system.

In order to stimulate economic growth, the Japanese government announced a 16 trillion yen fiscal stimulus package in April 1998, including both public works expenditures and tax reductions. Faced with intensifying economic contraction, the Japanese government proposed further expansionary fiscal measures in the fall of 1998. In November, the government announced a plan to pass a third supplementary budget aimed at implementing over 17 trillion yen in public works and other spending measures in 1999, along with more than 6 trillion yen in tax cuts.

As the world's second largest economy, Japan has a key role to play in maintaining global economic growth. The United States has urged Japan to take strong and sustained fiscal measures to stimulate domestic demand, to restore confidence, to deal promptly and effectively with the

problems of its banking system, and to open its markets and deregulate its economy. Japan's performance will help determine the prospects for Asia's recovery.

## **5. EFFECTS OF THE EMERGING MARKETS CRISIS ON THE UNITED STATES**

### **MACROECONOMIC EFFECTS**

The United States has enjoyed strong economic growth since the onset of the Asian crisis. Nevertheless, the crisis has produced both real and financial impacts. One consequence has been a marked decline in net exports and a widening of the U.S. trade deficit. The increase in the U.S. trade deficit (see Chart 6-3) is largely attributable to three factors: faster growth in the United States than in most other industrial countries; outright contraction in Japan and a large part of the rest of East Asia; and a nominal and real appreciation of the U.S. dollar relative to European and Asian currencies, particularly the yen (from mid-1995 until September 1998). Two sectors adversely affected by the crisis were agriculture and manufacturing. Shrinking exports and low prices (partly due to the financial crisis and partly due to large global supplies of agricultural commodities following bumper harvests), on top of bad weather in some regions, led to a fall in farm incomes. In manufacturing, export sectors such as commercial aircraft suffered from the fall of exports to Asia. Import-competing sectors such as steel, textiles and apparel have also been under pressure since the dollar appreciation has reduced the price of imports from the crisis affected countries. As discussed in Chapter 2, U.S. financial markets

were also impacted by the crisis and financial institutions have suffered losses on their emerging market loans and investments.

While the 1995-98 appreciation of the U.S. dollar (see Chart 6-4) contributed to an increase of the U.S. trade deficit, it has also had a number of beneficial effects on the economy. The strong dollar has led to a fall in import prices and a further reduction in inflation. The sharp decline in import prices, particularly for oil and commodities, has improved the U.S. terms of trade, defined as an index of the prices of U.S. exports relative to an index of the prices of U.S. imports. An increase in the terms of trade translates into increased purchasing power of U.S. goods in world markets and higher real U.S. income (see Chart 6-5.) A strong dollar and subdued inflation have also supported lower short and long-term interest rates low, benefiting households, firms and other borrowers in the economy.

As discussed in Chapter 2, the continued impact of the Asian crisis on U.S. trade and financial markets is expected to contribute to the moderation in U.S. economic growth -- below the exceptionally rapid pace of the last several years, toward still solid and sustainable levels -- forecast by the Administration in 1999.

## **THE U.S. TRADE AND CURRENT ACCOUNT DEFICITS AND THE DOLLAR**

### **Short-term behavior of the trade imbalance**

In 1998, the differential growth rate of the U.S. relative to its trade partners and the continued appreciation of the U.S. dollar exerted a significant impact on the U.S. trade balance. The U.S. trade deficit rose substantially in 1998, with a \$139 billion deficit on trade in goods and services through October as compared to a \$90 billion deficit in the comparable period in 1997.

**[data to be replaced later by more up-to-date statistics]** Compared to a similar point in 1997, year-to-date goods exports in 1998 are down 0.9 percent. Year-to-date goods imports are up a modest 5.1 percent in 1998 compared to the same period in 1997. Relative to past trends, the decline in exports is the more striking of the two figures. **[data to be replaced later by more up-to-date statistics]**

A large fraction of the increase in the dollar value of the U.S. trade deficit is related to the decline in U.S. exports to Asia; the contribution of import growth to the increased nominal value of the trade deficit has been quite modest thus far. As an indication of the likely effect of the East Asia crisis, the decline in U.S. exports to six East Asian countries (Indonesia, Japan, Korea, Malaysia, the Philippines, and Thailand) in the first ten months of 1998 was \$24 billion to \$30 billion at an annual rate, depending on the seasonal adjustment and timing method used. Korea accounted for almost two fifths of the decline. U.S. imports from these countries have also risen—although these imports have been on an uptrend for several years.

The increase in the trade deficit -- and the negative contribution of increased imports -- is larger when measured in *real* rather than nominal terms because import prices have fallen so that the quantities of goods imported have increased more than their dollar value. The fall in the dollar prices of imports from four Newly Industrialized Economies (NIES) (Korea, Hong Kong, Singapore and Taiwan) amounted to 9.4% between August 1997 and August 1998; the dollar prices of U.S. imports from Japan declined by 5.5% over the same period. Although separate import prices for other Asian crisis economies are not available, their decline was likely yet larger, because the currencies of these countries depreciated against the dollar by even more than

those of the four NIES. In addition to currency depreciations, sharp drops in the global prices of primary commodities have exerted downward pressure on U.S. import prices. Import prices for petroleum products declined 31.8% in August relative to a year earlier; import prices for agricultural goods declined 7.7% relative to the previous year. Despite their overall decline, the prices of U.S. imports from Asia have fallen by a smaller percentage than the exchange rates of these countries vis-a-vis the dollar. Thus, the pass-through from exchange rates to import prices has so far been less than full. Because U.S. export prices have also fallen, the decline in U.S. exports of goods and services was more modest during the first half of the year when measured in real rather than nominal terms.

### **Longer-term perspective on the current account**

International trade has contributed substantially to economic welfare and growth in the United States. Nevertheless, some contend that the large and growing U.S. trade deficit costs American workers jobs, while others argue that it reflects unfair trade practices of our trading partners or signals a loss of U.S. competitiveness in world markets. Although the growing trade deficit has been associated with some sectoral dislocations, job gains in services, information technology, and other non-traded sectors have more than compensated for job losses in manufacturing. Arguments about the adverse consequences of trade deficits are largely misplaced: the rising U.S. trade deficit is primarily a reflection of strong U.S. investment, employment and output growth rather than a symptom of economic weakness.

*The current account as the saving-investment balance*

Unraveling misconceptions about the trade deficit requires an understanding of the trade balance and a closely related concept, the current account balance. A country's trade balance is equal to the difference between the value of its exports -- the goods and services sold by its residents to foreigners -- and the value of its imports -- the goods and services which its residents buy from foreigners. The current account balance simply adds other sources of foreign income and foreign payments to the trade balance. The most important additional items are interest and investment earnings received (paid) on foreign assets (liabilities), and aid grants and transfers. A country's current account balance equals the difference between its national income (the sum of domestic production and the net income received from abroad) and its national spending (the sum of private and public consumption and investment spending). Since national saving is the difference between national income and total consumption, the current account is also equal to the difference between national saving and national investment. If a country's national income exceeds its spending or, equivalently, if national saving exceeds investment, the current account is in surplus. Conversely, if a country spends (consumes and invests) more than its national income, investment exceeds saving and the current account is in deficit.

In order to sustain a current account deficit -- namely, for investment to exceed national saving -- a country must finance it through capital inflows (borrowing) from the rest of the world. A country's current account deficit therefore equals the increase in its net foreign debt (or the decline in its net foreign assets if the country is a net creditor). Conversely, current account

surpluses -- reflecting an excess of saving over investment -- increase a country's net foreign assets.

*Business cycles, long-run growth and the current account*

The argument that current account deficits inevitably cause a net loss in jobs and output conflicts with the empirical finding that rapid growth of production and employment is commonly associated with large or growing current account deficits, while slow output and employment growth is frequently associated with large or growing current account surpluses. Chart 6-6 shows, for example, that the U.S. current account improved during the recessions of 1974-75 and 1991-92, while it declined during the cyclical upswings of 1970-1973, 1983-89, and 1993-1998. This reflects both the decline in import demand during recessions and the cyclical movements of saving and investment. During a recession, both saving and investment tend to fall. Saving falls because households typically defend their consumption patterns in the face of a temporary fall in income; and investment declines because low profits reduce profitable investment opportunities. However investment, which is highly sensitive to the profitability of capital, tends to drop more sharply than saving during recessions. The current account balance thus tends to rise. The trade balance typically improves during a recession because imports tend to fall with overall consumption and investment demand. The converse occurs during periods of boom when sharp increases in investment demand typically outweigh increases in saving, producing a decline of the current account. Of course, factors other than income influence

national saving and investment, so that the tendency of a country's current account deficit to decline in recessions is not ironclad. For example, a switch to a more expansionary fiscal policy beginning in 1980 produced an exceptionally large decline in national saving during the 1980-82 recession. The relation between the current account and economic performance typically holds not only on a short-term or cyclical basis, but also on a long-term or structural basis. Often, countries with rapid economic growth possess structural current account deficits, while those with weaker economic growth possess current account surpluses. This relationship likely derives from the fact that rapid growth and strong investment often go hand in hand. Whether the driving force for growth is the discovery of new natural resources, technological progress leading to opportunities to develop and produce new products, or the implementation of economic reform (like trade liberalization, capital market liberalization, macroeconomic stabilization), periods characterized by high economic growth are likely to be periods in which new investment is also unusually profitable.

Investment must, however, be financed with saving and if a country's national saving (the sum of private and public saving) is not sufficient to finance all new profitable investment projects, the country will rely on foreign saving to finance the excess of investment over national saving, experiencing a net capital inflow and a corresponding current account deficit. The current account deficit is merely the result of thousands of individual firms issuing debt or equity or borrowing from banks to finance investment. As long as the individual investment and financing decisions are sensible, the associated current account deficit should promote, not detract from economic welfare. If the new investment projects are profitable, they will generate

the extra earnings needed to eventually repay the principal and interest owed on the foreign debt.

When current account deficits reflect strong, profitable, investment programs, they work to raise the rate of output and employment growth, not to destroy jobs and production.

Historically, countries in relatively early stages of rapid economic development, such as the U.S., Canada and Argentina in the early part of this century, have enjoyed an excess of investment over saving, running large structural current account deficits for long periods of time.

The same general pattern has held in more recent times: in comparison to their slower growing developed country counterparts, faster growing developing countries have run structural current account deficits whereas the slower-growing mature economies have, on average, experienced surpluses.

The link between current account deficits and growth is also confirmed by a comparison of the U.S. trade balance with those of its G7 partners since the cyclical recovery of 1992 (Charts 6-7 and 6-8). A negative correlation between output growth and the current account, and between employment growth and the trade balance is evident. The U.S. enjoyed the fastest output and employment growth and the largest trade deficit. Conversely, Japan had the second slowest rate of growth of output and the largest trade surplus. Trade surpluses are also the norm in Europe where growth of output and employment has been disappointing. Similarly, unemployment in the U.S. has been low and falling since 1993 while in the 1990s the unemployment rate in Europe has remained high and has been rapidly growing in Japan.

*Budget deficits and the current account*

Although current account deficits are not usually a cause for concern when they reflect strong investment opportunities, they may be a cause for concern if they instead reflect a decline in national saving. Since national saving includes the government's own saving or dissaving, a growing current account deficit can result from rising government budget deficits. Such deficits may be harmful, resulting in an unsustainable buildup of foreign debt, when the government spending they permit is devoted to current consumption rather than productivity-enhancing public investments.

For example, in the late 1970s many developing countries ran large budget deficits, borrowing heavily in world capital markets to finance them, and accumulating large foreign debts in the process. The purpose of this borrowing was in part to support excessive government spending in the face of insufficient tax revenue. By 1982, however, many governments encountered difficulties in repaying interest and/or principal on their foreign liabilities. A severe 'debt crisis' erupted forcing many countries to negotiate a rescheduling of their foreign liabilities to avoid default.

The large current account deficits experienced by the United States during the 1980s, driven by large fiscal deficits, were a matter of concern for this same reason. High budget and current account deficits, the so called "twin deficits", led to high real interest rates, a crowding out of productive investment (as evidenced by the fall in the investment rate after its recovery from the 1982 recession) and a reduction in long-run growth opportunities. Chart 6-9 presents the United States current account deficit, the national and public saving rates, and the national investment rate. By definition, the current account is the difference between national saving and

national investment; this identity, however, is obscured by measurement errors, which have been particularly large in recent years due to a substantial statistical discrepancy between the income- and the product-side measures of GDP. Because of this widening discrepancy, the current account deficit has recently widened in spite of a narrowing gap between official measures of saving and investment.

