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# FRBSF WEEKLY LETTER

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## The NICs, the Dollar and U.S. Imports

The dollar's sharp depreciation against the currencies of our major industrial trading partners has not extended to the currencies of the "newly industrialized countries" (NICs). As a result, the NICs may increase their exports to the U.S. and thereby reduce the size of the improvement in the U.S. trade balance that would otherwise take place in response to the depreciation of the dollar. This *Letter* discusses the growing importance of NICs in U.S. trade and the reasons their exports to the U.S. may continue to grow.

### The dollar and the trade deficit

Measured against the currencies of the major industrial countries, the dollar depreciated 27 percent between February 1985 and March 1986. In seeming contradiction, the U.S. trade deficit grew from an annualized \$100 billion in the first quarter of 1985 to \$146 billion in the first quarter of 1986, and increased further in the second quarter. This is a matter of concern as the adverse performance of the external sector subtracted 0.7 percentage points from the 1985 growth of the real gross national product (GNP) — now estimated at 2.9 percent.

Although the magnitude of the deterioration in the trade balance is disturbing, the pattern is familiar. A depreciation can be expected to induce a deterioration in the trade balance for several months before a switch in expenditures away from more expensive foreign goods to domestic products results in a trade balance improvement. The declining and then rising pattern in net export revenue is called the "J" curve, since it follows the letter J in shape over time. In the short run, the volume of imports falls by less than the rise in import prices caused by a dollar depreciation — raising the total dollar value of imports.

While the lag in the response of the trade balance to changes in the dollar's value is expected, the improvement in net exports as a result of the current dollar depreciation has been slower than in the past. For example, based on historical experience, many forecasting models

underpredicted the first quarter 1986 trade deficit by large margins. Difficulties in explaining the behavior of net exports and GNP growth complicate the task of policymakers in determining appropriate responses to the continuing trade imbalance. For example, a better understanding of the reasons for the persistence of the U.S. trade deficit may shed light on whether a further depreciation of the dollar is necessary, or if policy should be geared toward stimulating U.S. economic growth in other ways.

One possible reason for the delayed improvement in net exports is that as the dollar depreciates against the currencies of our industrial trading partners, some U.S. customers may shift their imports from industrial countries to newly industrializing countries (NICs) and thereby reduce the favorable impact of the depreciating dollar on total imports and the aggregate trade balance. NICs in this article mean Hong Kong, Singapore, South Korea and Taiwan, although the process described here may apply to other developing countries, such as Brazil and Mexico. For simplicity, discussion is limited to the import side of the U.S. trade account.

### Importance of NICs in U.S. imports

The possibility that U.S. imports might shift to NICs is only of concern if the NICs are sufficiently "important" in U.S. trade, that is, if a large increase in their exports to the U.S. would have a significant effect on U.S. imports. The data certainly bears out the importance of NICs in total U.S. imports.

NIC exports to the U.S. in 1985 totalled \$42 billion, or 11 percent of total U.S. imports. As early as 1980, NICs as a group comprised the third largest exporter to the U.S. after Japan and Canada. In addition, out of a total 1985 U.S. trade deficit of \$124 billion, the U.S. trade deficit with NICs amounted to \$25 billion — second only to the \$50 billion trade deficit with Japan, and exceeding the U.S. trade deficits with the European Economic Community (EEC) and Canada (\$22 billion each).

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Between 1981 and 1985, the volume of NIC exports to the U.S. grew at an average annual rate exceeding 17 percent. If NICs maintain this growth rate in 1986, they would tend to increase U.S. imports by approximately 1.9 percent (which would tend to reduce the growth of U.S. real GNP by  $\frac{1}{5}$  of a percent. Of course, U.S. exports to NICs would offset this contractionary effect).

## Growth in NIC exports

Further increases in NIC exports to the U.S. may occur in spite of the sharp depreciation of the dollar for two reasons: (1) improvements in the productive capacity of NICs, which underlie a strong trend in the growth of their exports to the U.S., and (2) a dollar that has generally not depreciated against the currencies of the NICs (See chart). The trade-weighted index of the dollar, by which we commonly measure the dollar's strength, contains only the currencies of industrial countries. As a result, it does not show that U.S. imports from NICs have become cheaper than U.S. imports from industrial countries.

