I am very pleased to be here today to visit with the Tucson Chapter of the Association for Investment Management Research. I say “visit with” because I do hope that when I finish speaking we can engage in some questions and answers and comments about my chosen topic. International economic issues—especially trade issues—are hot topics these days. Through my concentration on capital markets issues, my intention is to emphasize just how important international capital flows are to the United States. In the process, I hope to shed some light, and not just add to the heat, on trade issues by exploring the intimate connections between international trade and international capital flows.

Recent economic indicators have suggested that the long-awaited acceleration of the recovery from the 2001 recession is under way. According to the advance estimate from the Department of Commerce, real GDP growth—the broadest measure of the strength of the economy—increased at a 7.2 percent annual rate in the third quarter, and the latest employment data show that the accelerated growth is fueling job creation after many months of stagnation.

Through all the ups and downs of the U.S. economy over the past two decades, a staple of the situation has been a deficit in the U.S. international trade accounts and a corresponding surplus in the international capital accounts. Many observers are troubled by this persistent state of affairs and are concerned that the trade deficit might derail the economic recovery. It is common to refer to the situation as an “imbalance,” which naturally implies that something is wrong. The word “deficit” in “trade deficit” has the same connotation. I intend to use the words “surplus” and “deficit” as simple descriptive words and hope that in listening to me you can consciously ignore the baggage that the words commonly carry. My purpose is to analyze the external imbalance to see why we might, or might not, be concerned about it.

Before proceeding, I want to emphasize that the views I express here are mine and do not necessarily reflect official positions of the Federal Reserve System. I appreciate comments provided by my colleagues at the Federal Reserve Bank of St. Louis. Michael R. Pakko, senior economist in the Research Division, provided special assistance. I take full responsibility for errors.

To emphasize the importance of thinking through the analysis and not letting the word “deficit” decide the issue, consider the situation faced by many healthy corporations. It is common for a thriving company to spend more than its revenues, making up the difference by borrowing. When a company borrows to finance spending on capital, the company may be said to have a deficit on current account—its total spending on goods and services, including new capital, exceeds its revenues. The company simultaneously has a surplus on capital account—more funds are flowing into the company to buy the company’s shares and bonds than the company is investing in similar securities issued by others. Arithmetically, the company has a current account deficit and a capital account surplus, and thus has an “imbalance.” Whether the company is suffering from an economic imbalance depends on the productivity of its capital investments. Sometimes companies do invest in capital and businesses that turn out not to yield returns sufficient to service the debt financing the investments. Such a situation, when repeated over the years, is not sustainable. For a company, and as I will argue for a country, whether continuing infusions of financial capital are sustainable depends on how the financial capital is employed.
CURRENT AND CAPITAL ACCOUNTS IN THE BALANCE OF PAYMENTS

The most widely cited measure of the U.S. external imbalance is the trade deficit—the difference between U.S. exports and imports. More generally, it is useful to concentrate on the broader concept of the current account, which includes current earnings on capital as well as trade in goods and services. Putting aside errors and omissions in the data, the capital account surplus is necessarily equal to the current account deficit. By the same token, a country with a current account surplus simultaneously has a capital account deficit—that is, it is importing more capital claims than it is exporting. In the official statistics reported by the Bureau of Economic Analysis, this side of the ledger is called the “Capital and Financial Account.”

A country’s trade balance and its capital account are clearly very closely related. From an economist’s perspective, the flows of goods and services that comprise the trade balance tell only part of the story of a country’s international economic relations. I’m going to concentrate on the capital account because that part of the international economic story is commonly neglected.

A common mistake is to treat international capital flows as though they are passively responding to what is happening in the current account. The trade deficit, it is said, is financed by U.S. borrowing abroad. In fact, investors abroad buy U.S. assets not for the purpose of financing the U.S. trade deficit but because they believe these are sound investments promising a good combination of safety and return. Many of these investments have nothing whatsoever to do with borrowing in the conventional meaning of the word, but instead involve purchases of land, businesses, and common stock in the United States. Foreign auto companies, for example, have purchased land and built manufacturing plants in the United States. These simple examples should make clear that a careful analysis of the nature of international capital flows is necessary before offering judgments about the U.S. external imbalance.