The chart clearly shows the “twin deficits” of the 1980s: as fiscal deficits increased in an environment of tight monetary policy in the early 1980s, the U.S. dollar appreciated in real terms and the current account moved into substantial deficit. The crowding out of productive investment due to the high real interest rates associated with the fiscal deficit is suggested by the fall in the investment rate between 1984 and 1990. The current account improved during the 1990-1991 recession as the investment rate slumped sharply during the economic downturn.

During the 1990s the Federal budget deficit first declined, then disappeared, and finally turned to surplus in 1998. National saving increased as a consequence, in spite of a decline in the personal saving rate. Even so, the current account deficit has again increased. However, this increased deficit can be viewed as “virtuous” because it has been driven by an even stronger increase in the pace of national investment. The U.S. gross investment rate rose from a low of 12.2% of GDP in middle of 1991 to 16.0% in the third quarter of 1998.

The investment boom enjoyed by the United States since 1993 contributed to expanding employment and output during that period and will provide payoffs for many years to come. It could not, however, have been financed by domestic saving alone: a current account deficit provided the additional capital inflow needed to finance that boom. In the absence of foreign

lending, U.S. interest rates would have been higher and investment would inevitably have been constrained by the supply of domestic saving. Therefore, the accumulation of capital and the growth of output and employment would all have been smaller if the U.S. had not been able to run a current account deficit in the 1990s. Rather than choking off growth and employment, the large current account deficit, perhaps paradoxically, allowed faster growth in the U.S. economy.

#### *The Asian crisis and the current account deficit*

The experience of the Asian crisis countries demonstrates that current account deficits can be dangerous not only when they finance unsustainable budget deficits but also when they finance low profitability investments. As noted in this Chapter, the crisis afflicted East Asian countries all enjoyed high saving rates. Their large current account deficits were attributable to their even higher investment rates. Even so, the build-up of debt deriving from these current account imbalances became unsustainable because, as discussed in Section 3, distortions in the operation of East Asian financial systems led to excessive investment in low profitability projects. Investment driven current account deficits only enhance economic welfare when expected investment returns exceed the cost of the borrowed funds. Throughout the East Asian region the rate of return to capital, while still positive, appeared to be falling in the 1990s signaling a deterioration in the quality of the investment projects.

Moreover, foreign debt must be serviced and, at some point, repaid. Therefore, debtor countries must ultimately run trade surpluses, potentially necessitating adjustments in their real exchange rates. Borrowing in world capital markets is perhaps least problematic when the new

investments it permits augment a country's capacity to produce goods for sale in foreign markets.

In contrast, many Asian countries borrowed abroad to finance commercial and residential investments, producing goods (offices and housing services) that are not usually traded internationally.

### **The U.S. international investment position**

If current account deficits continue year after year, creditor countries eventually become net debtors: every year the stock of net foreign liabilities rises by an amount equal to the current account deficit, ignoring valuation effects. To be precise, because the capital inflows which finance current account deficits can take the form of equity investment, such as foreign direct investment, rather than simply foreign loans, an increase in a country's net foreign liabilities does not automatically, however, translate into an increase in "foreign debt."

The relationship between the U.S. current account and the change in the U.S. net foreign asset position is shown in Chart 6-10. In the 1970s, the U.S. was a net creditor country. However, the string of current account deficits in the 1980s led to a reduction of net foreign assets and eventually, in 1987, turned the U.S. into a net debtor country. Because U.S. current account deficits of the 1980s were primarily driven by fiscal deficits and low national saving rates, the accumulation of net foreign liabilities by the U.S. was greeted with some concern. The large fiscal deficits were financed by government bonds, some of which were bought directly by foreign investors. Since 1993, however, current account deficits have been driven by increases in national investment with foreign financing taking the form of both direct and portfolio

investment (see Chart 6-11 for trends in inward and outward foreign direct investment). At present, U.S. net foreign liabilities amount to a relatively modest 10 percent of U.S. GDP.

### **Policies towards the external imbalance**

Calls for protection from import competition by domestic industries typically increase when the U.S. trade deficit burgeons, as it has since the onset of the Asian crisis. Although the crisis has caused dislocations in some export and import competing industries, jobs remain readily available in the U.S. economy. According to the argument of this section, the growing U.S. trade imbalance primarily reflects strong U.S. investment and growth opportunities in comparison with our trade partners rather than increased barriers to trade in foreign markets. Looked at another way, the crisis countries have been forced to reduce their own current account imbalances due to their sudden inability to finance such deficits through foreign borrowing. The worsening of the U.S. trade balance thus far in 1998 primarily reflects falling exports to these East Asian countries--declines in their imports engendered by the sharp economic contractions those countries have suffered.

The maintenance of open markets by the United States and other industrial countries is essential to the restoration of world economic growth. Higher barriers to trade in the U.S. would not only hinder recovery in Asia and other crisis countries but provoke emulation and retaliation, hampering our own growth prospects. Indeed, it is worth remembering that the Great Depression of the 1930s was exacerbated by a dramatic switch to protectionist policies in the United States and other industrial countries. As the crisis economies recover, their demand for U.S. goods and services will increase as well, once again fueling our own export growth.

## **6. CONCLUSION**

During a period of great turmoil in the global economy the first imperative of the Administration has been to work with the international community to sustain growth in the world economy, a prerequisite for the recovery of the crisis afflicted countries. No country, including the United States, is an island in the world economy. The growth prospects of all industrial nations will suffer unless all do their part. This need has been clearly recognized by the United States and its G7 partners.

The United States remains committed to opening markets to international trade, recognizing that an open trade environment will support the recovery of crisis-afflicted countries and ensure continued growth of the world economy. At the start of his Administration in 1993, President Clinton declared: "The truth of our age is this - and must be this: Open and competitive commerce will enrich us as a nation...And I say to you in face of all the pressure to do the reverse, we must compete, not retreat." Then, as now, the Administration remains strongly committed to such outward-looking, internationalist policies.

Beyond working to ensure growth in the industrial world, the United States has focused since the outset of this crisis on the need to contain financial contagion and restore the confidence of market participants so that capital flows can continue, and on the necessity of promoting recovery and alleviating suffering in the crisis afflicted countries. The Administration has supported the IMF in its mission of providing financial assistance to

countries in crisis that are willing to implement the often tough reforms needed to strengthen the underpinnings of their economies. At the same time the Administration is collaborating with other countries to strengthen the architecture of the international financial system with the goal of enhancing the stability of the international financial system in a world of continued integration of global product and financial markets. These reforms of the international financial architecture are discussed in Chapter 7.

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**[Note to Mike Treadway, editor: Sentences in square brackets may be dropped in the final revision to shorten the chapter]**

## **Chapter 7: The Evolution and Reform of the International Financial System**

### **INTRODUCTION**

The financial problems that began in Asia in the second half of 1997 have exposed weaknesses both in emerging market countries and in the international financial system. In response, the United States has taken steps, jointly with the international community, not only to contain the financial crisis, but also to foster reforms of the international financial system to make it less-crisis prone in the future.

This turmoil followed a robust period of increasing integration of world product and financial markets. The trend toward increasing integration is perhaps best epitomized by the long-anticipated realization of European Monetary Union in January 1999. Even as this historic monetary union takes place, repeated episodes of financial turmoil in the 1990s have generated concern about the possible adverse consequences of financial and monetary integration.

The recurrence of currency and financial crises in the world economy poses major challenges to policy makers. Is the process of financial integration and globalization partly to blame for the observed instability? What are the causes of these recurrent crises, instability, and financial market volatility? Does integration into modern global financial markets require

an increasing loss of macroeconomic policy autonomy? Should free capital mobility be restricted with capital controls? What regime of exchange rates in small countries is best-suited for the new world of global capital mobility? Can the Bretton Woods institutions (the IMF and the World Bank), which were designed for a world of fixed exchange rates and limited capital mobility, still ensure the stability of the international financial system in a radically different environment? What institutional framework best promotes stability for the international financial system? Developing answers to these questions will be critical to efforts to strengthen the stability of the international financial system and ensure that the process of global financial integration will continue to sustain prosperity and growth in the world economy.

Broad international consensus now exists that reforms of the global financial architecture are needed to increase ‘transparency’, namely to improve the availability of information; to strengthen and reform domestic financial institutions; and to improve the mechanisms available to resolve crises that do occur. This chapter starts with a description of proposals that have been advanced in each of these three areas. It then provides an analysis of the next steps to be considered in the redesign of the international financial system. Finally, it considers European Monetary Union, the prospects for the euro as an international currency, and possible implications for the U.S. dollar.

## **1. REFORM OF THE INTERNATIONAL FINANCIAL ARCHITECTURE**

As explained in Chapter I, the international community, under U.S. leadership, responded

to the prolongation of the crisis in 1998 with a series of initiatives in the Fall. Those reforms to the international system designed to reduce the incidence of future crises are referred to as the “new international financial architecture.” The aim is to create an international financial system for the 21st century that captures the full benefits of global markets and capital flows, minimizes the risk of disruption, and better protects the most vulnerable. At the same time the system must promote international financial stability. The work done in 1998 was only the latest stage in an evolutionary process that had been underway for some years.

## **FROM HALIFAX TO THE G22 REPORTS**

A broad debate on the steps needed to strengthen the international financial system was already underway when the Mexican peso was devalued suddenly in December 1994. The ensuing peso crisis gave the debate considerable impetus and pertinence. The annual Summit of G7 leaders in 1995 held in Halifax, Nova Scotia, initiated work in a number of areas. One such area was the need for additional means to achieve an orderly resolution of future financial crises. The Finance Ministers and Central Bank Governors of the G10 countries were asked to review ideas. The G10 established a working party that submitted a report – informally known as the Rey Report, after its chairman – to the ministers and governors in May 1996.

The report noted recent changes in financial markets that, in some cases, have altered the characteristics of currency and financial crises in emerging markets. It indicated that neither debtor countries nor their creditors should expect to be insulated from adverse

financial consequences in the event of a crisis. It also stressed the need for better market-based procedures for the workout of debts when countries and firms are under financial distress. Specific reforms of bond contracts were proposed to encourage the cooperation and coordination of bondholders when the financial distress of a country or corporation requires the restructuring of the terms of a bond contract. It also suggested a review of IMF rules on “lending into arrears” in order to extend the scope of this IMF policy to include new forms of debt. Such rules on “lending into arrears” would allow the IMF to continue lending, in certain unusual and extreme circumstances, to countries that had temporarily suspended debt-serviced payments but continued to maintain a cooperative approach towards their private creditors and to comply with IMF adjustment policies.

A number of important additional innovations came out of the Halifax process: the development of international standards for making economic data publicly available (under the IMF’s Special Data Dissemination Standard); international standards for banking supervision (the so-called Basle core principles for banking supervision); an emergency financing mechanism in the IMF, the Supplemental Reserve Facility, to help members cope with sudden and disruptive loss of market confidence; and the decision to expand the IMF’s backup source of financing under the New Arrangements to Borrow (25 potential participants to the NAB agreed to make loans to the IMF when supplementary resources are needed to forestall or cope with an impairment of the international monetary system, or to deal with an exceptional situation that poses a threat to the stability of the system).

Despite some progress in strengthening the system, the eruption of the Asian crisis in 1997 demonstrated the need to consider important further questions pertaining to the operation of the international system. In November 1997, on the occasion of the APEC (Asian Pacific Economic Cooperation) Leaders Summit in Vancouver, a number of Asian leaders proposed a meeting of finance ministers and central bank governors to discuss the crisis and broader issues. They suggested that the meeting be global, that is, that it should include emerging-market countries, and not just the usual small number of major industrialized countries. President Clinton responded by calling on Secretary Rubin and Chairman Greenspan to convene such a meeting. Finance ministers and central bank governors from twenty-two countries (informally dubbed the G22) thus gathered in Washington on April 16 to explore ways to reform the international financial system that could help reduce the frequency and severity of crises. Ministers and governors created three working groups to consider: measures to increase transparency and openness; potential reforms to strengthen domestic financial systems; and mechanisms to facilitate appropriate burden sharing between the official and private sector in times of crisis. The three working groups of the G22 presented their reports in October 1998 on the occasion of the annual meetings of the IMF and World Bank.

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**Box 7.\_\_: Membership in some steering groups of the international financial system**

The G-7 (including annual summits of national leaders): United States, Japan, United Kingdom,

Germany, France, Italy, and Canada

The G-10 (which has 11 members): Same as the G-7, plus the Netherlands, Belgium, Sweden, and Switzerland

The G-22: Ad hoc group with membership same as the G-10, plus...

The G- (an expanded version that met \_\_, 1998): Same as the G-22, plus...

[Omit: IMF Interim Committee, BIS, OECD...?]

