

**IMES DISCUSSION PAPER SERIES**

**America's Deficit, the World's Problem**

Maurice Obstfeld

**Discussion Paper No. 2005-E-8**

**IMES**

**INSTITUTE FOR MONETARY AND ECONOMIC STUDIES**

**BANK OF JAPAN**

**C.P.O BOX 203 TOKYO**

**100-8630 JAPAN**

You can download this and other papers at the IMES Web site:

<http://www.imes.boj.or.jp>

Do not reprint or reproduce without permission.

NOTE: IMES Discussion Paper Series is circulated in order to stimulate discussion and comments. Views expressed in Discussion Paper Series are those of authors and do not necessarily reflect those of the Bank of Japan or the Institute for Monetary and Economic Studies.

## America's Deficit, the World's Problem

Maurice Obstfeld

### Abstract

The United States deficit on current account, now running at an annual rate of over \$700 billion, has reached levels (as a percent of U.S. GDP) not seen since the first decades of the nineteenth century. The deficit is soaking up roughly three-quarters of the world's available external surpluses. Were the deficit to continue at this pace, the U.S. could ultimately converge to an external debt/GDP ratio around 1. Several analyses suggest that a rapid adjustment of the deficit toward balance would require a very sharp real depreciation of the U.S. dollar. This paper reviews the limitations of some optimistic arguments that predict instead a "soft landing" for the dollar. I focus in particular on the view that greater financial globalization allows the U.S. easily to run much bigger deficits for much longer periods. Some simple calculations based on real interest rate differentials suggest that markets could be underestimating the extent of necessary dollar depreciation.

**Key words:** Current account adjustment; international capital flows; exchange rates

**JEL classification:** F32

\*University of California, Berkeley

Keynote speech prepared for the Twelfth International Conference of the Institute for Monetary and Economic Studies, Bank of Japan, Tokyo, May 30-31, 2005. The material herein reflects, in part, collaborative research with Kenneth Rogoff. I am grateful to the IMF Institute for its hospitality while this paper's first draft was written, and to the Class of 1958 chair at UC Berkeley for research support. Naohiko Baba graciously assisted me in obtaining some of the data used in this paper.

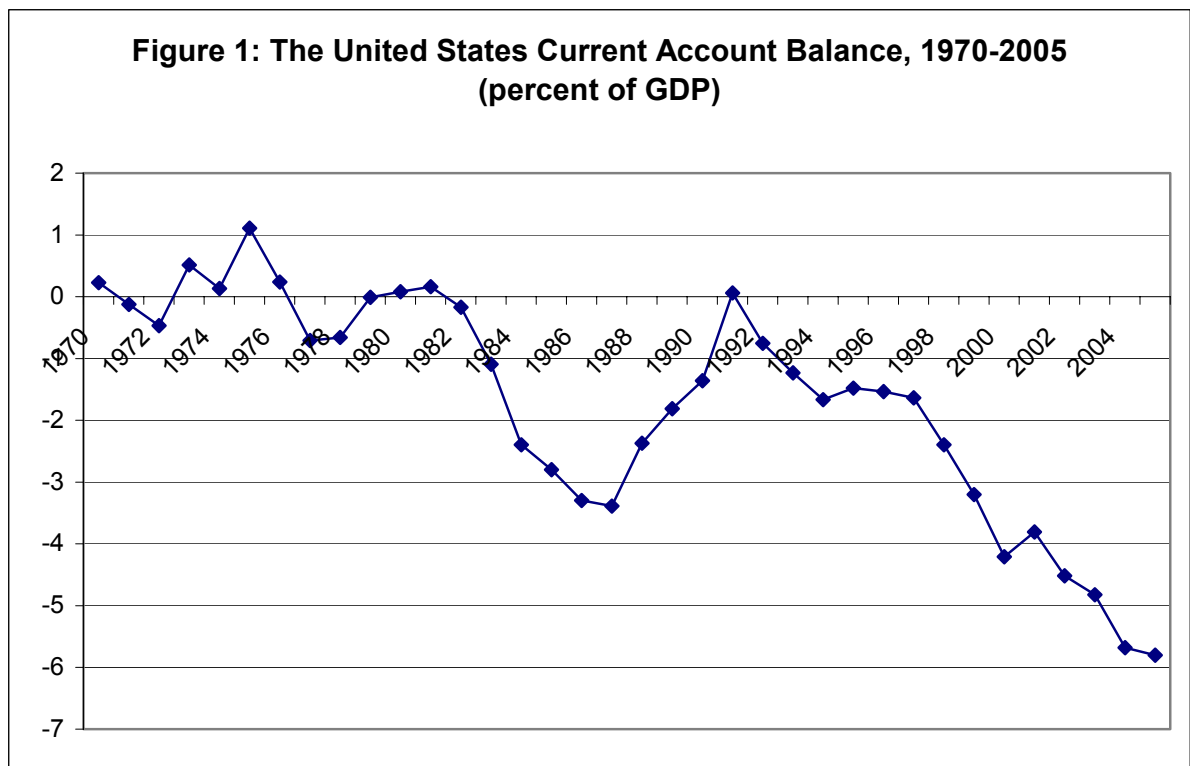
As a percent of national income, the United States current account deficit now stands at a level that has not been seen since the early decades of the American republic. It was at the beginning of this period that the first U.S. Treasury Secretary, Alexander Hamilton, sought to establish the new nation's creditworthiness in European capital markets. In absolute terms, of course, the deficit is the biggest ever seen in world history, absorbing a full three-quarters of the world's available external surpluses – including those of China, Japan, Germany, Norway, and Switzerland.

