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Remarks by

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Stability and Economic Growth: The Role of the Central Bank

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International finance presents us with a number of intriguing anomalies, but the one that seems to bedevil monetary policy makers the most as they seek stability and growth (the topic of this conference) is the seemingly endless ability of the United States to finance its current account deficit.

To date, despite a current account deficit exceeding 6 percent of our gross domestic product (GDP), we--or more exactly, the economic entities that comprise the U.S. economy--are experiencing few difficulties in attracting the foreign saving required to finance it, as evidenced by the recent upward pressure on the dollar. The markets are not behaving in the way that some, if not most, analysts anticipated as the U.S. current account deficit rose above its previous high of 3-1/2 percent of GDP recorded in 1986.

Of course, deficits that cumulate to ever-increasing net external debt, with its attendant rise in servicing costs, cannot persist indefinitely. At some point investors will balk at further financing. Such a development would be particularly likely should risk-adjusted rates of return on assets outside the United States rise relative to investment opportunities in the United States. Even if such returns on U.S. assets stay high, the rise of concentration risks in foreign official and private portfolios could still induce investors to slow their accumulation of dollar claims and thereby delimit the size of the financeable U.S. current account deficit.

However, the adjustment of the U.S. external balance, when it comes, doubtless will be initiated by the actions both of foreign investors and of U.S. residents. Whatever the triggers for adjustment, the move toward current account balance, in addition to being driven by foreign investors altering their external portfolios, presumably would also reflect actions by U.S. residents to address domestic imbalances.

In all instances, a current account balance is essentially the product of a wide-ranging interactive process that reflects the production and allocation of goods, services, and incomes among the residents of a country and those of the rest of the world. The outcome encompasses the full array of domestic and international product and asset prices, including interest rates. The array of bilateral exchange rates between the dollar and foreign currencies appears to be particularly important to the current account balance, although, of course, exchange rates, like all other prices, are determined interactively and simultaneously. To the extent that an economy harbors elements of inflexibility, so that prices and quantities are slow to respond to new developments, the deficit-adjustment process is likely to adversely affect the levels of output and employment.

A nation's current account balance thus is essentially a market phenomenon that is not readily subject to rebalance by targeting one or more policy variables such as the exchange rate. To be sure, if the exchange rate of the dollar, through intervention, is persistently pressed higher or lower, the whole set of previously noted relationships would shift accordingly. I doubt, however, whether, given the current size of global financial markets, locking together two major currencies such as the dollar and the euro is feasible any longer. Over time, the required large domestic adjustments would be quite unlikely to be accepted by the majority of residents of either the United States or those of the euro area.

To be sure, policy initiatives to increase interest rates, which would elevate the propensity of households to save, would reduce the need for domestic investment to be financed by borrowed foreign saving. However, the additional inflow of capital arising from higher U.S. interest rates would boost the dollar's value and offset the narrowing of the imbalance. Alternatively, a

discretionary reduction in our federal budget deficit would work toward narrowing the current account deficit but, if history is any judge, to an uncertain and possibly small extent.

The rise of our deficit and our ability to finance it appears to coincide with a pronounced new phase of globalization that has emerged in the past decade. This phase is characterized by a major acceleration in U.S. productivity growth and the decline in what economists call home bias, the parochial tendency to invest domestic savings in one's home country.

Output per hour of nonfarm business in the United States has risen at an annual rate of 3 percent over the past ten years, compared with only 1.6 percent during the previous quarter century. The acceleration reflects the synergies of computer, telecommunications and networking technologies, which although applied world wide, have had a particularly pronounced impact on the U.S. economy. Greater rates of productivity growth in the United States, compared with still-subdued rates abroad, have apparently engendered comparable differences in risk-adjusted expected rates of return and hence in the demand for U.S.-based investment assets.

Home bias is a broadly visible tendency of markets. Lower required risk compensation is associated with geographically close investment opportunities; when investors are familiar with the environment, they perceive less risk than they do for objectively comparable investment opportunities in far distant, less familiar environments. There is evidence that even when

choosing investment targets within the United States, investors hold assets that are disproportionately close to home.¹

¹Joshua D. Coval and Tobias J. Moskowitz, “Home Bias at Home: Local Equity Preferences in Domestic Portfolios,” The Journal of Finance, December 1999, pp. 2045-2073.

Home bias was very much in evidence for a half century following World War II. Domestic saving was directed predominantly toward domestic investment. Because the difference between a nation's domestic saving and domestic investment is the near-algebraic equivalent of that nation's current account balance, imbalances were small.² However, starting in the 1990s home bias began to decline discernibly. The weighted correlation between national saving rates and domestic investment rates for countries representing four-fifths of world GDP declined from a coefficient of around 0.97 in 1992, where it had hovered since 1970, to an estimated low of 0.68 last year. Excluding the United States, the coefficient declined from 0.96 in 1992 to 0.58 last year.