## GREATER TRANSPARENCY AND OPENNESS

There is a broad consensus on the need for greater transparency by the private sector, national authorities and international financial institutions. The Asian crisis made clear anew that it is important for countries to provide sufficient information about macroeconomic and financial conditions. This includes data on the size, maturity and currency composition of external liabilities, as well as accurate and comprehensive measures of the level of foreign exchange reserves. The crisis also underscored the need for countries' private sectors to provide accurate information about the financial accounts of banks and corporate enterprises. Without such information, outsiders are unable to assess adequately the true financial condition of governments and private sector firms. The crisis also made clear the importance of transparency on the part of international institutions themselves, and led to calls for the IMF and other international financial institutions to be more open and transparent about their activities, economic analysis, policy advice and recommendations.

[Automated Records Management System Hex-Dump Conversion]

The report of the G22 working group on transparency and accountability recommended that national authorities publish timely, accurate and comprehensive information on the external liabilities of private financial and corporate sectors as well as their own foreign exchange positions. The latter information would include both foreign exchange reserves and implicit liabilities deriving from government intervention in forward exchange rate markets. It recommended adherence to existing international standards for transparency and agreed that standards in additional areas, including monetary policy and accounting and disclosure by private financial institutions, need to be developed. The report called for better monitoring of countries' compliance with such standards, including through IMF reporting on countries' adherence to internationally recognized standards. It also recommended that a working party be established to examine the potential for greater transparency of the positions of investment banks, hedge funds and institutional investors.

Finally, the IMF and other international financial institutions (IFIs) were called upon to be more open and transparent. Accountability is always important, and unnecessary secrecy would be particularly inappropriate in institutions that are telling others to be more transparent. For example, the report recommended that IFIs adopt a presumption in favor of the release of information, except where release might compromise confidentiality. It also called for publication of program documents, background papers to reports following the regular yearly visit by the IMF to a member state, Public Information Notices (PINS) following

the IMF Executive Board discussion of reports on member countries economic conditions, retrospective program reviews, and other policy papers.

Increased transparency can help prevent the build-up of countries' financial and macroeconomic imbalances. For example, more information concerning the external debt of firms and banks might have limited investors' willingness to lend to such institutions in the first place. Transparency can also induce prompter policy adjustment by governments and help limit contagion by enabling investors to distinguish countries with sounder from those with weaker policies. Nonetheless, transparency alone is unlikely to be sufficient to prevent another major crisis from occurring. In Asia, greater transparency of information about net reserves and offshore liabilities of the financial and corporate systems might well have helped attenuate the crisis. But it is also true that many warning signals, found in data that were widely available, were missed. More is needed than just information.

## REFORMING AND STRENGTHENING DOMESTIC FINANCIAL INSTITUTIONS

As discussed in Chapter 6, financial sector weaknesses in borrowing countries now appear to have been a central cause of the Asian, as well as some previous financial crises.

[Y: I would omit this bracketed part: it is repetitious of Chapter 6. Commercial banks and other financial institutions borrowed excessively from abroad and lent excessively at home, channeling funds toward projects that were not always profitable. Insufficient expertise in the

regulatory institutions led to weak regulation of the financial system, and particularly to lax supervision of banks. Insurance of residents' bank deposits was poorly designed or only implicit. What is termed "connected lending" was widespread: banks and other financial firms in a business group would make loans to other firms in the same group without objectively evaluating or monitoring their soundness. The result was often distorted incentives for project selection and monitoring. All these factors contributed to the build-up of severe structural weaknesses in the financial system. The most visible manifestation was a growing share of non-performing loans. The problem was exacerbated by the increased supply of funds from abroad, the latter in part facilitated by the process of capital account liberalization and financial market deregulation in the region during the 1990s.]

Strengthening domestic financial systems will thus be a central element of ongoing systemic reform. The list of specific measures required is long, and will take years to complete. A partial list of the reforms recommended by the G22 includes:

- strong prudential regulation and supervision of banks and other financial institutions;
- design of explicit and effective deposit insurance schemes to protect bank depositors;
- design and implementation of bankruptcy and foreclosure laws for insolvent firms;
- development of liquid and deep financial markets, especially markets in securities (bonds and equities);
- national implementation of the Basle core principles of banking supervision and of the

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objectives and principles of securities regulation set by IOSCO (the International Organization of Securities Commissions);

- coordination and cooperation among international organizations and international supervisory entities in strengthening financial systems;
- technical assistance for and training of government officials and regulators;
- improvement of corporate governance in both the financial and non-financial sectors, so that investment decisions respond to market signals rather than to personal relationships;
- implementation of efficient insolvency and debtor-creditor regimes that would facilitate workouts for corporations in financial distress. These may include procedures for systemic bank and corporate restructuring and debt workouts.

## **BETTER CRISIS RESOLUTION, INCLUDING APPROPRIATE ROLES FOR THE OFFICIAL COMMUNITY AND THE PRIVATE SECTOR**

While strengthening financial systems may prevent some crises from occurring or make those that do occur less virulent, it cannot be expected to eliminate them altogether. As a result, it is essential to establish means of resolving crises at minimum cost to economic growth without undermining appropriate incentives for prudent private and public behavior.

This very important task constitutes the third and final pillar of the set of international

financial reforms proposed in October by the G22 working groups.

The G22 report identified policies that could help promote the orderly resolution of future crises, including policies and procedures that could facilitate appropriate private sector involvement in crisis resolution. Private sector burden-sharing, i.e. private sector assistance in crisis resolution, is critical. In many crisis circumstances, official money will not be available in large enough quantities. Moreover, the perception that sufficient official assistance will be made available to allow a country to meet all contractual obligations without commensurate commitments from the private sector could distort the incentives of both creditors and debtors. Therefore, appropriate private sector involvement helps to induce market discipline and reduce potential moral hazard problems that might otherwise be associated with official assistance. [JY: Omit this. While the international community will continue to provide assistance -- conditioned on economic reform -- to deal with the problems that gave rise to economic crises, it is important to develop mechanisms to allow the private sector to participate constructively to the containment of crises and their resolution over time.] Constructive ways must be found to “bail in” private investors, rather than bailing them out.

When banks accounted for the majority of international capital flows, troubled debtors could more easily resolve a crisis through joint negotiations with a small number of banks and the international financial institutions. Such negotiations often entailed agreements to

postpone debt repayments (debt restructuring) and/or to reduce the overall value of the obligation (debt write down). However, the recent proliferation of creditor institutions and instruments and the growth of international bond markets has increased the difficulty of coordinating the actions of creditors during a crisis. As a result, troubled debtors may now be more likely to take such highly disruptive unilateral actions such as mandatory debt restructurings and moratoria on repayment of debt. Unfortunately, such unilateral actions can themselves lead to contagion, if they increase investors' concern that other countries may follow similar policies. This might explain why Russia's unilateral debt restructuring in August 1998 produced financial market disruption as far away as Latin America.

Recognizing that new procedures, suitable to modern markets, must be developed to contain and resolve crises, the G22 report includes a number of recommendations.

- **A range of policies to help prevent crises and limit the scope of those crises that do occur.** The report emphasizes the need for countries to limit the scope of government guarantees, including those covering the liabilities of financial institutions, and to make explicit and price appropriately those guarantees which are offered. As discussed in Chapter 6, implicit and explicit governmental guarantees create the potential for moral hazard and encourage excessive risktaking, contributing to the chances of a crisis. The development of liquid domestic bond markets is recommended to avoid excessive reliance on bank-intermediated financing and to allow greater scope for long-term

financing in local, rather than foreign, currency terms. In addition, the report calls for the development of innovative financing techniques to permit increased flexibility in payments, greater risksharing among debtors and creditors, or the assurance of new financing in the face of adverse market developments. For example, debt contracts calling explicitly for repayments that are contingent on the prices of key primary commodities or indices of emerging market risk could provide countries with an automatic reduction in debt burdens in the face of adverse export or financial market developments. In order to provide assured access to liquidity in the event of liquidity crisis, Argentina negotiated contingent credit lines with a number of private financial institutions. The report also stresses the need for countries to implement effective insolvency and debtor-creditor regimes, including bankruptcy, restructuring and foreclosure laws. Workable procedures in these areas are needed to insure the prompt recovery of economic activity following a debt crisis.

- **Measures that could improve creditor coordination in the event of a crisis.**

Following the recommendations of the 1996 Rey Report, the G22 report proposes to include creditor coordination clauses in bond contracts among debtors and creditors. These clauses are designed to create an environment in which all parties – creditors, debtors and IFIs – can work together to reach the best resolution to a crisis.

“Collective action clauses” in bond contracts are needed to overcome the problem

inherent in having a large number of creditors. For example, a clause for the collective representation of creditors (such as the formation of a creditors' committee) can facilitate efficient coordination among a large group of creditors. Also, a "majority action clause" prevents a small minority of creditors from impeding a debt restructuring agreement, by allowing a qualified majority of creditors to alter the payment terms of the debt contract. Currently, most contracts require unanimity to restructure the terms of the contract. Similarly, "sharing clauses" mandate the equal treatment of creditors by imposing a fair division of payments among them. This discourages disruptive legal action and preferential settlements that benefit a few creditors at the expense of others.

- **New methods of crisis management in the extreme case of a temporary suspension of debt payments.** Recent experience (as in Russia in 1998) underscores the fact that suspensions of debt payments and restructuring actions can be highly disruptive, especially if they substitute for policy reform and adjustment. The report argues that a temporary suspension of debt payments (the interest due on bonds and loans and/or repayment of the principal) should not, and normally would not, be undertaken by countries until all other reasonable alternatives have been exhausted. However, such a suspension might nonetheless occur in the event of severe, unanticipated adverse market developments. In these exceptional cases, the report emphasizes the need for countries to rely on orderly and cooperative approaches, rather than unilateral actions, in negotiating the restructuring of contractual obligations. Unilateral actions may entail

significant economic and financial costs.

If a country suspends its debt payments to private creditors, it is technically “in arrears.” The report argues that, in those exceptional cases when a country experiences a severe crisis and a temporary suspension of debt payments cannot be avoided, the international community and private creditors still have an interest in providing countries with incentives for strong and sustained policy adjustments and structural reforms. It therefore suggests that the international community can signal its conditional willingness to provide financial support, under appropriate conditions, even if the country has imposed a temporary payments suspension. Official support should be provided only if the decision to suspend payments reflects the absence of reasonable alternatives, if the government is willing to undertake strong policy adjustment, and if the government is engaged in good faith efforts with creditors to find a cooperative solution to the country’s payments difficulties. An IMF policy of lending to a country that has suspended payments and has not yet cooperatively restructured its debt with private creditors is referred to as IMF “lending into arrears”.~~[JY--Omit this material.~~ Under these circumstances, to insist that a country clear up its arrears as a prerequisite for becoming eligible for IMF funding, might amount to an attempt to minimize the burden on creditors, at unreasonable cost to the debtor.]

- **Measures to help facilitate prompt and orderly workouts of external debt.**

**Nouriel: I don't understand what this section is about. Is this just related to external debt, as the title suggests, or is it about domestic lending as well? This is extremely confusing.**

Although national insolvency regimes (such as bankruptcy and corporate restructuring laws) are intended to provide an appropriate legal and institutional framework for the restructuring of corporate debt, corporate sector crises, as in Asian crisis, may occasionally achieve sufficient scale as to threaten the solvency of the entire financial system of a crisis country. Several measures can be undertaken to facilitate the orderly workout of external debt. One such measure is available in domestic insolvency regimes --such as corporate restructuring under the U.S. Chapter 11 -- that allow firms under financial distress to obtain new, senior credits to assure their ongoing operations during the restructuring of their debt. (Seniority means that the new lenders will be first in line to get repaid. Without such assurance they are unlikely to come forward.) Analogously in the international context, the report suggested that means of encouraging the private sector to provide new credits, in the event of a debt crisis or suspension of debt payments, should be considered. Otherwise, loans for basic purposes such as working capital for production and exports can become unavailable. Moreover, the government may also need to develop a framework for encouraging out-of-court negotiations between private debtors and their creditors. [Such a framework might include: (i) the establishment of creditors' committees; (ii) the removal of country-specific legal and regulatory obstacles to debt restructuring; and (iii) in certain extreme cases, the establishment by the

government of exchange rate insurance schemes to reduce the foreign exchange rate risk borne by firms. These schemes could also be designed to provide incentives for firms to restructure their outstanding foreign currency liabilities.] Moreover, international support can also be harnessed to support restructuring efforts. For example, one goal of the Asian Growth and Recovery Initiative recently launched by the U.S. and Japan is to support implementation of more comprehensive and accelerated restructuring of banks and corporations in the crisis-afflicted countries in Asia.

Implementation of the international financial architectural reforms proposed in the G22 reports will take time. But they also promise to reduce the likelihood of future crises and the severity of those that do occur. For its part, the G7 strongly signaled its commitment to begin implementing some reforms in its October 30 Declaration, a subject considered next.

