Mr. Greenspan's remarks to the Economic Club of New York Remarks by the Chairman of the Board of the U S Federal Reserve System, Mr. Alan Greenspan, at the Economic Club of New York in New York City, on 02/12/97.

Dramatic advances in the global financial system have enabled us to materially improve the efficiency of the flows of capital and payments. Those advances, however, have also enhanced the ability of the system to rapidly transmit problems in one part of the globe to another. The events of recent weeks have underscored this latter process. The lessons we are learning from these experiences hopefully can be applied to better the workings of the international financial system, a system that has done so much to foster gains in living standards worldwide.

The current crisis is likely to accelerate the dismantling in many Asian countries of the remnants of a system with large elements of government-directed investment, in which finance played a key role in carrying out the state's objectives. Such a system inevitably has led to the investment excesses and errors to which all similar endeavors seem prone.

Government-directed production, financed with directed bank loans, cannot readily adjust to the continuously changing patterns of market demand for domestically consumed goods or exports. Gluts and shortages are inevitable. The accelerated opening up in recent years of product and financial markets worldwide offers enormous benefits to all nations over the long run. However, it has also exposed more quickly and harshly the underlying rigidities of economic systems in which governments -- or governments working with large industrial groups -- exercise substantial influence over resource allocation. Such systems can produce vigorous growth for a time when the gap between indigenous applied technologies and world standards is large, such as in the Soviet Union in the 1960s and 1970s and Southeast Asia in the 1980s and 1990s. But as the gap narrows, the ability of these systems to handle their increasingly sophisticated economies declines markedly.

In western developed economies, in contrast, market forces have been allowed much freer rein to dictate production schedules. Rapid responses by businesses to changes in free-market prices have muted much of the tendency for unsold goods to back up, or unmet needs to produce shortages. Recent improvements in technology have significantly compressed business response times and enhanced the effectiveness of the market mechanism.

Most Asian policymakers, while justly proud of the enormous success of their economies in recent decades, nonetheless have been moving of late toward these more open and flexible economies. Belatedly perhaps, they have perceived the problems to which their systems are prone and recognized the unforgiving nature of the new global market forces. Doubtless, the current crises will hasten that trend. While the adjustments may be difficult for a time, these crises will pass. Stronger individual economies and a more robust and efficient international economic and financial system will surely emerge in their wake.

While each of the Asian economies is unique in many important respects, the sources of their spectacular growth in recent years, in some cases decades, and the problems that have emerged are relevant to a greater or lesser extent to nearly all of them.

Following the early post-World War II period, policies generally fostering low levels of inflation and high rates of savings and investment -- including investment in human capital through education -- contributed to a sustained period of rapid growth. In some cases this

started in the 1960s and 1970s, but by the 1980s most economies in the region were expanding vigorously. Foreign net capital inflows grew, but until recently were relatively modest. The World Bank estimates that net inflows of long-term debt, foreign direct investment, and equity purchases to the Asia-Pacific region were only about \$25 billion in 1990, but exploded to more than \$110 billion by 1996; less comprehensive data suggest that inflows rose to a still higher rate earlier this year.

Sustained, spectacular growth in Asian economies fostered expectations of high returns with moderate risk. Moreover the global stock market boom of the 1990s provided the impetus to seek these perceived high returns. As that boom progressed, investors in many industrial countries found themselves more heavily concentrated in the recently higher valued securities of companies in the developed world, whose rates of return, in many instances, had reached levels perceived as uncompetitive with the earnings potential in emerging economies, especially in Asia. The resultant diversification induced a sharp increase in capital flows into those economies. To a large extent, they came from investors in the United States and western Europe. A substantial amount came from Japan, as well, owing more to a search for higher yields than to rising stock prices and capital gains in that country. The rising yen through mid-1995 also encouraged a substantial increase in direct investment outflows from Japan.

