PACIFIC ECONOMIC PAPERS

No. 244, JUNE 1995

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A… AN RESEARCH CENTRE

Pacific Economic Paper No. 244
June 1995

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ISSN 0728 8409
ISBN 0 86413 174 7

ABSTRACT

For much of the interwar period, the United States ran large current account surpluses. The world spoke of dollar shortage. In the past decade Japan has run large current account surpluses, but no one has spoken of 'yen shortage'. This essay suggests two explanations. One is that the yen has not yet become a major international currency. The other is that Japan has financed its current account surpluses through capital outflow. Yen have not been short.

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Introduction

At a seminar about APEC in Bali last year, the American economist Gary Hufbauer was moved to declare that large current account surpluses are bad for the world economy. Someone in the audience asked: 'What about deficits?' This led me to point out that in the years after the Second World War the United States had a run of large current account surpluses, which we called 'dollar shortage'. Why is it that no one, to my knowledge, has ever talked about 'yen shortage'?

There are, I think, two answers, one relatively superficial, the other more fundamental. The first is that the yen has not yet become a major, let alone the dominant, international currency. The second is that the circumstances, causes and consequences, have been very different in the two cases.

The yen as international currency

Money performs the same three functions internationally as in the domestic economy — that is, as a unit of account, as a means of payment, and as a store of value. Internationally, the unit of account function takes the form of numeraire or anchor for national exchange rates, of invoicing currency for trade transactions, and of denomination currency for capital transactions. Money is used internationally as a means of payment to settle trade transactions and to discharge international financial obligations. It serves as a store of value for national governments in the form of currency reserves and for banks and other private agents as a liquid foreign asset.

Between 1870 and 1914, and for some years after the First World War, gold served as international money, supplemented by sterling. Following the breakdown of the gold standard during the Great Depression, the international monetary system disintegrated. The US dollar, convertible into gold at a fixed parity, became a major international currency, but sterling retained much of its role, especially but not only in the sterling area. From the Second World War the United States emerged as overwhelmingly the strongest economic power, and the US dollar as the dominant international currency. Although the Bretton Woods system operated nominally as a gold exchange standard, with national currencies convertible into gold, at least in principle, and exchange rates fixed (though adjustable) in terms of gold, the US dollar became increasingly predominant. National governments increasingly held their reserves in gold and dollars, the dollar become the chief invoicing and denomination currency, and foreign assets came increasingly to be held in the United States. By 1960 the US dollar had become unquestionably the world's 'key' currency.

In the last twenty years, US economic hegemony has come under challenge, chiefly from Germany and Japan, whose share in world income, trade and investment has grown steadily relative to that of the United States. One would expect their currencies to have grown correspondingly in international use, and this has indeed happened in the case of the Deutschmark. It has become the key currency for the European Union (EU), before long perhaps in the guise of the single currency of a monetary union. Within the EU, the Deutschmark now outranks the US dollar in all international functions and even outside the EU, the Deutschmark is second only to the US dollar as international currency.

The yen has not so far been internationalised to anything like the same extent. The international use of the yen has increased in the past decade, especially in the Asian region, but it is still small. No currencies are officially pegged to the yen and the yen does not significantly figure in the basket of currencies to which regional countries link their currencies, except for Singapore (and a few other countries in the years of dollar appreciation, 1981–84) (Frankel and Wei 1993). Only 8 per cent of foreign exchange reserves were held in yen in 1989 (up from 4 per cent in 1980), as compared with 60 per cent in US dollars and 19 per cent in Deutschmark; even Asian countries held only 17 per cent of their reserves in yen. There is no sign of the 'yen bloc', the emergence of which was expected not so long ago. Whereas 96 per cent of US exports were invoiced in US dollars and 82 per cent of German exports in Deutschmark, only 24 per cent of Japanese exports were invoiced in yen, partly because most of them were to developed countries, which tend to invoice their imports in the national currency and partly because Japanese exporters have sought (and may have been encouraged by the government) to maintain their market shares in the face of yen appreciation by invoicing in dollars. (The squeeze on their profit margins has been cushioned by the intermediary role of the trading companies, which have been able to offset yen appreciation losses on exports by gains on imports.)