## **[ADOPTION OF MEASURES TO REFORM THE INTERNATIONAL FINANCIAL ARCHITECTURE]**

Considering the work of the G22 reports and following detailed discussions, including with officials from other industrial and emerging market economies, the Finance Ministers and Central Bank Governors of the G7 countries agreed, in a statement issued on October 30, 1998, on specific reforms to strengthen the international financial system. In the words of their communique, they

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*agreed to carry these forward through our own actions and in the appropriate international financial institutions and forums. These reforms are designed to: increase the transparency and openness of the international financial system; identify and disseminate international principles, standards and codes of best practice; strengthen incentives for countries and economic agents to meet these international standards; and strengthen official assistance to help developing countries reinforce their economic and financial infrastructures. They also include policies and processes to ensure the stability and improve the surveillance of the international financial system. Finally, they aim at reforming the International Financial Institutions, such as the IMF, while deepening cooperation among industrialized and developing countries. ]*

## **2. FURTHER STEPS TO STRENGTHEN THE INTERNATIONAL FINANCIAL ARCHITECTURE**

In its October 30 statement, the G7 committed to a number of reforms consistent with the recommendations of the G22 working groups as well as a great deal of additional analysis and research. The G7 also stressed the need for the international community to widen its efforts to strengthen the international financial system. The G7 thus committed to initiate further work on a number of other important areas to identify additional concrete steps to strengthen the international financial architecture. These include:

- examining the additional scope for strengthened prudential regulation in industrial countries.
- further strengthening prudential regulation and financial systems in emerging markets.

- developing new ways to respond to crises, including new structures for official finance and new procedures for greater private sector involvement in crisis resolution.
- assessing proposals for further strengthening of the IMF.
- seeking to minimize the human cost of financial crises and encouraging the adoption of policies that better protect the most vulnerable in society.
- consideration of the elements necessary for the maintenance of sustainable exchange rate regimes in emerging markets.

Each of these steps poses a number of issues and challenges. Many of these are inter-related and are addressed in the sections below.

## **STRENGTHENED PRUDENTIAL REGULATION AND SUPERVISION IN INDUSTRIAL COUNTRIES**

The crises of the past year have revealed some gaps in the international regulatory infrastructure promoting financial stability and overseeing national financial systems. Global financial integration has led to a proliferation of financial institutions making cross-border financial transactions, the emergence of off-shore financial centers and hedge funds, and the development of a wide range of derivative instruments. In this new environment, investors may underestimate risks during periods of market euphoria, and thus contribute to an excessive build-up of exposures during the upswing.

Such developments pose significant challenges to financial regulators and supervisors. Creditors and investors in industrial countries need incentives to act with greater discipline, i.e., to analyze and weigh risks and rewards appropriately in their lending and investment decisions. Thus, there is a more urgent need to examine the scope for strengthened prudential regulation and supervision in industrial countries. Three aspects of these regulatory challenges are explored below.

### **Enhanced international financial supervision and surveillance**

While, traditionally, supervision and regulation of financial systems have been *domestically*-based, the increased global financial integration and the proliferation of institutions doing cross-border transactions suggest the need for enhanced *international* financial supervision and surveillance. Accordingly, appropriate supervisory regimes for the international financial system need to be devised. Better national and international procedures are needed to monitor and promote stability in the global financial system. **Nouriel: Are these Administration views, G-7 views or G-22 views? This needs to be clarified in what follows.**

The International Financial Institutions, working closely with international supervisory and regulatory bodies, need to conduct surveillance of national financial sectors and their regulatory and supervisory regimes with all relevant information accessible to them. Processes of peer review could be utilized in conjunction with the IMF's regular surveillance of its member countries.

Although good financial supervision must start at the domestic level, international

institutions and national authorities involved in financial sector stability must work jointly to foster financial stability and reduce systemic risk. They will need also to exchange information more systematically on the risks that exist in the international financial system. In this regard, the design of a policy-oriented forum including finance ministries, central banks and securities regulators from the major G7 countries, key emerging markets, relevant international organizations and international financial institutions would be useful.

### **Strengthened bank capital regulation**

At the heart of the issue of bank regulation are banks' capital adequacy standards. As discussed in chapter 6 (see Box 6-5), banks may have an incentive to make excessively risky investments, since much of the cost of failure may be borne by either depositors or the government. To mitigate this tendency, banks are required to hold a certain amount of their own capital in reserve against the loans they make.

That many banks are currently active on a global scale leads to good reasons for international bank capital standards. First, globally active banks headquartered in countries with low requirements would otherwise be at an advantage with respect to those headquartered elsewhere. In addition, by virtue of their global scale, the impact of global bank failures would likely extend well beyond national borders.

The 1988 Basle Capital Accord (named after Basle, Switzerland where representatives of industrialized-country central banks meet regularly) established an international standard by recommending that globally active banks maintain capital equal to at least 8 percent of their

assets. In addition, the Accord sought to distinguish between more and less risky assets, and required that more capital be held against investments with greater risk. As a result, the Accord called for banks to maintain capital equal -- not to 8 percent of their *total* assets -- but to 8 percent of their *risk-weighted* assets. Safe government bonds or cash, for example, receive a zero weight in calculating aggregate risk exposure, while long-term lending to emerging markets banks receives a 100% weight. Such minimum capital standards were meant to work in conjunction with direct supervision of banks and basic market discipline to restrain excessive risk-taking by banks with access to the safety net.

Even at the time of their adoption, it was recognized that the standards called for in the Accord might need to be reviewed and strengthened in the face of developments in the international financial environment. Effective capital regulation is an evolutionary process and the standards have already been improved in a number of ways in the decade since their initial adoption. However, some shortcomings of the system have become more apparent as a result of recent developments. First, the risk weights mirror only crudely the actual risk associated with different types of bank assets; moreover, a number of financial innovations have made it easier for banks to assume greater risk without being subject to increased capital charges [, contrary to the intent of the Accord]. Second, traditional assessments of credit risk might fail to account for some extreme circumstances. Third, current standards may have encouraged banks in developed countries to make short-term rather than longer-term loans to banks in emerging markets, since risk weights on the former assets are lower than those on the latter. Recent experience, however, suggests that short-term cross-border interbank flows are in fact subject to greater volatility. A fourth shortcoming concerns the treatment of off-balance sheet items such as derivative

positions, committed credit lines, and letters of credit, which create new types of risk that current standards inadequately address. These off-balance sheet items, like bets on football games, are not assets and are thus recorded “off balance sheet.”

Stock in a football team, on the other hand, is an asset and is recorded “on balance sheet.” Nevertheless, both pose risks.

Finally, different standards of regulation may be appropriate for sophisticated international banks than regional or community banks.

The task of improving further the Basle Capital Accord has just started. No consensus has yet emerged concerning reform of bank capital regulation. But it is likely that a strong and effective system of bank regulation will need to rely on several components: strengthened capital standards; improved internal risk-management controls in banks, including greater reliance on banks’ own models of risk assessment; and increased reliance on market discipline. [For example, a useful approach may be value-at-risk models, already used internally by some banks. These are sophisticated models that consider the risk and correlation of returns on all the assets and liabilities of a bank to derive a measure of market risk in a bank’s portfolio (i.e, how much a bank may lose because of a change in prices of assets and liabilities). However, such models can be improved by testing them for their robustness to a range of different kinds of stress in order to assess the many other risks faced by banks in addition to market risk. In fact, extreme market conditions and financial crises create additional risks (such as credit risk, counterparty risk and liquidity risk) that traditional models of the type and distribution of risks cannot assess well.] For example, market discipline over risk-taking by banks could be strengthened by requiring banks to issue subordinated debt equal to a specified proportion of their risk-weighted assets. Since holders of subordinated debt receive payments only paid after more senior claims are

satisfied, the holders of such debt would have a strong incentive to monitor the risk taking behavior of banks issuing it. In this sense, market discipline could be used to complement direct regulation. The price of traded, subordinated debt would also serve as a signal to regulators of the markets' perception of financial soundness.

A broad debate is certain to be waged on the issue of how to provide effective capital regulation of banks in the globalized environment in which they now operate. The Basle standards were designed for G10 banking institutions, but the proliferation of financial institutions in emerging markets poses the question of whether the same standards adequately address the risks faced by institutions operating in emerging markets. One proposal is to restrict access to major financial centers to banks that -- not only meet the usual specific regulatory requirements -- but also reside in countries with adequate bank supervision. The purpose would be to help limit the risks deriving from the activities of developing-country banks, as well as to encourage good supervision in their home countries. This proposal is controversial, however, as emerging economies may perceive it as limiting competition and stunting their ability to develop their own banks and other international financial institutions. To address these concerns, these new standards will have to be developed by an appropriately diverse group of national authorities.

The rapid development of derivative instruments and their widespread use in international financial markets poses another host of difficult regulatory issues. Derivatives are contracts that are written in terms of the price of an underlying asset, such as options or futures contracts written in terms of stock prices.

Derivatives can be used to hedge risks and thus have been very useful in risk-management by banks, other financial institutions, and corporate firms. However, they can also be used for taking

speculative positions (increasing risk rather than decreasing it). Moreover, the fact that derivative positions are recorded off-balance sheet makes it more difficult for the market and regulators to assess their contribution to the risks taken by the institution using them. If the creditworthiness of the counter-party is uncertain, firms or banks who believe they are hedged (e.g. against currency risk) may effectively not be.

A difficult issue concerns the type of regulatory oversight that should be put in place for derivative instruments. For example, excessive regulation of derivatives could lead the derivative business to move to unregulated offshore markets. The Administration is currently undertaking a long-term study of over-the-counter derivative instruments, including their potential risks and effects. This study will review recent market developments and existing regulation, and consider what regulatory or legislative changes may be appropriate. It will investigate possibilities for reducing systemic risk and eliminating legal uncertainty. It will also assess the potential use of derivatives for fraud or manipulation, and methods for curtailing regulatory arbitrage, i.e., the situation in which market participants seek to exploit differences that exist in regulation among different jurisdictions.

### **Issues posed by hedge funds and other highly-leveraged investment funds**

Hedge funds represent a relatively recent innovation in the financial markets. The near-failure of a prominent hedge fund (LTCM -- Long Term Capital Management) in September 1998 focused renewed attention on the role and activities of hedge funds and other highly leveraged entities.

It is challenging enough simply to define "hedge fund" in a precise way. The label is usually applied to investment funds that are unregulated because they restrict participation to a small number of wealthy investors (see Chapter 2 for a broader discussion of their activities). [They generally use sophisticated techniques to make very targeted investments. In addition, some of them use significant "leverage" -- that is, they make investments not only with their own funds but with sizable amounts of borrowed funds as well.]

The impact of hedge funds and other highly leveraged entities on financial markets certainly needs to be better understood. Accordingly, Treasury Secretary Rubin has called upon the President's Working Group on Financial Markets to prepare a study of the potential implications of the operation of firms such as hedge funds and their relationships with their creditors. A primary concern for regulators is that lenders manage the risks associated with extending credit to hedge funds appropriately. Regulation of the hedge funds themselves may not be easy or even appropriate. Regulation might, for example, lead such funds to move to unregulated offshore markets, in the same way in which the Eurocurrency markets in the 1960s emerged to get around regulation of U.S. financial markets.

The Administration-commissioned hedge fund study will examine a number of issues including questions relating to the disclosure of information by entities such as hedge funds and the potential risks associated with highly leveraged institutions. The study will examine whether the government needs to do more to discourage excessive leverage and, if so, what the appropriate steps might be. A number of the Working Group agencies are also participating in several studies on the international aspects of these questions.

[ The hedge fund study is just one example of a concrete initiative consistent with the G7's commitment to further the work of the three Working Groups and strengthen prudential regulation and supervision in their own financial systems. In its October 30 Declaration, the G7 governments also committed themselves to make progress on additional fronts. In their own countries, they pledged to investigate both the adequacy of risk management systems in financial institutions and existing prudential standards, and the efficacy with which they are monitored and enforced. The G7 also agreed that appropriate means should be sought to encourage off-shore centers to comply with internationally agreed standards, and called upon other countries that participate in the global capital markets to take similar action. Finally, the G7 also called for the BIS (Bank for International Settlements), in conjunction with national authorities, emerging market countries, and other relevant private and public sector bodies, to examine the question of appropriate transparency and disclosure standards for private sector financial institutions involved in international capital flows, such as investment banks, hedge funds and other institutional investors.]

