

Chicago Fed Letter

The dollar can only do so much

The United States has a trade problem. The basic facts are well known. The trade deficit became large as the value of the U.S. dollar increased. This made foreign goods cheap and U.S. goods expensive. U.S. imports rose dramatically and export growth stalled. The U.S. merchandise trade deficit went from \$25.5 billion in 1980 to \$159.5 billion in 1987. The U.S. has gone from the world's largest creditor nation to the world's largest debtor, with nearly \$600 billion of foreign debt.

Today, the dollar rests 35% below its peak in 1985. The trade deficit, while still large, is shrinking. On a quarterly basis during the second quarter of 1989, the U.S. posted a trade deficit of \$27.7 billion, the lowest since the first quarter of 1985, but still more than \$100 billion at an annual rate.

Can a lower value of the dollar correct the problem by itself? At some level it certainly can. But the real question is whether the dollar should be the major tool for correcting the U.S. trade deficit. The answer is, in all likelihood, no. To understand why, it is necessary to examine where the lower value of the dollar has helped and where it has not.

Progress is real but not universal

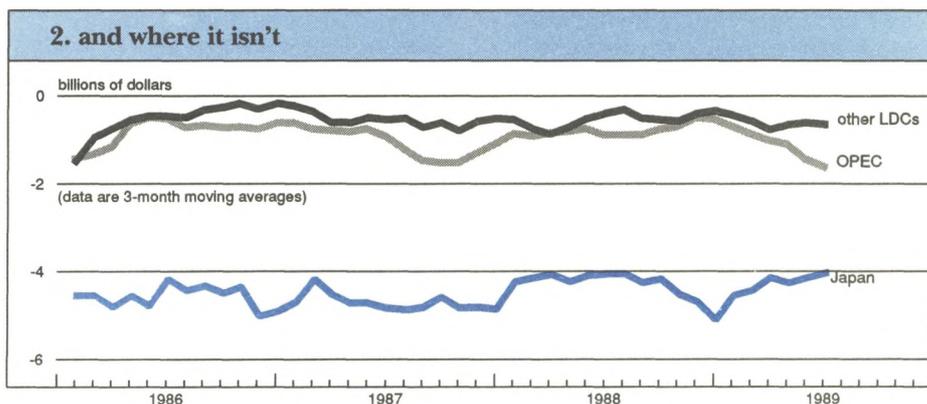
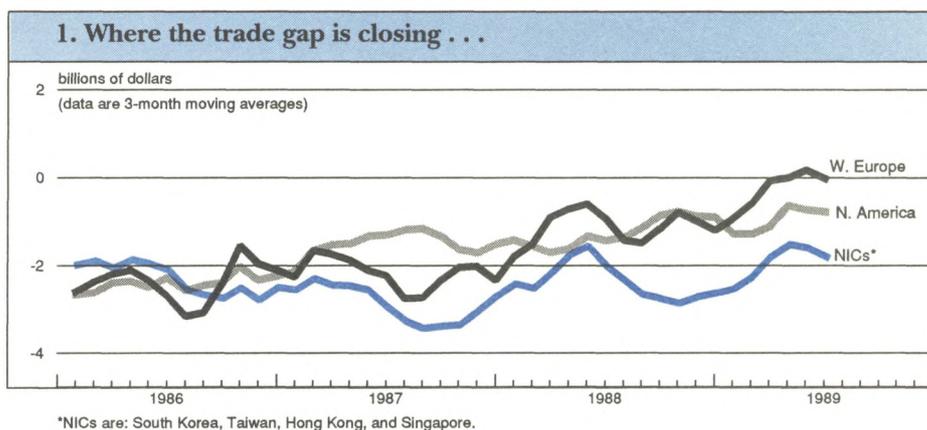
The dollar began to fall in 1985 but progress against the trade deficit was slow in coming. Progress on a broad basis was not evident in the trade statistics until early 1988. The reason: Many U.S. industries had been thoroughly uncompetitive and more

than a small adjustment was necessary. If a high value of the dollar causes U.S. goods to be overpriced by 50%, a 10% price break isn't going to have nearly as large an effect as it would at lower values of the dollar. When the dollar is lower, more U.S. industries are competitive and able to take advantage of the implied cost gains relative to foreign producers.

