Remarks by
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Globalization has altered the economic frameworks of both developed and developing nations in ways that are difficult to fully comprehend. Nonetheless, the largely unregulated global markets do clear and, with rare exceptions, appear to move effortlessly from one state of equilibrium to another. It is as though an international version of Adam Smith's "invisible hand" is at work.

One key aspect of the recent globalization process is the apparent persistent rise in the dispersion of current account balances. Although for the world as a whole the sum of surpluses must always match the sum of deficits, the combined size of both, relative to global gross domestic product (GDP), has grown markedly since the end of World War II. This trend is inherently sustainable unless some countries build up deficits that are no longer capable of being financed. Many argue that this has become the case for America's large current account deficit.

There is no simple measure by which to judge the sustainability of either a string of current account deficits or their consequence, a significant buildup in external claims that need to be serviced. In the end, the restraint on the size of tolerable U.S. imbalances in the global arena will likely be the reluctance of foreign country residents to accumulate additional debt and equity claims against U.S. residents. By the end of 2003, net external claims on U.S. residents had risen to approximately 25 percent of a year's GDP, still far less than net claims on many of our trading partners but rising at the equivalent of 5 percentage points of GDP annually. However, without some notion of America's capacity for raising cross-border debt, the sustainability of the current account deficit is difficult to estimate. That capacity is evidently, in part, a function of globalization since the apparent increase in our debt-raising capacity appears to be related to the reduced cost and increasing reach of international financial intermediation.
The significant reduction in global trade barriers over the past half century has contributed to a marked rise in the ratio of world trade to GDP and, accordingly, a rise in the ratio of imports to domestic demand. But also evident is that the funding of trade has required, or at least has been associated with, an even faster rise in external finance. Between 1980 and 2002, for example, the nominal dollar value of world imports rose 5-1/2 percent annually, while gross external liabilities, largely financial claims also expressed in dollars, apparently rose nearly twice as fast.¹

This observation does not reflect solely the sharp rise in the external liabilities of the United States that has occurred since 1995. Excluding the United States, world imports rose about 2-3/4 percent annually from 1995 to 2002; external liabilities increased approximately 8 percent. Less-comprehensive data suggest that the ratio of global debt and equity claims to trade has been rising since at least the beginning of the post-World War II period, though apparently at a more modest pace than in recent years.²

From an accounting perspective, part of the increase in the ratio of world gross claims to trade in recent years reflects the continued marked rise in tradable foreign currencies held by private firms as well as a very significant buildup of international currency reserves of monetary

¹Gross liabilities include both debt and equity claims. Data on the levels of gross liabilities have to be interpreted carefully because they reflect the degree of consolidation of the economic entities they cover. Were each of our fifty states considered as a separate economy, for example, interstate claims would add to both U.S. and world totals without affecting U.S. or world GDP. Accordingly, it is the change in the gross liabilities ratios that is the more economically meaningful concept.

²For the United States, for example, the ratio of external liabilities to imports of goods and services rose from nearly 1-1/2 in 1948 to close to 2 in 1980. The comparable ratios for the United Kingdom can be estimated to have been in the neighborhood of 2-1/2 or lower in 1948 and about 3-3/4 in 1980.
authorities. Rising global wealth apparently has led to increased demand for diversification of portfolios by including greater shares of assets denominated in foreign currencies.

More generally, technological advance and the spread of global financial deregulation has fostered a broadening array of specialized financial products and institutions. The associated increased layers of intermediation in our financial systems make it easier to diversify and manage risk, thereby facilitating an ever-rising ratio of both domestic liabilities and assets to GDP and gross external liabilities to trade. These trends seem unlikely to reverse, or even to slow materially, short of an improbable end to the expansion of financial intermediation that is being driven by cost-reducing technology.

Uptrends in the ratios of external liabilities or assets to trade, and therefore to GDP, can be shown to have been associated with the widening dispersion in countries' ratios of trade and current account balances to GDP to which I alluded earlier. A measure of that dispersion, the sum of the absolute values of the current account balances estimated from each country's gross domestic saving less gross domestic investment (the current account's algebraic equivalent), has

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3 For the United States, for example, even excluding mortgage pools, the ratio of domestic liabilities to GDP rose at an annual rate of 2 percent between 1965 and 2002. For the United Kingdom, the ratio of domestic liabilities to GDP increased 4 percent at an annual rate during the 1987-2002 period.