**STRENGTHENING PRUDENTIAL REGULATION AND FINANCIAL SYSTEMS,  
ENSURING ORDERLY LIBERALIZATION OF CAPITAL FLOWS,  
AND IMPROVING ECONOMIC POLICIES IN EMERGING MARKETS**

The recent Asian financial crisis has focused attention upon a wide variety of financial policies, both international and domestic in scope. Considering the central role played by

financial sector weaknesses in the crisis (see Chapter 6), the case for re-examination is particularly strong in the case of emerging markets. Accordingly, the second area for further work called for by the G7 is the identification of concrete steps to further strengthen prudential regulation and financial systems in emerging markets. Clearly, this is an ambitious undertaking, and will require a vast number of issues to be considered and challenges to be overcome. Some of the most significant are addressed in the sections below.

Some nations have apparently been tempted to turn inward as a result of the financial crisis. Instead of facing the challenges of strengthening their financial institutions, a few have in effect decided to eschew the benefits of international capital flows. The arguments for free capital mobility are numerous, however, especially when domestic financial systems are strong and properly supervised and regulated. First, with unrestricted capital mobility, the market is free to allocate saving to the best investment opportunities. Investors can earn a higher rate of return abroad than they could if limited to the domestic market. Second, firms and other borrowers in high-growth countries can obtain funds more cheaply abroad than if they had to finance their investments at home. Third, free capital mobility allows investors and households to diversify risks and to have access to a larger pool of assets; the benefits of portfolio diversification are enhanced by access to foreign investment opportunities. Fourth, the scrutiny of global investors can provide an important discipline on policy-makers. Well-functioning capital markets can discourage excessive monetary and fiscal expansion, since inflation, budget deficits and current account deficits quickly lead to reserve outflows and currency depreciation.

Logically, a case for restricting capital mobility requires the identification of distortions in the

market allocation of capital.

### **Increasing the Resilience of Financial Systems**

Nonetheless, international capital inflows can reverse suddenly, and openness potentially makes emerging economies more vulnerable such reversals. As a result, policies to increase the resilience of financial systems need to be identified. These include effective prudential regulation and supervision of financial markets. The G7 has suggested investigating concrete means of encouraging emerging economies to adopt international standards and best practices. In addition, countries could potentially reduce financial system vulnerability by: encouraging greater participation in their markets by foreign financial institutions; developing a better credit culture in the banking system; and relying more on equity and other financing that does not result in the build-up of excessive debt burdens. This includes efforts to develop local/regional capital markets.

### **Orderly liberalization of capital flows**

Most emerging economies have historically had heavily restricted capital markets. One result of the recent crisis is a growing consensus that capital market liberalization needs to be carried out in a careful and well-sequenced manner if countries are to benefit from closer integration into the global economy. As noted above, the benefits of free capital flows are numerous. The United States and most other leading industrial countries, for example, do well without capital controls. As discussed in Chapter 6, if domestic financial systems are weak, poorly regulated and subject to institutional distortions, however, rapid capital account liberalization can lead to excessive short-term borrowing and lending, and a mismatch of maturities and currency

denominations of assets and liabilities of financial institutions and corporate firms. Such tendencies have proven to be destabilizing in the many episodes of financial and currency crises. Effective regulatory and supervisory regimes must be in place and the financial sector must be poised to deal adequately with these risks as the capital account is liberalized. International financial institutions should play a constructive role in facilitating this orderly opening of the capital account.

It may prove useful to develop principles to help guide countries that are liberalizing and opening their capital markets so as to help reduce the vulnerability of their financial systems to sudden shifts in capital flows. Possible measure could include, for example, an open policy to foreign direct investment and promotion of longer-term equity financing. Conversely, it might be beneficial to discourage cross-border short-term interbank flows, which are likely both to be volatile and vulnerable to distortions arising from financial safety nets. There is now some support for a prudent management of these flows, at least within the sphere of prudential banking regulation.

#### **Prudential regulation of short-term interbank cross-border inflows**

One approach to ensure the stability of short-term cross-border interbank flows is through enhanced prudential banking standards. On the borrower side, a range of possible measures could be considered to help discourage imprudent foreign currency borrowing, while relying on market mechanisms to the extent possible. Prudential bank standards, such as limits on a bank's open foreign currency positions, if enforced effectively, could reduce the riskier kinds of foreign borrowing by banks. Some countries have experimented with regulatory requirements that force their banking systems

to maintain “liquidity buffers” to protect against the risk of sudden shifts in funds out of the banking system. Argentina, for example, has required banks to maintain large, liquid reserves against their short-term liabilities, including their short-term foreign liabilities.

More prudent short-term cross-border interbank flows could also be encouraged on the lender side, i.e., via the banks in the industrial countries. As already noted, current Basle capital adequacy standards provide incentives to lending banks in developed countries to prefer short-term to long-term loans to banks in emerging markets, since risk weights on short-term loans are lower than those on supposedly “more risky” long-term bank loans. Some have suggested adjusting risk weights on such loans to encourage more careful bank lending to emerging market entities that operate in weak financial systems.

#### **Broader controls on all short-term capital inflows?**

More controversially, some have suggested wider use of market-based, Chilean-style restraints on all short-term capital inflows to deter short-term foreign borrowing, not just via banks but by other means as well. Corporate firms are reported to have undertaken large-scale risky cross-border borrowing directly, rather than via the banking system, leading up to the crisis in Southeast Asia, for example. It has been argued, e.g., in support of Chile’s approach, that regulation on inflows to banks alone will lead to evasion through corporate borrowing. Controls on general inflows have also been said to help in the management of monetary policy when surges in inflows create difficult problems (how to “sterilize” their impact, avoiding an inflationary surge in the money supply).

The effectiveness of such controls has been questioned. Evasion and leakages tend to make capital controls less effective over time. Also, the apparent success of Chile may have been due more to the very effective prudential regulation and supervision of the financial system than to capital controls. Finally, such controls have favored large

corporations (who are more capable of raising funds directly in international financial markets) at the expense of small and medium ones.

The available empirical evidence from countries that have imposed controls on a broad range of short-term capital inflows shows that they do appear to have affected the composition of inflows (away from short-term maturities and towards the longer-term, and towards foreign direct investment), even though they do not appear to have affected the overall volume of capital inflows. Some argue that, if the rationale for controls is to reduce particularly risky short-term borrowing, the evidence can be seen as supportive. Opponents of such controls point out that, during the recent financial turmoil, Chile, Colombia and Brazil have all reduced their controls in order to stimulate urgently needed capital inflows and reduce pressures against their currencies. Proponents of Chilean-style controls reply that these moves do not undermine the rationale of slowing down short-term capital inflows temporarily during a cyclical phase where such inflows are feared to be excessive, in contrast to the crisis or outflow phase of the cycle where it is sensible to remove the controls.

Evidence is not only mixed, but preliminary and based on the experience of a limited set of countries. Given the numerous arguments against them, policies to restrict all short-term inflows remain quite controversial.

#### **Controls on capital outflows**

In the aftermath of the Asian crisis, some have suggested that countries should introduce controls on capital outflows as a way to prevent “destabilizing” capital flight. One argument presented in their favor, for example in East Asia currently, is

that they could help to stimulate growth by allowing lower interest rates. When the degree of capital mobility is high, a reduction in interest rates leads to capital outflows, and in turn to currency devaluation. Like high interest rates, currency depreciation can be recessionary because of the high burden of foreign currency debt. Capital controls therefore have been advocated to break the link between interest rates and exchange rates, allowing lower interest rates *without* the costs of a currency devaluation.

However, many arguments against capital controls in a crisis have been advanced. First, controls on outflows are often in practice administered in institutional frameworks in which they are used to extract rents and delay necessary reforms. Elaborate foreign exchange controls lead to rent-seeking behavior and corruption, and distort international trade. Over time, investors often find ways to avoid them. Moreover, capital controls may divert attention from the need to address policy distortions that lead to excessive borrowing, such as inadequate prudential supervision and regulation of the financial system. Reliance on targeted controls might also lead countries to use capital controls indiscriminately, thus insulating unsound macroeconomic policies from the discipline of the marketplace. Capital controls and other restrictions domestic capital market restrictions also serve as a form of financial repression -- a distortionary type of taxation -- that reduces the incentive to save. Studies show that capital controls in Latin America in the aftermath of the 1980s debt crisis led to negative real interest rates that eventually provoked more flight of capital out of the country rather than less. Finally, controls on outflows may discourage capital *inflows*, since foreign investors fear they may not be able to repatriate the proceeds of their investments in the future. And fears of controls on capital outflows can accelerate a crisis, rather than postponing it, and can lead to perverse international contagion. In

this regard, it has been suggested that the news of capital controls in Russia and Malaysia in August 1998 was a factor in the spread of financial panic to Latin America and the other emerging markets.

Moreover, if the goal is to allow a reduction in interest rates in the context of Asia today, it should be recognized that interest rates have already fallen substantially relative to the peaks of the crisis. (By the second half of 1998, they were back to pre-crisis levels in Korea.) However, in spite of interest rate reductions, severe distress of many financial institutions, combined with widespread corporate debt problems have produced credit crunches. Capital controls and lower interest rates would do little to promote lending in this situation.

### **Improving macroeconomic and other policies in emerging markets**

In addition to policies needed to strengthen financial systems, a number of policies are needed in developing countries to enhance financial stability, foster long-term economic growth and limit vulnerability to shifts in global capital:

*Sound macroeconomic policies.* Countries need consistent monetary and exchange rate policies and fiscal policies that avoid excessive accumulation of government debt.

*Prudent public debt management.* Although short-term borrowing, in foreign currency terms, can be very appealing to a government because it is cheaper and often easier in the short-run, too much of this kind of borrowing makes countries vulnerable to sudden shifts in investor confidence. Sound debt management is important to insure against the risk of market disruptions.

*Stronger legal infrastructure.* The Asian crisis demonstrated that for private markets to work effectively, better financial regulation is not enough. There must also be clear and enforceable bankruptcy laws, for example, so that a crisis in a single bank or company can be dealt with before it spreads. In addition, sound corporate governance and strong judicial systems are needed, so that investors' and shareholders' rights are clear, and laws in these areas can be clearly enforced.

## **NEW WAYS TO RESPOND TO CRISES, INCLUDING NEW STRUCTURES FOR OFFICIAL FINANCE AND NEW PROCEDURES FOR GREATER PRIVATE SECTOR INVOLVEMENT IN CRISIS PREVENTION AND RESOLUTION**

The recent global financial turmoil points to the need to develop new ways for the international community to respond to crises. This entails exploring the possibilities of new structures for official finance that better reflect the evolution of modern markets. It also includes examining new procedures for coordination of the relevant international bodies and national authorities, alongside greater participation by the private sector.

Any regime for crisis response must involve some combination of financial assistance and policy changes. The provision of large-scale official international finance raises difficult questions concerning the criteria that should govern access to such assistance, appropriate terms, the links, if any, to private sector involvement, and the sources of funding.

### **The logic of a precautionary facility**

In their October 30 statement, the G7 called for an enhanced IMF facility to allow large-scale international assistance in the form of a precautionary lines of credit, as opposed to traditional packages that are highly tranching (i.e., disbursed in successive rounds to keep borrowers on [a short leash of] strict policy conditionality). The rationale for a precautionary facility available to countries with sound economic policies which may be subject to attack is based on the possibility of “international bank runs” [, analogous to, but more complex than, domestic bank runs of the sort discussed in Box 6-5 in Chapter 6].

An international bank run can occur if many bank depositors -- both foreign and domestic -- simultaneously seek to exercise their claims on financial institutions’ foreign currency holdings. In such an event, a rapid loss of reserves and strain on the exchange rate is likely. In a domestic context, deposit insurance and the general “lender of last resort” role played by central banks are aimed at preventing self-fulfilling bank runs. However, such insurance creates moral hazard: if banks’ deposits are insured and/or liquidity support is guaranteed in the case of a run, banks will have an incentive ex ante to make risky loans that they would not make in the absence of insurance. The solution to this problem is strong capital adequacy standards and prudential supervision and regulation of banks.

In the international context, the expected provision of official liquidity may also lead to distorted incentives: expectations of official emergency financing may cause international investors to lend carelessly and domestic governments to engage in risky policies. Moral hazard in the domestic context can be mitigated if insolvent banks can be distinguished from illiquid ones. Analogously in the international context, precautionary financial support should ideally be

given to countries with good policies who are innocent bystanders in episodes of contagion and withheld from countries with weak policies. Drawing this distinction is even more difficult among countries than among banks. In practice there is a spectrum of crises, from those that stem primarily from poor policies to those that stem primarily from contagion. Most fall somewhere in the middle.

Just as there is a role, at times, for the government to intervene to prevent a domestic financial crisis from destabilizing the domestic financial system, so there is a role for the international community to intervene in an international financial crisis to help limit contagion and global instability, when appropriate. The current crisis has demonstrated that the official community needs, at times, to be able to provide large financing packages to quell potential contagion and instability. Congress' agreement in 1998 to support an increase in the IMF quota will -- highly leveraged by means of the waiting contributions of other countries -- provide the IMF with an important pool of new, uncommitted funds.