This gross lack of competitiveness was complicated by the widespread presumption that the dollar was going to continue to fall. Not only were U.S. goods still expensive, but foreign purchasers knew delaying purchases of U.S. goods would save

them money. Likewise, after the initial decline in the value of the U.S. dollar, foreign goods were still cheap, but more importantly were likely to soon become more expensive. Thus, in the U.S. the incentives were to increase rather than decrease purchases of foreign goods. So, for a while, the deficit actually worsened.

However, in time the dollar fell enough that U.S. industries did become competitive and the perverse effects of expected future drops in the value of the dollar declined. The U.S. trade balance began to improve. Peaking in the third quarter of 1987 at \$40.6 billion, the trade deficit fell to \$30.3 billion by the third quarter



of 1988. By the second quarter of 1989, the trade deficit still stood at \$27.7 billion.

Today, the value of the dollar is relatively low. Why, then, has so little progress been made against the U.S. trade deficit?

Figure 1 shows the trade balances for trading groups where the decline in the value of the dollar has had significant impact on trade with the U.S. Figure 2 shows the trade balances for those regions where the decline in the value of the dollar seems to have had little or no impact.

The use of group data rather than country-specific data is important for an understanding of today's situation because of the highly integrated production arrangements in many parts of the world. No one would suggest using Texas or Kansas trade data to analyze the U.S. trade deficit due to the high degree of integration in the U.S. economy. Likewise Europe has become far too integrated for the analysis of any one country's trade to provide insight.

How many groups and which countries should be included in each are difficult and somewhat arbitrary choices. The regions were chosen here to cover either trading zones, such as Europe, where economic integration has made separation questionable, or groups, such as OPEC, where similar endowments and situations make aggregation natural. Japan is left as a single country because it did not fit into either type of grouping.

The differences among the various groups is startling. Western Europe and the U.S. are basically back in balance, with a current trade deficit of only \$500 million at an annual rate during the first half of 1989 as compared with a deficit of \$26 billion in 1987. With our neighbors, Canada and Mexico, good progress has also been made reducing the deficit from \$17 billion in 1987 to \$13 billion, at an annual rate, in the first half of 1989.

With the Newly Industrializing Countries (NICs) of Asia, progress has been good; our bilateral trade deficit declined from \$34 billion in 1987 to \$24 billion at an annual rate in the first half of 1989. The situation here is even better than Figure 1 indicates. It appears from cursory examination that the progress with Asian NICs was very rapid, stalled, and is beginning to improve again. In reality, part of the massive early progress was \$2.25 billion of gold sales to Taiwan and some smaller gold sales to other Asian countries. Without these gold sales, progress, while somewhat slower initially, is much steadier.

Figure 2's story is not one of success. With the Less Developed Countries (LDCs), OPEC, and Japan essentially no progress has been made.

Three cases of failure

The explanations of why the dollar has had so little impact on our trade deficits with the LDCs and OPEC are, not surprisingly, similar. The continuing economic growth in the industrialized world pushed raw materials prices and import quantities up. This was exacerbated, in U.S. terms, because the industrial sector needed additional raw material imports to fuel our newly competitive export industries.

On the other side of the trading ledger, U.S. exports to the LDCs and OPEC did grow in line with our imports from them, but no one would lend these countries sufficient additional funds to finance any further growth in their U.S. imports, leading to a kind of net export stalemate. Progress in these regions, at this point, is not really a matter of competitiveness or of the dollar's value. Rather, it must be addressed through debt reductions or some other plan aimed at getting the LDCs back on their feet.

Why is Japan so different?

This leaves the largest and most persistent segment of the U.S. trade deficit, Japan's. The dollar has fallen

a remarkable 45% from its 1985 peak against the yen. Yet, virtually no progress has been made on the U.S.-Japanese bilateral trade deficit, currently running at \$49 billion at an annual rate in the first half of this year, up from \$48 billion in the same period in 1988.