Is this unprecedented situation a problem for the United States, for other countries, or for everyone? Opinions vary greatly – as they always seem to do in unprecedented (or at least not recently preceded) situations. I will argue that the American deficit has indeed become a problem for the United States, and therefore for the world economy as a whole. Given the need for a substantial global adjustment in expenditure patterns, it will be a major challenge for monetary and fiscal authorities in the major trading regions to engineer a “soft landing” for currency values.

### **International Payments Patterns Today**

The American deficit is not a new phenomenon. The U.S. current account balance has been continuously negative since the early 1990s, and it was also in deep deficit in the mid-1980s. Indeed, in retrospect (see Figure 1), the period of relatively moderate deficits between 1990 and 1998 now appears as something of an aberration along an otherwise consistent path of decline starting in the early 1970s (if not before).

In the April 2005 edition of its *World Economic Outlook*, the International Monetary Fund forecasts a 2005 U.S. current account balance of -\$725 billion (or -5.8% of U.S. GDP). First-quarter estimates show the 2005 U.S. deficit running at an even higher 6.4% of GDP so far. Who will finance this unprecedented level of borrowing by the world's economic and military superpower? Japan is expected to advance nearly 22% of the total sum, amounting to \$157 billion or 3.3% of its GDP. The euro zone is expected to provide a relatively small



Source: U.S. Department of Commerce, Bureau of Economic Analysis. Figure for 2005 is IMF April 2005 preliminary projection.

amount, \$50.1 billion (or 0.4% of its own GDP). Other advanced countries, taken together, are predicted to lend somewhat less than Japan, \$136 billion, while newly industrializing Asia – comprising Korea, Hong Kong, Taiwan, and Singapore – looks good for \$92 billion (about 6.8% of the group’s collective output).

Finally “other developing countries,” a grouping that includes commodity exporters currently enjoying enhanced revenues that have risen faster than can be domestically absorbed, are in line to cover fully 42% of America’s desired borrowing, or \$303 billion. This is up from the 37% of the U.S. deficit those countries financed in 2004, already a very large share. In some of these countries, for example, Saudi Arabia and Venezuela, political stability looks precarious.

The liquidity and risk structure of U.S. deficit financing would give an emerging-market finance minister sleepless nights, and would have generated concern even in the U.S. during the Bretton Woods era. More than 100% of the net finance from developing countries as a group has recently taken the form of reserve accumulation. In 2004, for example, developing countries’ net lending to the United States was about \$246 billion, out of the overall U.S. deficit of \$666 billion. These same countries, however, accumulated even more dollar reserves in that year – primarily liquid dollar claims on the U.S. Treasury. The discrepancy in part reflects U.S. accumulation of gross claims on developing countries, in the form of FDI, for example, and therefore liquidity and risk transformation (in addition to net short-term borrowing) on the part of the United States.

