

## ZOOMING IN ON JAPAN'S CAPITAL FLOWS

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### SUMMARY

*Japan's net capital exports in 1994 were greater than its combined exports of motor vehicles and computer hardware. This large — and persistent — outflow, the counterpart to the nation's current account surplus, has existed since 1981 and is likely to carry into the next century. Yet, the net figures portrayed by the current account, important as they are for some purposes, are not at all informative about the multiple sources and the uses of various investments, loans and acquisitions that comprise the current account imbalance. Likewise, undue focus on subaccounts and particular financial flows may blind one to the overall movements that affect such critical economic variables as exchange rates and trade balances. To gain a comprehensive view of capital flows it is necessary to deconstruct and reconstruct the current account imbalance and to understand some of the forces working at various levels.*

*A country's current account measures the net flow of capital between it and the rest of the world. A surplus means that a country consumes in aggregate less than it earns. These excess savings are invested and lent abroad, usually at higher rates of returns than are available at home. Since the current account nets out both inflows and outflows as well as short- and long-term assets and liabilities, it often is too abstract for ascertaining the finer details of financial and capital transactions.*

*The total value of new Japanese assets abroad, especially those related to direct investment, has fluctuated with the state of the Japanese economy and the availability of credit. Long-term foreign investments boomed during the bubble economy of the late 1980s and collapsed along with domestic asset prices in the 1990s. Short-run liabilities also surged during the bubble years when banks took advantage of their borrowing ability in international interbank markets; this measure then fell as banks liquidated their loans during the current decade. Japan's current account, however, has reflected little of the dramatic reversals in both short- and long-term assets and liabilities over the past 10 years or so because swings in specific types of assets tended to cancel one another out.*

***As Japan builds up its assets abroad, the income generated by those investments increases in value. Since the balance of trade in goods and services plus net income from foreign assets equals the current account and since net foreign investment income and the current account are relatively unrelated to what is happening in the international economy over any particular time span, the trade balance acts as the ballast. The exchange rate is the tool that influences exports or imports to give balance to the whole. Therefore, as Japan's net income from its increased level of foreign assets rises, the trade balance is likely to fall and the yen to appreciate. Simulations suggest that the trade balance could become negative in five to 10 years and that the yen will approach ¥70 to the dollar in a decade.***

## **A Growing Volume Of International Capital Flows**

International capital flows have soared globally since the early 1980s, and Japan's experience has fallen within this broader development. In 1980 its long- and short-term gross capital exports added up to less than 30 percent of its merchandise exports, but by 1987, impelled by the asset inflation associated with Japan's bubble economy of the late 1980s, capital outflows were more than 50 percent greater than the trade figure. The bursting of the bubble in the opening years of the 1990s put new constraints on the ability of Japan's lenders to finance foreign investments. By 1993 the gross volume of capital flowing abroad had dropped to about 40 percent of merchandise exports, but this was an absolute level five times greater than in 1980.

Several factors help to explain the spectacular growth of Japan's role in the world capital market over the last 15 years or so: deregulation and liberalization of external capital movements in Japan as well as in most of its trading partners; the floating of exchange rates in 1973; the availability of excess savings in Japan and the concomitant demand for savings in both developing and industrialized economies, especially the United States; plus the reduction in transaction costs brought about by advances in computers and telecommunications.

## Preliminary Analytics

All international transactions fall into one of three categories: exchange of goods and services for goods and services (barter); trade of goods and services for assets; and exchange of assets for other assets. The growing volume of trade in assets, like trade involving goods and services, occurs because it yields benefits to the participants. Two of the principal benefits are higher returns on foreign assets than are available on domestic investments and risk avoidance through portfolio diversification. Although some people may question whether Japanese investors actually have made money on their foreign investments — given some spectacular losses on major investments — simple calculations indicate an average annual pretax return of almost 6 percent since 1980. According to most estimates, this return was considerably larger than was realized on domestic investments.<sup>1</sup>

Any international transaction gives rise to two offsetting entries in the balance of payments. Therefore, the current account balance and the capital account balance automatically add up to zero. In essence the current account reflects the difference between a country's net purchases of assets from foreigners and its net sales of assets to them; it is in short the change in a country's net foreign position (excluding asset revaluation). The current account balance in accounting terms is the bottom line.<sup>2</sup> Overseas asset purchases amount to future claims on foreigners: the ownership of foreign stocks and bonds, loans to outsiders or the acquisition of factories and companies abroad. An increase in assets involves money flowing out of the country. When foreign ownership rights are liquidated or sold off, abroad asset flows can be negative. On the opposite side of the ledger are liabilities or foreigners' claims on the home country. Examples include a Japanese bank's short-term borrowing in Hong Kong or a foreigner buying shares on the Tokyo Stock Exchange. Usually the liabilities will be negative; however, if a domestic bank pays off its Hong Kong loan, the transaction will show up as a positive liability.

Another way of looking at a country's current account imbalance is that it equals exports of goods and services minus equivalent imports (plus some other categories typically small enough to ignore for the moment). When a country exports more than it imports, it is selling more to foreigners than it buys from them; it somehow must finance the ability of foreigners to buy more than they sell. A trade-surplus country lends the difference, thereby increasing its net foreign assets by the amount of the surplus. The ability of a country to lend abroad means that it has positive net savings (savings minus domestic investment) that it makes available to others. Current account imbalances accordingly reflect trade in the world's savings.

The fact that domestic savings are greater than domestic investment in a surplus country implies that the aggregate of household consumption, business investment and government spending is less than aggregate national income and production. Analyses of current account imbalances often focus on the trends of net savings by sector. Household savings and consumption typically change only slowly as they respond to demographic shifts and changes in the growth rate of income. Business investment varies with the state of the business cycle in the short run and with the underlying growth trends over longer periods. Government spending also varies cyclically but is particularly responsive to political policies.

Persistent current account surpluses or deficits indicate an accumulation of foreign assets or liabilities; the complete current account equation includes the returns (or the payments) earned on foreign holdings. In such cases the current account equals the balance of trade in goods and services (exports minus imports) **plus** net income earned abroad, which accrues in the form of profits, dividends, interest and reinvested earnings. Since the early 1980s, such returns have become significant determinants of Japanese and American exchange rates — but more about that later.

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<sup>1</sup>The calculation of the rate of return on foreign assets is simply the ratio each year of the net income from foreign assets to the cumulated current account, beginning in 1970 when consistent data became available.

<sup>2</sup>In this report capital outflows are shown as positive and inflows as negative to make the charts and the tables consistent in sign with the current account. This rendering is the opposite of the usual balance of payments conventions, which define capital flows as opposite in sign to the current account.

The foregoing discussion can be summed up in the following relationships:

Aggregate Income **minus** Aggregate Consumption (households plus business plus government)  
**equals** Current Account  
**equals** Savings minus Investment  
**equals** Net Capital Flows Abroad  
**equals** (Exports minus Imports) plus Foreign Asset Income

The value of the current account corresponds to the value of the net flow of capital into or out of a country, but it says nothing about gross flows in and out. Neither is it informative about which countries or regions are involved or the particular forms of capital. For example, when Japan's long-term asset flows peaked at \$192 billion in 1989, its current account surplus amounted to \$57 billion, long-term liabilities, meanwhile, grew by \$103 billion. In that same year Japanese banks' international short-term liabilities shot up an astounding \$142 billion, but bank assets almost counterbalanced that figure with an increase of \$134 billion.