It may make sense in today's world of large and sudden liquidity needs for more official money to be available up-front in return for more up-front policy changes. In their October 30 Declaration, the G7 agreed that, in response to the current exceptional circumstances in the international capital markets, strengthened arrangements for dealing with contagion are needed. The central element would be the establishment of an enhanced IMF Facility that would provide a contingent short-term line of credit for countries pursuing strong IMF-approved policies, i.e., those cases where problems stem more from contagion than from poor policies. This facility could be drawn upon in times of need and would entail appropriate interest rates along with

shorter maturities. The facility would be accompanied by appropriate private sector involvement.

### **Continued need for greater private sector participation**

As described earlier in this chapter, The G22 Working Group report on international financial crises pointed to the need for future work to develop new procedures for orderly and cooperative crisis resolution. The G7 has called for similar work as part of the next steps identified in its October 30 Declaration. Old methods of crisis resolution were developed in a world dominated by banks. There is now a need to develop innovative ways for holders of new financial instruments to participate constructively in crisis containment and resolution. This is one of the key challenges going forward. Pre-negotiated contingent credit lines (such as those negotiated by Argentina with commercial banks) and financial provisions that provide greater explicit sharing of risk between creditors and debtors are two avenues worth exploration.

### **IMF REFORM**

Proposals for strengthening the IMF, so as to improve its country programmes and procedures in crisis prevention and resolution, need to be assessed. This goes as well for proposals to strengthen the Interim Committee, in effect and IMF steering committee composed of representatives of member governments, and the Development Committee, which plays the analogous role for the World Bank.

### **MINIMIZING THE HUMAN COSTS OF FINANCIAL CRISES**

The sharp recessions in East Asia have led to a steep increase in both the unemployment and poverty rates in that part of the world, inflicting severe social costs. Thus strengthening social safety nets in crisis countries is also an important goal of stabilization packages. Ways must be found to minimize the human cost of financial crises and encourage the adoption of policies that better protect the most vulnerable in society.

More attention must be given in times of crisis to the effect of economic adjustment on the most vulnerable groups in society. The World Bank should develop as a matter of urgency general principles of good practice in social policy, in consultation with other relevant institutions. These should be drawn upon in developing adjustment programmes in response to crises.

## **SUSTAINABLE EXCHANGE RATE REGIMES FOR EMERGING MARKETS**

Exchange rate regimes vary in the degree of rigidity. There are more choices than simply “fixed” vs. “floating.” They range from institutional arrangements like monetary unions, dollarized regimes, and currency boards, to conventional fixed exchange rates, crawling pegs, basket pegs, managed floats, and free floats.

There is no single exchange rate regime that is best for all countries at all times; rather the choice must be based on a country's circumstances. Exchange rate regimes are institutional choices that signal policies, priorities, and commitments. Given that large fluctuations between the currencies of major countries economies are likely to continue, that many emerging markets have extensive trading

ties to a number of major industrial economies, and that the credibility of the policy environment in many emerging markets will take time to establish, the choice of an appropriate exchange rate for emerging markets economy is particularly difficult. No matter what exchange rate a country chooses, it is critical that it be backed by strong financial regulation and appropriate monetary and fiscal policies. Macroeconomic stability is based on good policies, irrespective of the exchange rate regime.

Policy mistakes that contribute to a currency crisis can occur in the context of any exchange rate regime.

The three goals of financial market openness, monetary policy independence, and exchange rate stability are not conceptually consistent -- a general principal known as the "impossible trinity". In other words, a country can attain any two out of the three, but not all three; it must give up at least one. As we have seen, most countries have moved in the direction of increasingly open capital markets. This sharpens the choice between the other two goals. With perfect capital mobility, a country choosing a fixed exchange rate loses its ability to pursue an independent monetary policy; conversely, autonomous monetary policy can be pursued only if the exchange rate is allowed to move flexibly. Therefore, a choice must be made between exchange rate fixity and monetary policy autonomy if free capital mobility is to be maintained.

### **Benefits of fixed exchange rate regimes**

Why would a country choose to fix its exchange rate, if it must give up its monetary independence to do so? There are a variety of reasons.

By eliminating exchange rate risk, a fixed exchange rate regime may encourage international trade and finance. However, the evidence on the effects of exchange rate stability on trade volumes is mixed. The effects on trade and finance may be greater if a country goes beyond fixing its exchange rate and literally adopts the currency of a neighbor (monetary union or dollarization). The advantage of eliminating exchange rate volatility may look especially attractive to the extent that large market movements appear on occasion not to be founded on economic fundamentals.

Another potential benefit of fixed rate regimes is that they can provide monetary discipline. The loss of monetary autonomy under fixed exchange rates limits the ability of monetary authorities to pursue excessively expansionary and inflationary monetary policies. Relatively rigid fixed exchange rates can be an important signal of policy commitment to achieving and maintaining low inflation, especially when countries are seeking rapid disinflation from conditions of high inflation or hyperinflation, as part of a consistent plan for macroeconomic stability.

In some cases, fixed rates may contribute to greater fiscal discipline: reducing the ability of monetary authorities to monetize fiscal deficits may restrain tendencies to have loose fiscal policies. Adopting a fixed exchange rate does not, however, automatically provide policy discipline. Instead, adopting a fixed exchange rate and/or a currency board requires fiscal discipline and a strong financial system to be credible.

Currency boards, an extreme form of fixed exchange rates, may help to prevent currency

crises, under certain conditions. (See Box 7-1 for a definition and discussion of currency boards.) But they limit the ability of the monetary authority to perform its function of lender of last resort if bank runs occur, an issue that is exacerbated when a fraction of the liabilities of the banking system is denominated in foreign currency. Strong financial systems with well-supervised banks (such as those in Hong Kong and Argentina) are thus important conditions for a successful currency board.

### **Benefits of exchange rate flexibility**

Exchange rate flexibility has several benefits. Most succinctly, as already noted, it allows monetary independence. Flexible rate regimes permit more macroeconomic policy flexibility than more rigid exchange rate regimes. They can allow a country to pursue a different monetary policy than that of its neighbors, as it might want to do, for example, when it is at a different stage of its business cycle. In addition they can facilitate a country's adjustment to external shocks. Examples of such shocks are the swings in capital flows and terms of trade shocks that have been factors in recent crises.

Fixed exchange rates may undesirably reduce the perceived risk of foreign currency-denominated borrowing by banks and firms, by inducing the false belief that they face only one-sided uncertainty on the movements of the exchange rate. In contrast, more flexible exchange rates explicitly introduce two-way risk; the currency may depreciate as well as appreciate. This may help discourage the accumulation of unhedged foreign currency

liabilities.

The three episodes of currency crisis in the 1990s occurred under regimes where exchanges rates were either fixed or kept in a narrow band. Semi-fixed exchange rate regimes and policies of exchange-rate based stabilization -- no less than floating regimes -- have at times led to real currency appreciations that worsened a current account deficit, and contributed to triggering a crisis. Exchange rate-based stabilizations may be more successful if the initial fixed rate anchor regime is followed by a crawling peg regime where the exchange rate is allowed to depreciate on the basis of the inflation differential between the domestic economy and the world. Experience suggests that maintaining protracted fixed rates in the aftermath of exchange rate-based stabilizations can lead to real appreciation (due to residual inflation) and deteriorating trade balances, which can eventually undermine fixed-rate regimes not supported by consistent policy regimes. Some countries have made strong institutional commitments to a rigid fixed exchange rate regime; other countries could benefit from increasing flexibility during periods of macroeconomic and financial stability, when the move to flexibility may be less disruptive.

More work must be done to determine whether certain exchange rate regimes provide more stability in the presence of high capital mobility and the potential for sudden reversals of capital flows following changes in investors' expectations. In no case, can the choice of a particular exchange rate regime substitute for sound macroeconomic policies and strong

financial systems as the foundations of true stability.

One form of fixed exchange rates even more extreme than a currency board is a monetary union, which solves the problems of credibility and speculation automatically. The next section discusses the prospects of the European Monetary Union and whether Europe represents an “optimal currency area.”

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**Box 7-1. - Currency Boards**

A currency board is a monetary institution that only issues currency that is fully backed by foreign assets. Its principal attributes include the following:

- an exchange rate that is fixed not just by policy, but by law
- a reserve requirement stipulating that each dollar's worth of domestic currency is backed by a dollar's worth of foreign reserves
- a self-correcting balance of payments mechanism, in which a payments deficit automatically contracts the money supply, resulting in a contraction of spending.

By maintaining a strict unyielding exchange rate and 100 percent reserves, the government hopes to ensure credibility.

The first currency board was established by the British in Mauritius in 1849. The use of currency boards eventually spread to 70 British colonies. The purpose was to provide the colonies with a stable currency without the associated difficulty of issuing sterling notes and coins that were costly to replace if lost or destroyed. The colonies also benefitted from this

approach in that they could earn interest on the foreign currency assets being held in reserve. The use of currency boards peaked in the 1940s and declined thereafter. [In the 1960s, many newly independent African countries replaced their currency board with a central bank, and most other countries followed suit in the 1970s.]

The introduction of currency board-like arrangements in Argentina (1991), Hong Kong (1983), Estonia (1992), Lithuania (1994), and Bulgaria (1997) constitutes a small resurgence in their use worldwide. A currency board can help to create a credible policy environment by removing from the monetary authorities the option of printing money to finance government deficits. Argentina, for example, has benefited from such credibility. Argentina was prompted to adopt a currency board [which it calls the convertibility plan] because of a dramatic hyperinflation in the 1980s and the absence of a credible monetary authority. Since 1991, Argentina has become a model of price stability and has achieved laudable growth rates, aside from the Mexican peso “Tequila”-induced recession in 1995, from which Argentina soon rebounded strongly. By most accounts, the currency board has worked for Argentina.

Characteristics that suit countries to be candidates for currency boards are: a small open economy, a desire for further close integration with a particular neighbor or trading partner, a strong need to import monetary stability due to a history of hyperinflation or an absence of credible public institutions, access to an adequate level of reserves, and a strong, well supervised and regulated financial system.

Currency board supporters have pushed for their wider use—in particular, for Indonesia, Russia, and Ukraine. But proclaiming a currency board does not automatically guarantee the

credibility of the fixed rate peg as sometimes asserted. [Little credibility is gained from putting an exchange rate peg into the law, in a country where laws are not heeded or are changed at will.]

A currency board is unlikely to be successful without the solid fundamentals of adequate reserves, fiscal discipline, and a strong and well-supervised financial system, in addition to the rule of law.

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### **3. EUROPEAN ECONOMIC AND MONETARY UNION**

The European response during the 1990s to the challenges presented by exchange rate volatility and financial globalization has been to accelerate the economic and financial integration of the continent. As part of this process, eleven members of the European Union embarked on a project of monetary unification that took effect on January 1, 1999, with Stage Three of the process of European Monetary Union (EMU). As noted at the outset of the chapter, European integration raises some of the same analytical issues and policy challenges as integration of the emerging market countries into the world financial system.

#### **THE EMU SCHEDULE**

In the spring of 1998, a summit of European Union (EU) heads of government decided that EMU should proceed, as envisioned in the Maastricht Treaty of 1991. Initial members were selected upon assessments by the European Monetary Institute (the forerunner of the European

Central Bank) and the European Commission, as to whether countries had met the Maastricht Treaty's convergence criteria. According to these criteria, members in the single-currency were required to have government deficits and total debt no higher than 3 percent and 60 percent of gross domestic product, respectively and inflation rates and long-term interest rates within 1.5 and 2 percentage points, respectively, of the average of the three countries with the lowest inflation and interest rates. Finally, members' currencies must also have stayed within the Exchange Rate Mechanism bands for two years.

The Maastricht Treaty required EU members to satisfy these criteria in 1997 to qualify as founding member of EMU on January 1, 1999. Twelve of the fifteen members of the EU wished to participate, and eleven of these were found to satisfy the criteria for membership. This, in part, reflected remarkable progress at fiscal consolidation, since the targets had seemed out of reach for members such as Italy a mere year or two in advance. Of the countries desiring membership, only Greece was deemed not to satisfy the criteria. Of the other three EU countries, the United Kingdom and Denmark opted not to join for the time being, while Sweden chose not to qualify by remaining out of the Exchange Rate Mechanism.