Factors other than exchange rates may also be responsible for the growth in NIC exports as those exports to the U.S. have grown even when NIC currencies were not depreciating against the dollar. One such factor may be the change in the productive capacity of NICs.

A 1978 Federal Reserve Board study found that the growth in the productive capacity (i.e., the full employment output) of Japan and other industrial countries in the 1960s was important in explaining the growth of U.S. imports at the time. In particular, changes in productive capacity helped explain the entry of Japan into U.S. markets in the 1960s — a development not well captured by historical data on the response of U.S. demand for imports to changes in exchange rates or U.S. income growth.

Similarly, the growth in the productive capacity of NICs could cause an increase in NIC exports to the U.S. not fully reflected in measures of U.S. import demand. The rapid growth of capital formation in NICs, which is an indicator of increases in NIC productive capacity, is consistent with this hypothesis. Between 1976 and 1983, the average annual real growth of gross fixed capital formation was 14 percent in South Korea, 12 percent in Singapore, 11 percent in

Hong Kong, and 6 percent in Taiwan. The last figure reflects a slowdown in Taiwan's investment since 1981 that came in the wake of an impressive 14 percent average real growth in capital formation between 1978 and 1980. In contrast, comparable growth rates for the three largest U.S. industrial trading partners were 0.6 percent for Canada, 3.9 percent for Japan, and 2.2 percent for West Germany.

## Substitutability of NIC exports

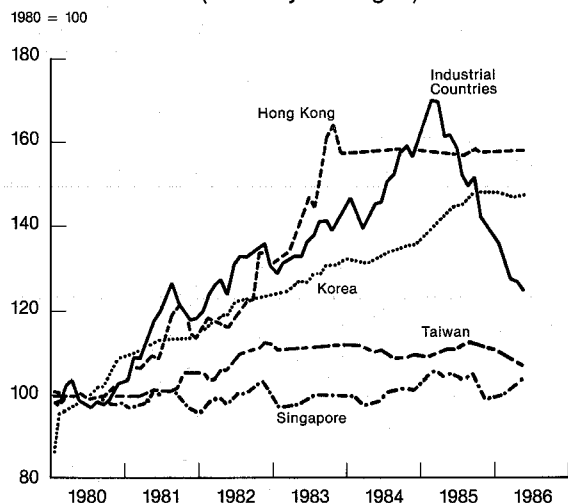
Apart from the impetus provided by increased productive capacity, the growth of NIC exports to the U.S. could receive a further boost if U.S. demand for NIC products increases as the dollar depreciates against the currencies of industrialized countries (while staying steady with respect to NICs). The importance of this effect will depend on how well NIC exports can be substituted for those of industrial countries.

One indicator of the substitutability of NIC exports for those of industrial countries is the extent to which NICs have penetrated those sectors of the U.S. market that previously were dominated by industrial countries. As a proxy for the NICs, we will examine the performance of East Asian (excluding Japan) exporters to the U.S., for which disaggregated data are more readily available.

The share of East Asian exporters in U.S. non-agricultural imports (excluding fuel) rose nearly 4 percentage points to 17 percent between 1976 and 1985 — compared to 1985 shares of 21 percent for the EEC and 25 percent for Japan. For manufactured goods, the share of East Asian exporters rose from 9.4 percent in 1976 to 13 percent in 1985, reflecting gains in iron and steel, among other exports. Over the same period, Japan's share fell from 23 percent to 17 percent, while the EEC's share rose from 20 to 22 percent.

U.S. imports of machinery and transport equipment totalled \$142 billion in 1985 (compared to \$32 billion in 1976), of which over 11 percent came from East Asian exporters — up from nearly 8 percent in 1976. Increased East Asian exports of office machinery and automatic data-processing machines and telecommunications and sound-producing apparatus explain a significant portion of this increase. While the gains of NICs in machinery and transport equipment

U.S. Dollar Exchange Rate Since 1980  
(Monthly averages)



do not match the increase in Japan's share of 9 percentage points (to 39 percent) over the same period, there is significant growth potential for East Asian exporters in this sector, which includes the automobile market recently entered by South Korea. In contrast, the EEC share in the machinery and transport equipment sector declined over 3 percentage points between 1976 and 1985 to 19.5 percent.