Whereas even the prospect of such developments would once have sent financial markets reeling, market actors now seem to be accepting the extent and nature of U.S. borrowing, and the prospect of its indefinite continuation, with equanimity. The U.S. net

external debt has reached 25% of GDP, and could rise much higher, yet long-term dollar interest rates show no signs of upward pressure -- quite the contrary -- and there is no evidence that American financing needs are straining the willingness of foreigners to absorb into their portfolios additional claims on the United States. The U.S. Commerce Department's preliminary balance of payments estimates for 2004 show that private foreign investors acquired an additional \$1.078 trillion in assets located in America; foreign private purchases of a mere \$666 billion would have sufficed to finance the current account deficit, even without any foreign official dollar purchases. Of course, U.S. residents simultaneously acquired more than \$800 billion in foreign-based assets, and foreign central banks more than \$400 billion in dollars, an illustration of the extreme degree of foreign leverage that has come to characterize the U.S. external portfolio (as well as those of other industrial countries). Are there really no risks in sight, or are foreign private and official lenders to the U.S. simply discounting the potential risks very heavily?

Leading economists have positioned themselves on both sides of this question. The next section reviews some of the main arguments in favor of a benign neglect of the current U.S. external position. I focus on the implications of greater financial integration because that is perhaps the most striking way in which the present differs from the past. At the same time, I offer some reasons for being skeptical of the case for complacency.

### **Arguments for Complacency and Their Limitations**

Whenever a heretofore unsustainable trend develops, and then persists, arguments emerge as to why the world has changed so that what once was thought impossible now is not only

possible, but necessary. While these arguments generally have some plausibility, their primary purpose is to provide intellectual reassurance in the face of the grim reality that markets can seem fickle, reversing themselves sharply and unpredictably. While such reversals, I believe, sometimes reflect a true multiplicity of equilibria, even models with a unique equilibrium can allow long-run policy inconsistencies to remain largely hidden from view for some time – for example, due to a fixed exchange rate – before markets erupt in a sudden crisis.<sup>1</sup>

One prominent argument in favor of a relaxed approach has been advanced by Chairman Alan Greenspan of the Federal Reserve (Greenspan 2004). In brief, his view is that world financial markets have become so deep and efficient that for a country as creditworthy as the U.S. has been, much larger current account imbalances are sustainable over longer periods and therefore need not urgently require policy interventions.

It is certainly true that the last fifteen years have seen a spectacular growth in several measure of global financial integration.<sup>2</sup> Figure 2 displays, at the global level, the paths of world foreign assets and liabilities (with liabilities in excess of assets, contrary to the prediction of accounting identities, as a result of the same statistical problems that generate a global current account deficit in the available data)<sup>3</sup>. Both have global asset stocks risen sharply in recent years, and for individual countries, the ratios of foreign assets and liabilities