In retrospect, it is clear that more investment monies flowed into these economies than could be profitably employed at reasonable risk. It may have been inevitable in those conditions of rapid growth, ample liquidity, and an absence of sufficient profitable alternatives, that much investment moved into the real estate sector, with an emphasis by both the public and private sectors on conspicuous construction projects that had little economic rationale. These real estate assets, in turn, ended up as collateral for a significant proportion of the assets of domestic financial systems. In many instances, those financial systems were already less than robust, beset with problems of poor lending standards, weak supervisory regimes, and inadequate capital.

At the same time, rising business leverage added to financial fragility. Businesses were borrowing to maintain high rates of return on equity and weak financial systems were poorly disciplining this process. In addition, explicit government guarantees of debt or, more often, the presumption of such guarantees by the investment community, encouraged insufficient vigilance by lenders and hence greater leverage. But high debt burdens allow little tolerance for rising interest rates or slowdowns in economic growth, as recent events have demonstrated.

Moreover, the rapidly growing foreign-currency-denominated debt, in part the result of pegged exchange rates to the dollar, put pressure on companies to earn foreign exchange. But earning it became increasingly difficult. The substantial rise in the value of the dollar since mid-1995, especially relative to the yen, made exports of the Southeast Asian economies less competitive. In addition, in some cases, the glut of semiconductors in 1996 and the accelerated drop in their prices suppressed export earnings growth, exerting further pressures on highly leveraged businesses.

In time, the pressures on what had become fixed-exchange-rate regimes mounted as investors, confronted with ever fewer profitable prospects, slowed the pace of new capital inflows. Fearing devaluation, many domestic Asian businesses sought increasingly to convert domestic currencies into foreign currencies, or, equivalently, slowed the conversion of export earnings into domestic currencies. To counter pressures on exchange rates, countries raised interest rates. For fixed-exchange-rate, highly leveraged economies, it was only a matter of time

before slower growth and higher interest rates led to difficulties for borrowers, especially those with fixed obligations.

Particularly troublesome over the past several months has been the so-called contagion effect of weakness in one economy spreading to others as investors perceive, rightly or wrongly, similar vulnerabilities. This is an age-old phenomenon. When investors are unsettled by uncertainties and fears, they withdraw commitments on a broad front; the finer distinctions between countries and currencies are lost. There is a flight to safe-haven investments, many of which are in developed nations.

Perhaps, given the circumstances, it was inevitable that the impressive and rapid growth experienced by the economies in the Asian region would encounter a temporary slowdown or pause. I say temporary because there is no reason that above-average growth in countries that are still in a position to gain from catching up with the prevailing technology cannot persist for a very long time, provided their markets are opened to the full force of competition. Nonetheless, free-market, even partially free-market, economies do periodically run into difficulties because investment mistakes invariably occur. And, as I noted earlier, many of these mistakes arose from government-directed or influenced investments. When this happens, private capital flows may temporarily turn adverse. In these circumstances, individual companies should be allowed to default, private investors should take their losses, and government policies should be directed toward laying the macroeconomic and structural foundations for renewed expansion. New growth opportunities must be allowed to emerge.

Although the economies of the troubled Asian countries were usually characterized by a combination of current account deficits, large net foreign currency exposures, and constraints on exchange rate fluctuations, one cannot generalize that these are always signs of impending difficulties.

Large current account deficits, per se, are not dangerous if they result from direct investment inflows that are not subject to rapid withdrawal and that generate an increase in income sufficient to compensate the investors. Foreign currency exposures need not be a problem if positions are properly managed and the risks are recognized. Fixed exchange rates, also, are not necessarily a problem. Indeed, if they can be sustained, they yield extensive benefits in lower risk and lower costs for all international transactions. But a small open economy can maintain an exchange rate fixed to a hard currency only under certain conditions. Both Austria and the Netherlands, for example, have been able to lock their currencies against the Deutsche Mark because their economies are tightly linked through trade with Germany, they mirror the Bundesbank's monetary policies, and they are perceived to engage in prudent fiscal policies. Were it not for issues of national identity and seignorage, they could just as readily embrace the DM as their domestic currency without any economic disruption. Other economies, such as Argentina and Hong Kong, have fixed their exchange rates essentially through currency boards. Changes in dollar reserves directly affect the monetary base of those economies.