The current account portrays the net result of myriad flows. Gross flows in one direction may depart considerably from the picture conveyed by net statistics. One example of the huge difference between gross and net is shown in Table 1 regarding Japan's international securities (stocks and bonds) transactions in 1994. Although Japanese buyers purchased almost \$1 trillion worth of foreign bonds that year, they sold almost the same amount over the course of the year. The net flow out of Japan into foreign bonds was \$61 billion. When all of the transactions are aggregated, neglecting the negative signs on capital inflows, the gross total of securities changing hands was almost \$3 trillion! The net flow of capital into and out of securities, the number that makes its way into the current account, came to \$28 billion — a substantial quantity but only 1 percent of the gross flow. Which, then, is the “real” number: \$2.7 trillion or \$28 billion? The answer depends on the question.

Due to the many different ways that the separate capital accounts can add up to the current account imbalance, people looking at narrow sectors sometimes overgeneralize their particular

Table 1: Gross and Net Capital Flows In and Out of Securities  
 by Japanese and Foreign Investors, 1994

(in billions of dollars)

|                                | <u>Bought</u> | <u>Sold</u> | <u>Net</u> |
|--------------------------------|---------------|-------------|------------|
| <u>By Japanese</u>             |               |             |            |
| Foreign Stocks                 | \$61          | \$-47       | \$14       |
| Foreign Bonds                  | 992           | -931        | 61         |
| Net Securities Assets          |               |             | 75         |
| <u>By Foreigners</u>           |               |             |            |
| Japanese Stocks                | -206          | 160         | -46        |
| Japanese Bonds                 | -164          | 163         | -1         |
| Net Securities Liabilities     |               |             | -47        |
| Net Capital Flow in Securities |               |             | 28         |

Total Value of Securities Changing Hands: \$2.724 trillion

Note: Negative signs indicate capital flowing into Japan.

Source: Nomura Research Institute, *Quarterly Economic Review*.

experience. A common example is the assertion that capital flows out of Japan have dried up — despite \$100 billion-plus annual current account surpluses in recent years. One obvious interpretation of such a statement is that the flows crossing at least one trader's desk or the areas covered by the analyst making the comment are not what they used to be; however, the current account total is the obvious number to which individual accounts have to balance. Any changes in the current account can be traced to the sum of a number of categories, but a change in one particular category does not mean that the current account will reflect that change.

## **Transition To Capital Liberalization In The 1970s**

During the period after World War II when international economic affairs were governed by the written and the unwritten rules of the 1945 Bretton Woods Agreement national domestic investment was constrained to equal national savings. Since large international capital flows could create pressures on exchange rates, governments adjusted fiscal policies to keep current account imbalances small in order to preserve the currency values fixed by the Bretton Woods accord. Moreover, exchange controls that restricted capital flows were still quite severe in Japan and many European countries in the 1950s and the 1960s. Consequently, little private capital was available to accommodate current account imbalances. Net capital transfers remained very small well into the 1970s.

U.S. inflation rates in the late 1960s that were higher than those of America's trading partners caused the dollar to be overvalued at its fixed parity. Speculative flows of "hot" money and wider concerns about the dollar's overvaluation led the U.S. government under President Nixon to abandon the fixed rate exchange system in the 1971-73 period. The new system of floating exchange rates allowed governments to pay less attention to controlling current account imbalances. Subsequently, savings and investment could depart from equality within an economy and seek balance among the world's economies.<sup>3</sup>

Until the late 1970s restrictions on foreign exchange and private capital flows in Japan remained tight. These policies came under pressure toward the end of the decade from the domestic financial sector as well as from American government negotiators. Outside pressure likely had less impact than the declining domestic demand for loans plus growing opportunities evident overseas as other countries liberalized their broadly defined financial policies; that proved a strong impetus for Japanese investors to seek changes in domestic regulations. Banking deregulation took place in the United States in 1979, and capital controls in the United Kingdom were relaxed the same year.

Prior to 1980 changes in Japan, the two groups formally allowed to invest abroad — insurance companies and investment trusts — had to obtain permission from the Ministry of Finance to do so. Very little overseas investment took place under these restrictive rules. During the economic slowdown of the 1970s Japanese demand for domestic loans shrank, and higher cost lenders, such as insurance and investment companies, were squeezed out of the market. In 1980 the Foreign Exchange and Trade Control Law was revised. Although billed at the time as representing an about-face in the regulatory environment governing international transactions, the revamped law kept many restrictions in place. For example, strict ceilings meant that most Japanese banks still were limited in their foreign operations. MOF gradually eased these restrictions and in 1986 moved to raise the ceilings sharply. This series of actions greatly expanded the opportunities for Japanese financial institutions to invest abroad. Much of the rapid growth in Japan's foreign asset position from 1980 to 1986 or so represented adjustments toward desired levels that previously were not attainable.

Partly because of the relaxation of capital controls, the United States and Japan around 1981 began to run large current account imbalances. These would persist for at least the next 14 years, and they probably will continue well into the next century.

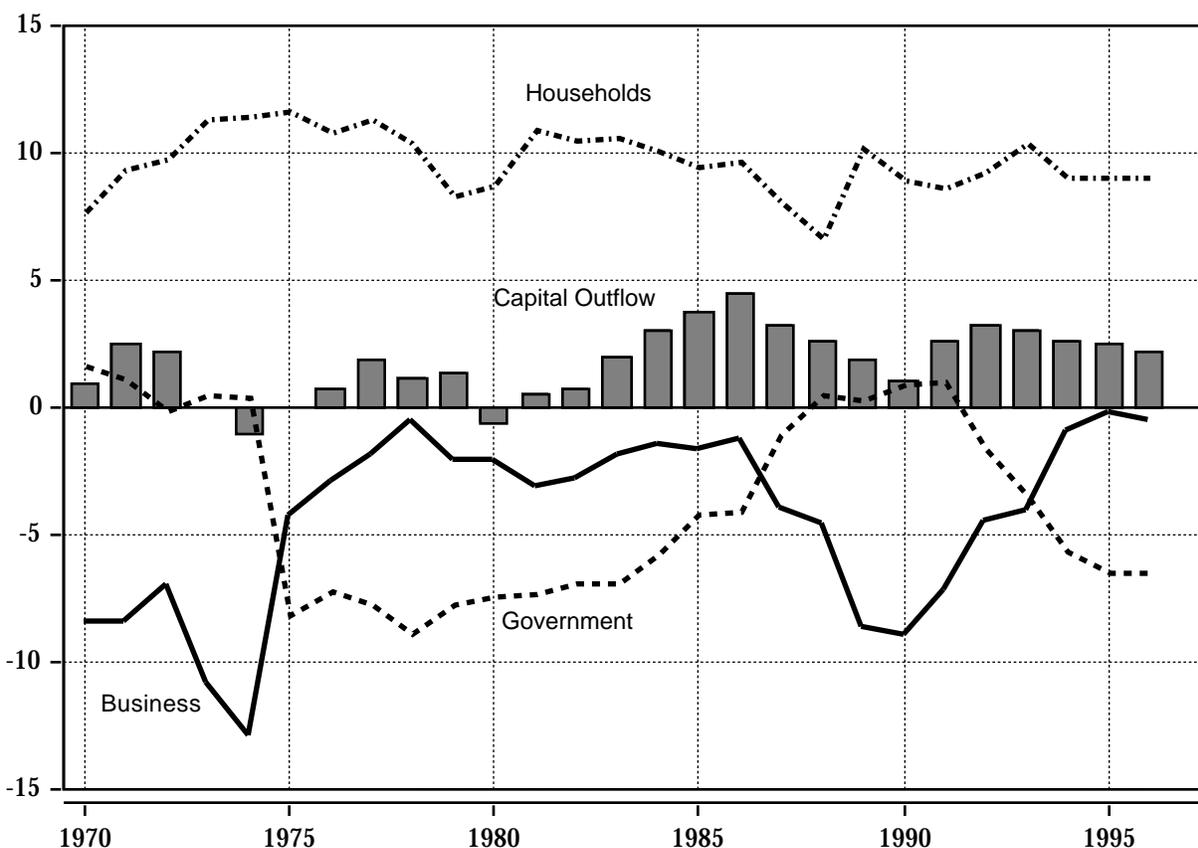
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<sup>3</sup>Roland I. McKinnon, "The Rules of the Game: International Money in Historical Perspective," *Journal of Economic Literature*, March 1993, p. 24.

