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## **The Value of the Dollar: What You Should Know**

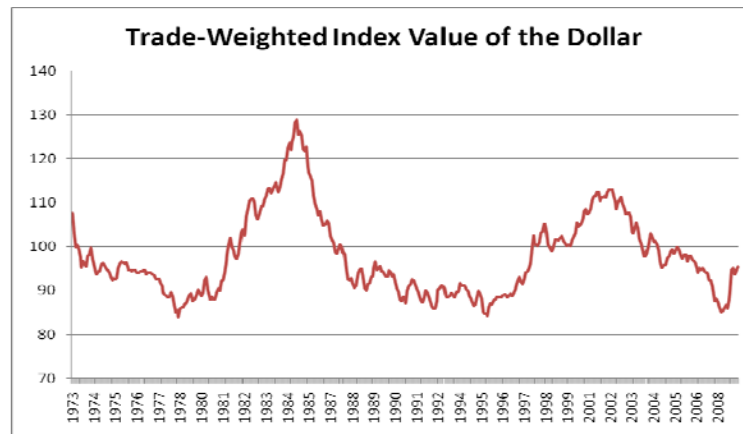
## *I. Overview*

The value of the dollar is one of the most influential yet least understood prices in global markets. The dollar affects the profits and overall performance of all U.S. companies that export and import. It affects all financial companies that hold international as well as domestic assets.

This OFII Research Note examines the forces driving the value of the dollar against other major currencies in the world. Four points to remember:

1. Demand for the U.S. dollar is driven mainly by demand for U.S. assets. The value of the dollar relative to other world currencies is driven mainly by the demand for U.S. assets relative to assets in the rest of the world.
2. For over a generation the United States has been, on net, selling U.S. assets to foreign investors to fund ongoing and generally widening deficits in trade in goods and services. The gross asset transactions between the U.S. and the rest of the world are much, much larger than the net asset flow that offsets the U.S. current-account deficit.
3. At year-end 2007, foreign direct investment (FDI) accounted for 16.6% of all U.S. assets owned by foreign investors. FDI is an important component of the overall set of U.S. assets owned by the rest of the world. FDI tends to be more stable than portfolio investments such as U.S. Treasury securities, and it directly supports employment and other important activities such as investment and R&D.
4. In 2009 and beyond, the U.S. government will run record fiscal deficits—nearly \$1.8 trillion in 2009 alone. Because U.S. households save so little, foreign investors will need to purchase the large majority of the Treasury securities issued to fund these record deficits. Demand for these Treasuries, and more generally for all U.S. assets—including businesses—and thus the U.S. dollar, will depend heavily on the overall U.S. investment and business climate established for these foreign investors.

## *II. Demand for U.S. Assets Drives Demand for the U.S. Dollar*



The above figure plots the real value of the U.S. dollar against the currencies of countries with which the United States trades goods and services. A rising index corresponds to dollar appreciation, a falling index dollar depreciation. It is a weighted-average index, where at each point in time countries with which the U.S. trades more receives larger weights. Source: U.S. Federal Reserve Board 1

What explains the rise and fall of the dollar against other currencies?

Since 1973, the Federal Reserve generally has not been conducting monetary policy with a goal of targeting the value of the U.S. dollar. This means that the value of the dollar against other countries' currencies has varied with global demand for U.S. assets (and, to a lesser extent, for output of goods and services) relative to other countries' assets (and output). **Rising relative demand for U.S. assets appreciates the dollar; falling relative demand for U.S. assets depreciates the dollar.**<sup>1</sup>

For example, from the late 1970s until the mid-1980s, the dollar appreciated strongly against all major currencies in the world. A combination of contractionary U.S. monetary policy and expansionary U.S. fiscal policy drove U.S. interest rates to very high levels, which in turn raised the relative attractiveness of U.S. assets in the eyes of global investors. From 2002 into 2008, the dollar depreciated as strong economic growth and asset-price appreciation in developing countries like China and India shifted global investor demand away from U.S. assets. The sharp dollar appreciation in 2008 reflected a global surge in demand towards relatively safe assets—in particular, U.S. Treasury securities—as financial crisis and recession gripped the world.