On the import side, where primary products — traditionally sold in world commodity markets and invoiced in sterling or US dollars — predominate, the share of the yen as invoicing currency is even smaller, at 14 per cent in 1988. Even external lending by Japanese banks continues to be mainly denominated in US dollars, although yen denomination increased significantly in the 1980s, from 14 to 27 per cent (Tavlas and Ozeki 1991).

The extensive literature on the subject (cf. Tavlas and Ozeki 1991 and references given there) advances a number of reasons for the relative insignificance of the yen as an international currency, despite the important role of Japan in the world economy.

One is simply time lag. Sterling remained a major international currency, rivalling and in some respects still surpassing the US dollar, long after Britain had lost its status as the leading economic power. The reason was partly customary practices and connections, but also London's sophisticated capital and money market institutions. The same factors now ensure continuing New York predominance as the world's leading financial centre, and of the US dollar as the key currency, and they are likely to do so for some time yet.

But a more effective impediment to internationalisation of the yen than mere time lags has been the obstacles put in its way by deliberate official discouragement and by Japan's tightly regulated financial system. The Japanese authorities were for long reluctant to allow the yen to function as an international reserve currency for fear of disturbance of domestic monetary stability by international capital movements, a policy backed up until recently by failure to develop an active market in treasury bills. The lack of an effective bankers' acceptance market, continuing administrative controls over interest rates until recently, and the complex procedures imposed by official regulation of Japan's financial system have all held back the shift from dollars to yen in current and capital transactions that would otherwise have occurred in time.

In the mid-1980s steps were taken to promote internationalisation of the yen through the establishment of an offshore currency market in Tokyo. By 1989 it was widely expected that Tokyo would soon overtake London as a world financial centre and come to rival New York. In the last five years, these expectations have subsided. Few now expect Tokyo to take the lead, even in Asia. Average daily turnover in Tokyo's foreign exchange market has declined every year, and the number of foreign firms listed on the Tokyo stock exchange has fallen. High operating costs due to the tangle of regulations are given as the main reason for this retrogression (Hartcher 1994a). For example, the required translation of annual reports costs companies four times as much in Tokyo as in Hong Kong and three times as much as in Singapore.

The yen therefore still plays a quite minor role in the finance of Japan's huge foreign trade and investment. Most of Japan's exports and even imports are invoiced in dollars. Japanese investors frequently buy the shares of Japanese companies in London rather than in Tokyo to avoid the high transaction costs. Most of the long-term capital outflows of the world's largest creditor country continue to be in dollar-denominated securities. The only exceptions are some borrowings from Japan by Asian countries, such as Indonesia, in the form of yen-denominated loans, and foreign borrowings from Japanese institutions in the Euro-yen market, which are substantial but insulated from Japan's financial system and balance of payments. Since most foreigners do not need yen to pay for imports from Japan or settle debts to Japan, they have little incentive to hold yen balances. As Tavlas and Ozeki (1991, p. 34) note, 'The processes underlying the emergence of sterling and the dollar as international currencies, whereby developing (and reconstructing) countries accumulated sterling- and dollar-denominated balances (for liquidity and/or investment, and to service loans for capital development in these currencies) appear to be less significant in the case of the yen (except with respect to Asian developing countries)'.

The crucial test of international currency status is the use of a national currency for international liquidity, by governments in the form of international reserves and by private institutions in the form of liquid foreign assets. The importance of international reserves has declined with the move, at least by the major currencies, towards floating exchange rates. But international reserves are still needed, and held, and exchange rate volatility has encouraged currency diversification. Countries for which Japan is a major trade partner and source of capital, such as Indonesia and Australia, now hold some of their international reserves in yen. But overall, as we have seen, use of the yen as an international currency is still very limited.

There are signs that this situation is causing concern in official circles in Japan. The Ministry of Trade and Industry (MITI) recently published a report urging internationalisation of the yen. Business and academic voices urge deregulation of the financial system. But as the chairman of the Bank of Tokyo, Mr Toyoo Gyohten, pointed out at a recent Australian National University (ANU) seminar, the bureaucracy remains 'a major area of resistance to any deregulation' (Walsh 1994). Japan has certainly become a major international financial intermediary, generally lending long and borrowing short. But the bulk of this lending and borrowing goes on in US dollars. When London, and later New York, served as the world's reserve centres, they enjoyed virtually unlimited overdrafts: any balance of payments deficits were financed automatically by foreigners adding to their reserves in the key currency. Since the 1950s, New York has been the dominant reserve centre, with Frankfurt perhaps before long replacing London in second place. The US–Japan imbalances of the past decade, therefore, have resulted in dollar surpluses accumulated by Japan, not in yen shortage.