The remarkable convergence of financial conditions in the European countries is clear from the data on the 11 EMU countries' short-term and long-term interest rates (see Charts 6-3 and 6-4), showing that both sharply converged after 1996. Differences in interest rates across countries can be due to two major factors: a currency premium related to the risk of devaluation, and a country premium related to the possibility of default on the public debt. With monetary union starting in January 1999, short term interest rates converged as currency risk was

eliminated and default risk is close to zero for very short-term public debt. Even after monetary union, differences among long-term interest rates may remain, as different EMU countries with different stocks of public debt may be perceived as having different default probabilities. However, long-term interest rates in the euro-11 area converged quite sharply by the fall of 1998 as well.

In July 1998, the European Central Bank came into existence. On January 1, 1999 the single currency, the euro, was created as the currency of the 11 EMU countries. The European Central Bank took control of monetary policy in all EMU countries. Existing national notes and coins will continue to circulate until euro cash is introduced although they are no longer separate currencies - they are "non-decimal denominations" of the euro, locked in at permanent conversion rates. (By analogy, most American dollar bills carry a circular seal with a letter inside denoting the Federal Reserve District from which they come. However, Europeans will continue for some time to be far more aware of the geographic origin of the currency they carry than Americans are.) Only in 2002, will euro cash (coins and notes) enter into circulation with national currencies being phased out. This transition period is necessary because central banks need time to print the banknotes and mint coins; retailers and banks also want time to prepare; and the public sector needs time to prepare as governments have to consider how to change their services over to the use of the euro.

While euro cash will be introduced only in 2002, in the three years between now and then many changes will occur. Government bonds issued after 1999 will have to be denominated in euro. Also, almost all existing issues of marketable government debt by the participating

countries were redenominated in euros at the end of 1998. Moreover, several large European companies plan to begin accounting in euros in 1999. Such a move may lead smaller firms to follow. Even businesses which do not switch their internal accounting to euro may quote prices in euro for trading before 2002. Consumers and the public sector are likely to be using national currency units until 2002. In general, European governments agreed that there will be "no compulsion" and "no prohibition" in the use of the euro between 1999 and 2002.

## **BENEFITS AND POTENTIAL COSTS OF EMU**

There are several potential benefits of EMU. Transaction costs in trade will be lowered as exchange rate risk and currency transactions within Europe will both be eliminated; and the ensuing goods market integration and price competition will be beneficial to consumers. Integrated European financial markets will be broadened and deepened. Inflation discipline will be preserved by an independent European Central Bank committed to price stability. It is hoped that fiscal discipline will also result since, as agreed in a Growth and Stability Pact, membership requires maintenance of disciplined fiscal policy. (According to the Pact, fines may be imposed on countries found to be running excessive deficits.) Participation in EMU eliminates national monetary policy and limits the scope of fiscal policies as a tool of stabilization policy. This loss of macroeconomic tools to address cyclical unemployment makes more urgent the need for European structural reforms, e.g., to increase flexibility in the labor market. In this sense, it is to be hoped that EMU might serve as a discipline tool to nudge European countries to implement structural reforms more rapidly and eliminate impediments to sustained economic growth.

Creation of a large region of monetary stability is a commendable culmination of the 50-year economic, social and political integration that has taken place in Europe. Indeed, the original motivation for economic integration in Europe was to ensure that the countries in the heart of Europe, which had fought three wars over the preceding 100 years, never did so again. This is one reason why, in historical perspective, European integration has always been in the political interest of the United States. Even in an economic sense, the U.S. will benefit as a trading partner from strong economic growth and performance in Europe, which may be enhanced by the single currency project in the long run. As long as Europe remains open to trade, what is good for Europe economically is good for us.

However, EMU may also entail some potential costs. Most important, it entails a loss of monetary autonomy and the ability to use this tool to respond to “asymmetric” national shocks, unexpected economic developments that affect some countries differentially than others (i.e., idiosyncratic or country-specific events). Exchange rate changes are another instrument for coping with such shocks, but with EMU this tool will also no longer be available. Absent these tools, flexibility of wages and labor mobility across regions and industries are the major mechanisms of adjustment. But labor mobility is much lower among the nations of Europe than, for example, among the American states. Fiscal policy can also play a stabilization role but the rules for EMU membership constrain countries’ ability to use such a tool. Finally, in Europe there is also little in the way of a central system of federal taxes and transfers to cushion against regional/national shocks as compared to the United States. Limited labor mobility, structural labor market rigidities, and decentralized and constrained fiscal policy could imply that Europe

does not satisfy the criteria for an “optimal currency area” as well as do the regions of the United States. (These points are elaborated in Box 7-2 on Optimum Currency Areas).

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**Box 7-2 - Is Europe an Optimum Currency Area?**

The theory of **optimum currency areas** provides a set of criteria to identify groups of countries which are likely to benefit from membership in a common monetary union. Some research suggests that the nations of the EU are less well-suited to a common currency than are, for example, the states of the United States. Nevertheless, Europe is becoming increasingly integrated over time, and this may tip the balance in the direction of satisfying the optimum currency area criteria in the future.

**Common rather than national shocks.** Why do countries ever need independent currencies? If a country (or other geographic region) suffers an adverse "shock," such as a fall in demand for its products, it may want to follow a more expansionary monetary policy, in order to stimulate demand and head off unemployment. Yet, if it does not have an independent currency, it will not be able to undertake monetary expansion. Conversely, only common shocks can be properly addressed by a union-wide monetary policy change.

For example, in the early 1990s Germany experienced a sudden increase in interest rates (which arose out of the unification of the country and the associated increase in West German spending in the Eastern länder). It was difficult for other European countries to accept this increase in German interest rates, because it did not suit their own economic conditions. The resultant strains broke apart Europe's Exchange Rate Mechanism in 1992-93.

**High degree of labor mobility.** Labor mobility is an important criteria for an optimum currency area: if a region has this means of adjustment, then it has less need for monetary independence. Consider a country or other geographical unit that gives up its monetary independence. Subsequently, in the event of an adverse shock, it might still have other ways of adjusting. One way of adjusting is that workers may move out, to other countries or regions with stronger economies. While this might not sound like an attractive solution, it turns out that inter-state migration is the most rapid means of adjustment to economic downturns within the United States (e.g., more rapid than adjustment of wage levels).

Labor mobility among European countries is much lower than in the United States. Thus, by the labor mobility criterion, European countries are less well-suited to a common currency than are American states.

**Existence of a federal system of fiscal transfers.** When disparities in income do arise in the United States, federal fiscal policy helps to narrow them. One recent estimate suggests that when a region's per capita income falls by one dollar, the final reduction in its disposable income is only 70 cents. The difference, a 30 percent federal cushioning effect, includes both an automatic decrease in federal tax receipts plus an automatic increase in unemployment compensation and other transfers. The cushioning effect has been estimated at 17 percent in the case of Canadian provinces. European countries have greater scope for domestic fiscal stabilization than do American states. Furthermore there are some cross-country fiscal transfer mechanisms. Nevertheless, neither the fiscal transfer mechanisms that are already in place within the European Union nor those that are contemplated under EMU -- so-called "structural

funds" -- are as large as those in the U.S. or Canadian federal fiscal system.

Judged at least by these two optimum currency area criteria (labor mobility and fiscal transfers), the European Union is not as good a candidate for a monetary union as is the United States. European countries may be less adaptable than American states. This suggests that, if there are shocks in the coming decade that affect EU members differentially as did the German unification shock of 1990, those adversely affected could experience popular resentment against what -- for them -- will be the insufficiently expansionary monetary policies of the rest.

**Prospects for EMU.** There is good hope, however, for a successful EMU. The degree of integration among EU countries is increasing decade by decade. The degree of international labor mobility, for example, is likely to be higher in the future than in the past. The Schengen convention now allows free movement of citizens among a subset of European countries. Thus the European countries may come to satisfy the textbook criteria of an optimum currency area in the future, even if they do not fully now.

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While such potential costs of EMU have some relevance, some of the objections to EMU have been exaggerated. First, while monetary policy can affect real economic activity in the short-run, it does not in the long-run. Therefore, monetary policy can do little in any case to address structural rigidities, such as labor market inflexibility and real wage rigidity that are generally thought to keep unemployment rates high in Europe in general and in depressed regions such as southern Italy in particular. These problems will have to be addressed by structural reforms with or without monetary union.

Second, the role of fiscal policy is also inherently limited in Europe, since fiscal deficits and debt-to-GDP ratios are still high for several countries. Fiscal retrenchment should continue in Europe with or without EMU; therefore EMU may not be a strong constraint. Third, asymmetric shocks and limited factor mobility may diminish over time as EMU leads to greater real integration among European economies (see Box 7-2). For example, as intra-European trade has grown and will further grow in response to with European integration and EMU, the creation of a common free market for goods, services and factors of production could make idiosyncratic national shocks less prevalent if it reduces the degree of spatial concentration of individual industries.

Finally, it has been argued that EMU is likely to exert discipline in favor of structural reform. As there will be no national monetary and exchange rate policies and fiscal policy autonomy will be constrained, the ability to use macro instruments to delay structural market reforms will be reduced; governments will have stronger incentives to pursue policies that further long-run economic growth. The opposite has also been argued, by some who fear that EMU will slow the drive to structural reforms. Since reforms are socially costly, the flexibility deriving from monetary, exchange rate and fiscal discretion can ease the transition costs as resources are reallocated. With EMU, the absence of these social “shock absorbers”, may slow down the structural reform process. [In that scenario, the absence of the structural reform would continue, creating detriments to EMU.]

#### **4.THE EURO AS AN INTERNATIONAL CURRENCY,**

[Automated Records Management System Hex-Dump Conversion]

## **AND IMPLICATIONS FOR THE U.S. DOLLAR**

The formation of a monetary union in Europe is a positive development that could simultaneously benefit the continent, the United States and the world economy. Some have expressed a concern, however, that a strong European economy and the emergence of the euro as an alternative 'rival' international currency to the dollar is likely to harm the United States. Such concerns are mostly misguided. The U.S. has long benefitted from a prosperous, growing Europe, and since the Marshall Plan after WWII has supported the development of strong market economies on the continent.

With the development of an open and integrated economic area in Europe, the United States will benefit. American producers will be able to export to a very large, integrated European market with no cross-national restrictions to trade. U.S. firms producing in Europe will benefit from the lack of exchange rate volatility, common European standards for goods and services and a large open market. Indeed, U.S. corporations have more experience selling into a large unified market than do European corporations. American financial institutions in particular, who are already quite competitive in commercial and investment banking services and securities products, can benefit from the opportunities provided by the broadening and deepening of integrated European financial markets.

The emergence of the euro as a rival international currency should not be viewed with alarm for a number of reasons. Even if the euro emerges as an international currency strong enough to rival the dollar, the negative effects on U.S. economic welfare are likely to be small. Furthermore, the euro is unlikely to rapidly displace the U.S. dollar as a major international

currency. International currency status does not automatically follow from a currency's possession of a large home-base. One might even argue that it is healthy for the world to have two or more currencies competing for the status of international currency, as a discipline on each.

### **The functions of an international currency**

What does it mean to be a major international currency, and is it likely that the euro will become one? A currency has three main uses: it can be used as a means of payment; a unit of account; and a store of value. An international currency is simply one that is also used outside its home country for these three purposes. Within each of the three functions, an international currency has both official and private uses.

In money's *store of value* function, investors decide how much of their wealth to hold in the form of assets denominated in various currencies. Will public and private investors hold a fraction of their portfolio in assets denominated in euros? If yes, beyond the sum of the fractions previously occupied by the German mark and other disappearing European currencies, there may be large portfolio shifts leading to greater demand for euros. This could in turn possibly cause an appreciation of the euro. However, a higher share of euros in portfolios will depend on economic factors such as inflation rates in the euro area, confidence in the value of the euro relative to the U.S. dollar and the Japanese yen, the rate of return on euro assets, and economic growth in Europe, as well as political factors.

The official side of the store-of-value use is that currencies are held as foreign reserves by central banks. There is a possibility of greater diversification away from U.S. dollar towards the

euro. In the 1970s and 1980s, the dollar's share of reserve currency holdings gradually shrank to make room for the mark and yen. This trend was suspended, or even reversed, in the 1990s, but could resume in the 2000s to make room for the euro. Such diversification away from the dollar would depend in part on the same risk-reward considerations as matter for private use. Countries with strong economic fundamentals, sound currencies and low inflation are more likely to have their currency used as an international currency. As long as the U.S. maintains a strong economy, the international demand for U.S. dollar will remain strong.

A *unit of account* is a reference scale for quoting prices, which is distinguishable from the actual currency in which assets are held or payments made. On the private sector side of the unit of account function, an international currency is used to invoice imports and exports. Presently, the U.S. dollar plays a dominant role in invoicing around the world, especially for primary commodities like oil. But invoicing will be mostly in euros within Europe. Also, the euro may be used widely in Central and Eastern Europe, the Middle East and Africa, areas of high and increasing trade with Europe.