4 If the rate of growth of external assets (and liabilities) exceeds, on average, the growth rate of world GDP, under a broad range of circumstances the dispersion in the change in net external claims of trading countries must increase as a percentage of world GDP. But the change in net claims on a country, excluding currency valuation changes and capital gains and losses, is essentially the current account balance. Of necessity, of course, the consolidated world current account balance remains at zero.

Theoretically, if external assets and liabilities were always equal, implying a current account in balance, the ratio of liabilities to GDP could grow without limit. But in the complexities of the real world, if external assets fall short of liabilities for some countries, net external liabilities will grow until they can no longer be effectively serviced. Well short of that point, market prices, interest rates, and exchange rates will slow, and then end, the funding of liability growth.
been rising as a ratio to aggregate GDP at an average annual rate of about 2 percent since 1970 for the OECD countries, which constitute four-fifths of world GDP.

The long-term increase in intermediation, by facilitating the financing of ever-wider current account deficits and surpluses, has created an ever-larger class of investors who might be willing to hold cross-border claims. To create liabilities, of course, implies a willingness of some private investors and governments to hold the equivalent increase in claims at market-determined asset prices. Indeed, were it otherwise, the funding of liabilities would not be possible.

With the seeming willingness of foreigners to hold progressively greater amounts of cross-border claims against U.S. residents, at what point do net claims (that is, gross claims less gross liabilities) against the United States become unsustainable and deficits decline? Presumably, a U.S. current account deficit of 5 percent or more of GDP would not have been readily fundable a half-century ago or perhaps even a couple of decades ago.\(^5\) The ability to move that much of world saving to the United States in response to relative rates of return would have been hindered by a far lower degree of international financial intermediation. Endeavoring to transfer the equivalent of 5 percent of U.S. GDP from foreign financial institutions and persons to the United States would presumably have induced changes in the prices of assets that would have proved inhibiting.

\(^5\)It is true that estimates of the ratios of the current account to GDP for many countries in the nineteenth century are estimated to have been as large as, or larger, than we have experienced in recent years. However, the substantial net flows of capital financing for those earlier deficits were likely motivated in large part by specific major development projects (for example, railroads) bearing high expected rates of return. By contrast, diversification appears to be a more salient motivation for today's large net capital flows. Moreover, gross capital flows are believed to be considerably greater relative to GDP in recent years than in the nineteenth century. (See Alan M. Taylor, "A Century of Current Account Dynamics," *Journal of International Money and Finance*, 2002, 725-48, and Maurice Obstfeld and Alan Taylor, "Globalization and Capital Markets," NBER Working Paper 8846, March 2002.)
There is, for the moment, little evidence of stress in funding U.S. current account deficits. To be sure, the real exchange rate for the dollar has, on balance, declined about 15 percent broadly and roughly 25 percent against the major foreign currencies since early 2002. Yet inflation, the typical symptom of a weak currency, appears quiescent. Indeed, inflation premiums embedded in long-term interest rates apparently have fluctuated in a relatively narrow range since early 2002. More generally, the vast savings transfer has occurred without measurable disruption to the balance of international finance. Certainly, euro area exporters have been under considerable pressure, but in recent months credit risk spreads have fallen, and equity prices have risen, throughout much of the global economy.

To date, the widening to record levels of the U.S. ratio of current account deficit to GDP has been, with the exception of the dollar’s exchange rate, seemingly uneventful. But I have little doubt that, should the rise in the deficit continue, at some point in the future further adjustments will be set in motion that will eventually slow and presumably reverse the rate of accumulation of net claims on U.S. residents. How much further can international financial intermediation stretch the capacity of world finance to move national savings across borders?

A major inhibitor appears to be what economists call “home bias.” Virtually all our trading partners share our inclination to invest a disproportionate percentage of domestic savings in domestic capital assets, irrespective of the differential rates of return. People seem to prefer to invest in familiar local businesses even where currency and country risks do not exist. For the United States, studies have shown that individual investors and even professional money
managers have a slight preference for investments in their own communities and states. Trust, so crucial an aspect of investing, is most likely to be fostered by the familiarity of local communities. As a consequence, home bias will likely continue to constrain the movement of world savings into its optimum use as capital investment, thus limiting the internationalization of financial intermediation and hence the growth of external assets and liabilities.  