Much has been written about the difficulties of exporting to Japan: the structural barriers created by their families of vertically integrated firms; their obscure and tightly controlled distribution systems; the nationalistic sentiments of Japanese consumers; as well as some outright protectionism, such as in agriculture goods. Some fault no doubt also lies with American business, although the standard argument that U.S. firms don't know enough about the Japanese market is overplayed. The U.S. is not by and large a consumer goods exporter and the special country-specific information requirements for selling industrial goods are not nearly as high as they are for consumer goods. Benzine is benzine, computer disk drives are computer disk drives.

But this cannot be the whole story. Trade is a two-way street. While the Japanese may not import as much as we would like, no one is forcing U.S. consumers to buy Japanese goods. Then why are Americans still buying Japanese goods despite the fall in the dollar? The story here is more complicated. The heart of the answer seems to be that, despite the fall in the dollar, Japanese goods don't cost that much more than before, especially compared to other imports.

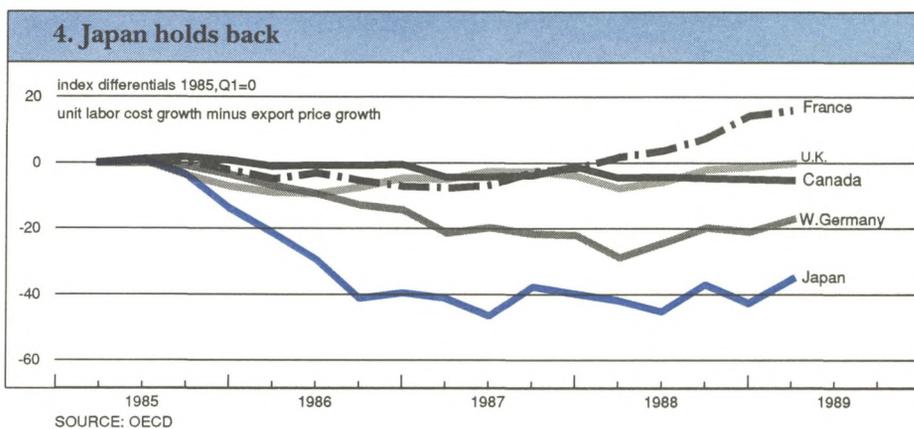
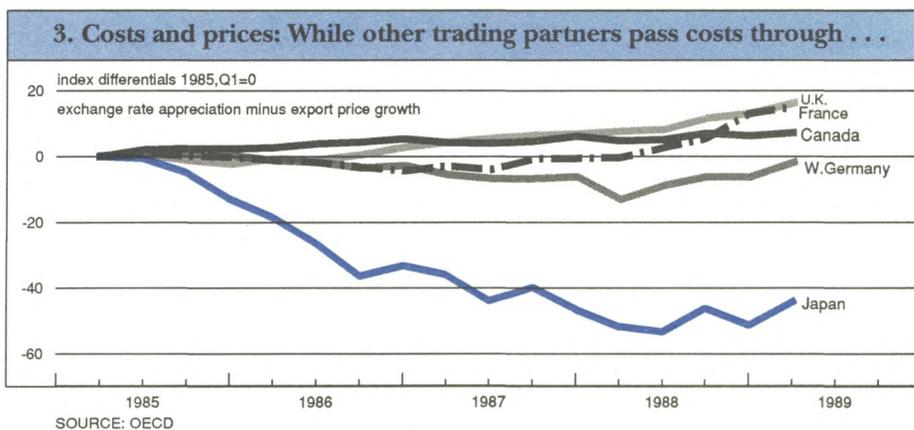
The idea that a fall in the value of the dollar will cause net exports to improve is based on the notion that when a country's currency increases in value, everything in that country becomes more expensive when measured in other currencies. Wages, land prices, and domestically provided services all are more expensive. But, some goods, such as oil, are priced internationally in dollars and will not change, thus the foreign country's export prices measured in dollars, while increasing, may not

increase the full amount of the currency movement. Roughly, the more domestic value a country with an appreciated currency adds to its manufactured goods relative to the cost of its now cheaper imported inputs, the more sensitive the price of that country's goods should be to increases in the value of its currency.

Of course, foreign producers may choose to ignore the increase in their foreign currency-valued costs of their exports in favor of preserving their market share. Or, they could find more efficient ways of producing that reduce their costs enough to offset the effects of currency movements. Certainly, when the dollar's value was high U.S. firms scrambled to increase their efficiency and have in turn become much "leaner and meaner." In any case, some significant part of the exchange rate change should normally be passed on and result in higher prices, in dollar terms, for their exports.

