

Managing Exchange Rates: Achievement of Global Re-balancing or Evidence of Global Co-dependency?

THE UNITED STATES AND ITS TRADING PARTNERS HAVE SERIOUS VESTED INTERESTS IN THE STATUS QUO

By Catherine L. Mann



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Long-term global economic health requires that external imbalances and the internal imbalances that support them be corrected by both the United States and its trading partners. The current path of external imbal-

ances appears to be unsustainable, but relying on exchange rate adjustments is unlikely to suffice as long as there is a co-dependency of structural characteristics and policy choices between the United States and its trading partners. There is a real possibility that the entanglements created by this co-dependency cannot be undone by anything short of a global economic crisis.

How are exchange rates related to the U.S. external accounts and macro policy management? There is no doubt that further depreciation of the dollar will be part of the package of policy moves and economic responses that will yield “global re-balancing.”¹ This term implies the complementary narrowing of two imbalances around the world. One is the yawning U.S. current account deficit, and the other is the widely geographical-

¹Global rebalancing is a phrase first used by Steven Roach, chief economist of Morgan Stanley.

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ly disbursed but nevertheless persistent dependence of the rest of the world on net exports to the United States. Underlying these external imbalances are internal imbalances in both countries and regions with respect to savings and investment and to domestic demand and production.

Is the dollar depreciation to date moving the imbalances along a path of adjustment? Moreover, can any realistic magnitude of change in the value of the dollar do the job of global re-balancing? Relying on exchange rate adjustment is likely to be more difficult than it appears, for evidence suggests a global co-dependency of policy choices and structural characteristics in both the United States and other countries. U.S. structural characteristics and policy choices are revealed in domestic and external behaviors that stand in the way of the dollar 'doing its job' to rectify the U.S. side of the global imbalance. By the same token, policymakers in the rest of the global system, for their own structural reasons, are actively inhibiting the dollar's move toward broad-based depreciation. Taken individually, the U.S. path and the rest-of-world path are not sustainable, but together they may well be sustained for an extended period—thus the term global co-dependency.

Hence, in the near-to-medium time period, despite much theory and empirical suggestion that the dollar

should depreciate a lot, it likely will not; and global imbalances are likely to widen further. Global co-dependency, which keeps the dollar from steady and significant depreciation and keeps the current configuration of global imbalances in place, could have a very long duration. But, with cumulative imbalances weighing ever more heavily on the individual countries and the global system, it will become increasingly difficult to untangle the global co-dependency without precipitating a crisis in currencies, international exchange of goods and financial assets, and domestic and global growth.

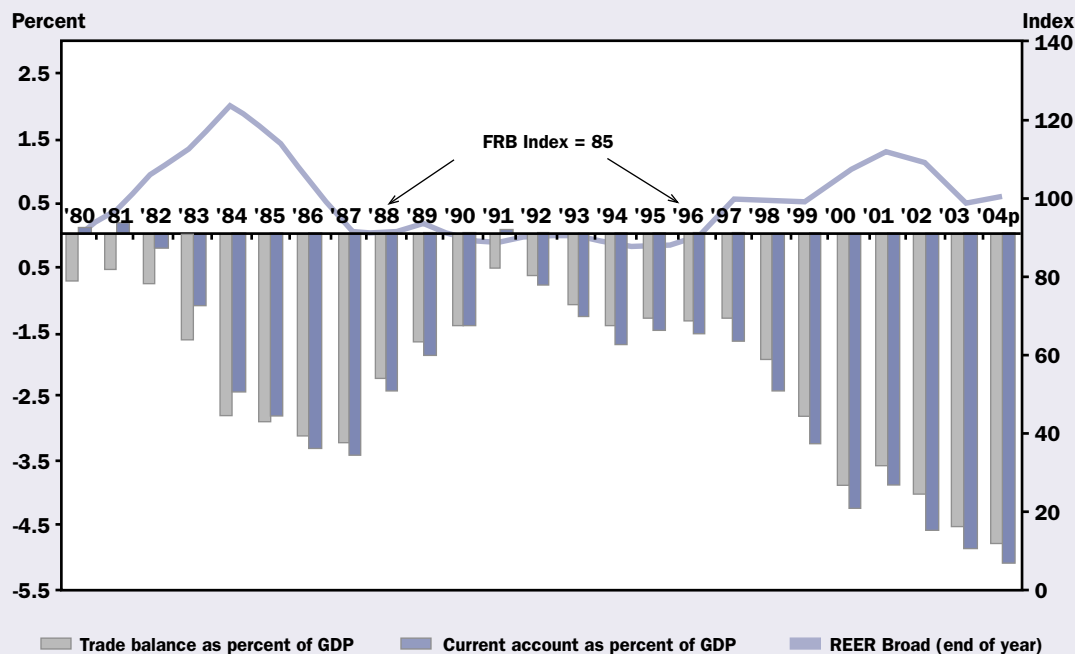
The Dollar and Global Re-Balancing in Historical Perspective

The dollar has played a role in global re-balancing in the past. Figure 1 shows the historical record of the current account, trade balance, and the Federal Reserve's broad real effective exchange rate (REER) index for the dollar. The current account is driven predominantly by trade in goods and services, which in turn is largely determined by U.S. and foreign income growth, along with relative prices, for which the exchange value of the dollar is a good proxy.