RECENT TRENDS IN THE U.S. INTERNATIONAL FINANCIAL POSITION

Examining recent trends in the U.S. international financial position will help to uncover key facts and issues. There is a huge amount of detailed data in official U.S. statistics. I’ll draw on some of that information.

The capital account measures the change in the net foreign asset position of a country for a given period, such as a year. For the United States, the capital account includes the accumulation of foreign assets by U.S. residents as well as the accumulation of U.S. assets by foreigners. In the U.S. balance of payments accounts, each of these gross asset flows is broken down into “official” flows—representing asset purchases by governments and central banks—and “private” flows—representing the purchases of individuals and corporate entities. These totals are further broken down by type of asset—government securities, corporate bonds, private equity—in tables reporting the international investment position of the United States.

The sheer volume of international financial flows is truly phenomenal. According to the Bank for International Settlements, in 2001 trade in foreign currencies averaged $1.2 trillion per day, and trading in derivatives averaged $1.4 trillion per day. Much of this daily activity nets out when measuring quarterly and annual flows, but even the quarterly and annual magnitudes have been quite large. Moreover, they have been rising significantly over the past few years. For example, foreign-owned U.S. assets increased by an average of $155 billion per year during the 1980s. Since 2000, foreign ownership of U.S. assets increased at an average rate of $833 billion per year—more than a fivefold increase. In 2000, over $1 trillion of assets were sold to foreign entities. Growth of U.S. ownership of foreign assets has shown similar, if not quite so remarkable, growth. Averaging $95 billion during the 1980s, the U.S. entities have accumulated foreign assets at a rate of $366 billion per year over the past three years. Over the entire span of this comparison, the volume of U.S. assets owned abroad has outpaced our accumulation of foreign assets—a capital account surplus that has moved our country from a positive to a negative net asset position.

It is sometimes said that the United States has become a net debtor. The word “debtor” is extremely misleading in this context, for the U.S. assets owned by foreigners include equities and physical capital located in the United States, as well as bonds issued by U.S. entities. Moreover, the part of the U.S. international financial position that is debt, by which I mean bonds and other fixed claims such as bank loans, is predominantly denominated in dollars. A country with most of its debt denominated in its own currency is in a very different situation from one whose debt is denominated in other currencies.
The familiar crises experienced by several Asian countries in 1997-98, by Mexico on several occasions, by Argentina, and by numerous other countries have all involved situations in which the impacted countries have had large external debts denominated in foreign currencies.

The balance-of-payments accounts provide estimates of annual international investment flows. These accumulate over time to change the stocks of assets. Data on the stocks are available and are referred to as measures of the U.S. international investment position.

As recently as the early 1980s, the U.S. had a positive net investment position. As a consequence of large capital inflows in the 1980s and late 1990s, the United States today has the world’s largest negative net international investment position. By the end of 2002, foreigners owned more than $9 trillion of U.S. assets, based on market values, while U.S.-owned assets abroad reached a level of not quite $6.5 trillion. Hence, at the end of last year, the U.S. net international investment position represented a negative net position of $2.6 trillion, about 25 percent of U.S. GDP.

This new role for the United States, with its negative net international investment position, has been a source of consternation among those who see the globalization of financial markets as a worrisome phenomenon. I am much more sanguine about the U.S. international asset position. To explain why I view the rapid growth of cross-border financial market activity in a positive light, I’ll discuss some basic economic principles that underlie changes in the U.S. net international position. It would be a mistake, though, to think that the United States is in uncharted waters; other prosperous countries have had large negative international investment positions without getting into trouble, and the United States itself was in this position for decades prior to World War I.

**TRADE AND CAPITAL FLOWS**

In today’s world, with electronic funds transfers, financial derivatives, and largely unrestricted capital flows, investors have a global marketplace in which to seek profitable returns and diversify risk. In such an environment, we should consider the possibility that aggregate patterns of international trade flows may simply be the by-product of a process through which financial resources are seeking their most efficient allocations in a worldwide capital market. That is, instead of thinking that capital flows are financing the current account deficit, it may well be that the trade deficit is, so to speak, financing capital flows driven by investors seeking the best combination of risk and return in the international capital market.