Prior to the changes that began to free up financial transactions in Japan in the 1980s, the regulated financial system channeled the household sector's large savings into capital spending. The economic downturn in the 1970s meant declining business investment demand for household savings; this was counterbalanced for a time by very large government deficits (see Figure 1). As Tokyo worked to end its use of deficit financing through the 1980s, Japan's current account gradually moved into surplus — with its excess savings flowing overseas.

**Figure 1: Japan's Sectoral Balances, 1970-94 Actual and 1995-96 Projected**

(Savings-Investment as Share of GNP)



Note: The absence of a column means that the net capital outflow was zero.

Source: Nomura Research Institute, *Quarterly Economic Review*.

In the United States the federal budget deficit was the chief source of savings-investment imbalance, as shown in Table 2. Savings and investment both fell after 1982 compared to the 1960-81 period, but investment dropped by a larger amount.<sup>4</sup> As shown by several studies, Japan's current account surplus is not independent of the U.S. demand for capital.<sup>5</sup> A 1 percentage point cut in the ratio of the U.S. federal budget deficit to gross national product would reduce Japan's current account surplus

<sup>4</sup>Craig S. Hakkio, "The U.S. Current Account: The Other Deficit," *Federal Reserve Bank of Kansas City Economic Review*, Third Quarter 1995, p. 23.

<sup>5</sup>Jeffrey Sachs, "Global Adjustment to a Shrinking U.S. Trade Deficit," *Brookings Papers on Economic Activity*, No. 2, 1988, p. 662; Ku Shin, *The Effects of the Changing Policy Environment on the Global Economy* (Rand Graduate School Dissertation, N-3595) (Santa Monica, California: Rand Corp., 1992), p. 52.

Table 2: U.S. Financial Flows, 1960-94

(percent of GNP)

|                           | <u>1960-1981</u> | <u>1982-1994</u> |
|---------------------------|------------------|------------------|
| Gross Domestic Investment | 16.5%            | 15.7%            |
| Gross Private Savings     | 17.5             | 17.0             |
| Federal Government Budget | -0.6             | -2.9             |
| Net Capital Inflow        | -0.4             | 1.8              |

Source: Craig S. Hakkio, "The U.S. Current Account: The Other Deficit," *Federal Reserve Bank of Kansas City Economic Review*, Third Quarter 1995, p. 28.

by about \$7 billion to \$15 billion, according to separate studies by economists Jeffrey Sachs and Ku Shin. In contrast, scant evidence shows the U.S. current account imbalance as dependent on Japanese economic variables. Thus, the notion that Japan is exporting its production surplus and unemployment to the United States does not hold up to economic scrutiny.

### Looking At The Flows

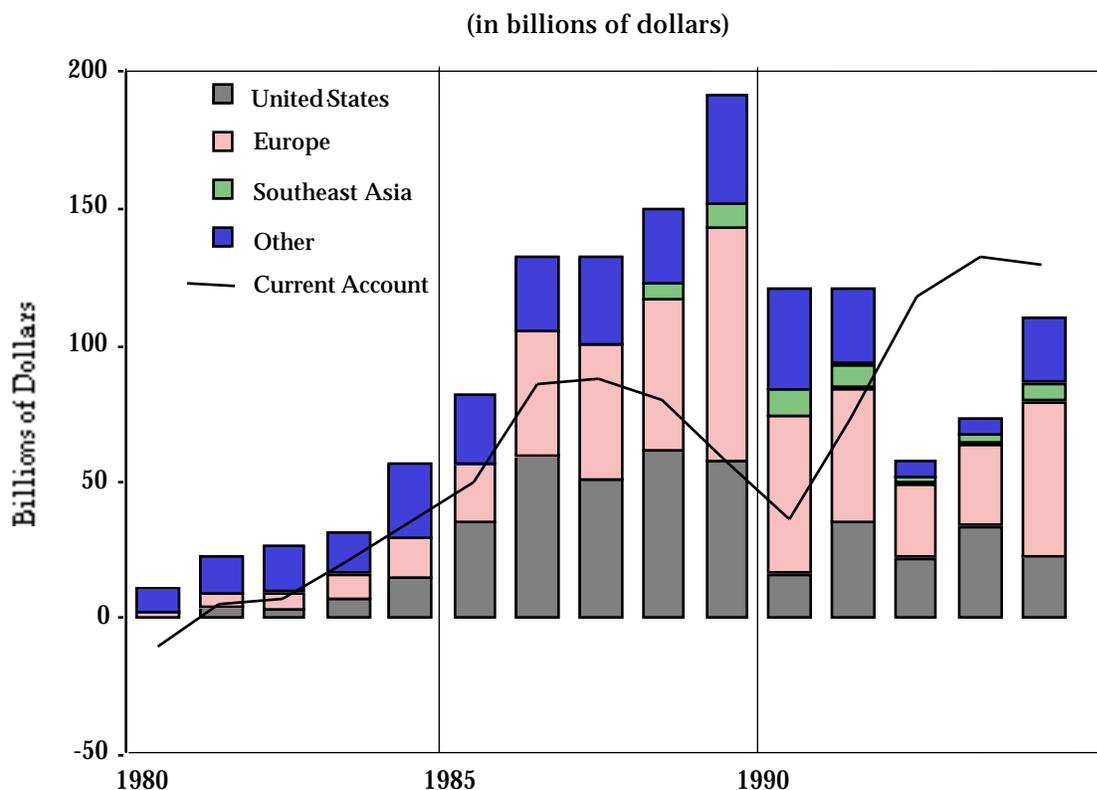
Long-term assets — comprised of securities (that is, portfolio investment or investments in stocks and bonds), foreign direct investment and loans, all with a maturity greater than one year — arguably are the most visible of the various types of capital investments and perhaps the most important. These assets finance real business activities and are somewhat less volatile than the so-called hot money that can move in and out of a country with little notice. Figure 2 shows the breakdown of Japan's gross long-term asset flows by country or region, together with its current account surplus. There is only a loose relationship between the current account balance and long-term capital outflows, with the latter typically either offset or complemented by a variety of other financial flows (as illustrated in the earlier series of relationships). From the figure it is obvious that the United States and Western Europe have been the overwhelming recipients of Japanese long-term funds. Investments in Southeast Asia have grown very rapidly since the mid-1980s, but the absolute size of that region in Japan's financial portfolio remains relatively small.

What seems to be more important to analyze is the asset bubble of the late 1980s. Soaring asset prices in Japan allowed banks and life insurance companies to leverage their access to cheap, abundant capital to expand their overseas investments. Insurance companies in particular were motivated to invest in foreign shares that paid more substantial dividends than did those of Japanese companies because insurers themselves were forced to limit their own payouts to the dividends that they received on their investments. Japanese banks borrowed "short" from banks in Hong Kong, Singapore, London and New York to finance the acquisition of long-term assets whose volume outran Japan's current account surplus.<sup>6</sup> The preference for securities is obvious in all years except 1990, with foreign direct investment lagging well behind (see Figure 3). Portfolio investment rose at an especially rapid pace with the expansion of the economic bubble in Japan in the second half of the 1980s and plunged in equally dramatic fashion in 1990, as domestic asset prices began to tumble in the face of Bank of Japan efforts to use monetary policy, particularly repeated hikes in the official discount rate, to burst the bubble (see *JEI Report No. 16A*, April 28, 1995).

