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Turnabout in U.S. Merchandise Trade

by Gerald H. Anderson

This Economic Commentary contrasts last year's improvement in the balance of trade with the large adverse swing of the preceding three years. The article also examines the rather uncertain outlook for trade in 1980.

The United States accomplished a massive \$21-billion improvement in its non-oil trade balance in 1979. More rapid growth of foreign economies compared with the U.S. economy was a major cause of improvement in non-oil trade. In addition, depreciation of the dollar prior to 1979 helped to improve the trade balance in 1979. Gold sales by the U.S. Treasury also made a significant contribution to improving the trade balance. Unfortunately, most of this improvement was offset by increased spending on oil imports, as petroleum prices rose sharply.

Substantial uncertainty clouds the outlook for U.S. trade in 1980. At present, the major foreign economies are still expected to expand activity, albeit slowly. In the United States, a recession of uncertain depth and duration is already in progress. The dollar has experienced some sharp movements up and down since mid-1978, but there has been no clear shift in its level that would benefit or hurt trade in 1980. Spending on oil imports will certainly grow sharply because of large price increases; what is not clear is the extent by which a slack domestic economy and higher oil prices will reduce the volume of oil imported and moderate the increase in the oil-import bill. The U.S. Treasury policy on gold sales and the impact of the embargo on grain and technology sales to the Soviet Union are additional uncertainties. In the author's opinion, an in-

crease in the massive U.S. trade deficit remains a distinct possibility for 1980.

Although this article focuses on the U.S. trade balance, it is noteworthy that many of the industrial nations with which the United States trades are also experiencing substantial increases in trade deficits, or decreases in trade surpluses, as they, too, pay higher prices for imported oil.

Trade Balances

Every year the United States trades an enormous and increasing volume of goods with other nations. In 1979, the total of U.S. exports and imports was \$388 billion, up from \$204 billion in 1975.¹ From 1975 to 1979, the United States increased its purchases of foreign goods from \$96 billion to \$206 billion, as import prices rose 38 percent, and import volume grew 55 percent. In the same period, the United States expanded its merchandise sales to other nations from \$108 billion to \$182 billion, as export prices advanced 33 percent, and export volume increased 27 percent.

Differences in growth rates of exports and imports cause changes in the trade balance, with important implications for gross national product (GNP) and the dollar. The trade balance is the difference between revenues from exports and spending on imports. When exports exceed imports, we have a trade surplus; the opposite situation is a trade deficit. Increases in the trade deficit tend to reduce growth of GNP. A trade

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1. Except where noted, trade data in this article are census basis, free alongside ship (f.a.s.).

deficit and expectations of such tend to weaken the dollar in foreign-exchange markets. Of course, many other factors also influence exchange rates, such as relative inflation rates, relative interest rates, trade balances of other countries, and other international transactions.² The U.S. balance between exports and imports worsened by \$40 billion from 1975 to 1978 but improved by \$4 billion in 1979.

Trade Deterioration from 1975 to 1978

The U.S. trade balance shifted from an \$11.5-billion surplus in 1975 to a \$28.5-billion deficit in 1978 (see table 1). Rising petroleum imports often have been blamed for this \$40-billion deterioration in U.S. trade; indeed, oil imports played a key role, but non-petroleum trade was actually a greater culprit.³ Petroleum imports increased from \$25.1 billion in 1975 to \$39.6 billion in 1978, a \$14.5-billion change. This, however, accounted for only 36 percent of the total trade shift. Deterioration in non-petroleum goods trade, by contrast, was \$25.5 billion, or 64 percent of the total deterioration of the trade account. Trade in manufactured products, which moved from a \$20-billion surplus in 1975 to a \$5.6-billion deficit in 1978, accounted for the non-oil trade shift. Thus, instead of the growing surplus in non-oil trade that was needed to meet the costs of increasingly higher-priced

Table 1 U.S. Trade Balances, 1975-1979

Billions of dollars

	Trade balance ^a	Petroleum imports ^b	Trade balance excluding petroleum imports
1975	+11.5	25.1	+36.6
1976	-5.9	32.1	+26.2
1977	-26.7	42.0	+15.3
1978	-28.5	39.6	+11.1
1979	-24.7	56.5	+31.8
1980 ^c	-32.4	78.8 ^c	+46.4
Change, 1975-78	-40.0	+14.5	-25.5
Change, 1978-79	+3.8	+16.9	+20.7

a. Census basis using f.a.s. imports.

b. Data from table 2; data differ slightly from census data.

c. January-April annualized. Petroleum imports are census data.

oil, the United States suffered a sharp deterioration in non-oil trade.