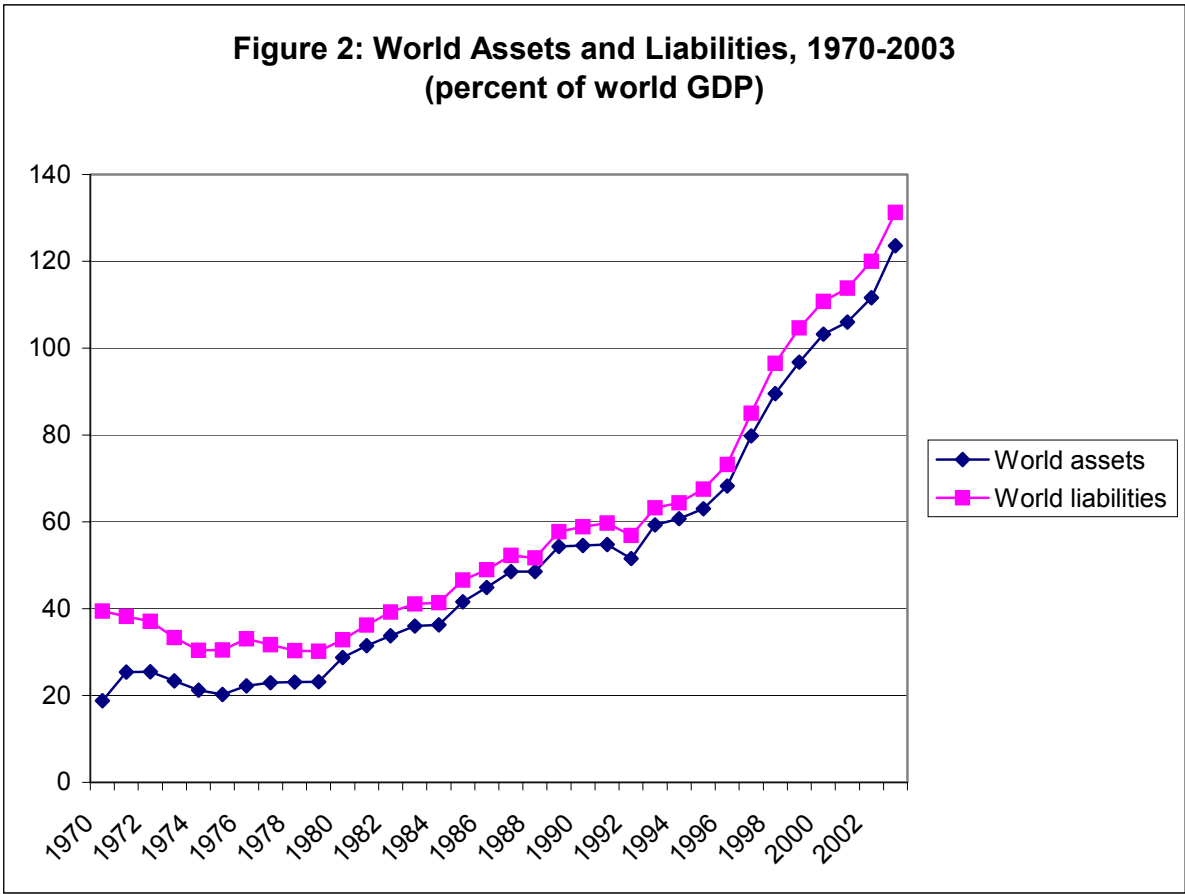
---

<sup>1</sup> An example along these lines is Dooley's model (2000) of emerging-market crises driven by moral hazard.

<sup>2</sup> For a more detailed discussion taking a long-run historical perspective, see Obstfeld and Taylor (2004).

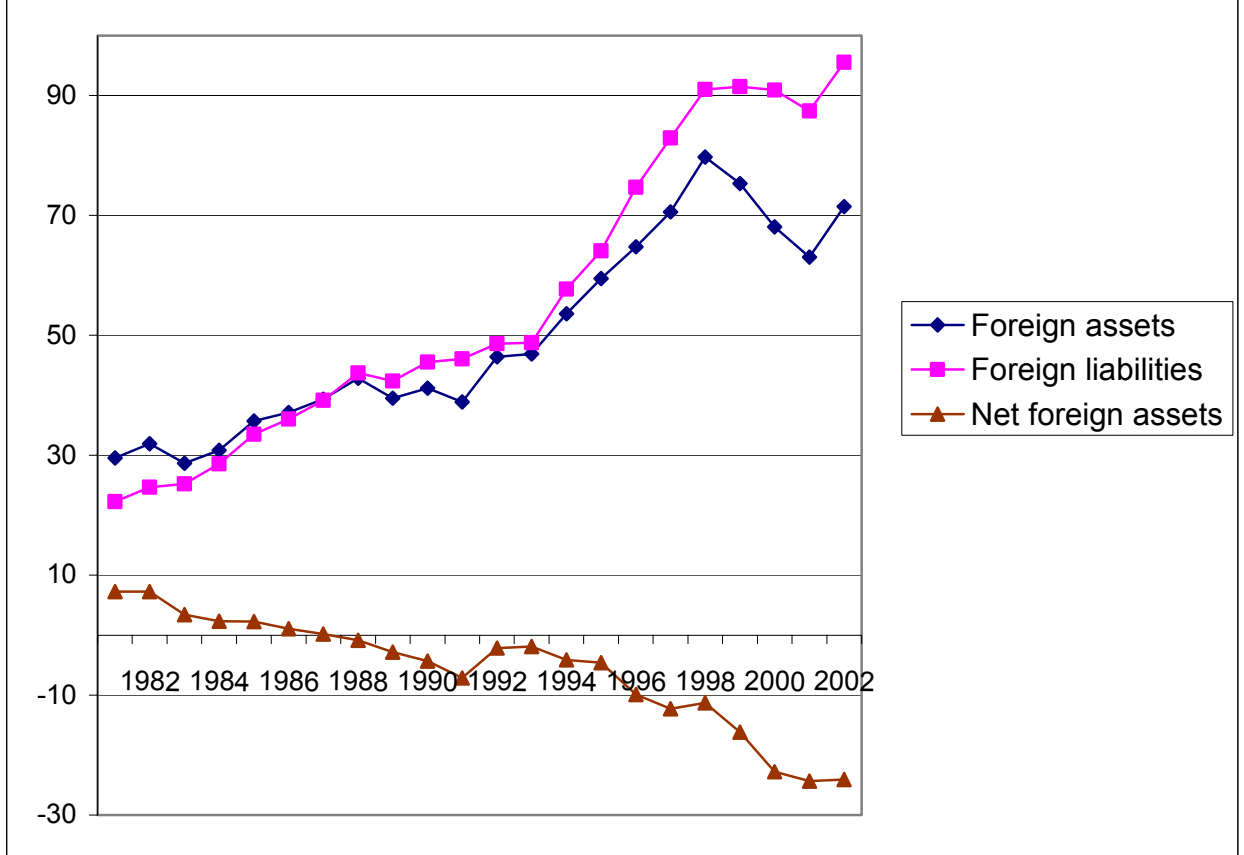
<sup>3</sup> These data are taken from the important work of Lane and Milesi-Ferretti (2005).