Foreign direct investment also responded sharply in the mid- and late 1980s to the availability of low-cost capital in Japan. Figure 4 compares American and Japanese direct investment abroad from

<sup>6</sup>Robert N. McCauley and Stephen Yeaple, "How Lower Japanese Asset Prices Affect Pacific Financial Markets," *Federal Reserve Bank of New York Quarterly Review*, Spring 1994, pp. 19-20.

Figure 2: Japan's Long-Term Capital Flows into Foreign Assets by Region, 1980-94



Source: Bank of Japan, *Balance of Payments Monthly*.

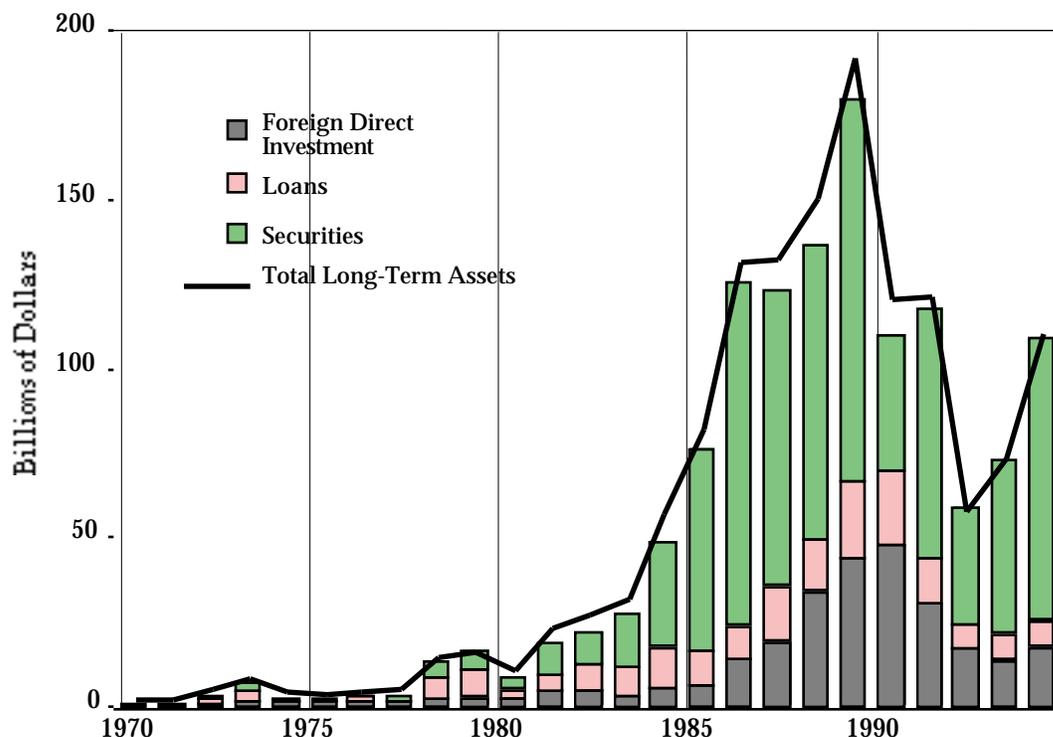
1970 through 1994. Except for a four-year period at the height of the bubble, corporate America's foreign direct investment almost always was greater than Japan's. While Japanese equity investment overseas collapsed after 1990, U.S. foreign direct investment continued to grow at a very rapid rate.

Since a large share of Japanese portfolio investment is in American securities, the question has been raised: How important are Japanese buyers in financing the U.S. fiscal deficit? This issue has been paraphrased by the question: What if they held a Treasury auction and the Japanese did not come? One answer is that, as long as foreigners are buying any kind of American financial assets, the particular instrument does not matter because money is fungible. The narrow answer, though, requires a look at the evidence.

Two kinds of data are available: Federal Reserve Board statistics on net foreign purchases (including by Japanese investors) of marketable securities with more than a one-year maturity and standardized statistics published by the International Monetary Fund on total new government debt and the amount of that debt held by nonresidents. The volume of government debt bought by foreigners is erratic, as shown in Figure 5, and has no obvious relationship to the amount of U.S. securities on the market. Table 3 presents the averages for net foreign purchases of U.S. government debt over three periods: the first half of the 1980s before Japan's economic bubble, the bubble period of the later 1980s and the 1991-95 time frame. The data clearly show a significant role for foreign buyers of U.S. government debt — from 20 to 30 percent of the total in the past 10 years. The average Japanese share, though, was much more limited. At its highest level over the three periods indicated it was less than 10 percent, a figure coinciding with the 1991-95 period. On an annual basis Fed statistics reveal that

Figure 3: Japan’s Long-Term Capital Flows into Foreign Assets by Type, 1970-94

(in billions of dollars)



Source: Bank of Japan, *Balance of Payments Monthly*.

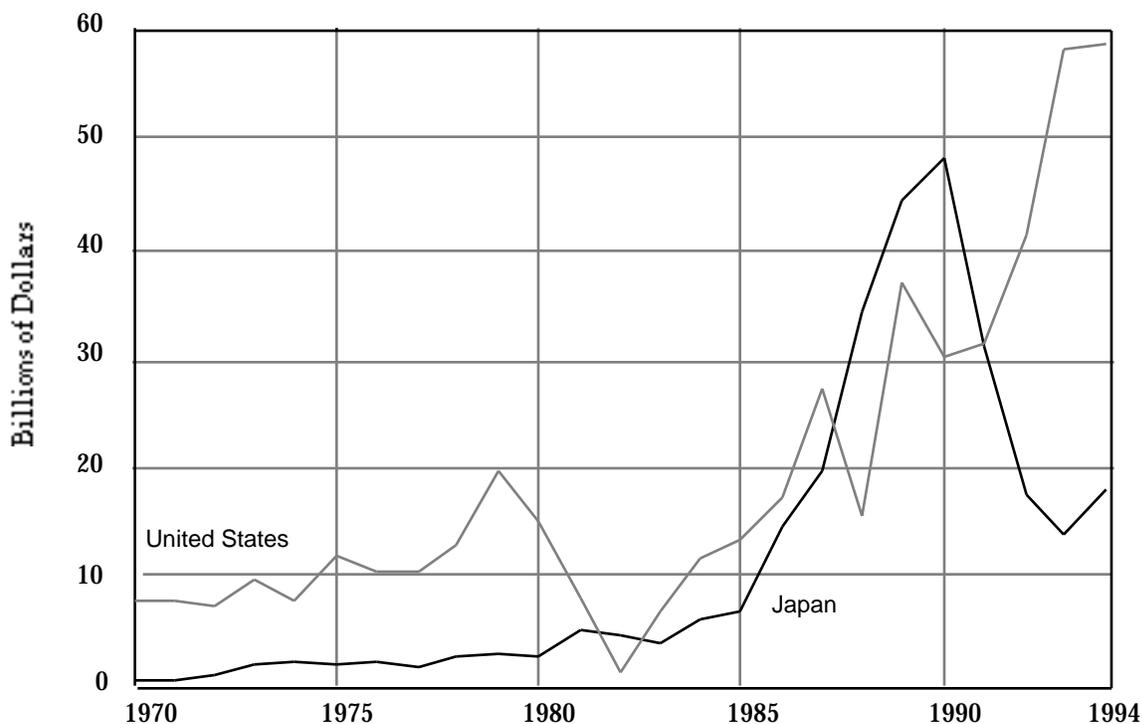
Japanese buyers had peaks of importance in 1988 and 1994 when they acquired more than 20 percent of the U.S. government’s long-term marketable instruments. In contrast, 1990 and 1991 witnessed net disinvestment by Japanese holders. The first six months of data for 1995 suggest that foreign participation is at an all-time high, with purchases almost equal to the full year of 1994. Moreover, Japanese investors are among the most prominent buyers, probably because of the spread between interest rates in Tokyo, where Japanese government bonds are yielding 2.9 percent, and New York, where U.S. government bonds are returning 5.9 percent.<sup>7</sup>