The faster growth of the U.S. economy compared with the economies of U.S. trading partners was a major contributor to the adverse trade swing. Between 1975 and 1978, U.S. GNP expanded by 15.4 percent in real terms, compared with real growth of only 10.9 percent in the combined economies of the nine member nations of the European Community.⁴ As an economy grows, its demand for both domestic and imported goods grows.⁵ The rapid demand growth in the United States encouraged rapid growth of imports. At the same time, however, slower economic growth abroad dampened growth of foreign demand for U.S. exports.

2. The census-basis merchandise trade balance discussed in this article is but one of several measures of this nation's international economic performance. For a thorough discussion of the relationships among these measures and their relationships to the dollar and gross national product, see Gerald H. Anderson, "U.S. International Economic Performance Measures," *Economic Commentary*, Federal Reserve Bank of Cleveland, September 3, 1979.
3. Non-petroleum trade is used here to mean trade excluding only imports of petroleum and petroleum products. Not excluded is the relatively small amount of U.S. exports of petroleum and petroleum products.

4. The European Community includes the United Kingdom, Ireland, France, West Germany, Italy, the Netherlands, Belgium, Luxembourg, and Denmark.

5. For example, U.S. imports of manufactured goods grew almost three times as fast as GNP between 1967 and 1978. In this period, the volume of manufactured-goods imports expanded an average 8.8 percent per year, while real GNP grew at a 3.0 percent annual rate.

Table 2 U.S. Annual Consumption and Imports of Petroleum and Petroleum Products

	Import unit price, dollars per barrel	Import volume, thousand barrels	Import value, billions of dollars	Total domestic consumption, ^a thousand barrels	Ratio of import volume to domestic consumption, percent	Barrels consumed per thousand 1972 dollars of GNP
1960	\$2.45	664,111	\$1.63	3,535,805	18.8	4.799
1970	1.39	1,248,062	1.74	5,364,473	23.3	4.989
1973	3.39	2,283,493	7.74	6,317,303	36.1	5.115
1974	11.77	2,230,947	26.26	6,078,239	36.7	4.991
1975	11.34	2,210,335	25.06	5,957,515	37.1	4.955
1976	12.00	2,676,411	32.11	6,390,750	41.9	5.032
1977	13.07	3,214,646	42.01	6,727,468	47.8	5.017
1978	12.97	3,052,645	39.60	6,879,017	44.4	4.916
1979	18.41	3,070,075 ^b	56.51	6,728,578	45.6	4.700

a. Production plus imports minus exports, plus or minus change in stock.

b. Preliminary data.

NOTE: These import data differ slightly from census basis import data.

SOURCE: *Crude Petroleum, Petroleum Products, and Natural Gas Liquids*, U.S. Bureau of the Mines, annual.

Between 1975 and 1978, the U.S. share of manufactured goods exported from the United States and 14 other industrial nations fell from 17.3 percent to 15.0 percent, despite the improvement in price competitiveness just described.⁶ While trade barriers, subsidies, and other factors may have played roles in this unenviable performance, rapid economic growth in the United States perhaps made U.S. firms less eager to capture foreign sales, while sluggish growth abroad made foreign firms more eager to serve the U.S. and third-country markets.

Increased spending on oil imports resulted from increases in both prices and quantity of imports. The unit value of petroleum and petroleum-product imports advanced from \$11.34 per barrel in 1975 to \$12.97 per barrel in 1978, as the Organization of Petroleum Exporting Countries (OPEC) raised the benchmark price of Arabian

light crude from \$10.46 to \$12.70 per barrel (see table 2).

Oil-import quantity soared even more rapidly than oil prices, advancing from 6.1 million barrels per day in 1975 to 8.4 million barrels per day in 1978. This increase may seem puzzling when one recalls that North Slope oil began flowing through the Alaskan pipeline in 1977. Production in the lower 48 states, however, continued to decline during this period, substantially offsetting the gain from Alaskan production. Moreover, growth of the U.S. economy stimulated demand for petroleum products, purchases of which were encouraged further by U.S. laws that kept domestic prices of petroleum products substantially below the levels they otherwise would have reached. In the best of circumstances, adjusting oil consumption to higher oil prices would have been slow. The nation's capital stock was constructed with energy efficiencies appropriate for low energy prices. The enormous task of adjusting this stock to high energy prices has begun, but of necessity it will be a long, slow process.

6. U.S. Department of Commerce, *International Economic Indicators*, March 1980, p. 34.

Rebound in 1979

The United States improved its trade performance last year, following the \$40 billion adverse swing in trade from 1975 to 1978. A sharp improvement in non-oil trade was hidden within the overall \$3.8-billion trade improvement (see table 1). The non-oil trade surplus increased by \$20.7 billion, from \$11.1 billion to \$31.8 billion. The gain was most pronounced in the surplus on trade in manufactured goods, which improved by \$9.8 billion. Trade in food and live animals and crude inedible materials together improved by \$6.1 billion, also helping to brighten the trade picture.