One official use of international currencies that can be classified under the unit of account function is a major currency to which smaller countries can peg their exchange rate. Non-EMU European countries, particularly those in the East, are likely to consider pegging their currencies to the euro for two reasons: they undertake more of their trade and finance with the EU than with the U.S., and they aspire to eventual membership in EMU. If this happens, greater use of the euro as an intervention currency will increase official demand for euros. The unit-of-account, store-of-value, and means-of-payment functions are interrelated.

Currently, the dollar is used as the primary vehicle currency in foreign exchange trading which is one example of *means of payment*. A trader who wishes to exchange one minor currency for another is more likely to go through the dollar than to go through some other major currency, or to be able to find a counterparty for a direct “cross trade.” (See Box 7-3 on the role of different international vehicle currencies.)

The private use of a currency as a means of payment in international trade and finance depends on economies of scale in payments systems. As in the case of a domestic currency, there are significant increasing returns to scale in payments: it is easier and cheaper to use the same currency that is used by everyone else. In this regard, the advantages of incumbency and inertia will favor the U.S. dollar even as the euro’s natural home grows to be as large as that of the dollar.

Overall, while it is likely the euro will become an international currency, it is unlikely that the U.S. dollar will be replaced anytime soon in its role as leading international currency.

### **Is it good or bad to be an international currency?**

Does it matter whether the dollar remains the leading international currency? One should not overemphasize the decidedly modest benefits that having an international currency provides to a country. Central banks' reserve currency holdings may have some implications for the determination of the exchange rate. But this is another question. What about the global role of the dollar per se?

*Advantages of having a key currency*

There are at least five advantages to a country of having its currency used internationally.

(1) Convenience for residents. It is certainly more convenient for a country's exporters, importers, borrowers and lenders to be able to deal in its own currency than foreign currencies. The global use of the dollar, as with the global use of the English language, is a natural advantage that American business tends to take for granted. [But the benefits from having one's country's currency used as a unit of account should not be overemphasized. Invoicing U.S. imports in dollars does not necessarily shift the currency risk from the buyer to the seller, as the dollar price sometimes can change quickly when the exchange rate changes.]

(2) More business for the country's banks and other financial institutions. There need be no firm connection from the currency in which banking is conducted to the nationality of the banks (nor from the nationalities of the savers and borrowers to the nationality of the intermediating bank). British banks, for example, continued to do well in the Eurodollar market long after the pound's international role waned. Nevertheless, it stands to reason that U.S. banks have a comparative advantage at dealing in dollars. Only U.S. banks have access to the safety net provided by U.S. regulatory authorities (access to the discount window, and so forth).

(3) Political power and prestige. The benefits of "power and prestige" are decidedly nebulous. Nevertheless, historians and political scientists have sometimes associated key currency status [and international creditor status], along with such non-economic factors as colonies and military power, as trappings of great powers.

(4) Seigniorage. This is thought by some to be perhaps the most important advantage of having other countries hold one's currency. They must give up real goods and services, or

ownership of the real capital stock, in order to add to the currency balances that they use.

Seigniorage derives from the fact that the U.S. effectively gets a zero-interest rate loan when dollar bills are held abroad. Just as American Express reaps profits whenever people hold its travelers' checks, which they are willing to do without receiving interest, so the United States profits whenever people in Argentina or Russia hold dollars that do not pay interest. Wherever hyperinflation or social disorder undermine the public's faith in the local currency, the American dollar is the preferred alternative. (Illegal activities are another source of demand, of course).

A way to compute cumulative seigniorage is to estimate the stock of dollars held abroad, and multiply by the interest rate. Foreign holdings of U.S. currency are conservatively estimated at 60 per cent of total dollar currency in circulation. With total currency outstanding in mid-1998 at \$441 billion, foreign holdings are about \$265 billion. One simply multiplies by the Treasury bill interest rate, to derive the estimate that seigniorage currently runs about \$13 billion a year.

[This is implicitly a tax on foreign transactions that are intensive in dollar cash.]

(5) Ability to borrow in international capital markets in one's own currency. Some have argued that the U.S. ability to finance its current account deficit via foreign borrowing has been facilitated by the ability to issue dollar denominated liabilities. The concern has been expressed that such ability may be hampered by a loss of reserve currency status. This concern is probably overdone. First, many industrial countries whose currency is not a key currency are able to borrow in domestic currency. Second, countries with larger current account deficits than the U.S. (as a share of their GDP) have regularly and persistently financed such imbalances with borrowing in foreign currency rather than their own domestic currency. Countries become unable

to borrow to finance current account imbalance when such imbalances become unsustainable. The fact that borrowing may occur in domestic or foreign currency has little to do with such sustainability. [Financing the foreign debt in one's own country currency gives, in principle, the potential advantage of being able to debase the real value of such debt through inflation. But no one would recommend deliberately following such a destructive economic strategy, given the loss of credibility and the economic costs of high inflation that it would entail. ]

#### *Disadvantages of having a key currency*

One can think of two disadvantages from the viewpoint of a key-currency country. They explain why Japan, Germany and Switzerland, have in earlier decades been reluctant to have their currencies held and used widely.

(1) Larger fluctuations in demand for the currency. Having one's currency held by a wide variety of people around the world might result in greater variability of demand, although such instability is more likely to follow from the increase in the degree of capital mobility than from key currency status per se. In any case, central banks are particularly concerned that internationalization will make it more difficult to control their money stocks. This problem need not arise if they do not intervene in the foreign exchange market. But the central bank may view letting fluctuations in demand for the currency be reflected in the exchange rate as being just as undesirable as letting them be reflected in the money supply.

(2) An increase in the average demand for the currency. This is the other side of seigniorage. In the 1960s and 1970s, the Japanese and German governments were particularly

worried about the possibility that if assets were made available to foreign residents, an inflow of capital would cause the currency to appreciate and render exporters uncompetitive on world markets. Some Europeans today express the same concern about the euro.

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**Box 7-3. How does the dollar rank against other international currencies (pre-euro)?**

Most measures show a gradual decline in international use of the dollar in recent decades. Reserve currency use, perhaps the most important measure, is shown in Figure 7\_\_\_. The dollar's share of central bank reserve holdings declined from 76.1 % in 1973 to 56.0 % in 1990. Central banks gradually shifted their portfolio shares into marks and yen. But the dollar's share in reserve holdings has been relatively flat in the 1990s, amounting to 61 % in 1997.

Other major measures of international currency status, on the eve of the birth of the euro, are shown in Table 7.1. Overall, they tend to show the same thing: the dollar still on top, despite a gradual decline in its use versus the mark and yen over the last thirty years. The dollar is still more important than its three or four rivals combined.

- The first column reports the popularity of major currencies among smaller countries choosing a peg for their currencies. It is still the case that no currencies anywhere are pegged to the yen. Three currencies (those of Estonia, Bulgaria, Bosnia) were pegged to the mark last year, however. Elsewhere (Africa) the French franc was still the most common choice as a peg (29 per cent of peggers), owing to a special set of arrangements with the French Treasury, after the dollar (39 per cent). The euro is inheriting this role of the mark and franc. The dollar share should automatically go down in 1999 as the EU-11 are for the first time counted as pegging to

each other.

- 87 percent of trades in the foreign exchange market in April 1998 involved the dollar, as the currency either bought or sold (see third column of the table). This figure (like the share of reserves held in dollars) should automatically go up in 1999, as EMU eliminates intra-European transactions among member currencies.
  - The various measures of use of currencies to denominate private international financial transactions -- loans, bonds, and deposits -- still showed the dollar as the dominant currency, with a 54 percent share.
  - Figures on the use of international currencies as substitutes in local cash transactions, are not generally available. The two leaders have been the dollar, for which internationally-circulating cash has been estimated by the Fed at 60 percent of U.S. currency outstanding, and the mark, for which international circulation has been estimated by the Bundesbank at 35-40 percent of German currency outstanding.
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### **What are the determinants of international currency status?**

Will the dollar in the future maintain its global role? There are four major sorts of conditions that determine whether a currency is used internationally.

(1) Patterns of output and trade. The currency of a country that has a large share in international output, trade and finance has a natural advantage. The U.S. economy is still larger than the euro-11 economies combined. If Britain and the other remaining EU members (Sweden, Denmark and Greece) join in the future, however, the two currency areas will then be very close

in size.

(2) History. There is a strong inertial bias, in favor of using whatever currency has been the vehicle currency in the past. An individual (exporter, importer, borrower, lender, or currency trader) is more likely to use a given currency in his or her transactions if everyone else is doing so. For this reason, the world's choice of international currency is characterized by "multiple stable equilibria." The pound remained an important international currency even after the United Kingdom lost its position as an economic superpower early in the century. In the present context, the inertial bias favors the continued central role of the dollar.

(3) The country's financial markets. Capital and money markets must be not only open and free of controls, but also deep, well-developed and liquid. The large financial marketplaces of New York and London clearly benefit the dollar and pound relative to the deutschemark and yen. It remains to be seen whether EMU will turn Frankfurt or Paris into one of the top few financial centers.

(4) Confidence in the value of the currency. Even if a key currency were used only as a unit of account, a necessary qualification would be that its value not fluctuate erratically. As it is, a key currency is also used as a form in which to hold assets (firms hold working balances of the currencies in which they invoice, investors hold bonds issued internationally, and central banks hold currency reserves). Here confidence that the value of the currency will be stable, and particularly that it will not be inflated away in the future, is critical.

The monetary authorities in Japan, Germany and Switzerland, in the 1970s established a better track record of low inflation than did the United States, which helped their currencies to

achieve greater international currency status. Given the good U.S. inflation performance more recently, this is no longer such a concern.

### **What is the prognosis for the dollar and the euro?**

In light of these desiderata for a would-be international currency, is it likely that the euro will rival the dollar as the leading international currency? The euro automatically inherits the roles of the ecu, DM, french franc, and other EMS currencies. Subsequently, the euro's share will probably gradually rise, to move in the direction of "Euroland"'s share of output.

The odds are against the euro's rapidly supplanting the dollar as the world's premier currency. It is not that the dollar is ideally suited for the role of everyone's favorite currency. At least one characteristic mars its appeal: the United States is a debtor country with a large current account deficit. But an international currency is one that people use because everyone else is using it. Two of the four determinants of reserve currency status -- developed financial markets and historical inertia -- support the dollar over the euro. The third, economic size, is a tie (or will be if the United Kingdom joins). The fourth determinant is also a tie as both Euroland and U.S. have pursued stable monetary policies aimed at maintaining a low rate of inflation.

While the widespread use of the U.S. dollar as international currency -- for holding reserves, pegging minor currencies, invoicing imports and exports, and denominating bonds and lending -- is testimony to the strength of the U.S. economy and the confidence with which it is viewed around the world, the direct economic benefits deriving from this international role are

limited. The welfare of a country is measured by its ability to produce a large quantity of goods and services and provide a sustained increase in real income and consumption opportunities for its citizens. Whether a country's currency is an international currency or not has little to do with such long-run well-being, as the experience of many successful economies whose currencies do not have international roles attests. A strong and healthy U.S. economy that is a leader and champion of sound economic policies has led - as a by-product- to a strong international role for the U.S. dollar.

[ To summarize, the introduction of the euro in January 1999 instantly created an international currency that potentially rivals the dollar. The standard measures of international currency use will show a euro that inherits roughly the sum of its constituent currencies. Subsequently the dollar will probably lose share gradually, as it lost share in the 70s and 80s to the mark and yen. There may be some small associated costs for the U.S.. But there is no reason to expect the euro to surpass the dollar anytime soon, nor for the costs from the U.S. viewpoint to outweigh the political and economic advantages to a successful EMU. ]

## **5. CONCLUSION**

Reforms are desirable to create a strengthened international financial architecture for the global market-place in the next millennium, one that captures the full benefits of international capital flows and global markets, minimizes the risk of disruption, and better protects the most vulnerable.

The United States has worked intensively with key emerging markets, other

industrialized nations, and the relevant international organizations, to put in place the building blocks of this new architecture. The reforms recommended by the G22 and adopted by the G7 are an important starting point. The United States and its G7 partners also agreed to do more to build a modern framework for the global markets of the 21st century and to limit the swings of boom and bust that destroy hope and diminish wealth. Thus, they also committed to initiate new work on a number of other important areas to identify additional steps to strengthen the international financial architecture. All these reforms will ensure that the unprecedented growth, increase in welfare and opportunity experienced in the 50 years after the creation of the Bretton Woods system are maintained in the future.

Meanwhile, the United States salutes the formation of the European Monetary Union. The United States has much to gain from the success of this momentous project. Now more than ever, America is well served by having an integrated and prosperous trading partner on the other side of the Atlantic. Europe should benefit from a single currency that supports these ends -- and if Europe benefits, this will greatly benefit the United States.