The shifting composition of Japan's capital portfolio is captured dramatically in Figure 6, which shows the two sides of the ledger — assets and liabilities — for both long-term and short-term maturities. For five years in the latter half of the 1980s Japanese banks borrowed heavily in Asian and American markets to help finance their long-term lending for various purposes. The bubble's collapse in 1990 coincided with the Switzerland-based Bank for International Settlement’s Basel Accord, which established capital adequacy requirements for banks operating internationally. Japanese banks scrambled to reduce their lending to match a capital base that had shrunk as a result of the burst bubble’s falling securities and property prices. Bank short-term liabilities decreased even faster than assets fell as loans from overseas banks were paid off, throwing liabilities into the positive column after 1991. With the drawing down of lending and the paying off of liabilities, banks’ short-term flows, when netted out, turned sharply positive, moving from a negative \$75 billion in 1987 to almost \$100 billion only four years later. The summary of the short-term flows, contrasted with net long-term asset flows, can be seen in Figure 7.

<sup>7</sup>Michael Sesit, “U.S. Treasuries Are Luring Foreign Buyers,” *Wall Street Journal*, October 31, 1995.

Figure 4: Gross Foreign Direct Investment Outflow from Japan and the United States, 1970-94

(in billions of dollars)



Sources: Bank of Japan, *Balance of Payments Monthly*, and International Monetary Fund, *Balance of Payments Statistics Yearbook*.

Net long-term assets moved just as dramatically but in the opposite direction — from a 1987 high of \$136 billion to a negative \$37 billion in 1991. A major part of the 1991 fall of net long-term assets into negative territory stemmed from large foreign purchases of Japanese securities that year, to the tune of a bargain-hunting \$67 billion. The Tokyo Stock Exchange was experiencing a steep slide from its yearend 1989 high of 38,915.87 for the Nikkei average index of 225 stocks listed on the first

Table 3: Shares of U.S. Government Debt Represented by Net Foreign Purchases, 1981-95

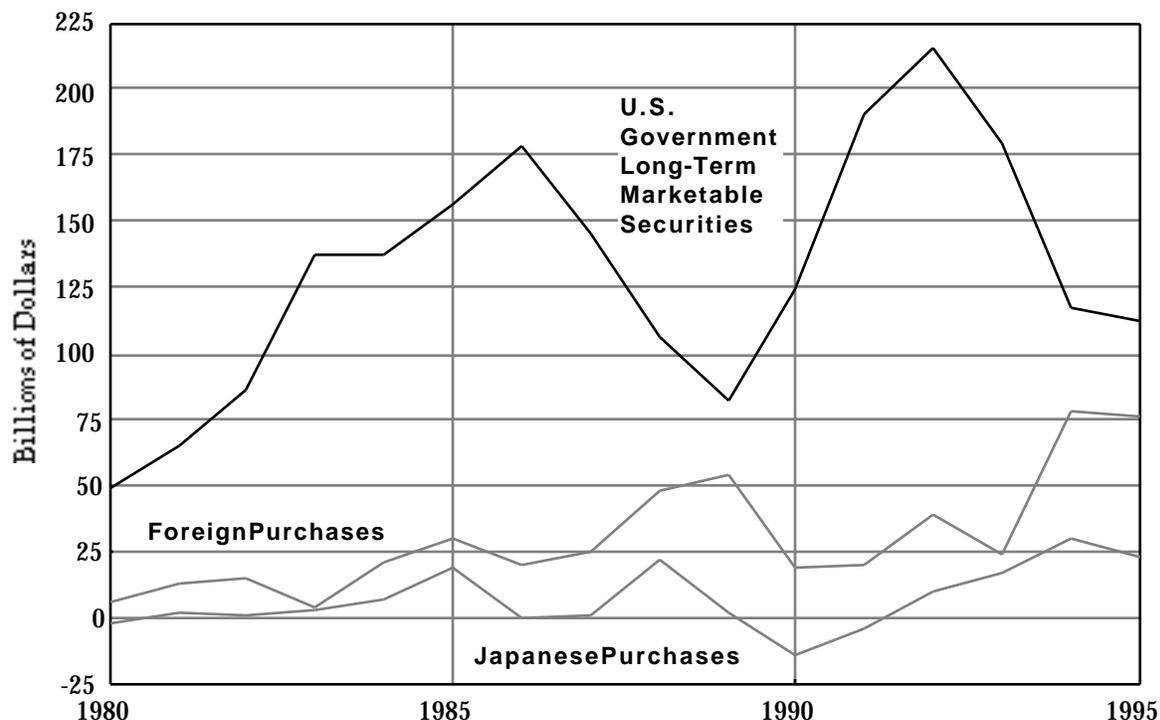
|          | <u>Federal Reserve Board Data</u> |              | <u>International Monetary Fund Data</u> |
|----------|-----------------------------------|--------------|---|
|          | <u>Total Foreign</u>              | <u>Japan</u> | <u>Total Foreign</u>                    |
| 1981-85  | 9.5%                              | 5.1%         | 10.2%                                   |
| 1986-90  | 26.3                              | 1.5          | 21.6                                    |
| 1991-95* | 29.3                              | 9.3          | 26.1                                    |

\*Through June 1995.

Source: Federal Reserve Board, *Federal Reserve Bulletin*, and International Monetary Fund, *International Financial Statistics*.

Figure 5: Foreign Purchases of U.S. Government Long-Term Debt, 1980-94

(in billions of dollars)



Source: Federal Reserve Board, *Federal Reserve Bulletin*.

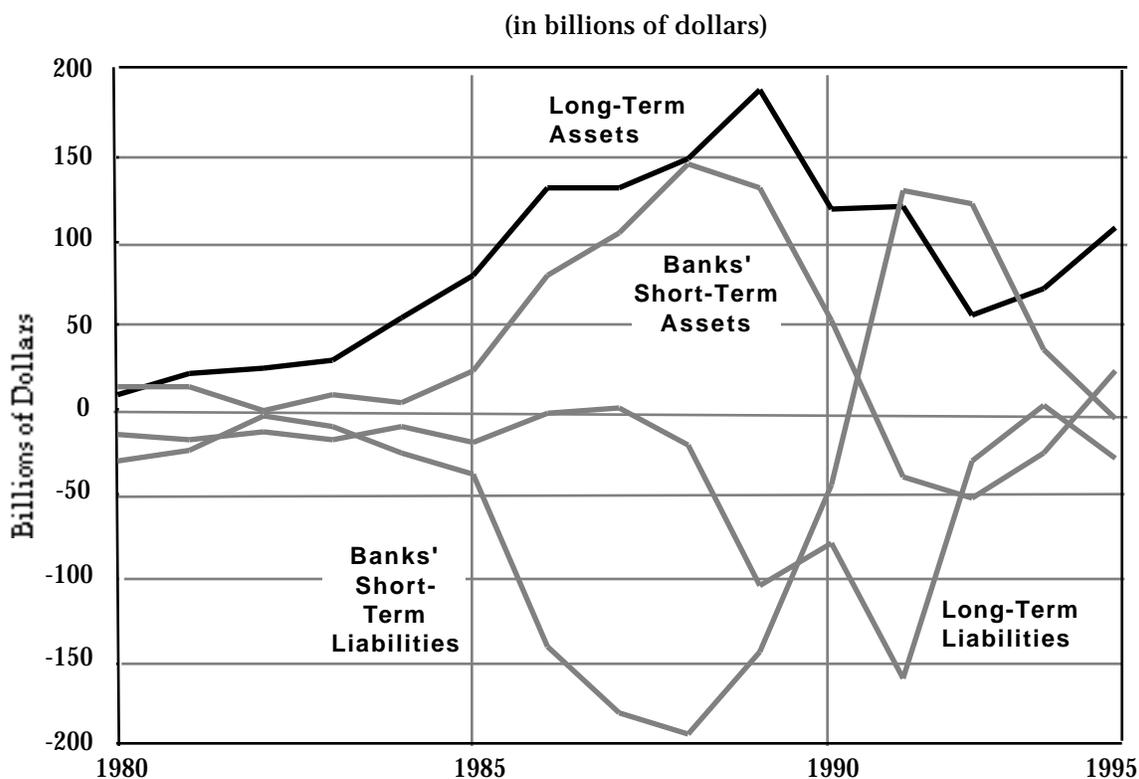
section of the TSE; that average reached a low — 14,309.41 — in August 1992. Notwithstanding the startling swings in the flow of net assets, the current account sailed on its own relatively smooth course, determined primarily by domestic macroeconomic forces. (The dip in the current account in 1990 and 1991 partly reflected Tokyo’s contribution of approximately \$13 billion to Operation Desert Storm.)