But when exchange rates are fixed, with or without currency boards, should monetary and fiscal policies diverge significantly from those of the larger economy, the currency lock of the smaller economy would be difficult to hold irrespective of the size of reserves. Large reserves can delay adjustment. They cannot prevent it if policies are inconsistent, or prices in the smaller country are inflexible.

A well-functioning international financial system will seek out anomalies in policy alignments and exchange rates and set them right. In such a system, the exploitation of

above-normal profit opportunities, that is, arbitrage, will force prices to change until expected returns have been equalized. To policymakers in the country whose currency is not appropriately aligned, capital outflows are too often seen as attacks by marauding currency speculators. There have no doubt been some such attempts on occasion. But speculators rarely succeed in dislodging an exchange rate that is firmly rooted in compatible policies and cost structures. More often, speculation forces currencies through arbitrage into a closer alignment with underlying market values to the benefit of the international economic and financial system as a whole. We used to describe capital flight as "hot money". But we soon recognized that it was not the money that was "hot", but the place it was running from.

The prodigious expansion of cross-border financial transactions in recent years has tightened and refined the arbitrage process significantly. But, to repeat, the inestimable advantages that it brings to trade and standards of living also carry a price. The inevitable investment mistakes and governmental policy failures are more rapidly transmitted to other markets by this process than was the case say twenty, or even ten, years ago. Moreover, there is little evidence to suggest that the rate of increase of financial transactions will slow materially in the years immediately ahead.

Technology will continue to reduce the costs of finding and exploiting perceived differences in risk-adjusted rates of return around the world, helping to direct capital even more to its most efficient use. Already, covered rates of return on actively traded interest-rate instruments have been equalized among many industrial countries.

But the broader merging of world savings and investment markets, clearly, has not been achieved, largely because investors are fearful of investing in countries they do not understand to the extent that they do their own, or are uninformed of the opportunities.

One measure of this so-called home bias in world investments is the degree that portfolios remain substantially local. Foreign investments, on average, represent less than 10 percent of U.S. portfolios, for example. The percentage of Japanese portfolios is only slightly higher, and 15 percent of German portfolios is in foreign assets. The partial exception is Great Britain, where, with a longer history of global financial involvement, one-third of portfolios is invested in foreign assets.

Home bias in investments is considerably less than it was ten years ago, but we are still far from full globalization. Unless government restrictions inhibit the expansion of ever more sophisticated financial products that enable savers in one part of the world to reduce risk by investing in another, the bias will continue to diminish and the size of the international financial system will continue to expand at a significant pace. It is this overall diversification, and hence lowering of risk, that an effective international financial system offers. It facilitates the ever more efficient functioning of the global economic system and, hence, is a major contributor to rising standards of living worldwide.

Nonetheless, there are those who ask whether the price of so sophisticated a financial system is too high. Would it not be better to slow it down a bit, and perhaps achieve a system somewhat more forgiving of mistakes, even recognizing that such a slowing may entail some shortfall in long-term economic growth?

Even if we could implement such a tradeoff, with only minor disruption, should we try? For centuries groups in our societies have railed against, and endeavored on occasion to

destroy, new inventions. Fortunately for us the Luddites and their ilk failed, and recent generations have enjoyed the fruits of those technologies.

Moreover such a slowdown may not even be possible -- at least without major disruption and cost. Newer technologies, especially advanced telecommunications, make it exceptionally difficult for open markets, with associated opportunities, to be suppressed. Price and capital controls, which might have been feasible a half century ago, would be very difficult to implement in today's more technologically advanced environment. Tinkering at the edges of our system in order to produce a less frenetic pace of change would be easily circumvented. Arguably, it would take massive government controls to substantially slow the advance toward greater efficiency of our systems. This would surely produce a far more negative impact on economic growth than would be acceptable to even the most ardent advocates of reining in the rapid expansion of our international financial system.

If, as I suspect, it turns out after due deliberation and analysis, that slowing the pace of financial modernization is not in fact seen as a feasible alternative, what policy alternatives confront the international financial community to contain the periodic disruptions that are bound to occur in any free market economy?