### Meeting increased demand

The increased substitutability of East Asian exports for those of the industrial countries implies that the demand for East Asian products may increase significantly even as the dollar depreciates. While the fast growth in productive capacity discussed previously will enhance the ability of East Asian economies to increase their exports to the U.S., their ability to meet increased demand also depends on the extent to which they have re-oriented their export production structure to compete more directly with industrial countries.

The extent of this re-orientation is suggested by the composition of East Asian exports to the U.S. Nonagricultural exports to the U.S. were

88 percent of total East Asian exports in 1985 — up from 68 percent in 1976, in contrast to a 4 percentage point decline in the EEC's share to 86 percent. More significantly, the share of machinery and transport equipment in total East Asian exports nearly doubled to 30 percent between 1976 and 1985, while in Japan's case, it increased 20 percentage points to 76 percent. Over the same period, the share of this sector in total EEC exports to the U.S. increased over one percentage point to 40 percent. As East Asian exporters include a number of less developed countries, these trends understate the extent to which NICs themselves have transformed their export structure.

### Conclusion

Standard explanations for the behavior of U.S. imports focus on two key variables: (1) changes in the value of the dollar, which affect the competitiveness of U.S. products, and (2) U.S. income growth, which tends to increase domestic spending and overall demand for imports. The preceding discussion suggests that the growing penetration of NICs in U.S. markets provides an additional impetus to U.S. import growth that may not be captured in the standard analysis. In particular, NICs now appear able to delay and, to some extent, reduce the improvement in the U.S. trade balance that would otherwise have already resulted from the present dollar depreciation.

Notwithstanding its increased importance to the overall U.S. trade balance, U.S. trade with NICs is still not large enough to offset fully the expected decline in imports from industrial countries. That is, given the substantial dollar depreciation in relation to the currencies of industrial countries, and continuing efforts to reduce U.S. domestic spending, a significant reduction in total U.S. imports can still be expected in the coming months.

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# San Francisco Bank of Federal Reserve Research Department

## BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT (Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 7/23/86	Change from 7/16/86	Change from 7/24/85 Dollar	Percent <sup>7</sup>
Loans, Leases and Investments <sup>1 2</sup>	199,407	-1,377	5,756	2.9
Loans and Leases <sup>1 6</sup>	181,683	-1,414	6,329	3.6
Commercial and Industrial	50,989	-278	514	0.9
Real estate	66,901	63	3,120	4.8
Loans to Individuals	39,322	60	3,024	8.3
Leases	5,516	24	112	2.0
U.S. Treasury and Agency Securities <sup>2</sup>	10,340	12	1,106	9.6
Other Securities <sup>2</sup>	7,383	49	532	7.7
Total Deposits	202,702	-4,608	7,638	3.9
Demand Deposits	49,548	-4,301	5,035	11.3
Demand Deposits Adjusted <sup>3</sup>	35,106	-1,053	5,327	17.8
Other Transaction Balances <sup>4</sup>	16,328	166	2,739	20.1
Total Non-Transaction Balances <sup>6</sup>	136,827	140	133	0.0
Money Market Deposit Accounts—Total	46,919	227	2,035	4.5
Time Deposits in Amounts of \$100,000 or more	35,374	250	2,359	6.2
Other Liabilities for Borrowed Money <sup>5</sup>	23,075	-1,698	316	1.3
<b>Two Week Averages of Daily Figures</b>	Period ended 7/14/86	Period ended 6/30/86		
<b>Reserve Position, All Reporting Banks</b>				
Excess Reserves (+)/Deficiency (-)	6	123		
Borrowings	23	80		
Net free reserves (+)/Net borrowed(-)	17	43		

<sup>1</sup> Includes loss reserves, unearned income, excludes interbank loans

<sup>2</sup> Excludes trading account securities

<sup>3</sup> Excludes U.S. government and depository institution deposits and cash items

<sup>4</sup> ATS, NOW, Super NOW and savings accounts with telephone transfers

<sup>5</sup> Includes borrowing via FRB, TT&L notes, Fed Funds, RPs and other sources

<sup>6</sup> Includes items not shown separately

<sup>7</sup> Annualized percent change