The empirical facts are startling. Figures 3 and 4 show two measures of relative movements in various countries' costs and the prices they charged for their exports, since the dollar's peak in 1985—both measures are in terms of dollars. This cost-price gap shows how related—or unrelated—are the prices, in dollar terms, of various countries' exports and the costs they pay to produce them.

Figure 3 shows the gap in percentage terms between the appreciation in the value of each country's currency measured in dollars and the price of their exports measured in dollars. If a country's currency appreciates against the dollar by 20% that would mean at least to a rough approximation that its costs measured in dollars would also rise by 20%. If those costs were passed on, then export prices would rise by 20%. If export prices only increased by 5%, then it could be said that a 15% gap had occurred. Figure 4 shows the same gap, except instead of using the various country's currencies valued in dollars to approximate costs, a more direct meas-



ure, each country's unit labor costs measured in dollars, is used.

Using either measure, Japan passes on far less of its currency-induced cost increases than any of the other countries shown. The United Kingdom, for example actually has passed on more than the currency appreciation by 10% and has passed on almost exactly its labor-cost increases, leaving a 0% gap, and passed on 83% of its labor-cost increases, leaving a 17% labor-cost gap. Japan only passed on 53% of its currency-induced price increases, leaving a large 47% gap between the increase in its dollar-measured costs and the dollar price of its exports. Measured in terms of labor costs, Japan has a 37% cost-price gap.

It might be argued that Japan passes on less of its currency-induced costs because a higher percentage of the costs of its production are determined by the price of its imports. While exact numbers are not available, com-

parisons of total value of merchandise imports to the Gross Domestic Product for each of the countries discussed shows just the opposite (see Table). Japan imports only 6.7% of the total value of its GDP, less than half as much as a percent of GDP than any of the other countries, indicating that it should pass on a higher percentage of currency appreciations, rather than less.

Karl A. Scheld, Senior Vice President and Director of Research; David R. Allardice, Vice President and Assistant Director of Research; Edward G. Nash, Editor.

Chicago Fed Letter is published monthly by the Research Department of the Federal Reserve Bank of Chicago. The views expressed are the authors' and are not necessarily those of the Federal Reserve Bank of Chicago or the Federal Reserve System. Articles may be reprinted if the source is credited and the Research Department is provided with copies of the reprints.

Chicago Fed Letter is available without charge from the Public Information Center, Federal Reserve Bank of Chicago, P.O. Box 834, Chicago, Illinois, 60690, (312) 322-5111.

ISSN 0895-0164

5. Japan imports less

	Imports as percent of GDP, 1987
Japan	6.3
U.S.	9.6
France	17.4
W. Germany	20.4
Canada	21.1
United Kingdom	23.2
EEC ¹	14.9

¹Excluding intra-EEC trade. Based on the U.S. dollar as the common currency.

Source: OECD and GATT

Perhaps, Japan is better at adjusting to currency fluctuations than anyone else; in any case, it is clear that, as long as Japan responds to dollar declines in this manner, reductions

in the value of the dollar will have essentially no impact on our trade deficit with Japan. Viewed from another perspective, the situation is actually worse. Since the dollar is lower, we are actually receiving fewer Japanese goods and sending more American goods to Japan just to maintain the current deficit. An additional disadvantage of the low value of the dollar is that American assets and technology become cheap in terms of yen, allowing Japanese firms to purchase U.S. firms and technology on a discounted basis. This is not optimal from an American viewpoint.

Conclusions

Where little progress has been made on the U.S. trade deficit—OPEC, the LDCs, and Japan—it is not clear that further movements in the dollar would have any impact at all, except to make U.S. properties, both physi-

cal and intellectual, easier for foreigners to acquire.

It appears that the dollar may have reached its limits as a tool for reducing the U.S. trade deficit, and that other remedies should be explored.

—Steven Strongin and
Jack L. Hervey

Chicago Fed Letter

FEDERAL RESERVE BANK OF CHICAGO
Public Information Center
P.O. Box 834
Chicago, Illinois 60690
(312) 322-5111