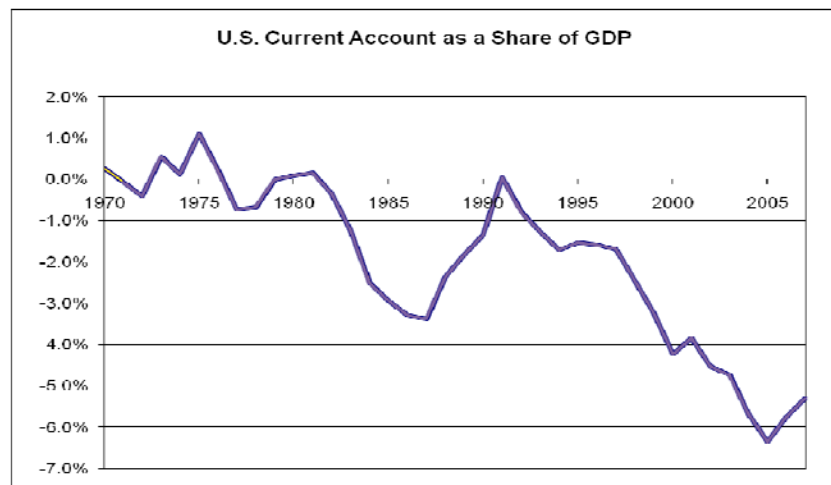
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<sup>1</sup> Even though today the Federal Reserve does not conduct monetary policy to fix the value of the dollar against some other country's currency, the converse is not true. Today and in earlier times as well, many other countries devote the creation of money in their monetary policy to pegging the value of their currencies to the U.S. dollar. One commonly discussed example today is the Chinese central bank, which conducts monetary policy to fix the value of the yuan against a basket of currencies that heavily focuses on the U.S. dollar. After World War II, the value of the dollar was fixed by the Federal Reserve. From 1945 until 1973, in what was widely known as the Bretton Woods exchange-rate system, many major countries around the world fixed the value of their currencies to the U.S. dollar, which in turn the Federal Reserve fixed to gold at \$35 per ounce.

### **III. Expanding U.S. Trade Deficits Have Driven Expanding Net U.S. Asset Sales**

Every year since 1976, the United States has run a trade deficit with the rest of the world; in other words, the value of U.S. imports (goods and services) has exceeded the value of U.S. exports (goods and services). The main cause of this trade deficit has been low U.S. national savings relative to U.S. national capital investment. This trade deficit is closely related to the current-account deficit, which equals the trade deficit plus net transfers to the rest of the world and net income flows from international asset holdings.

In 2006, the U.S. current-account deficit reached a record high of \$788.1 billion, and in 2007 it totaled \$731.2 billion. The following figure plots the annual U.S. current-account balance since the early 1970s (as a share of U.S. gross domestic product, rather than in dollar terms.)



Source: U.S. Bureau of Economic Analysis

**To finance this excess of imports over exports of goods and services that underlies the current-account deficit, each year the United States must, on net, sell an equivalent amount of assets to the rest of the world. These asset sales reflect the rest of the world providing its savings to fund U.S. capital investment in excess of U.S. national savings. So, for example, in 2007 the United States sold, on net, \$731.2 billion worth of U.S. assets to foreign investors to offset its equivalent current-account deficit.**

Important buyers of U.S. assets have included countries such as China and Japan that have been running offsetting current-account surpluses. Looking at institutions, important buyers of U.S. assets have included the central banks of these current-account-surplus countries and, more recently, sovereign wealth funds linked to rising prices for commodities such as oil and natural gas.

**It is important to point out the *gross* asset transactions between the U.S. and the rest of the world are much larger than the *net* asset flow that offsets the U.S. current-account deficit.**

For example, in 2008 the rest of the world purchased on net \$412.5 billion in long-term U.S. securities including equities, corporate bonds, and Treasury securities. But this net purchase during 2008 was the result of foreign investors purchasing \$30.67 trillion and selling \$30.26 trillion of these long-term U.S. securities over the course of the year. Similarly, in 2008 U.S. investors sold a net \$102.1 billion of foreign securities to foreign investors—the result of \$7.69 trillion in sales and \$7.59 trillion in purchases of these foreign securities to and from foreign investors, respectively.<sup>2</sup>

**Net and gross asset transactions both help determine the value of the U.S. dollar.** Gross trade in assets is much larger than the net asset trade reflected in the current accounts mainly because of transactions driven by considerations of portfolio diversification. Above and beyond the U.S. net sale of assets to the rest of the world with each year's current-account deficit, millions of investors worldwide—individuals, pension funds, hedge funds, central banks, etc.—continually rebalance their portfolios by buying and selling assets around the world.

#### ***IV. The Mix of U.S. Assets Owned By the Rest of the World***

What assets does the United States sell to foreign investors? Some are “portfolio” assets such as U.S. Treasury securities, corporate stocks, corporate and other bonds, and bank loans and other bank liabilities. **Another important asset transaction that helps finance the current-account deficit is the sale or acquisition of U.S. firms by companies headquartered abroad—i.e., “insourcing” M&A.** To finance current-account deficits, insourcing M&A offers two big advantages relative to portfolio assets.

##### *The Advantages of M&A*

One important advantage is the productivity benefits that insourcing M&A brings to companies and overall host countries through high levels of R&D, capital investment, and international trade. In turn, these investments support jobs in a variety of industries, including research and innovation, manufacturing, and management positions. Portfolio investments, by contrast, do not entail the degree of ownership control typically required for the transfer and use of ideas, technologies, and best practices that FDI brings.