Source: Lane and Milesi-Ferretti (2005).

**Figure 3: United States Foreign Assets, Liabilities, and Net Foreign Assets, 1982-2003**  
(percent of GDP)



Source: U.S. Department of Commerce, Bureau of Economic Analysis.

to GDP have ballooned. For the United States, see Figure 3, foreign assets are now nearly 75% of GDP while liabilities are nearly 100% of GDP. In effect, the U.S. portfolio is extensively leveraged, with foreign obligations four times the net external liability and foreign claims three times as big as the net liability. Since these assets and liabilities differ fundamentally in nature – compared to other countries, the U.S. is short on debt instruments and long on equity instruments – the gross positions are not offsetting. Instead, they have very different risk and liquidity characteristics, that is, different payouts in different possible future states of the world.

For smaller countries and major financial or banking centers, the numbers are even more extreme than for the United States. See Table 1, which is drawn from Obstfeld and Rogoff (2005). Developing countries generally have smaller ratios of gross assets and liabilities to GDP – there is much more intertemporal trade compared to asset swapping.<sup>4</sup> However, even within the group of developing countries, there are increasing flows of FDI, in particular from middle-income to lower-income countries. Such flows tend to be associated with higher international leverage in the source countries.

At one level, these mushrooming gross positions are correlated with a welcome increase in global diversification, the sort of risk-sharing functions highlighted in international finance textbooks. At another level, however, the amount of additional real diversification is surely lower than these numbers imply. The reason is that, in today's globalized world of financial engineering, a given monetary investment may pass through

---

<sup>4</sup> I discuss this contrast more fully in Obstfeld (2004).

any number of financial intermediaries in different countries before the initial investor and the ultimate risky asset are matched.

**Table 1: International Investment Positions of Selected OECD Countries, 2003**  
(Ratio to GDP)

	Assets	Liabilities	Net Position
Canada	0.75	0.93	-0.18
France	1.79	1.72	0.07
Germany	1.48	1.41	0.06
Italy	0.95	1.00	-0.05
Japan	0.87	0.48	0.39
U.K.	3.26	3.29	-0.02
U.S.	0.71	0.96	-0.24
Switzerland	5.03	3.67	1.35
Euro Area	1.07	1.18	-0.10

Source: International Monetary Fund, *International Financial Statistics*.

The implications of all this for the U.S. current account cut two ways. On the one hand, global capital markets may indeed be more forgiving than in the past, allowing the U.S. to adjust gradually toward a significantly smaller external deficit even after it has incurred a net foreign debt much larger than today's. This is the "soft landing" scenario: the U.S. has plenty of time to adjust later on, and the markets will happily provide it, minimizing the sharp and disruptive price effects that a more abrupt reversal would cause.

On closer examination, however, one might conclude that market behavior is likely to be conditioned by an assessment of the probability of some sort of "hard landing" – and that this probability depends more on the extent of *goods-market* than of *asset-market* integration. Goods markets remain far less integrated internationally than asset markets, implying that big

changes in expenditure patterns – such as might accompany a sharp drop in the U.S. external deficit – would result in large exchange rate movements. Kenneth Rogoff and I (see Obstfeld and Rogoff 2005) have estimated that a global adjustment of the U.S., Asian, and European current accounts to balance could result in nearly a 30% fall in the dollar against the euro, and a 35% fall against an aggregate Asian currency basket. Importantly, this result has very little to do with the degree of asset-market integration, which itself feeds into the degree of depreciation needed for a given current account change in a relatively secondary way. Taking realistic price stickiness and exporters' pricing-to-market into account would magnify these estimates.