### The Profitability Of Japan's Overseas Investments

As suggested above, doubts exist about whether Japanese investors have made money on their foreign assets. Was all that investment of excess domestic savings overseas worthwhile? The economic disasters associated with names like Rockefeller Center and Pebble Beach are buttressed by stories about Japanese-owned office buildings in Los Angeles that are half vacant or resort properties in Hawaii, where one hotel requires 95 percent occupancy at \$800 per night to break even. These are potent reminders that Japanese bankers and investors did not possess superhuman financial skills during the bubble years. The fact that Japanese direct investment in the United States has not earned positive returns in recent years adds to the qualms in corporate boardrooms about the financial soundness of overseas equity investment.

Anecdotes, however, do not tell the whole story. Even the seemingly bleak tale portrayed by negative returns on Japanese direct investment in the United States is not all that bad. Figure 8 tells part of the more complete story by showing average and marginal yields on net Japanese foreign investments for 1985 through 1994. The starting year was chosen to reflect the period when Japan’s overseas assets began to reach stable and sizable levels. Average yields are calculated as the net

Figure 6: Japanese Long- and Short-Term Foreign Assets and Liabilities, 1980-94



Source: Federal Reserve Board, *Federal Reserve Bulletin*.

income on foreign assets divided by the cumulative current account balance since 1970. Marginal yields

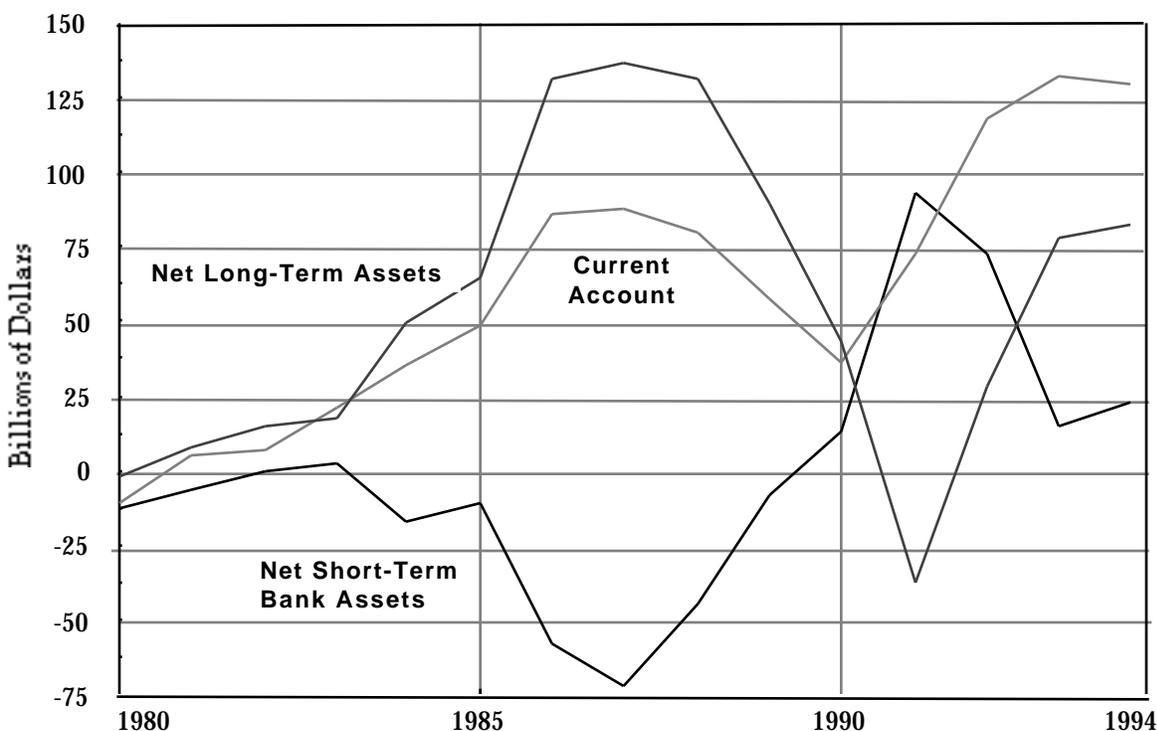
are the year-to-year differences in net income on foreign assets divided by the previous year's current account balance. Average returns drifted downward from over 7.5 percent in 1985 to close to 5 percent in 1994. Marginal yields were more volatile, bouncing between minus 1 percent and 8 percent. These movements reflected conditions on foreign stock exchanges, overseas business conditions, property rentals and other indicators of the world's economic health. The generally downward trend in the average yield appears to have been produced by the enormous rate of investment abroad in the late 1980s, which likely depressed returns as investors moved down worldwide yield curves and as new direct investments had to overcome low returns from high start-up costs.

Low returns on direct investments in the United States have been experienced not only by Japanese firms but also by other foreign companies. While U.S.-based manufacturing firms were generating 10 to 15 percent returns on their domestic investments after 1980, foreign firms operating in this country were lucky to reach the 5 percent level, according to a report by David Laster and Robert McCauley for the Federal Reserve Bank of New York. Moreover, the difference in yields between domestic and foreign firms widened over time. The gap in the return on equity averaged 3.4 percentage points between 1951 and 1975, 6.8 points in the 1976-80 time frame and 8.8 points in the 1981-91 period.<sup>8</sup> The study's authors attributed the depressed earnings by foreign firms to the rapid buildup of U.S. operations in the 1980s. "These companies paid top dollar for under-performing U.S. firms, borrowed

<sup>8</sup>David S. Laster and Robert N. McCauley, "Making Sense of the Profits of Foreign Firms in the United States," *Federal Reserve Bank of New York Quarterly Review*, Summer-Fall 1994, p. 44. Transfer pricing that did not reflect actual costs contributed to, but was not a major source of, the lower foreign company profits.

Figure 7: Net Japanese Long-Term and Short-Term Capital Flows, 1980-94

(in billions of dollars)

Source: Bank of Japan, *Balance of Payments Monthly*.

heavily, and then spent freely on investment and marketing. As the share of recently acquired foreign firms in the United States rose in the 1980s, aggregate returns deteriorated.”<sup>9</sup>

This experience does not depart from the history of domestic acquisitions by U.S.-based firms or from their foreign experience. American direct investment overseas earned a return of 8.3 percent in 1993 but showed weak profitability in the 1950s and 1960s when holdings were growing rapidly. Data for 1988 indicated that the median year of incorporation of U.S.-owned firms abroad was between 1960 and 1964; however, for manufacturers the median occurred between 1955 and 1959. As measured in 1990 the median start-up year for foreign-owned firms in the United States dated only to sometime in the late 1970s.<sup>10</sup> As these firms mature, their profitability may improve, although the experience of Japanese firms in Southeast Asia suggests that profits there are unrelated to the relatively young age of the firm.