But there is a second, more fundamental, sense in which dollars were in short supply in the postwar years (and indeed in the interwar years before the term came to be used), but in which yen have not been short in the 1980s.

Different imbalances

Samuelson, in the first-edition of his famous textbook, *Economics*, published in 1948, referred to 'the great and universal "dollar shortage", which is the financial counterpart of the great need in Europe for the food, fertilizer and capital equipment that only America can provide' (Samuelson 1948, p. 376). While the United States had emerged from the Second World War with enormously increased productive capacity — GDP and national saving had more than doubled in five years — the economies of Europe had been laid low by war, much of their capital equipment had been destroyed and even basic consumer goods were in desperately short supply. During the war, Britain was able to meet essential requirements from the United States by selling off past investments and by Lend-Lease aid, supplemented in 1946 by a £1,000 million loan. Continental Europe from 1948 obtained American supplies for minimum needs and reconstruction through Marshall aid — the European Recovery Program. Even so, dollar spending had to be restrained by discriminatory trade and exchange controls. Under the fixed exchange rate regime, dollars had to be rationed. Haberler's prescription — 'Stop the inflation and adjust the exchange rate' (Haberler 1948) — was in most countries politically impracticable. This was the 'dollar shortage'. In the early 1950s it disappeared and soon gave way to 'dollar glut' (Hansen 1965). As the European economies recovered, with Germany in the forefront, they were able to reduce their trade deficits with the United States, while at the same time US development aid, private direct investment abroad and greatly increased military spending with the outbreak of the Korean War pushed the US current account into deficit, where it has remained ever since.

It is worth recalling, that the postwar dollar shortage was not unprecedented. A similar situation had developed after the First World War, which had transformed the United States from a debtor to the leading creditor country, while its European allies were economically weakened and saddled with war debts, and Germany with a large reparations bill. On that occasion, the problem was deferred for a decade by US loans and private investment in Europe. But it emerged when the Wall Street boom of 1928 led to large speculative capital flows to New York and it became disastrous with the Wall Street slump and the Great Depression. 'The combined effect of the fall in world prices, the contraction of international trade, the recall of short-term funds and the failure of continued American long-term investment brought about financial and economic crises in almost every country and in most of them set going cumulative processes of decline [of income and employment] similar to that which was going on in the USA' (Arndt 1944, p. 19).

Dollars were now in short supply in Europe. No longer financed by US capital inflow, war and reparations debts could have been serviced only by European trade surpluses with the United States, and for a year or two Germany achieved such a surplus. But in 1930 the US Congress enacted the Hawley–Smoot tariff, the highest ever, to protect US industries, and with the depression US imports declined drastically. The United States was widely perceived to have failed to 'act as a creditor nation' by opening the American market wide to foreign goods (Kindleberger 1950, p. 3). The result was a vicious circle of beggar-my-neighbour policies — tariffs, import and exchange controls and competitive currency depreciation, culminating in 1933 in a 40 per cent devaluation of the US dollar. In the absence of significant US capital outflow, US current account surpluses were financed mainly by huge gold purchases, nearly US$10 billion worth (equivalent to about US$250 billion today) between 1934 and 1939, which increased the US share in the world stock of monetary gold from 38 to 59 per cent (Arndt 1944, p. 91). The dollar shortage of the 1930s ended with the Second World War.

Both in the 1930s and in the latter 1940s, dollar shortage occurred because each of the two world wars enabled the United States to develop, within a few years, very large current account surpluses, which it was unwilling to eliminate through structural adjustment when it could or would no longer finance them by adequate capital outflow. In the 1930s, most of the imbalance was removed by trade and exchange controls, the rest financed by US gold purchases. In the 1950s, the imbalance was suddenly ended by aid and military spending and increasingly reversed as declining US saving and diminishing international competitiveness caused ever larger current account deficits.