These considerations suggest a second, less benign implication of globalized financial markets. The prospect of large exchange rate changes raises the prospect of large capital gains and losses on leveraged international positions which (as we have seen) have now become very large. The longer the U.S. deficit continues, and the larger it gets, the larger also is the overhang of potential dollar depreciation. Thus, the larger is the potential, also, for an abrupt reversal of market sentiment – such as various emerging markets have experienced many times in recent years. In effect, the fluid international capital market may be extending to the U.S., at low interest rates, a longer rope from which to hang later on.

The complex chains of counterparty obligation that have arisen in the global economy, typically involving hedge funds and other nonbanks and impossible to track by any national regulator, raise a serious systemic threat. It is made worse by the market's knowledge that, at some stage, a precipitous dollar fall could occur. This creates the possibility of a sudden and extensive market movement to unload dollar assets, as in a variant of the asymmetric information setup that Morris and Shin (1998) applied to speculative attacks on fixed

exchange rates. The systemic threat raised by Long-Term Capital's difficulties in 1998 could pale compared with what is possible now.

There are, of course, other arguments for complacency beside the reliance on greater financial integration.. Another is that the world is awash in savings, and the U.S. is the best place to invest them. America has no choice but to accommodate these investment inflows by running a large current account deficit. Any attempt to raise U.S. saving, in these circumstances, would have a globally deflationary effect.

This theory of the U.S. deficit runs afoul of the timing of events. According to the IMF, gross world saving declined somewhat between 1997 and 2002 while the U.S. deficit swelled from 1.6 to 4.5% of GDP; see Table 2. In 2003, world saving indeed jumped back up to roughly its 1997 level, and it rose another percent of world GDP in 2004 as

**Table 2: The U.S. Current Account Deficit, Gross World Saving, and the Price of Oil**

	U.S. CA balance (% GDP)	World saving (% world GDP)	Oil price (\$/barrel)
1997	-1.6	24	19.27
1998	-2.4	23	13.08
1999	-3.2	23.2	17.98
2000	-4.2	23.9	28.24
2001	-3.8	23.2	24.33
2002	-4.5	23.1	24.95
2003	-4.8	23.9	28.89
2004	-5.7	24.9	37.76

Source: International Monetary Fund, *World Economic Outlook*, various issues. The world saving measure is the weighted average of national gross saving rates, where country weights are the share of PPP-adjusted GDP in world PPP-adjusted GDP.

the U.S. external balance worsened by nearly 1% of U.S. GDP. Thus most of the U.S. deficit cannot be attributed to higher world savings.

As for the source of higher world saving, much originates in the emerging market economies. One important driving factor is the recent sharp run-up in world oil prices (Table 2), which has, in the short run, augmented the savings of oil producing countries such as Venezuela, Nigeria, a number of middle eastern countries, and the Commonwealth of Independent States.<sup>5</sup> A similar impetus has come from rapid increases in nonfuel commodity prices in 2003 and especially 2004. At the same time, the U.S. real interest rate, as measured by the inflation-indexed 10-year Treasury yield, dropped by about 100 basis points between 2002 and 2004, and now (June 2005) stands at around 1.6 to 1.7% per annum. (The indexed bond rate was roughly 4% in 1999-2000.) The very recent behavior of the rate could well be associated with higher world saving, though declining perceptions of investment profitability compared with 1999-2000 may also be a factor. When global investment demand does recover, as it surely will, there will be more attractive opportunities outside the U.S., and the U.S., as a major international debtor, will suffer as the world interest rate rises. Recent commodity-price increases will also be reversed, helping primary-product importers but possibly placing additional upward pressure on world real interest rates (and once again hammering indebted emerging markets through the Triffin effect).

In any case: higher foreign demand for U.S. assets bears at best an indirect relationship to the U.S. saving-investment balance. Foreigners can invest in the U.S. without

---

<sup>5</sup> Some commentators ascribed the low U.S. real interest rates of the latter 1970s to a transfer of world income in favor of oil producing economies having relatively high short-run marginal propensities to save.

its running an external deficit, provided Americans are willing to acquire foreign assets – which they have been, given the much higher return they have earned on those assets historically compared to the rather meager payout on U.S. obligations to foreigners!<sup>6</sup>

What about the prominent “Revived Bretton Woods” model advanced by Dooley, Folkerts-Landau, and Garber (2003)? The emergence of China as a global economic power, they claim, has changed everything. China’s interest is to peg the renminbi and accumulate dollar reserves, thereby drawing excess labor out of the countryside into manufacturing, while attracting the advanced-country FDI on which its ongoing industrialization depends. Because this arrangement is incentive-compatible for both China and the U.S., it can continue for five, ten, or perhaps even twenty more years.