With respect to growth differentials, movements in the

FIGURE 1

THE U.S. CURRENT ACCOUNT, TRADE BALANCE, AND EXCHANGE RATE 1980-2004



Source: Bureau of Economic Analysis. U.S. Transactions Data: Federal Reserve

U.S. trade balance are in part influenced by the degree to which the U.S. and foreign economic cycles are out of sync (Ch. 8 in Mann, 1999 and Mann, 2002). In the early 1980s, and again in the early 1990s, the U.S. economy slipped into recession and imports slowed. During those cycles, world growth remained relatively robust, so U.S. exports rose. The trade deficit narrowed from both sides. But, during the late 1990s as well as the last few years, anemic growth in Japan, Europe, and other markets around the world has dampened demand for U.S. exports. U.S. growth has rebounded far more quickly than expected. Consequently, both the current account and trade deficit have widened into unprecedented territory, both in dollar terms and as a share of GDP. (The current account was at \$580 billion and 5.1 percent of GDP by first quarter 2004, annual rate).

Until recently, not only income differentials, but also relative prices (as proxied by the real exchange value of the dollar) have tended to augment the U.S. trade and current account deficits. In fact, consistent with models where asset-prices overshoot, the movement of the dollar has often tended to exacerbate growth differentials and further widen the external deficits. In the early 1980s, the considerable appreciation of the dollar bolstered import growth and held back export growth. Similarly, in the late 1990s and through 2001, the exchange value of the dollar continued to appreciate even after growth differentials in favor of the United States waned. In contrast, when both dollar and growth differentials worked together, the current account and trade deficit narrowed (late 1980s to mid 1990s). During this period, Figure 1 shows that the Federal Reserve real broad exchange rate index exhibited relative stability at about index value 85, an observation to which we will return.

Now that the current account is beyond all historical precedent, and in light of other findings that determine that the supply of U.S. assets being offered into the global financial markets is large with respect to the growth in home-bias adjusted wealth, the dollar should be under significant depreciation pressure (Mann, 2003a). However, structural factors and current policy stances in the United States and the rest of the world will influence the manner in which global imbalances will, or will not, be re-balanced.

Global Imbalance: The U.S. Side

For the international trade economist, there is an empirical regularity in the data on how income affects U.S. trade: U.S. imports grow relatively faster when U.S. income grows as compared to how much U.S. exports grow

when foreign income grows. This empirical finding (the so-called Houthakker-Magee asymmetry) goes back to the early post-war period and has remained a fixture of U.S. trade data since then. When looking at disaggregated data, the Houthakker-Magee effect is particularly serious. Moreover, disaggregation highlights key regularities both in domestic and international data.

With respect to the domestic data, Figure 2 shows a decomposition of the national income and product accounts into the savings-investment balance. A downward trend in net household savings is clear. During the 1990s, the narrowing of the fiscal budget, ultimately into surplus, helped finance the increase in investment of that period. The complex relationship between the fiscal position and other economic factors further supported consumption (and diminished household saving) through higher wealth—both stock market and housing assets. In the last several years, with a changed economic environment, household savings has rebounded a bit; but the fiscal position has returned to deficit, in part due to significant tax cuts to individuals. Overall, private consumption has been robust through both fiscal surplus and fiscal deficit, and net household savings continued to trend downward throughout the period.

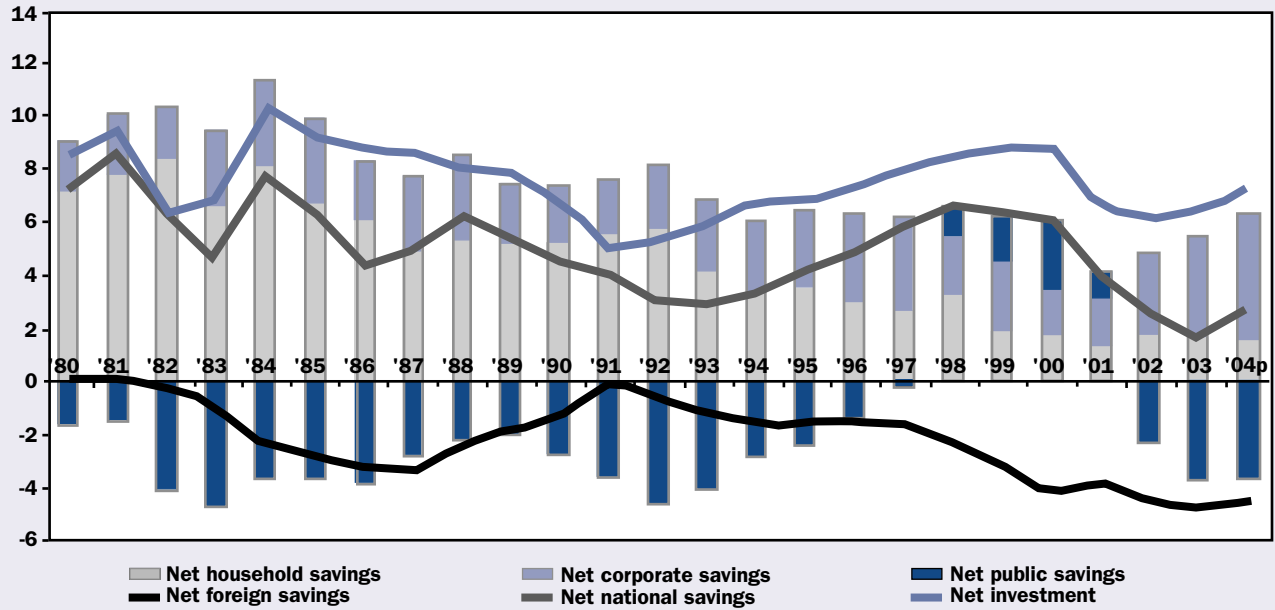
The pattern of robust and structurally supported consumption shows up in a disaggregated presentation of the trade balance (Figure 3). Examining the trade deficit using the Bureau of Economic Analysis ‘end-use’ categories reveals that the biggest component of the overall trade deficit is in consumer goods and autos—reflecting the downward trend of household savings. Indeed, nearly the whole of the deficit can be accounted for by these two categories! Only outright recession (in 1991 and 2001) has stemmed the widening in these components of net trade. Moreover, services, such as transportation tied to the U.S. import boom (and, more recently, government service outlays related to terrorism and the war in Iraq), have added to the trade and current account deficits. While it may be the case that the United States has a comparative disadvantage in consumer goods and autos, the trend widening of these components of the trade deficit and their relationship to trend net household savings point to the difficulty of turning the trade deficit and current account around, particularly in light of current fiscal policies that favor additional tax cuts to individuals.