A financial system, like all structures, is as strong as its weakest link. As the international financial system has become even more complex, the particular areas of weakness to be addressed have changed. At the risk of oversimplification, let's examine some of the key links of our current infrastructure.

Today, the organized exchanges and over-the-counter markets of industrial countries can handle massive volumes of transactions. Even in emerging countries exchanges are developing and expanding. In contrast, during the world-wide stock market crash of October 1987, the transactions systems were under severe stress and, indeed, some broke down, incapable of handling the enlarged volumes. At that time, the Hong Kong stock exchange could not open for several days. The New York Stock Exchange was straining badly under the near 400 million daily share volume of late October 1987, with long reporting delays creating uncertainties that, doubtless, exaggerated the price declines. Those weaker links have since been strengthened by large infrastructure investments. Almost 1.2 billion shares traded on the NYSE on October 28 of this year, three times the 1987 volumes with no evident problems or delays.

Our equity, debt, and foreign exchange trading systems, and their peripheral futures and options markets have functioned well under stress recently. These systems are not weak links in the developed economies, nor, for the most part are they in other economies.

Neither is the payment system, that complex network, which transfers funds and securities in huge and growing volumes domestically and internationally, rapidly and efficiently. The private and public sectors across the globe have endeavored diligently for years to expand the capacity of the system to meet the increasing demands put upon it. And they have initiated and strengthened procedures for reducing risk in settling transactions, and diminishing uncertainties. That they have generally succeeded is evident from the smoothness with which huge volumes of funds produced under recent stressed market conditions were transferred and settled with finality, through various netting and clearing arrangements.

Banks are another matter. These are highly leveraged institutions, financed in part by interbank credits and, hence, prone to crises of confidence that can quickly spread. In most developed nations banking systems appear reasonably solid. Japan has been somewhat of an exception, but there have been some positive signs there, as well. Banks have been recognizing losses, and the government seems finally to be appropriately addressing their problems. In a large number of emerging nations, as I indicated previously, banks are in poor shape. Lax lending has created a high incidence of non-performing loans, supported by inadequate capital, leaving banks vulnerable to declines in collateral values and non-performance by borrowers.

How can such deficient institutions be elevated to a level that would allow their economies to function effectively in our increasingly sophisticated international financial system? Certainly, improved cost and risk management and elimination of poor lending practices are a good place to start.

But these cannot be accomplished overnight. Loan officers with experience judging credit and market risks are in very short supply in emerging economies. Training will require time. The same difficulties confront bank supervision and regulation. Important efforts in this area have been underway for several years through the auspices of the Bank for International Settlements, the International Monetary Fund, and the World Bank. But again, it will take time to develop adequate systems and trained personnel.

Moreover, robust banking and financial systems require firmly enforced laws of contract, and transparent, market-oriented systems of corporate reporting and governance. The current crisis in Asia is, to a much greater extent than many previous crises, one of private, not public, debts, at least de jure. Arguably, the absence of efficient and transparent work-out arrangements for troubled private borrowers makes the problems more difficult to deal with. Efficient bankruptcy arrangements reduce disruptions to economic activity that often arise when losses have to be imposed on creditors. Many developing countries do not have good work-out arrangements for troubled debtors, and, as a result, governments in these countries often feel compelled to bail them out rather than accept the consequences of defaults.

The most troublesome aspect of many banking systems of emerging countries, to expand on the issue I raised earlier, is the widespread prevalence of loans driven by "industrial policy" imperatives rather than market forces.

What is wrong with policy -- that is, politically-driven -- loans? Potentially nothing if they were made to firms to finance expansions that just happened to coincide with a rise in consumer or business or overseas demand for their newly-produced products. In these circumstances, the loan proceeds would have been profitably employed and the loan repaid at maturity with interest. Unfortunately, this is often not the case. Policy loans, in too many instances, foster misuse of resources, unprofitable expansions, losses, and eventually loan defaults. In many cases, of course, these loans regrettably end up being guaranteed by governments. If denominated in local currency, they can be financed with the printing press -- though with consequent risk of inflation. Too often, however, they are foreign-currency denominated, where governments face greater constraints on access to credit.