While such a conclusion is surely an overstatement, I believe that it does contain an important element of truth. Capital flows are a highly dynamic feature of the international economy; changes in investor attitudes and expectations can alter capital flows quickly and force changes in the trade account. To paint a more complete picture of the broad nexus of forces driving trade and investment patterns around the world, I will describe three complementary views of how cross-border goods and asset flows are jointly determined.1

Perhaps the most basic model for explaining a country’s international position could be called “the trade view,” which focuses explicitly on the factors determining the import and export of goods and services. Under this perspective, the emphasis is on the economic conditions that determine whether a country runs a deficit in trade. The capital account simply measures the offsetting financial transactions that take place; investors are treated as passive players who finance what is happening in the dynamic trade sector. This view lends itself naturally to the application of basic principles of demand theory. The quantity of goods and services that a country imports depends on income and the relative price of imports, which is determined importantly by the exchange rate. Exports depend on the responses of a country’s trading partners to changes in their income and exchange rate movements.

Economists who have taken an empirical approach to estimating these demand relationships have found that the trade view can explain much about the fluctuations in trade and capital flows that we observe across countries. But their estimates have also presented a puzzle: U.S. import demand responds more strongly to changes in income growth than corresponding income responses in other countries. This finding means that, in the long run, with exchange rates settling at their equilibrium values and U.S. and foreign growth rates equal, the U.S. is predicted to run a persistently widening current account deficit. Alternatively, a widening deficit could be halted by a persistent depreciation

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1 In describing these three views and highlighting the importance of international capital flows, I draw on the work of Catherine L. Mann, a former economist at the Fed who is now a Senior Fellow at the Institute for International Economics in Washington, D.C. (Mann, 2002).
of the dollar, or by suffering a persistently slower growth rate than the rest of the world.

The conclusion is that either the United States is destined to face some combination of these undesirable outcomes—a continuously depreciating currency and/or lower GDP growth than the rest of the world—or the demand equations of the trade view are missing something. What might be missing is some important factor outside the trade view that can explain the recent historical trend of a widening U.S. current account deficit in an environment in which U.S. GDP growth is on average higher than growth in much of the rest of the world and in which the dollar, despite short-run fluctuations, is on average relatively strong and not persistently depreciating.

A second perspective of current account/capital account determination is best explained through accounting identities of the National Income and Product Accounts. The National Accounts are structured such that the total output—the GDP—of the United States is divided into principal components of consumption, investment, spending by government on goods and services, and exports. Total income from production can be either consumed or saved. These relationships imply that a current account deficit must equal the difference between U.S. domestic investment, or capital formation, and total U.S. saving by both the private sector and government.

This view suggests several explanations for U.S. current account deficits. One explanation that gained popularity in the 1980s was that large, persistent government budget deficits reduced national saving and thereby induced an inflow of financing from abroad. This “twin-deficit” argument has some appeal, particularly in that it suggests a key role for capital account flows. The argument is that claims on U.S. assets are exported to help finance government budget deficits. Indeed, the growth of the U.S. capital account surplus has included a vast accumulation of U.S. Treasury debt by foreigners. It is estimated that over $1.4 trillion of U.S. Treasury debt is currently held by foreigners, representing about 37 percent of the total outstanding. It is important to recognize, however, that foreign purchases of any U.S. assets, and not just Treasury bonds, serve to help finance the government budget deficit.

The twin-deficits explanation, however, is clearly inadequate. While this explanation appeared to fit the facts of U.S. experience in the 1980s, the relationship breaks down when examining other episodes. One recent example is the United States during the late 1990s, when the current account deficit persistently widened while the government budget moved from deficit to surplus. In other countries that have experienced large swings in government deficits and current account deficits, the twin-deficits theory doesn't seem to hold up in terms of timing or magnitude either.

Another explanation suggested by the savings/investment view is that periods of high investment demand—like the late 1990s in the United States—fully absorb domestic savings and require additional external financing. This explanation puts a completely different spin on current account deficits. If we are exporting claims on U.S. assets—financing abroad by selling bonds, equities, and claims on productive facilities—to fund productive investment opportunities, the payoff from those investments will finance the obligations incurred. This is a classic example of how financial markets can be used to exploit productive opportunities that might otherwise be unavailable.

From this perspective, the profitability of U.S. investment opportunities makes United States something of an “oasis of prosperity,” attracting savings from around the world from those who wish to share in the returns and safety of investing in U.S. markets. On this view, trade and current account deficits are induced by the dynamic role of the United States in world capital markets.