On the other hand, U.S. services continue to reveal international competitiveness. The balance of trade in “other private services” such as education, finance, and business and professional services is persistently positive and has continued to rise despite slow growth abroad. This

FIGURE 2

U.S. INVESTMENT AND SAVINGS BY SECTOR, 1980-2003

Percent of GDP

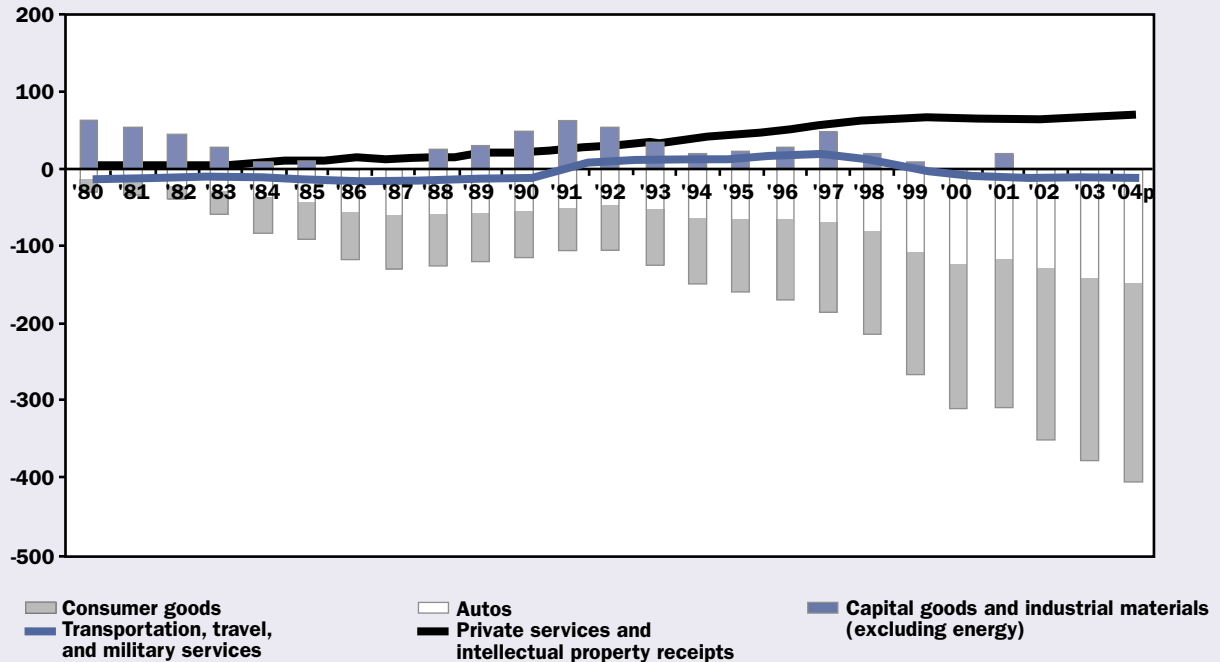


Source: Bureau of Economic Analysis. NIPA Table 1.1.5

FIGURE 3

U.S. TRADE BALANCE: MAJOR COMPONENTS

Billions USD



Source: Bureau of Economic Analysis. U.S. International Transactions Data

is particularly impressive given that the asymmetry in trade with respect to growth in income, discussed above in the context of trade overall, is nearly absent or is reversed for this category of trade in services, so that slow growth abroad disproportionately tends to hold down exports of these services (Mann, 2004). (It is unclear whether offshore outsourcing, as enabled by information technology, will alter these trends and the trade balance in other private services. But that phenomenon is too recent to be addressed by this analysis.²)

An important puzzle is the balance of trade in capital goods and industrial supplies and materials, excluding oil. Up until 1997, this balance cycled through larger and smaller surpluses depending in large part on the U.S. and global business cycles. Since about that time, however, the trade balance in this category fell from a surplus of about \$50 billion to about zero. Moreover, both exports and imports abruptly changed their time-series properties around 1997, when growth slowed, then speeded up to a peak in 2000, and then dropped again with no recovery to date. Is this evidence of the appreciation of the dollar and slow growth abroad weighing more heavily on this category of goods than on U.S. trade overall, or of a changing international supply chain for production of capital goods. Or, is it related to lasting fallout from the Asian financial crises?