Restructuring of financial systems, while indispensable, cannot be implemented quickly. Yes, the potential risks to the banking systems of many Asian countries and the potential contagion effects for their neighbors, and other trading partners, should have been spotted earlier and addressed. But flaws, seen clearly in retrospect, are never so evident at the time. Moreover, there is significant bias in political systems of all varieties to substitute hope (read, wishful thinking) for possibly difficult pre-emptive policy moves, both with respect to financial systems and economic policy. There is often denial and delay in instituting proper adjustments. Recent propensities to obscure the need for change have been evidenced by

unreported declines in reserves, issuance by the government of equivalents to foreign currency obligations, or unreported large new forward short positions against foreign currencies. It is very difficult for political leaders to incur what they perceive as large, immediate political costs to contain problems they see as only prospective.

Reality eventually replaces hope, and the cost of the delay is a more abrupt and disruptive adjustment than would have been required if action had been more pre-emptive. Increased transparency for businesses and governments is a key ingredient in fostering more discipline on private transactors and on government policymakers. Increased transparency can counter political bias in part by exposing for all to see the risks of current policies to stability as they develop. Under such conditions, failure to act would also be perceived as having political costs.

We should strongly stress to the newer members of the international financial system -- the emerging economies -- that they should accelerate the restructuring of their financial systems in their own interests. But having delayed timely restructuring, many now find themselves with major shortfalls in bank liquidity and equity capital that put their systems at severe risk of collapse before any full restructuring is feasible. The IMF, the World Bank, and their major shareholders, the developed countries, may wish to facilitate adjustment through temporary loans to governments and the encouragement of private equity infusions to these banking systems. Since any severe breakdown can have contagion effects on a world-wide basis, it is in our interest to do so.

These loans must be judged in their entirety. They transform short-term obligations into medium-term loans, but they do so contingent on the country using the time to reform financial systems as well as adopt sound economic policies. Such conditionality accelerates the adjustments in financial systems needed to lay the foundation for resumption of robust, sustainable, growth, while cushioning to some degree the economic effects of the immediate crisis. Assistance without further reform of financial systems and economic policies would be worse than useless since it would foster expectations of being perpetually bailed out. That, in turn, could induce perverse behavior on the part of emerging nations' governments and of private sector investors in emerging nations. Believing that the international financial community will support these economies, in part by backstopping the obligations they incur, induces investors to commit more than they would otherwise. This has tended in the past to push the expansion of investment beyond prudence -- given the limit of profitable opportunities.

As the international financial system becomes ever larger and more efficient, the size of the financial response -- whether to help banks or to add to foreign currency reserves -- may have to be correspondingly larger per unit of crisis, if I may put it that way -- unless we alter our approach. While it is precarious to generalize from one observation, it is likely that the Mexican financial crisis of the 1980s was broader than in 1994-95, but the size of the assistance program, to set things right, was much larger in the latter than in the former case. The reason appears to be that the increased efficiency of the financial system created a larger negative spillover, which had to be contained. Among other developments, the marked shift from bank credits in the earlier crisis, to a more securitized, anonymous, set of liabilities made workouts far more complex.

It is, hence, all the more essential that the weaker links in our international financial system, the banking systems of the emerging nations, be strengthened. Preventive programs should be accelerated sufficiently far in advance of the next crisis to effectively thwart or contain it.

Moreover, it is incumbent on governmental policymakers to insure that unstable economic environments do not induce or exacerbate international financial disruptions. But governments and international financial institutions should be brought on the scene only rarely. To do otherwise risks the perverse incentives I spoke of earlier. Markets should be allowed to work.

Recent events in Asia have sharpened our understanding of the complexity of today's international capital flows and, presumably, of similar episodes that may emerge in the future.

The rapid integration of national financial systems has fostered the growth of trade and standards of living worldwide. It has also forced a review of the soundness and viability of our burgeoning financial systems. We should welcome such pressures even as they impose challenges to all of us. The end result is very worthwhile having.