This argument, too, appears overdrawn. Why must the U.S. run a deficit to in order for China to accomplish its goals? What of the position of Japan, which is an even bigger holder of dollar reserves than China is but faces very different policy imperatives? Will China be able to withstand the threat of U.S. protection, which has already induced it to tax textile exports, or the internal price pressure due to continuing speculative capital inflows? And if the current configuration is so stable, why did China introduce limited foreign exchange trading in May (for external currencies), and why did Hong Kong, in the same month, widen its fluctuation band against the U.S. dollar?

Most importantly, perhaps, China’s participation in a “revived Bretton Woods” arrangement is neither necessary nor sufficient to allow the U.S. to run large external deficits

---

<sup>6</sup> Obstfeld and Rogoff (2005) estimate that since the early 1980s, the U.S. has, on average, earned 3.1 per cent per year more on its foreign assets than it has paid on its foreign liabilities, taking account of the capital gains associated with exchange rate and asset price fluctuations.



indefinitely. So we are back to the worrisome but unanswered questions about U.S. adjustment. How abruptly might it occur, when, and with what economic consequences for the U.S. and the world?

### **What Are the Markets Thinking?**

If the preceding analysis is correct, and if a resolution of global imbalances is necessary and may require extensive dollar depreciation, why has the dollar not depreciated more sharply already? One possible way to approach the question is to redo a calculation that Krugman proposed two decades ago to assess the dollar's sustainability at its then stratospheric exchange rate against major foreign currencies (Krugman 1985). If the possibility of sharp dollar depreciation is not reflected in asset prices and yields, we can conclude that the market is optimistic about a soft landing outcome – and perhaps excessively so.

The Krugman calculation makes the assumption (not an innocuous one) that interest parity holds for long-horizon instruments. The implication of interest parity is that the real interest differential in favor of the U.S. should equal the expected real depreciation of the dollar against foreign currencies. Krugman examined the resulting implicit forecast of the real dollar's path and concluded that it would imply an implausibly (if not impossibly) high level of foreign debt accumulation by the United States. On that basis he argued that markets were simply in error – the dollar would have to depreciate precipitously once markets understood the long-term implications of the dollar's high exchange rate. That, of course, is what subsequently happened.

Twenty years later, U.S. net foreign debt levels that Krugman considered wildly implausible (for example, 50% of U.S. GDP) are already coming into view. The current low level of U.S. real interest rates, however, makes the configuration of market prices today arguably even more incongruous than it was when Krugman wrote his paper. Let us look at the data, recognizing that nowadays we have an important advantage over Krugman: the existence of inflation indexed government debt instruments in the U.S., Japan, and the euro zone allows us to observe long term real rates of interest directly.<sup>7</sup>

**Table 3: Returns and Differentials on Inflation Indexed Government Bonds, June 6, 2005 (percent per annum)**

(1)	(2)	(1) - (2)	(3)	(4)	(3) - (4)
U.S. 10-year	Japan 10-year		U.S. 30-year	France 30-year	
1.57	0.35	1.22	1.68	1.56	0.12

Source: Global Financial Data, Bloomberg

Table 3 shows that for 10-year bonds, and assuming interest parity, markets expect the dollar to depreciate in real terms against the yen at an average rate of 1.22% per year over

---

<sup>7</sup> Krugman (1985) took as a crude proxy the long-term nominal interest rate less current inflation. That measure, applied today, comes tolerably close to the inflation-indexed rates for the U.S. and Europe. For Japan, however, the 10-year indexed-bond return is much lower than the corresponding real return estimated as the nominal bond rate less current inflation. This suggests a market expectation that over the next decade, Japan's inflation will rise from its current rate of just under zero to something approaching 1% per year. The indexed euro instrument that I consider, issued by France, is indexed to the harmonized euro zone CPI excluding tobacco.

the next decade. Expected real dollar depreciation against the euro is much smaller – essentially the expectation is of no change. Given the price elasticities generally estimated in the literature, neither of these real exchange rate paths will allow the U.S. substantially to reduce its current account deficit or Japan substantially to reduce its surplus. Only if longer-run elasticities are far above short-run estimates could the implied price changes be consistent with current-account adjustment over a long horizon. Suppose, for example, that the implied real depreciation of the dollar is consistent with a reduction in the U.S. current account deficit to 4.5% of GDP, while nominal U.S. GDP grows at a rate of 6% per year. Then the forecast must be that the U.S. net foreign debt will stabilize at 75% of GDP, three times its current level. One might well conclude that at the present time, markets are excessively optimistic about a protracted “soft landing” for the dollar and about the dollar’s future real value.