²For a discussion of related issues, see Mann, 2003.

In sum, the U.S. structural tendency toward consumption and a savings-investment imbalance is reflected in a trending downward in household savings and a structural predilection toward imported consumer goods and autos. At this point in time, net national savings and net household savings rates are near or at historical lows, and consumer-good and auto net trade are in unprecedented deficit. This implies tough initial conditions of structural imbalance in which global re-balancing will have to take place.

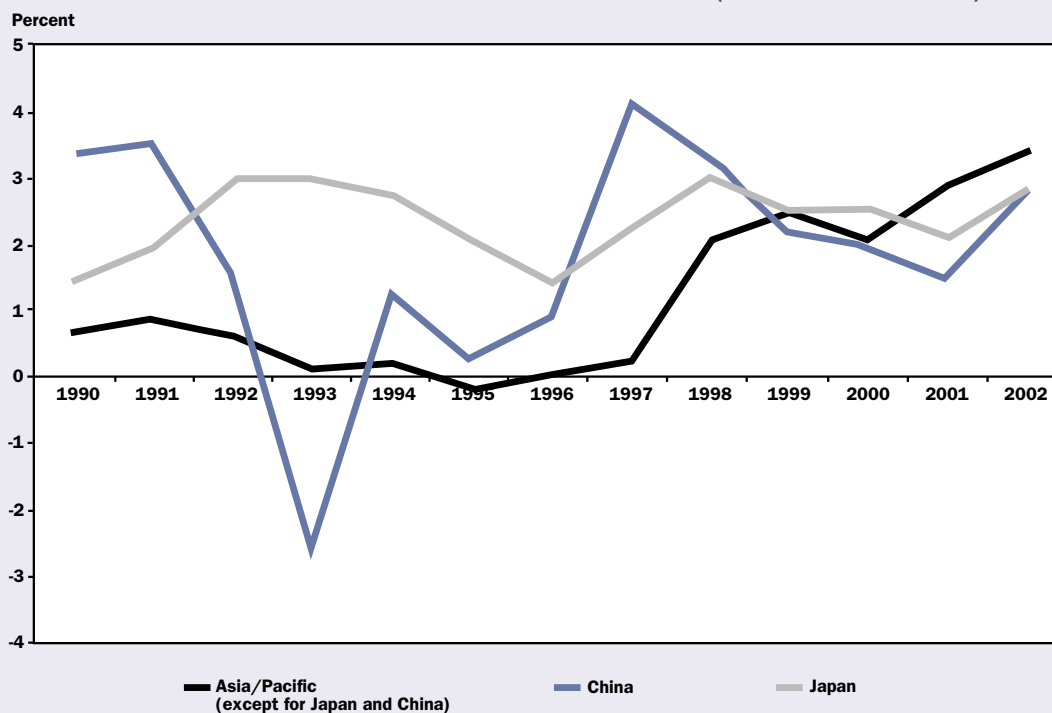
Global Imbalance: The Rest of the World

Structural imbalances of two types also exist in the rest of the world (as measured by the global current accounts of other countries), and vis-à-vis the United States (as measured by bilateral trade with the United States). Increasingly, these rest-of-world imbalances fit as a mirror image to the U.S. external deficit. That these imbalances are widespread across international trading partners should not imply that they are any less difficult to re-balance. On the contrary, the combination of these rest-of-world imbalances may point to structural difficulties that will impair the adjustment in the dollar necessary to ameliorate the situation.

Around the world, certain regions and countries tend toward persistent current account surplus—Japan for example. (See Figures 4a and 4b.) On balance, though, over all