To be sure, international trade has been expanding as a share of world GDP since the end of World War II. Yet, through the mid-1990s, the expansion was largely a grossing up of individual countries' exports and imports. Only in the past decade has expanding trade been associated with the emergence of ever-larger U.S. trade and current account deficits, matched by a corresponding widening of the aggregate external surpluses of many of our trading partners. Indeed, the growing dispersion of current account balances is closely tied to the shrinking degree of correlation of country shares of saving and investment.³ Obviously, if domestic saving exactly

²National income accounting establishes that the gap between domestic saving and domestic investment is equivalent to net foreign saving; net foreign saving is a close approximation of the current account balance.

³ Since domestic saving less domestic investment is equal, with small adjustments, to the current account balance, the dispersion of domestic saving less domestic investment among nations is a very close approximation to

equaled domestic investment for every country, all current accounts would be in balance and the dispersion of such balances would be zero.

Current account imbalances require that the correlation between domestic saving and investment--which reflects the degree of home bias--to be less than 1.0. Home bias, the inclination of individuals to prefer to invest in their own country, given comparable foreign opportunities, of course, is only one of several decision-sets that determine how much a nation actually saves, as distinct from intended saving, and what part of that saving, or of foreign saving, is attracted to fund domestic investment.

Aside from the ex ante average inclination of the residents of a country toward home bias, the difference between domestic saving and domestic investment, that is, the current account balance, is determined by the potential rate of return on foreign investments relative to domestic investments as well as a nation's underlying propensity to save relative to that of other nations.

the dispersion of current account deficits.

Indeed, all of these factors working simultaneously determine the extent to which domestic savers successfully reach beyond their borders to, on net, invest in foreign assets and thereby create current account surpluses and deficits. That ex post relationship, the correlation between actual--instead of intended--domestic saving and domestic investment was the object of the seminal work by Feldstein and Horioka a quarter century ago.⁴ Without the evident world-wide fall in home bias over the past decade, noted earlier, the United States would not have been able to finance its recent current account deficits, and, accordingly, these deficits would have been smaller.

The decline in home bias reflects a number of recent factors that have converged to lessen restraints on cross-border financial flows as well as on trade in goods and services. In addition to the dismantling of restrictions on capital flows, the advance of information and communication technologies has effectively shrunk the time and distance that separate markets around the world.

⁴ The article implied that global savings are inefficiently distributed to investment, meaning that savers are bearing too much risk for the returns they achieve and that countries with high-potential investment projects are getting less financing than they could productively employ. Savers tend, to their own detriment, to over-discount foreign returns. Such suboptimal allocation of capital lowers living standards everywhere. See Martin Feldstein and Charles Horioka (1980), "Domestic Savings and International Capital Flows," *Economic Journal*, vol. 90, pp. 314-29.

The vast improvements in these new technologies have broadened investors' vision to the point that foreign investment appears less risky. Combined with improvements in transportation networks, these developments have expanded the range of tradable goods and services that can be brought to each market and financed, and thereby enabled, greater integration of the productive resources of national economies.

Technological innovation and ongoing deregulation and tariff reductions have driven the globalization process by tearing down the barriers that have separated economic agents and thereby lowering the cost of transacting across borders. The effect of these developments has been to markedly increase the willingness and ability of financial market participants to reach beyond their national borders to invest in foreign countries, just as a century and more ago savings moved beyond local investment opportunities to develop national markets.

As I noted, the movement of savings across national borders to fund investment has permitted the significant increase in the dispersion of national current account balances. In recent years, the negative tail of the distribution of current account balances has been, of course, dominated by the U.S. deficit. The decline in home bias has clearly enlarged sources of finance for the United States. Indeed, the fall in the correlation of domestic saving with domestic investment over the past decade reflected an increase in the proportion of world saving invested cross border from 5 percent in the mid-1990s to 10 percent last year.

Given that we have yet to experience difficulties in funding a current account deficit that exceeds 6 percent of our GDP, what are the limits to the foreign markets' absorption of claims on U.S. residents?

Home bias is deeply ingrained in economic decisions and evident in the geographical mix of peoples' investments, even within national boundaries.⁵ How much further home bias can decline is obviously conjectural, given the paucity of historical precedent. Federal Reserve staff studies indicate that, despite evidence of recent diversification, U.S. and foreign portfolios still exhibit marked home bias. Funding of our current account deficit likely will become more difficult when home bias approaches its practical minimum. Irrespective of how globalized our economy may become, other things equal, people will still accord nearby investments a lower risk premium.

Presumably, well before the practical lower limits of home bias are reached, effective constraints on deficit funding, and hence on the deficit itself, are likely to come from foreign investors' fear of portfolio concentrations of claims on the residents and government of the United States.

⁵See footnote 1.