### Capital Flows, Exchange Rates And Trade Balances

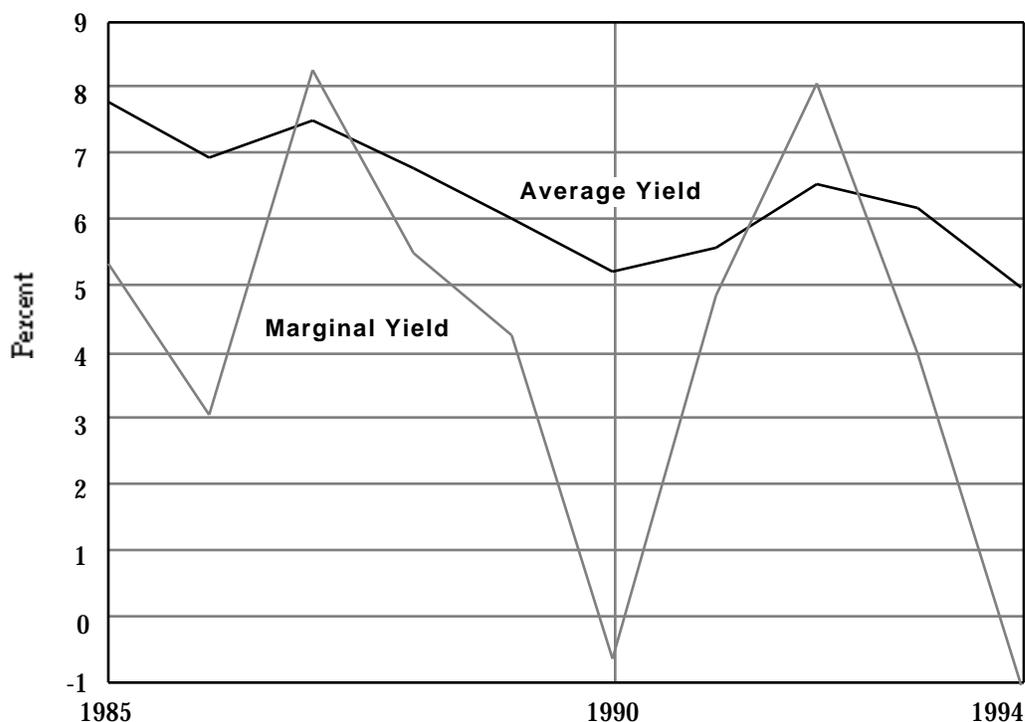
Over the long run Japan’s accumulation of assets abroad associated with its protracted run of current account surpluses generates income that flows back to the country. The results of the consequent buildup of overseas assets are well-known to economists. The mechanism that governs events is revealed in one of the relationships mentioned earlier:

Current Account equals (Exports minus Imports) plus Foreign Asset Income.

<sup>9</sup>*Ibid.*, p. 44.

<sup>10</sup>*Ibid.*, p. 53.

Figure 8: Yields\* on Japanese Net Foreign Investment, 1985-94



\*Ratio of net income on foreign assets to current account balances.

Source: Bank of Japan, *Balance of Payments Monthly*, and author's calculations.

The current account is largely a function of domestic macroeconomic forces affecting savings, investment, consumption and government spending. Income from foreign assets is generated by investments made over the preceding years. Both of these flows are pretty much predetermined. The balance of exports of goods and services minus equivalent imports is the only set of activities free to adjust to the underlying fundamental forces. Thus, if the current account is given and income from overseas investments is rising because of accumulating outflows of excess savings, then the trade balance must fall through a combination of declining exports and rising imports. An appreciating exchange rate is the vehicle that accomplishes this feat.

Changes in the yen's exchange rate can be expected because Japan's annual income from foreign assets has grown dramatically from virtually zero in 1980 to more than \$40 billion in recent years. The net American flow of income from U.S. investments abroad has declined in just as startling a fashion from more than \$30 billion in 1982 to a negative \$10 billion in 1994 — the first year since early in the century that America's net foreign asset income sank below zero. Reflecting the earlier-mentioned cause-and-effect relationship, the yen has appreciated 2.8 percent annually in real terms against the currencies of Japan's major trading partners over the 20-year period since 1975 whereas the dollar has depreciated at a 1.2 percent yearly rate over that time frame. Until each country's current account imbalances disappear, the appreciation and the depreciation of their respective currency can be expected to continue. More than that, Japan's trade surplus can be expected to get smaller and perhaps even become negative; the American deficit is likely to shrink, too.

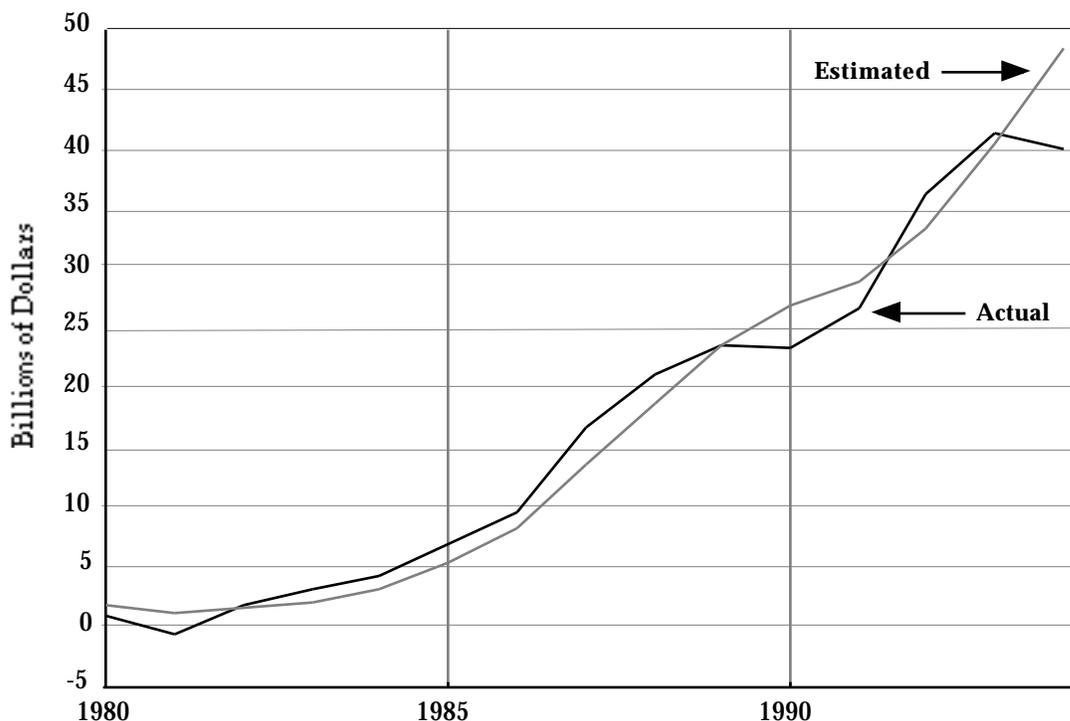
The rate at which the yen's exchange rate and Japan's trade imbalance adjust depends on many variables, but a simple simulation can give a flavor of the variables at work and the possible trend of

events. To begin, it is necessary to project Japan's future current account surplus. Two alternatives are considered. The first possibility is a steady decline in the current account imbalance to zero over a 10-year horizon from the 1994 level. The second current account scenario assumes a one-time decline to \$90 billion in 1995, with stability thereafter. Several plausible arguments lie behind the first scenario of steady decline, the main driving forces being projected lower household savings and higher government spending. Japanese household savings may fall slowly because of an aging population; older people, even in Japan, save less than those in their prime working years. The currently large government budget deficit is unlikely to disappear in the next decade or so, despite the prospective ending of the current recession, because of the social needs of an aging population in areas like health care, pensions and welfare. Furthermore, if the American fiscal deficit of approximately 2 percent of GNP is brought into balance over the next decade, that in itself could reduce Japan's current account surplus by an estimated \$15 to \$30 billion as U.S. demand for Japanese savings falls.