In retrospect, it is a nice irony that for some years the notion got about that by running large current account deficits, the United States, as the world's reserve centre, was performing a necessary service to the international monetary system: it was supplementing inadequate supplies of gold by creating international liquidity in the form of dollar balances. But this promptly led to the 'Triffin paradox': US deficits would weaken confidence in the dollar and therefore willingness to accumulate and hold more dollars. The paradox evaporated with the abandonment of dollar convertibility and adoption of floating rates in the early 1970s.

The fundamental reason why neither of the other two cases of large and prolonged current account surpluses — Britain during the pre-1914 decades and Japan since the early 1980s —

has given rise to the equivalent of dollar shortage is that they have differed in important respects from the American case.

Britain's surplus built up very gradually from the 1830s, reaching its peak in the 1880s. It was sustained by capital export largely for overseas development of natural resources to supply Britain with essential food and raw materials. Growing volumes of imports did not significantly compete with British industries and the capital exported increasingly came not so much from British savings as from reinvestment of property income on past investments abroad.

Japan's current account surplus grew very rapidly during the 1980s, reaching in five years a size (as a percentage of GDP) which it took Britain fifty years to attain (Arndt 1990, p. 4). It has not given rise to 'yen shortage' partly, as we have seen, because the yen is not yet a major international currency. But this, clearly, is not the main reason. Britain was the world's key currency in the pre-1914 period, yet no one ever spoke of 'sterling shortage'. The fundamental difference is that in both the British and Japanese cases, unlike the American, capital export most of the time adequately financed the current account surpluses.

The fact that sterling and later the US dollar functioned as reserve currencies but the yen has not yet done so has made a difference. When Britain ran into temporary balance of payments deficits, it did not have to borrow; its sterling liabilities rose automatically. Similarly, if the United States were to run a balance of payments surplus, it would automatically reduce its dollar liabilities. The debts were in the debtor's national currency. The Bretton Woods Agreement acknowledged, in its 'scarce currency' clause, that it is the system's reserve currency which is 'scarce' when the reserve centre's balance of payments is in overall surplus. Japan's capital outflow, which has financed its current account surpluses, has partly taken the form of direct investment in the United States and elsewhere, attracted much like 19th century British foreign investment by profit opportunities in the production of goods for the Japanese market. But most of it has taken the form of accumulation of vast US dollar balances, securities and deposits, attracted by higher interest rates in the United States (more or less adequately discounted for exchange risk) (Kawai 1991). This has involved Japan in what has sometimes been called the 'Plaza paradox': the larger the Japanese current account surplus and accumulation of dollar balances, the greater the pressure on a weakening US dollar and the risk of loss of confidence among foreign creditors and withdrawal of funds from New York. What prevents massive withdrawals is the reluctance of Japanese holders to realise their capital losses on the depreciated dollar balances, and this is likely to prevail against any attempt to use withdrawal of funds as a weapon in Japan's trade contretemps with the United States of which there has recently been some loose talk (*Australian Financial Review*, 8 November 1994).

Could the Plaza paradox be overcome if Japanese investors demanded, and the US Treasury and institutional borrowers were prepared to supply, securities denominated not in US dollars but in yen or Deutschmark or SDR? To the extent that the interest differential which attracts Japanese funds to the United States reflects the exchange risk, it would presumably decline with such a change in currency denomination of securities. But there would also need to be a change in attitudes on both sides, which may happen if the problem persists.

The Plaza paradox is, of course, not the only reason why Japan has resisted, staunchly but vainly, continuing appreciation of the yen. The dollar–yen exchange rate declined from ¥360 in 1971 to ¥200 in 1985, to ¥140 in 1989 and through ¥100 in 1994. Yet Japan's current account surplus continued to increase to 1994 and has as yet declined only slightly. In the words of a recent newspaper report, 'Japan's exporters, bureaucrats and politicians absolutely abhor the yen's appreciation. Japanese exports become less competitive as the stronger yen makes their overseas prices higher. This affects the whole economy by depressing external demand' (Hartcher 1994b). The official US view is that failure of the Japanese surplus to contract with yen appreciation is due to the 'invisible tariff' of Japan's regulatory and collusive distribution system, which restricts access of US manufactures and services to the Japanese market. (Some American and most third-country observers point to evidence of inadequate attention by US manufacturers to the requirements of the Japanese market (cf., *Economist*, 27 May 1995, for instance). The Japanese reply, as expressed for many years by Tokyo University economist, Professor Ryutaro Komiya, is that the current account surplus is the excess of Japanese saving over domestic investment. So long as the United States needs Japanese surplus savings to fill its own savings gap, there is bound to be a corresponding current account imbalance — a US deficit and a Japanese surplus. Japan's capital outflow sustains Japan's current account surplus.