FIGURE 4A

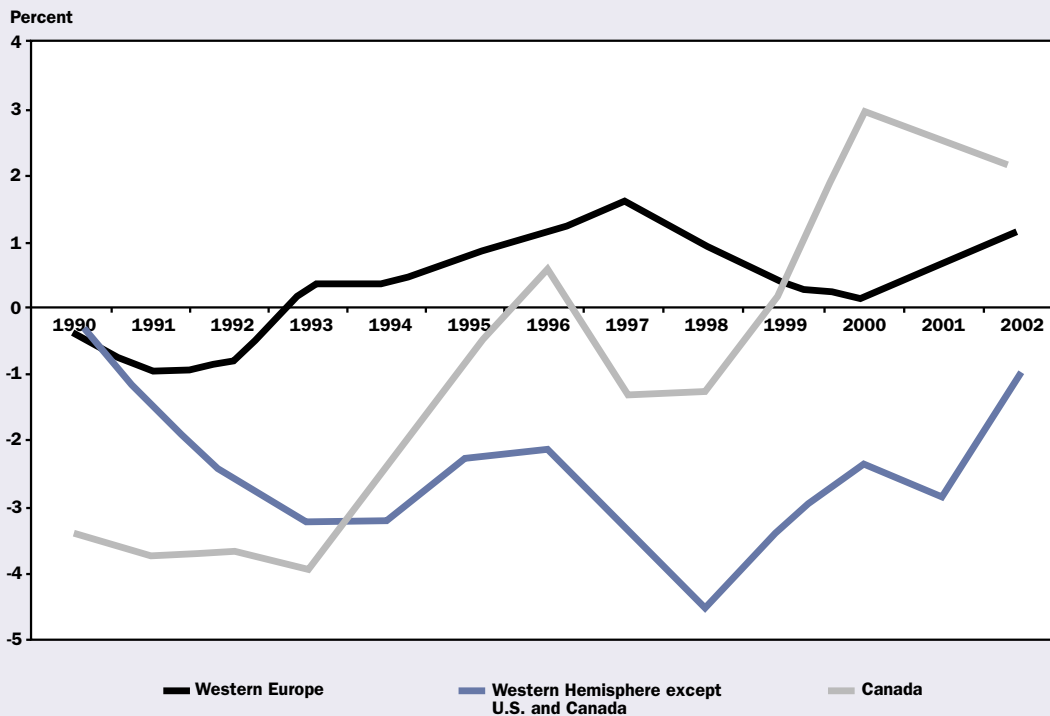
CURRENT ACCOUNT BALANCES OF REST OF THE WORLD (PERCENT OF GDP)



Source: The World Bank, World Development Indicators, June 2004

FIGURE 4B

CURRENT ACCOUNT BALANCES OF REST OF THE WORLD (PERCENT OF GDP)



Source: The World Bank, World Development Indicators, June 2004

countries and the whole of the 25-year period being considered in this exercise, there is no dramatic trend toward rest-of-world imbalance between savings and investment when trade among all countries is considered. Looking just since 1990, a modest trend toward current account surplus is observed for some countries (China and Canada, for example). For Asia/Pacific, the impact of the financial crises continues to reverberate in the data, with increasing surpluses registered as a share of GDP for these countries. For these countries, their experiment with growth led by domestic demand during the 1990s (when they ran balanced global current accounts) ended in a financial distress and a return to the more familiar export-led growth strategy.

When countries' global current accounts are examined more narrowly through the lens of bilateral trade with the United States, the mirror to the U.S. trade deficit is dramatic--over all countries and regions there are wide trade surpluses vis-à-vis the US. (Figure 5). The widening U.S. trade imbalance is not just about imports from China or Japan, but is broad-based across all trading partners. Indeed, the worsening of the bilateral U.S. trade balance vis-à-vis Europe is about the same dollar magnitude as with China. Thus, any re-balancing of the U.S. trade deficit implies a narrowing, to a greater or lesser degree, in these

bilateral surpluses, and hence the behavior of many countries. When juxtaposed against these economies' current account positions with the whole world, what does this re-balancing vis-à-vis the United States imply for countries that are persistently in current account surplus with the rest of the world (Asia) versus for those countries that are more balanced on a global current account basis (Europe, Western Hemisphere)?

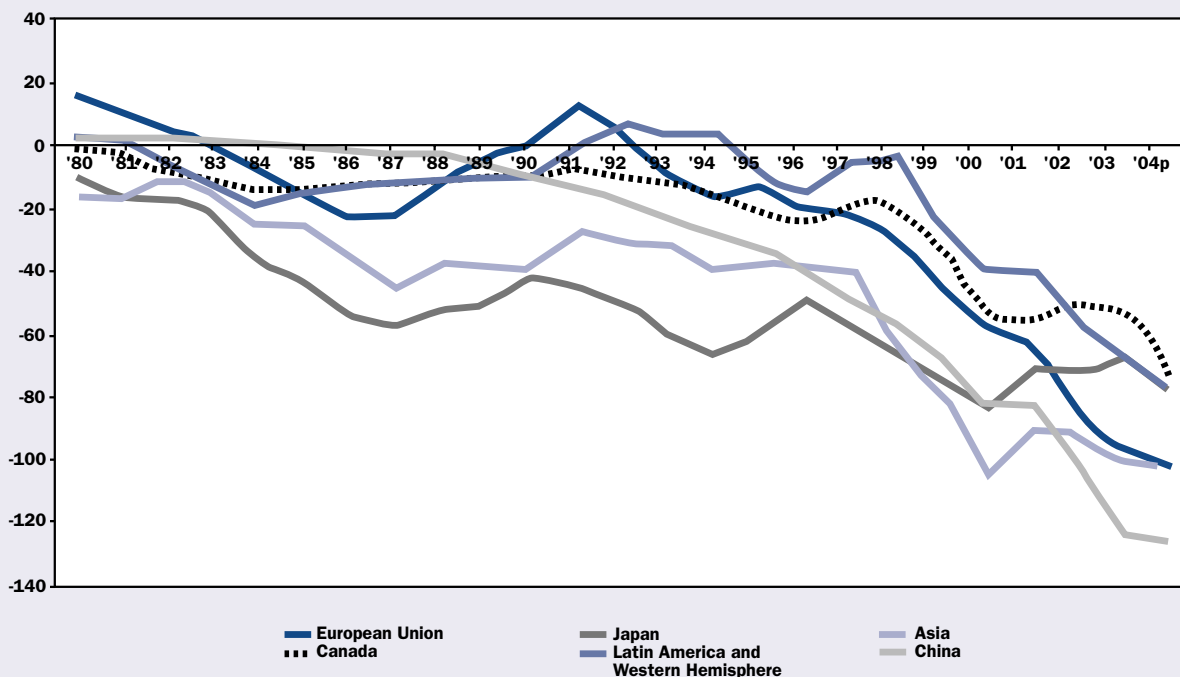
In sum, when the global current account data are combined with the bilateral U.S. trade data, a true rest-of-world global imbalance appears. To an inordinate degree, all countries and regions in the rest of the world have depended on net exports to the United States—both directly and indirectly—for economic growth. Domestic demand as a source of growth has lagged. This is the global imbalance that is both widespread and will be hard to re-balance. But, it is in Asia that the combined domestic imbalances of aggregate demand relative to production and external imbalance in dependence on net exports to the United States are particularly apparent.