Concentration and other risks in holding dollar balances seem to have become a consideration at least for some investors. Of the more than \$30 trillion equivalents of cross-border banking and international bond claims reported by the private sector to the Bank for International Settlements for the end of the first quarter of 2005, 42.5 percent were in dollars and 39.3 percent were in euros. Adjusting for exchange rate changes, the dollar's share was 4 percentage points less than three years earlier, and the euro's share was more than 5 percentage points greater.⁶ Monetary authorities have been somewhat more inclined to hold dollar obligations. At the end of the first quarter of 2005, of the \$3.8 trillion equivalents held as foreign exchange reserves, more than three-fifths were held in dollars and approximately one-quarter in euros. Since early 2002, the dollar's share has been little changed after adjusting for movements in exchange rates.

What could be the potential consequences should the dollar's status as the world's reserve currency significantly diminish, especially if foreign investors reduce their rate of accumulation of claims on U.S. residents? Most analysts would contend that, during the past century, U.S. interest rates were lowered by the world's accumulation of dollars. Accordingly, in the event of a significant diminishing of the dollar's reserve currency status, U.S. interest rates would presumably rise.

⁶Bank for International Settlements, cross-border locational statistics, bond database, and Federal Reserve Board staff calculations

Although I doubt that the U.S. dollar will lose its status as the world's reserve currency any time soon, there are, in my judgment, lessons to be learned from the experience of sterling as it faded as the world's dominant currency. Sterling's status was at its height 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. Many wartime controls were maintained in the years immediately after World War II. Arguably these exacerbated the periodic sterling crises that hobbled Britain in those years as much of the remnants of its empire endeavored to reduce their heavy reliance on holding sterling assets as central bank reserves and private stores of value. The experience of Britain's then extensively regulated economy, provides testimony to the costs of structural rigidity in times of crisis.

Any diminution of the reserve status of the dollar, should it occur, is likely to be readily absorbed by a far more flexible U.S. economy than existed in Britain immediately following World War II. This, of course, presupposes that we in the United States in the years ahead maintain and, I trust, enhance our economy's degree of flexibility and our involvement in the highly successful globalization of recent decades.

Governments today, although still far more activist than in the nineteenth and early twentieth centuries, are rediscovering the benefits of competition and the resilience to economic shocks that it fosters. We are also beginning to recognize an international version of Smith's invisible hand in the globalization of economic forces.

Whether by intention or by happenstance, many, if not most, governments in recent decades have been relying more and more on the forces of the marketplace and reducing their intervention in market outcomes. We appear to be revisiting Adam Smith's notion that the more flexible an economy, the greater its ability to self-correct after inevitable, often unanticipated

disturbances. That greater tendency toward self-correction has made the cyclical stability of an economy less dependent on the actions of macroeconomic policy makers, whose responses often have come too late or have been misguided.

Being able to rely on markets to do the heavy lifting of adjustment is an exceptionally valuable policy asset. The impressive performance of the U.S. economy over the past couple of decades, despite shocks that in the past would have surely produced marked economic disruption, offers the clearest evidence of the benefits of increased market flexibility.

We weathered a decline on October 19, 1987, of a fifth of the market value of U.S. equities with little evidence of subsequent macroeconomic stress--an episode that hinted at a change in adjustment dynamics. The credit crunch of the early 1990s and the bursting of the stock market bubble in 2000 were absorbed with the shallowest recessions in the post-World War II period. And the economic fallout from the tragic events of September 11, 2001, was moderated by market forces, with severe economic weakness evident for only a few weeks. Most recently, the flexibility of our market-driven economy has allowed us, thus far, to weather reasonably well the steep rise in spot and futures prices for oil and natural gas that we have experienced over the past two years. The consequence of this flexibility has been a far more stable economy.

Flexibility is most readily achieved by fostering an environment of maximum competition. A key element in creating this environment is flexible labor markets. Many working people equate labor market flexibility with job insecurity. Despite that perception, flexible labor policies appear to *promote* job creation. An increased capacity of management to discharge workers without excessive cost, for example, apparently increases companies' willingness to hire without

fear of unremediable mistakes. The net effect, to the surprise of most, has been what appears to be a *decline* in the structural unemployment rate in the United States over the past quarter century.

Protectionism in all its guises, both domestic and international, does not contribute to the welfare of workers. At best, it is a short-term fix for a few workers at a cost of lower standards of living for a nation as a whole. Increased education and training for those displaced by creative destruction is the answer, not a stifling of competition.

As we move forward, I trust that we all have learned durable lessons about the benefits of fostering and preserving a flexible economy. In the United States that flexibility has been the product of the economic dynamism of our workers and firms that was unleashed, in part, by the efforts of policymakers to remove rigidities and promote competition.

Although the business cycle has not disappeared, flexibility has made the United States and most of the global economy more resilient to shocks and more stable overall during the past couple of decades. To be sure, that stability has created some new challenges for policymakers. But more fundamentally, an environment of greater economic stability has been key to the impressive growth in the standards of living and economic welfare so evident in much of the competitive world.