Clearly, there is a chicken-and-egg problem here. Which is cause and which effect? It is true in a sense, as Professor Komiya argues, that the Japanese current account surplus does not matter because it is financed by Japanese capital outflow (much as Corden and Pitchford have argued that the Australian current account deficit does not matter because it is financed by capital inflow). But, as I suggested some years ago, in relation to the British case,

> British institutional investors, banks and other new issues houses, channelled British savings into overseas government bonds and railway and other securities because they offered a higher return (allowing for not always adequately assessed higher risk) than British consols and other outlets for savings. But much of this capital outflow financed

> imports of British capital goods, such as railway equipment, and indirectly promoted demand for British textiles and other consumer goods by the borrowing countries. While the precise mechanism is not obvious, it is difficult to believe that British capital export was not encouraged, officially and privately, for the benefit of British industries. To this extent — and there is no way of disentangling its relative importance — the capital account promoted and accommodated the current account surplus (Arndt 1990, p. 8).

Promotion of US exports does not seem to have figured significantly among the motives for US capital exports in the years of US current account surpluses (except perhaps to a limited extent for US direct foreign investment in the 1920s). Geopolitical and security considerations predominated. But Japan may present an analogy with Britain. To quote again my 1990 article, 'that there is some causal relationship between Japanese capital export and the interests of Japanese export industries, somewhat analogous to that which I have suggested prevailed in the United Kingdom in the latter half of the 19th century, does not seem to me unlikely' (Arndt 1990, p. 9). How far is the Japanese current account surplus due to Japan's excess savings or to Japan's superior competitiveness? Conversely, how far is the US deficit due to inadequate US savings or to inadequate US competitiveness? I do not think there is a clearcut answer to this crucial question, if only because the two variables are interdependent, improvement in competitiveness, by increasing exports and reducing imports, *ipso facto* tending to improve the saving–investment balance. But the resolute persistence of the Japanese–US current account imbalance in the face of massive yen appreciation might lead one to conclude that the saving–investment imbalance is decisive.

The future

Komiya's argument would suggest that the US–Japan current account imbalance can continue indefinitely; it does not matter so long as it is financed by long-term capital flows. But will Japan be willing to accumulate dollars, and the United States increase its foreign debt, indefinitely? Japanese reluctance to realise capital losses on depreciated US dollars will presumably continue to deter large-scale withdrawals, short of some major crisis. US international competitiveness appears to be improving, Japan's perhaps declining partly (but only partly) because of yen appreciation, and Japan is taking steps, under pressure, to open its markets further to imports. More substantial progress than in the last few years in Japan towards the implementation of the Maekawa program to shift the balance of Japanese investment from abroad to domestic infrastructure and housing would undoubtedly help. But the crucial question, our argument suggests, is whether there will be a convergence between the high Japanese and the low American saving rate. In the longer term, Japanese saving rates are expected to decline with slowdown of economic growth and an ageing population; and there is an abundance of good intentions in the United States about determined measures to reduce the budget deficit. So far the signs are not promising. Japan's current account surplus still remains almost impervious to yen appreciation and the US budget deficit, though substantially reduced since the 1992 peak, is still very large.

Even if the yen assumes more of the functions of a key currency in the years to come, which seems probable at least in the Asian region, and even if there should be large-scale withdrawals of Japanese dollar balances, which seems improbable, we are not likely to see a 'yen shortage' resembling the post-1945 dollar shortage. Whether, how soon and by how much the US–Japan imbalance will right itself is in the lap of the gods.

Notes

* The author is indebted to Anand Chandavarkar, Andrew Elek, Fred Gruen, Harold Lydall, Charles Kindleberger, Ed Visbord and an anonymous referee for helpful comments on the earlier first drafts. The usual caveat applies.

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