Global Co-dependency

It is a reality that countries have a vested interest in a large and chronic U.S. trade deficit. Their dependency on

FIGURE 5

U.S. GOODS BALANCES WITH SELECTED TRADING PARTNERS (BILLIONS OF USD)



Source: Bureau of Economic Analysis. U.S. International Transactions Accounts Data

U.S. demand as a source of growth matches the U.S. dependency on foreign savings to finance domestic investment. What is the evidence, and how does it impact the ability of the dollar to act as the re-balancing mechanism?

Foreign official purchases of U.S. financial assets during times of dollar depreciation are not new (Figure 6). Important foreign official purchases appear in 1986-1989 and again in the mid 1990s, both periods of time when the dollar was experiencing depreciation pressures. However, official purchases have accelerated in recent quarters and are unprecedented both in terms of dollar value and as a share of total financial inflow. (\$500 billion and 28 percent of foreign purchases of U.S. assets as of first quarter 2004, annualized).

Foreign official purchases are reflected in different rates of appreciation of individual currencies against the dollar. This is shown for U.S. major trading partners in Figure 7. Currencies that are traded through liquid private markets—such as the Canadian dollar, British pound, Swiss franc (not shown), Australian dollar, and euro—have appreciated some 15 percent (Canada) to 27 percent (euro) against the dollar since the beginning of 2002 (when the dollar started a generalized deprecia-

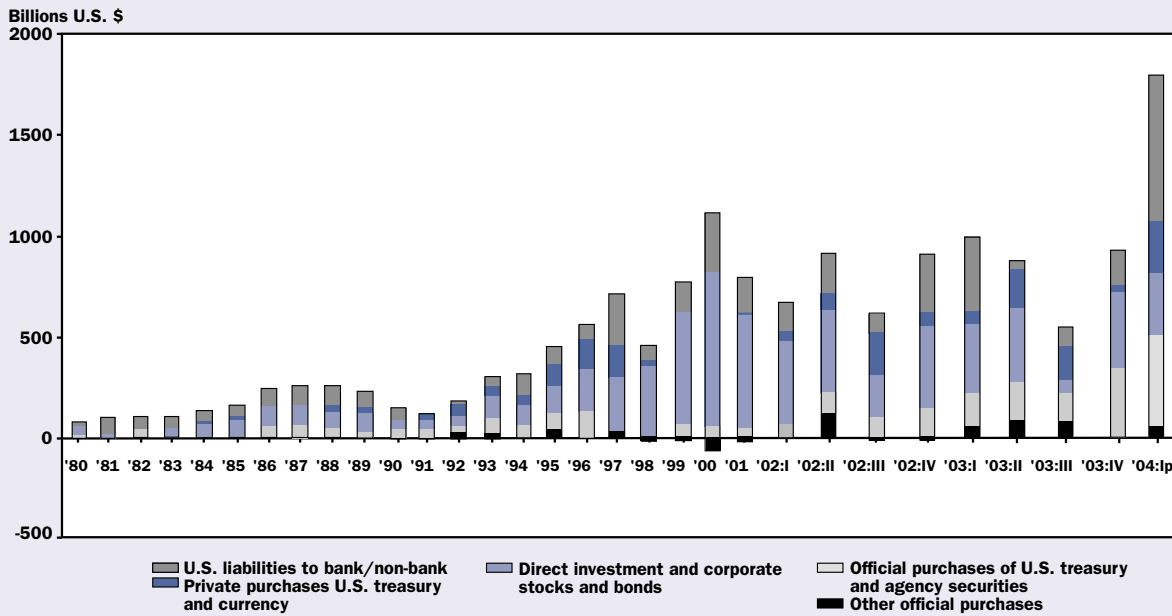
tion).³ For currencies that are not traded widely or are in illiquid markets, official intervention can play an important role in affecting currency price. Prominent examples are the Korean won, Indian rupee, Thai baht (not shown), the Taiwan dollar, and the Chinese renminbi (not shown because its value has been held constant relative to the dollar for almost two years). For these currencies, the appreciation has been relatively little or nil. Asian policymakers are amassing large stocks of U.S. official assets and working hard to inhibit dollar depreciation and global re-balancing. Why, and at what potential future cost?