Once the future current account balance is established, a rate of return on those assets must be applied to produce the future income stream; a 5 percent return is assumed. The adequacy of such a simple assumption is demonstrated in Figure 9 in which past income from foreign assets was estimated using an assumed 6 percent return applied to cumulative current account surpluses since 1970. Estimated income is quite close to the actual figure for most years. Because of the slowly declining trend in average returns shown in Figure 8, a 5 percent return seems reasonable for future projections.

Figure 9: Japan's Actual and Estimated Net Foreign Investment Income, 1980-94

(in billions of dollars)



Source: Bank of Japan, *Balance of Payments Monthly* and author's calculations.

The net change in foreign asset income is simply the return on the previous year's current account balance. According to the equation linking the current account to the balance in overall trade plus foreign asset income, the trade balance has to adjust to accommodate the other variables. That is, the

change in the trade balance equals the change in the current account minus the change in foreign asset income. For example, in the case of the assumed \$90 billion current account surplus, the trade balance would have to decline by an estimated \$4.5 billion each year if foreign asset income grew at 5 percent annually. To accomplish that task the real exchange rate would have to appreciate by a little under 1 percent a year.<sup>11</sup> Since Japanese inflation rates are likely to be somewhat lower than those of the United States and other trading partners — based on past history — nominal exchange rates will reflect these differences. Inflation differentials of 2.5 percent are assumed.

Table 4 presents the estimates from the simulations. Under the declining current account surplus scenario Japan's trade surplus is projected to disappear by the turn of the century. The real value of the yen-dollar exchange rate is predicted to appreciate by about 6.5 percent cumulatively over an eight-year period and then begin to depreciate by the year 2004. The nominal value of the yen is forecast to march toward the low 70s over the next decade. The stable alternative, which assumes a \$90 billion current account surplus, shows the real exchange rate appreciating at a somewhat faster, continually upward pace and the trade balance taking a longer time to become negative — around 2005 under the scenario assumptions. These calculations illustrate the point that the yen will continue to appreciate in real terms as long as a positive current account builds up assets abroad. Ironically, recent Japanese government policies — such as facilitating the foreign investments of insurance companies and trust funds, steps that are intended to depreciate the currency in the short run — will have the opposite effect in the longer run.

Table 4: Simulations of Japan's Future Trade Balance and Yen-Dollar Exchange Rate,\* 1994-2005

| Year                                      | Current Account<br>(\$ billion) | Trade Balance<br>(\$ billion) | Cumulative                |  | Current Account<br>(\$ billion) | Trade Balance<br>(\$ billion) | Cumulative                |                          |
|---|---------------------------------|-------------------------------|---------------------------|--|---------------------------------|-------------------------------|---------------------------|--------------------------|
|   |                                 |                               | Real Exchange Rate Change | Yen-Dollar Exchange Rate                 |                                 |                               | Real Exchange Rate Change | Yen-Dollar Exchange Rate |
| <u>Declining Current Account Scenario</u> |                                 |                               |                           | <u>Constant Current Account Scenario</u> |                                 |                               |                           |                          |
| 1994                                      | \$135                           | \$95                          | 1.38%                     | ¥99                                      | \$135                           | \$95                          | 1.38%                     | ¥99                      |
| 1995                                      | 120                             | 73                            | 2.57                      | 95                                       | 90                              | 43                            | 2.28                      | 95                       |
| 1996                                      | 105                             | 52                            | 3.59                      | 92                                       | 90                              | 39                            | 3.15                      | 92                       |
| 1997                                      | 90                              | 32                            | 4.43                      | 89                                       | 90                              | 34                            | 3.99                      | 89                       |
| 1998                                      | 75                              | 12                            | 5.12                      | 86                                       | 90                              | 30                            | 4.81                      | 86                       |
| 1999                                      | 60                              | -6                            | 5.65                      | 84                                       | 90                              | 25                            | 5.61                      | 84                       |
| 2000                                      | 45                              | -24                           | 6.04                      | 81                                       | 90                              | 21                            | 6.38                      | 81                       |
| 2001                                      | 30                              | -42                           | 6.29                      | 79                                       | 90                              | 16                            | 7.13                      | 79                       |
| 2002                                      | 15                              | -58                           | 6.41                      | 77                                       | 90                              | 12                            | 7.86                      | 76                       |
| 2003                                      | 0                               | -74                           | 6.41                      | 75                                       | 90                              | 7                             | 8.57                      | 74                       |
| 2004                                      | -15                             | -89                           | 6.29                      | 73                                       | 90                              | 3                             | 9.25                      | 72                       |
| 2005                                      | -30                             | -103                          | 6.07                      | 72                                       | 90                              | -2                            | 9.92                      | 69                       |

\*Assumes current account balances shown, a 5 percent return on foreign assets, a 2.5 percent inflation differential between Japan and the United States, import and export price elasticities of 0.75 and a 3 percent annual gain in the volume of trade.

## Conclusions

Other countries have exported capital for extended periods, notably the United Kingdom in the 19th century and Germany, Switzerland and the United States in the post-World War II period.

<sup>11</sup>The simulation assumes import and export price elasticities of 0.75 and a growing volume of trade of 3 percent per year.

Persistent exports of capital usually are considered a mark of economic maturity and historically have accompanied the world's highest living standards and productivity levels. The United Kingdom ran continuous and growing current account surpluses for more than 100 years in the 19th and early 20th centuries. The continually appreciating pound sterling produced increasingly large trade deficits in the decade before World War I.<sup>12</sup> The British had the highest standard of living in the world at the close of the 19th century, and their economy was the most productive. They bought goods and services from the rest of the world at low prices and sold their own output at high prices. The economic welfare of the average citizen was enhanced by the ability of British investors to find investment opportunities abroad that earned higher rates of return than were available at home.<sup>13</sup> The only group that suffered were exporters, since their products faced higher prices on world markets.

The central question about Japan today is: Why is it a net exporter of capital when it still lags by a considerable margin the living standards and productivity levels of the United States and advanced European countries? Although Japanese citizens can benefit from the lower prices of foreign goods and from the high prices that their own output fetches on world markets, it could be argued that they would be even better off if their domestic savings that flow so freely around the world today were invested at home. Of course, the reason savings are not put to work domestically is because the returns are too low. A tentative answer as to why Japan exports its savings when there ought to be investment opportunities at home is that excessive regulation and insufficient openness and competition limit the number of profitable activities and attractive ventures. Just as the United States and other developing countries thrived because of the capital investments made by the United Kingdom in the 19th century, the rest of the world today benefits from Japanese savings that finance international investment. The Japanese people must wonder at times when they will see comparable benefits.

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The views expressed in this report are those of the author and do not necessarily represent those of the Japan Economic Institute.

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<sup>12</sup>Robert Triffin, *The Evolution of the International Monetary System: Historical Reappraisal and Future Perspectives* (Princeton Studies in International Finance No. 12) (Princeton, New Jersey: Princeton University, 1964), p. 7.

<sup>13</sup>Barry Eichengreen, "Historical Research on International Lending and Debt," *Journal of Economic Perspectives*, Spring 1991, p. 153.