And yet this savings/investment view also appears incomplete and not in accord with recent facts. The U.S. external imbalance has continued to widen in recent years despite the fact that growth in the investment component of GDP dropped precipitously during the recent recession and has only recently shown signs of picking up. Moreover, returns in the U.S. equity market were pretty miserable from early 2000 until quite recently. Again, we seem to be left with only part of the story.

A third view of the U.S. external imbalance can, I believe, help complete the story. Just as the savings/investment view exploits the accounting identities of the National Accounts, an “international capital markets view” can be derived from the identity that one country’s deficit is balanced by another country’s surplus. From this perspective, capital account adjustment can play an important independent role that is determined by the motivations of both foreign and domestic investors. In particular, we can think of capital market flows as the equilibrium outcome of investors worldwide seeking to acquire...
portfolios that balance risk and return through diversification.

THE U.S. ROLE IN INTERNATIONAL CAPITAL MARKETS

Current commentary on international economic issues pays far too little attention to the role of the United States in international capital markets. The globalization of financial markets—spurred by technological advances and liberalization of capital flow restrictions worldwide—has created entirely new investment opportunities for investors in both the United States and abroad. These new opportunities have undoubtedly given rise to a re-balancing of portfolios, and there are reasons to believe that this process might be associated with a net export of claims on U.S. assets—a capital account surplus.

U.S. financial markets are among the most highly developed in the world, offering efficiency, transparency, and liquidity. Moreover, the U.S. dollar serves as both a medium of exchange and a unit of account in many international transactions. These factors make dollar-denominated claims attractive assets in any international portfolio. No capital market in the world has a combination of strengths superior to that of the United States. Our advantages include the promise of a good return, safety, secure political institutions, liquidity, and an enormous depth of financial expertise. The United States has worked hard for generations to create outstanding capital markets; our latest efforts to improve corporate governance should be viewed as simply another chapter in an ongoing story.

For some purposes, it is useful to think of U.S. financial markets as serving as a world financial intermediary. Just as a bank, or a mutual fund, channels the savings of many individuals toward productive investments, the U.S. financial markets play a similar role for many investors from around the world. In the process, individuals, companies, and governments around the world accumulate dollar-denominated assets to serve as a vehicle for facilitating transactions and storing liquid wealth safely.

A bank earns its return on capital by paying a lower interest rate to depositors than it earns on its assets. Similarly, the United States earns a higher return on its investments abroad than foreigners do on their investments in the United States. Despite the fact that the U.S. international investment position at the end of 2002 was –$2.6 trillion, U.S. net income in 2002 on its investments abroad slightly exceeded income payments on foreign-owned assets in the United States.

How is the United States able to earn a significantly higher return on its assets abroad than foreigners earn on their assets in the United States? A very simple example is currency, which pays a zero return. At the end of 2002, U.S. currency held abroad was estimated to be about $300 billion, whereas only a trivial amount of foreign currency is held in the United States.

More generally, many private and governmental investors abroad rely on the U.S. capital market as the best place to invest in extremely safe and highly liquid securities. Along a spectrum of safety and liquidity, these assets include currency, U.S. government obligations, agency debt, and corporate bonds. U.S. equity markets are also highly liquid. The United States as a whole earns a return from providing these safe and liquid investments to the world. Indeed, the desire of foreigners to hold U.S. Treasury securities is a testament to the confidence that the world has in the safety and soundness of our financial system.

Recent data show just how impressive is the world’s appetite for safe U.S. assets. Over the six quarters ending with the second quarter of this year, total outstanding U.S. government debt rose by about $345 billion, while foreign holdings of such debt have risen by about $304 billion.

Another force at work may be a gradual breakdown in the home bias to investment. For some years, international economists have noted that investors tend to hold portfolios that are weighted more toward domestic assets than would appear optimal by the principles of diversification—there is home-bias to investor behavior. Business cycles and investment risks are not perfectly synchronized across countries; a balanced international portfolio can help to diversify risk. The opening of global capital markets has allowed investors to exploit these opportunities, particularly foreign investors who are able to participate in the relative openness of U.S. capital markets and the multinational diversification of U.S. corporations.