With the financial crises still fresh, some are buying assets to give themselves a larger stock of dollar ammunition should private markets turn against them again. At the same time, for some of these countries, the financial crises proved the “folly” of a domestic-led growth strategy and renewed their preference for the more dependable, export-oriented growth strategy. With this renewed attention to net exports (particularly to the United States), competition with China for market share is intense. Thus, purchases of U.S. assets are key to keeping their curren-

³For a discussion of reasons why the dollar started to depreciate at the beginning of 2002, see Mann (2003a).

FIGURE 6

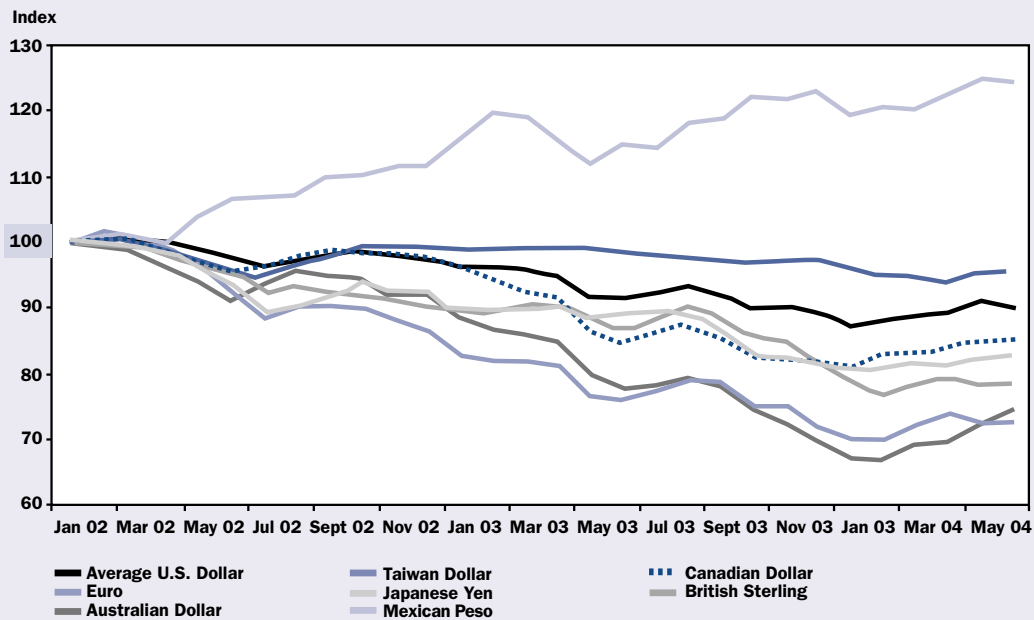
FOREIGN PURCHASES OF U.S. ASSETS BY ASSET TYPE AND PURCHASER



Source: Bureau of Economic Analysis. U.S. International Transactions Accounts Data

FIGURE 7

NOMINAL AVERAGE DOLLAR AND BILATERAL RATES JANUARY 2002 = 100
SELECTED MAJOR TRADING PARTNERS



Source: University of British Columbia Pacific Exchange Rate Service and the Federal Reserve Board of Governors

cies and products competitively priced for the U.S. consumer.

However, this strategy constitutes a bargain with the devil in the sense that when their own currencies eventually do appreciate, not only will their exports fall, but so, too, will the value of the U.S. assets in their portfolios. Thus, these policymakers are trading off the positive certain benefits of export-led growth today against the negative certain capital loss on their holdings of U.S. assets tomorrow. With a high enough rate of time preference, the cost of that negative certainty is small in today's terms, making sense of their side of the global co-dependency.

It is not just official purchase of U.S. assets, however, that has moved the dollar. Even amongst the market-traded currencies, the tendency toward dollar depreciation has attenuated in recent months. For private traders, it is somewhat more of a puzzle as to why they continue to purchase U.S. assets. After all, it made sense to increase U.S. holdings when the United States was clearly outperforming other markets during the latter half of the 1990s. But now? To some degree, the markets no doubt have overshot in terms of reallocating portfolios away from U.S. assets toward assets of other markets. Going forward, it remains to be seen whether private markets' assessment of U.S. relative to foreign rates of return will be actualized and what might happen when those expectations are dashed.

From the standpoint of the U.S. side of the global co-dependency, the official purchases along with private market purchases have tended to hamper dollar depreciation at a time when it is increasingly important for U.S. export growth. At the same time, low interest rates and the expansion of buying power coming from individual tax cuts in the United States keeps U.S. import growth robust—particularly in consumer goods and autos. Hence the trade and current account deficits will continue to widen.

Is the accumulating negative net international investment position for the United States also a devil's bargain? The magnitude of internal and external debt will lead to a day of reckoning. But, a unique feature of U.S. international borrowing—mostly in dollar denominated assets—is that a depreciation of the dollar in fact reduces the burden of debt. Thus, the certain future loss in purchasing power that comes with a dollar depreciation is offset to some degree by the certain future write-down in what the United States has to repay. There is some sense to the U.S. side of the global co-dependency.

How long can this global co-dependency go on, and what are broader global ramifications of the U.S. current account imbalance? Global co-dependency creates significant currency management issues for third parties. In

particular, Europe, which has not leaned against dollar depreciation, has borne the brunt of currency adjustment so far. But Europe has also depended on the United States for its growth. The pressure of euro appreciation on firms and workers dependent on exports has been real, and offsetting macroeconomic stimulus by policy authorities there has been modest. The potential for Europe to grow more robustly and offer attractive returns to their investments (and thus validate the appreciation of the euro) may well be running out of steam. In Japan, although the official purchase of U.S. assets has reached gargantuan levels, Japan appears to be shifting its dependence to someone else—China.