Nonetheless, during the past decade, home bias has apparently declined significantly. For most of the earlier postwar era, the correlation between domestic saving rates and domestic investment rates across the world’s major trading partners, a conventional measure of home bias, was exceptionally high.  

For OECD countries, the GDP-weighted correlation coefficient was 0.97 in 1970. However, it fell from the still elevated 0.96 in 1992 to less than 0.8 in 2002. For OECD countries excluding the United States, the recent decline is even more pronounced. These declines, not surprisingly, mirror the rise in the differences between saving and investment or, equivalently, of the dispersion of current account balances over the same years.

The decline in home bias doubtless reflects, in part, vast improvements in information and communication technologies that have broadened investors’ scope to the point that foreign investment appears less exotic and risky. Moreover, there has been an increased international tendency for financial systems to be more transparent, open, and supportive of strong investor

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6 Without home bias, the dispersion of world current account balances would likely be substantially greater.

Accordingly, the trend of declining home bias and expanding international financial intermediation will likely continue as globalization proceeds.

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It is unclear at what point the rising weight of U.S. assets in global portfolios will impose restraint on world current account dispersion. When that point arrives, what do we know about whether the process of reining in our current account deficit will be benign to the economies of the United States and the world?

According to a Federal Reserve staff study, current account deficits that emerged among developed countries since 1980 have risen as high as double-digit percentages of GDP before markets enforced a reversal. The median high has been about 5 percent of GDP.

Complicating the evaluation of the timing of a turnaround is that deficit countries, both developed and emerging, borrow in international markets largely in dollars rather than in their domestic currency. The United States has been rare in its ability to finance its external deficit in a reserve currency. This ability has presumably enlarged the capability of the United States relative to most of our trading partners to incur foreign debt.

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8Research indicates that home bias in investment toward a foreign country is likely to be diminished to the extent that the country’s financial system offers transparency, accessibility, and investor safeguards. See Alan Ahearne, William Griever, and Frank Warnock, "Information Costs and Home Bias" Board of Governors of the Federal Reserve System, International Finance Discussion Paper No. 691, December 2000.


10Less than 10 percent of aggregate U.S. foreign liabilities are currently denominated in nondollar currencies. To have your currency chosen as a store of value is both a blessing and a curse. Presumably, the buildup of dollar holdings by foreigners has provided Americans with lower interest rates as a consequence. But as Great Britain learned, the liquidation of sterling balances after World War II exerted severe pressure on its domestic economy.
Besides experiences with the current account deficits of other countries, there are few useful guideposts of how high America’s net foreign liabilities can mount. The foreign accumulation of U.S. assets would likely slow if dollar assets, irrespective of their competitive return, came to occupy too large a share of the world’s portfolio of store of value assets. In these circumstances, investors would seek greater diversification into nondollar assets. At the end of 2002, U.S. dollars accounted for about 65 percent of central bank foreign exchange reserves, with the euro second at 19 percent. Approximately half of the much larger private cross-border holdings were denominated in dollars, with one-third in euros.

More important than the way that the adjustment of the U.S. current account deficit will be initiated is the effect of the adjustment on both the U.S. economy and the economies of our trading partners. The history of such adjustments has been mixed. According to the aforementioned Federal Reserve study of current account corrections in developed countries, although the large majority of episodes were characterized by some significant slowing of economic growth, most economies managed the adjustment without crisis. The institutional strengths of many of these developed economies--rule of law, transparency, and investor and property protection--likely helped to minimize disruptions associated with current account adjustments. The United Kingdom, however, had significant adjustment difficulties in its early postwar years, as did, more recently, Mexico, Thailand, Korea, Russia, Brazil, and Argentina, to name just a few.

Can market forces incrementally defuse a worrisome buildup in a nation’s current account deficit and net external debt before a crisis more abruptly does so? The answer seems to
lie with the degree of flexibility in both domestic and international markets. By flexibility I mean the ability of an economy to absorb shocks, stabilize, and recover. In domestic economies that approach full flexibility, imbalances are likely to be adjusted well before they become potentially destabilizing. In a similarly flexible world economy, as debt projections rise, product and equity prices, interest rates, and exchange rates could change, presumably to reestablish global balance.