Another aspect of the situation may be a consequence of demographics. Europe and Japan, especially, have populations that are aging more rapidly than does the United States. Just as a retired household typically consumes more than its income, drawing down retirement savings in the process, so also may an entire country draw down international investments to finance the consumption of its retired
population. Japan especially has a high saving rate relative to its domestic investment rate; it is accumulating assets abroad that may be run down in future years to support its elderly population. This process is one that will work out over many years. What may appear to be an “imbalance” this year may make perfect sense over a long-term horizon.

While the international capital markets view provides a perspective on some unique influences on U.S. current account/capital account imbalances, it is entirely consistent with the alternative perspectives. As foreigners decide to accumulate dollar-denominated assets, U.S. interest rates are kept lower than they otherwise would be, which tends to increase investment demand in the United States. This investment demand, incidentally, includes both corporate demand for capital formation and household demand for new housing. The total demand for funds also includes the U.S. government’s demand, which may be temporarily high as a consequence of the war on terrorism, Iraq, and the 2001-03 period of recession and slow recovery. These factors are consistent with the savings/investment perspective that helps to understand why the United States has a capital inflow and the associated current account deficit.

**IS THE U.S. EXTERNAL IMBALANCE SUSTAINABLE?**

When considering widening external imbalances like those that the United States has experienced in recent years, a natural question is whether or not current trends are sustainable. Indeed, with a current account deficit equal to 5 percent of GDP and a negative international investment position that amounts to 25 percent of GDP, some have drawn comparisons with countries such as Argentina, Brazil, and Mexico at times of severe balance of payments crises.

I consider it highly unlikely that such a crisis will befall the United States. As a stable, diversified industrial economy, the United States is not likely to suffer from a sudden lack of confidence by investors. In fact, other industrialized economies have incurred much larger external obligations without precipitating crises. For example, Australia’s negative net investment position reached 60 percent of GDP in the mid-1990s, Ireland’s exceeded 70 percent in the 1980s, and New Zealand accumulated a position amounting to nearly 90 percent of GDP in the late 1990s. Notably, these economies have recently been among the most successful—in terms of economic growth—in the industrialized world. Indeed, the combination of rising external obligations and prospects for robust growth is entirely consistent with the view of the capital account I have discussed today.

Moreover, the international capital markets view suggests that the United States is not only more like those countries that have experienced high levels of debt without obvious ill effects—but that the U.S. case is, in some sense, unique. The central role of U.S. financial markets—and of the dollar—in the world economy suggests that capital account surpluses are being driven by foreign demand for U.S. assets, rather than by any structural imbalance in the U.S. economy itself.

To be sure, no country can permanently incur rising levels of net external obligations relative to GDP. If sustained indefinitely, service payments on ever-increasing obligations would ultimately exceed national income. Long before that situation of literal insolvency occurred, however, market forces would drive changes in exchange rates, interest rate differentials, and relative growth rates in such a way to move the economy toward a sustainable path. Nevertheless, such adjustments need not be sudden, large, or disruptive as they have sometimes been for countries with severe balance-of-payments crises.

Not only are there market forces that will restore equilibrium, should the current situation not correct itself, but more importantly the international capital markets may well be looking ahead to changing circumstances that will reduce the capital flows to the United States in coming years. I’ve already mentioned the demographic forces at work. Another possibility is that economic growth will rise elsewhere in the world, raising demands both for U.S. exports and for international capital to finance higher growth. Given the strength of U.S. multinational corporations, U.S. firms will share in the profits from higher growth abroad, and some of those earnings will be repatriated to the United States.

**CONCLUDING COMMENTS**

The international financial markets view of U.S. international capital account determination that I have described today highlights the dynamic role of international capital adjustments as investors exploit the opportunities of globalized financial markets. Because the technological progress and capital-market liberalizations that have driven this process have evolved over time, the process has
been protracted. Ultimately, however, when portfolio adjustments have optimally exploited new diversification opportunities, and as growth abroad rises, the net international investment position of the United States will stabilize.

If this view is correct, the forces driving the U.S. capital account represent a persistent, but ultimately temporary, process that might result in a higher level of net indebtedness without necessarily posing any threat to the sustainability of the U.S. international investment position. Nor will the transition to a sustainable long-run path necessarily require wrenching adjustments in domestic or international markets or in exchange rates.

In the meanwhile, we can all benefit from our good fortune to have access to increasingly safe, liquid, and transparent financial markets. The United States has created for itself a comparative advantage in capital markets, and we should not be surprised that investors all over the world come to buy the product.