In sum, the U.S. predilection to consume finds its mirror in the dependence of other countries on net exports to the United States, and in some to a predilection towards savings. In the near-to-medium term, despite much theory and empirical suggestion that the dollar *should* depreciate a lot, global co-dependency works to inhibit the process while at the same time increasing cumulative imbalances.

Global Rebalancing Via the Dollar?

Suppose the global co-dependency that has inhibited dollar depreciation breaks down. What might happen to the dollar and to the U.S. current account and trade deficit? Figure 8 shows three scenarios.⁴ Recall that the lowest sustained index value for the Federal Reserve REER is an index value of about 85 (to which the dollar has not yet returned). The assumptions that underlie this analysis are shown in Table 1.

The first scenario is one where the dollar does not depreciate, resulting in a current account deficit of about 13 percent of GDP by 2010. It seems likely that the co-dependency will break down long before this.

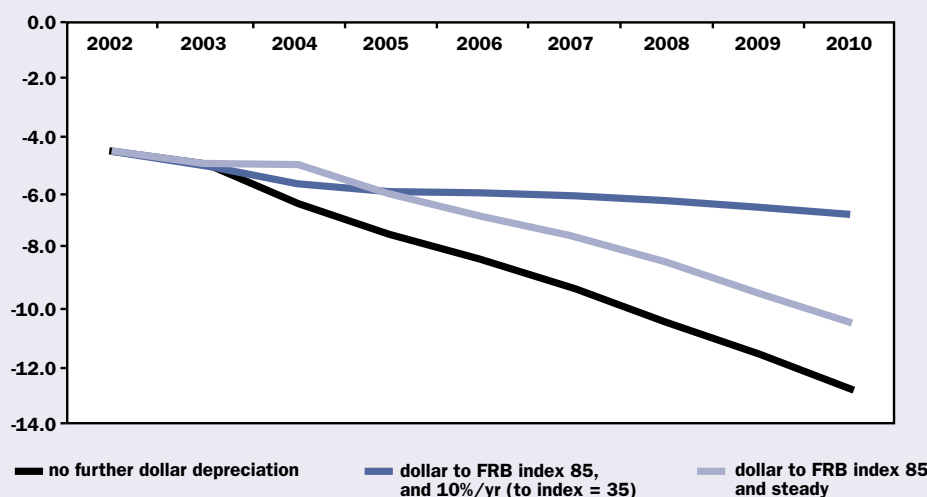
The second scenario assumes that the dollar depreciates to index value 85 and stays there for a sustained period. Relatively little improvement in the current account results because the asymmetry in income elasticities are exacerbated by the initial conditions of the very large deficit. To narrow the current account, export growth (and implied foreign growth) would have to be dramatic, well outside the bounds of historical experience on a sustained basis, and import growth would have to fall to recession

⁴The simple spread-sheet model on which this analysis is based is outlined in Mann (1999, Chapter 10).

⁵Not surprisingly, this is about the same story that Jeffrey Frankel (1985) told before the dollar started to depreciate and Paul Krugman and Richard Baldwin (1987) told after the dollar depreciated. The big difference between then and now? A ten percent depreciation of the dollar stabilizes the current account deficit at six percent of GDP instead of two percent!

FIGURE 8

SCENARIOS FOR THE U.S. CURRENT ACCOUNT: CURRENT ACCOUNT/GDP (%)



Source: Bureau of Economic Analysis. U.S. International Transactions Accounts Data

TABLE 1

ASSUMPTIONS FOR U.S. CURRENT ACCOUNT SCENARIOS

	2003	2004	2005	2006	2007	2008	2009	2010
US real GDP ^a	3.1	4.7	4.1	3.7	3.0	2.8	2.7	2.7
World GDP ^b	2.1	3.4	3.3	3.3	3.1	2.8	2.8	2.8
Interest rate	4.0	4.6	5.5	5.8	5.39	6.0	6.0	6.0

Export income elasticity of 1.0. Import income elasticity of 1.7.

^a: 2003-05 from April 2004 forecast; 2006-2010 from Dec. 9, 2003 long-term forecast.

^b: Multilateral trade-weighted real activity. 2003-05 from April 2004 forecast, 2006-2010 from Dec. 9, 2003 long-term forecast.

Source: Macroeconomic Advisors LLC

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rates for this dollar to yield an narrower current account.

So, what dollar depreciation 'does the job' of narrowing the current account deficit? The third scenario shows that a steadily depreciating real dollar, at about ten percent per year, keeps the current account from widening as a share of GDP.⁵ This experiment is wholly partial equilibrium, in that the feedback effect of such dollar depreciation on the growth of other countries is not accounted for.

These exercises serve to emphasize how large the global imbalances are, and how difficult re-balancing is. Perhaps not surprisingly, when the path to adjustment is so difficult, global co-dependency is just the easier course to take. Going forward, how will the global imbalances be re-balanced? Only a combination of structural change in the United States and abroad along with dollar depreciation appears to re-balance the global economies. Whether these changes can be accomplished before a global economic crisis forces them is an open question. ■