The experience over the past two centuries of trade and finance among the individual states that make up the United States comes close to that paradigm of flexibility, especially given the fact that exchange rates among the states have been fixed and, hence, could not be part of an adjustment process. Although we have scant data on cross-border transactions among the separate states, anecdotal evidence suggests that over the decades significant apparent imbalances have been resolved without precipitating interstate balance-of-payments crises. The dispersion of unemployment rates among the states, one measure of imbalances, spikes during periods of economic stress but rapidly returns to modest levels, reflecting a high degree of adjustment flexibility. That flexibility is even more apparent in regional money markets, where interest rates that presumably reflect differential imbalances in states' current accounts and hence cross-border borrowing requirements have, in recent years, exhibited very little interstate dispersion. This observation suggests either negligible cross-state-border imbalances, an unlikely occurrence given the pattern of state unemployment dispersion, or more likely very rapid financial adjustments.

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We may not be able to usefully determine at what point foreign accumulation of net claims on the United States will slow or even reverse, but it is evident that the greater the degree
of international flexibility, the less the risk of a crisis.\textsuperscript{11} The experience of the United States over the past three years is illustrative. The apparent ability of our economy to withstand a number of severe shocks since mid-2000, with only a small, temporary decline in real GDP, attests to the marked increase in our economy's flexibility over the past quarter century.\textsuperscript{12}

In evaluating the nature of the adjustment process, we need to ask whether there is something special in the dollar's being the world's primary reserve currency. With so few historical examples of dominant world reserve currencies, we are understandably inclined to look to the experiences of the dollar's immediate predecessor. At the height of sterling's role as the world's currency more than a century ago, Great Britain had net external assets amounting to some 150 percent of its annual GDP, most of which were lost in World Wars I and II. Early post-World War II Britain was hobbled with periodic sterling crises, as much of the remnants of Empire endeavored to disengage themselves from heavy reliance on holding sterling assets as central bank reserves and private stores of value. The experience of Britain's then extensively regulated economy, harboring many wartime controls well beyond the end of hostilities, testifies to the costs of structural rigidity in times of crisis.

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Should globalization be allowed to proceed and thereby create an ever more flexible international financial system, history suggests that current imbalances will be defused with little

\textsuperscript{11} Although increased flexibility apparently promotes resolution of current account imbalances without significant disruption, it may also allow larger deficits to emerge before markets are required to address them.

\textsuperscript{12} See Alan Greenspan, remarks before a symposium sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming, August 30, 2002.
disruption. And if other currencies, such as the euro, emerge to share the dollar's role as a global reserve currency, that process, too, is likely to be benign.

I say this with one major caveat. Some clouds of emerging protectionism have become increasingly visible on today's horizon. Over the years, protected interests have often endeavored to stop in its tracks the process of unsettling economic change. Pitted against the powerful forces of market competition, virtually all such efforts have failed. The costs of any new protectionist initiatives, in the context of wide current account imbalances, could significantly erode the flexibility of the global economy. Consequently, it is imperative that creeping protectionism be thwarted and reversed.

The question of whether globalization will be allowed to proceed rests largely on the judgment of whether greater economic freedom, and the often frenetic competition it encourages, is deemed by leaders in societies to enhance the interests, one hopes the long-term interests, of their populations. Such broad judgments in the end determine how societies are governed.

The reasons that some economies prosper and others sink into long-term stagnation consequently has been the object of intense interest in recent decades. Agreement is growing among economic analysts and policymakers that those economies that have been open to cross-border trade have, in general, prospered. Those economies that chose to eschew such trade have done poorly. Most economists have long stipulated that, for a society based on a division of labor to prosper, the exchange of goods and services must be subject to a rule of law—specifically, to laws protecting the rights of minorities and property. Presumably to be effective such arrangements must be perceived as just by an overwhelming majority of a society. Thus, a rule of law arguably requires democracy.
Clearly, ideas shape societies and economies. Indeed, I have maintained over the years that the most profoundly important debate between conflicting theories of optimum economic organization during the twentieth century was settled, presumably definitively, here more than a decade ago in the aftermath of the dismantling of the Berlin Wall. Aside from the Soviet Union itself, the economies of the Soviet bloc had been, in the prewar period, similar in many relevant respects to the market-based economies of the west. Over the first four decades of postwar Europe, both types of economies developed side by side with limited interaction. It was as close to a controlled experiment in the viability of economic systems as could ever be implemented.