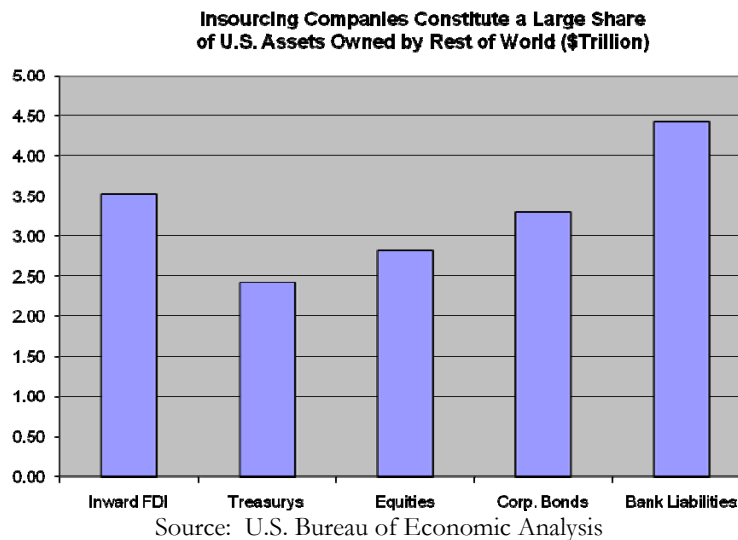
The other important advantage is stability. FDI is a less-volatile form of international capital flows than is portfolio investment, thanks to the long-term focus that typically motivates insourcing M&A decisions. Accordingly, FDI is less prone to sudden swings in investor demand and thus in asset prices (e.g., currency values or bond rates) that can have large impacts on the real economy in terms of output and employment.

Given the benefits insourcing M&A can play in financing current-account deficits, the important question becomes how large a role has it played for the United States. **In the past generation, insourcing M&A has been an important asset transaction helping finance America's current-account deficit.** During the merger wave of the late 1980s, the insourcing M&A share of the overall current-account deficit rose to 70.0% in 1990. It fell back to 21.1% again in 1992 but then rebounded, reaching 87.9% in 2000. The share fell sharply after that, to just 9.6% in 2003, but has since climbed back to 32.5% in 2007.

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<sup>2</sup> These statistics come from the Treasury International Capital (TIC) data for December 2008, released 2/17/09.

The past generation of insourcing M&A playing a large role in financing America's current-account deficit means that today, insourcing companies constitute a big share of all U.S. assets owned by the rest of the world. For five major asset classes, the following figure presents the value of U.S. assets owned by foreign residents at year-end 2007.



At year-end 2007, the rest of the world owned a total of \$21.18 trillion of U.S. assets. **Inward FDI is a big asset class: at a market value of \$3.52 trillion, this was 16.6% of the total and a class larger than all foreign holdings of U.S. Treasury securities, of corporate stocks, and of corporate and other bonds—second in size to only to bank loans and other bank liabilities.**

## **V. Recent and Future Demand for U.S. Assets**

The global financial crisis and recession of 2008 have triggered large and often sudden shifts in demand for assets around the world. As discussed earlier in Section II, in recent months the dollar has appreciated sharply against many major currencies in response to a surge in demand towards relatively safe assets.

There is widespread consensus that the world's safest financial assets are short-term U.S. Treasury bills. In 2008, foreign investors bought on net \$456.0 billion in these Treasury bills, a stunning ten-fold surge from the 2007 total of just \$49.7 billion (and a net sale of \$9.0 billion in 2006). In contrast, foreigners in 2008 sold on net \$37.7 billion of riskier Fannie Mae and Freddie Mac bonds—the first such net-sale year for this group of bonds since 1983, and a sharp reversal from the 2007 net purchases of \$219.0 billion.<sup>3</sup> This surge in demand for Treasury bills has driven their yields to historic lows—at various points slightly negative yields, a signal of such strong demand for safety that investors were willing to receive upon maturity less than the original principal invested.

**But there is reason to question whether recent strong demand for U.S. Treasury securities—and thus for the U.S. dollar—will persist.** In the coming years, the U.S. government will run record fiscal deficits—nearly \$1.8 trillion in 2009 alone. This is both because of the recession itself, which erodes tax receipts and boosts income-support expenditures, and because of new fiscal outlays to combat the financial crisis (ongoing TARP spending) and the recession (recently enacted American Recovery and Reinvestment Act of 2009).

Because U.S. households save so little, foreign investors will need to purchase the large majority of the Treasury securities issued to fund these record deficits. **Demand for Treasuries, and more generally for all U.S. assets and thus the U.S. dollar, will depend heavily on the overall investment and business climate the United States establishes for these foreign investors.**

The ability of the United States to continue to smoothly finance both its ongoing current-account deficits and its rapidly expanding fiscal deficits will depend, in part, on foreign investors having many, rather than few, American assets to consider. **The likelihood of a gradual, orderly evolution of U.S. deficits will be higher the wider is the range of U.S. assets the rest of the world can purchase—including U.S. companies via insourcing M&A. Foreign-investor appetite for U.S. assets will be stronger the more open U.S. policy remains to international trade and investment.** This will be an important macroeconomic benefit of U.S. global engagement, beyond all the documented advantages and strengths of insourcing companies themselves.<sup>4</sup>

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<sup>3</sup> These statistics come from the Treasury International Capital (TIC) data for December 2008, released 2/17/09.

<sup>4</sup> For details on these strengths, see the 2007 Organization for International Investment study, *Insourcing M&A*.