## **Conclusion**

In June 2004, Republicans in the U.S. Congress floated a proposal to replace Alexander Hamilton’s portrait on the \$10 note with that of recently deceased President Ronald Reagan. This proposal looks ironic in view of the current U.S. macroeconomic and geopolitical impasse. Having witnessed first-hand the Continental Army’s near-defeat by Britain as a result of scanty financial resources, Hamilton well understood that military muscle depends, first and foremost, on financial muscle. As Treasury Secretary, his first priorities therefore were to establish American credit abroad and to solidify the central

government's power to levy taxes. For these (and other) reasons, he has deservedly occupied the \$10 bill since 1929.<sup>8</sup>

Reagan, in contrast, presided over sweeping tax cuts and sharp deteriorations in the U.S. federal and external accounts. To his credit, however, Reagan eventually recognized the dangers posed by these imbalances and agreed to deficit-reducing tax increases. These measures, in turn, helped bring about the rather benign U.S. current account and dollar adjustment of the late 1980s (see Figure 1).

The U.S. is once again running high fiscal deficits, and its current account financing needs dwarf those of the Reagan era. The world looks increasingly dangerous, yet America's foreign military commitments already outstrip the current capacities of its armed forces. Tax increases are a political nonstarter; indeed, there is even pressure to expand the federal debt sharply so as to fund private retirement accounts as part of social security reform. And of course, even if the U.S. were to solve its own problem of reconciling internal and external balance, Europe and Japan would likely face unwelcome deflationary pressures.

The situation looks unsustainable – but how will it end, and when? Some observers, including myself, are acutely uncomfortable. We favor U.S. policy actions, such as federal deficit reduction, likely to reduce U.S. net foreign borrowing (as well as additional monetary stimulus in Europe and Japan). What would Hamilton think? We can easily guess. To paraphrase another American president, Gerald Ford, if Alexander Hamilton were alive today, he'd be turning over in his grave.

---

<sup>8</sup> Chernow (2004) offers a comprehensive recent account of Hamilton's extraordinary life and accomplishments. A more concise summary focusing on Hamilton's contributions to the U.S. fiscal and financial system is in Bryan, Champ, and Ransom (2000).

## References

- Bryan, Michael, Bruce Champ, and Jennifer Ransom, "Who Is That Guy on the \$10 Bill?" *Economic Commentary*, Federal Reserve Bank of Cleveland, June 2000.
- Chernow, Ron. *Alexander Hamilton*. New York: Penguin Press, 2004.
- Dooley, Michael P. "A Model of Crises in Emerging Markets." *Economic Journal* 110 (January 2000), 256-272.
- Dooley, Michael P., David Folkerts-Landau, and Peter M. Garber. "An Essay on the Revived Bretton Woods System." Working Paper 9971, National Bureau of Economic Research, September 2003.
- Greenspan, Alan. "Evolving U.S. Payments Imbalance and Its Impact on Europe and the Rest of the World." *Cato Journal* 24 (Spring-Summer 2004), 1-11.
- Krugman, Paul. "Is the Strong Dollar Sustainable?" In *The U.S. Dollar – Recent Developments, Outlook, and Policy Options*. Kansas City, MO: Federal Reserve bank of Kansas City, 1985.
- Lane, Philip R. and Gian-Maria Milesi-Ferretti. "The External Wealth of Nations: Mark II." Manuscript, Trinity College, Dublin, and International Monetary Fund, 2005.
- Morris, Stephen and Hyun Song Shin. "Unique Equilibrium in a Model of Self-Fulfilling Currency Attacks." *American Economic Review* 88 (June 1998): 587-597.
- Obstfeld, Maurice. "External Adjustment." *Review of World Economics* 140 (December 2004), 541-568.
- Obstfeld, Maurice, and Kenneth Rogoff. "Global Current Account Imbalances and Exchange Rate Adjustments." *Brookings Papers on Economic Activity* 1:2005, forthcoming.
- Obstfeld, Maurice, and Alan M. Taylor. *Global Capital Markets: Integration, Crisis, and Growth*. Cambridge: Cambridge University Press, 2004.