The results, evident with the dismantling of the Wall, were unequivocally in favor of market economies. The consequences were far-reaching. The long-standing debate between the virtues of economies organized around free markets and those governed by centrally planned socialism, one must assume, is essentially at an end. To be sure, a few still support an old fashioned socialism. But for the vast majority of previous adherents it is now a highly diluted socialism, an amalgam of social equity and market efficiency, often called market socialism. The verdict on rigid central planning has been rendered, and it is generally appreciated to have been unqualifiedly negative. There was no eulogy for central planning; it just ceased to be mentioned, and a large majority of developing nations quietly shifted from socialism to more market-oriented economies.

Europe has accepted market capitalism in large part as the most effective means for creating material affluence. It does so, however, with residual misgivings.

The differences between the United States and continental Europe were captured most clearly for me in a soliloquy attributed to a prominent European leader several years ago. He
asked, "What is the market? It is the law of the jungle, the law of nature. And what is civilization? It is the struggle against nature." While acknowledging the ability of competition to promote growth, many such observers, nonetheless, remain concerned that economic actors, to achieve that growth, are required to behave in a manner governed by the law of the jungle and are hence driven to an excess of materialism.

In contrast to these skeptics, others, especially in the United States, believe the gains in material wealth resulting from market-driven outcomes facilitate the pursuit of broader values. They support a system based on voluntary choice in a free marketplace. The crux of the largely laissez-faire argument is that, because unencumbered competitive markets reflect the value preferences of consumers, the resulting price signals direct a nation's savings into those capital assets that maximize the production of goods and services most valued by consumers. Incomes earned from that production are determined, for the most part, by how successfully the participants in an economy contribute to the welfare of consumers, the presumed purpose of a society's economy.

Clearly, not all activities undertaken in markets are civil. Many, though legal, are decidedly unsavory. Violation of law and breaches of trust do undermine the efficiency of markets. But the legal foundations and the discipline of the marketplace are sufficiently rooted in a rule of law to limit these aberrations. It is instructive that despite the egregious breaches of trust in recent years by a number of America's business and financial leaders, productivity, an important metric of corporate efficiency, has accelerated.

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On net, most economists would agree that vigorous economic competition over the years has produced a significant rise in the quality of life for the vast majority of the population in market-oriented economies, including those at the bottom of the income distribution. The highly competitive free market paradigm, however, is viewed by many at the other end of the philosophical spectrum, especially among some here in Europe, as obsessively materialistic and largely lacking in meaningful cultural values. Those that still harbor a visceral distaste for highly competitive market capitalism doubtless gained adherents with the recent uncovering of much scandalous business behavior during the boom years of the 1990s.

But is there a simple tradeoff between civil conduct, as defined by those who find raw competitive behavior demeaning, and the quality of material life they, nonetheless, seek? It is not obvious from a longer-term perspective that such a tradeoff exists in any meaningful sense.

During the past century, for example, economic growth created resources far in excess of those required to maintain subsistence. That surplus, even in the most aggressively competitive economies, has been in large measure employed to improve the quality of life along many dimensions. To cite a short list: (1) greater longevity, owing first to the widespread development of clean, potable water and later to rapid advances in medical technology; (2) a universal system of education that enabled greatly increased social mobility; (3) vastly improved conditions of work; and (4) the ability to enhance our environment by setting aside natural resources rather than having to employ them to sustain a minimum level of subsistence. At a fundamental level, Americans, for example, have used the substantial increases in wealth generated by our market-driven economy to purchase what many would view as greater civility.

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The collapse of the Soviet empire, and with it central planning, has left market capitalism as the principal, but not universally revered, model of economic organization. Nevertheless, the vigorous debate on how economies should be organized in our increasingly globalized society and what rules should govern individuals' trading appears destined to continue.