Although the reasons for the improvement are numerous, more rapid economic growth abroad, together with dollar depreciation, probably caused most of this improved trade performance. The United States increased its GNP by only 2.3 percent last year, while the corresponding figure for six other major industrial nations together was an estimated 4.5 percent. In addition, between September 1977 and October 1978, the U.S. dollar depreciated by 13.1 percent on a trade-weighted average basis relative to the currencies of other industrial nations. Because exchange-rate changes gradually affect trade flows, dollar depreciation probably had a significant positive impact on the U.S. trade balance in 1979.

Unfortunately, a surge in the dollar volume of petroleum imports offset most of this massive trade improvement. Petroleum imports soared in 1979 by \$16.9 billion, an amount that exceeded the entire deterioration of the preceding three years. In contrast to the earlier period, however, price increases were the predominant cause of the import surge. Unit prices of crude and refined imports soared 42 percent, while import volume edged up only 0.6 percent.

Adjustment to higher prices is clearly the underlying reason why the increase in the physical volume of petroleum and

product imports was so small in 1979. In each of the last three years, the amount of petroleum and products consumed per unit of constant-dollar GNP has declined, and the rate of this reduction has been growing. In 1977, this amount dropped 0.3 percent to 5.017 barrels per thousand 1972 dollars of GNP. The reduction was 2.0 percent in 1978 and 4.4 percent in 1979 (see table 2). Higher prices are encouraging more efficient use of petroleum, evident in the increasing popularity of small cars and some switching to other energy sources. The favorable effect of petroleum conservation on imports was outweighed between 1975 and 1979, however, by the impact of rapid economic growth on petroleum consumption, together with sluggish domestic petroleum production. Despite the opening in 1977 of the Alaskan pipeline, the total domestic petroleum supply was only 2.5 percent higher in 1979 than in 1975.

Uncertainties Clouding the Trade Outlook for 1980

Petroleum prices will play a dominant role in the U.S. trade performance in 1980. Price increases implemented late in 1979 and through May 1980 suggest that unit prices of crude- and refined-petroleum product imports are likely to average nearly \$31 per barrel in 1980, a 68 percent increase from last year's average of \$18.41 per barrel. Indeed, the price of imports has already jumped from \$24.35 per barrel in December 1979 to \$30.88 per barrel in April 1980. Domestic oil production may grow slightly, while domestic oil consumption is likely to decline in response to recession and sharply higher prices. Consequently, import volume is likely to fall, and perhaps sharply.⁷

7. In January through April 1980, domestic petroleum production increased 3.2 percent, petroleum consumption fell 10.8 percent, and petroleum imports declined 11.4 percent, compared with the same period in 1979.

Although the United States is adjusting consumption, the oil-import bill will rise sharply again in 1980. A 12 percent decline in volume and 68 percent rise in price would mean a \$27-billion increase in spending on petroleum imports. In January through April 1980, petroleum imports were at an annual rate of \$78.8 billion, compared with \$56.5 billion for the year 1979.

The oil-price hike may also hurt U.S. trade indirectly in two additional ways. Higher oil prices may reduce demand for U.S. goods by other oil-importing nations. Oil-importing, developing nations especially are facing sharply higher oil bills; in seeking to conserve scarce foreign exchange, these nations are likely to attenuate their non-oil imports, thus reducing the market for U.S. exports. Higher oil prices are likely to require developing nations to spend something on the order of \$20 billion more for oil in 1980 than in 1979. In addition, other industrial nations may tighten their monetary and fiscal policies to restrain domestic inflation, which has been exacerbated by soaring oil prices. These actions, by reducing economic expansion abroad, will erode the growth of demand for U.S. exports and increase the incentive for foreign firms to expand exports to the United States.

The domestic recession is probably the only strongly favorable element in the U.S. trade outlook for 1980. If real GNP in the final three quarters of 1980 were to follow the average pattern of the first three quarters of the other six postwar recessions, real GNP in 1980 would be 0.2 percent below 1979. The Organization for Economic Cooperation and Development has forecast 2.6 percent real economic growth for the combined economies of the six other leading industrial nations (Japan, West Germany, France, United Kingdom, Italy, and Canada). If these recession and growth rates materialize for 1980, the difference between them—2.8 percentage points—will be somewhat larger

than the 2.2-percentage-point difference in U.S. and foreign growth rates estimated for 1979, suggesting a greater improvement than last year's in non-petroleum trade.

U.S. policies on grain and gold, however, seem likely to reduce the amount of non-oil trade improvement. Some observers estimate that the recently imposed limitations on U.S. sales of grain and high-technology goods to the Soviet Union may reduce U.S. exports by as much as \$2 billion from what they otherwise would have been. U.S. Treasury policy on gold sales may also have a significant impact. The Treasury auctioned 11.75 million ounces of gold for \$3.1 billion last year, reducing net U.S. gold imports by the same amount. The Treasury, however, has sold no gold since November 1, 1979, and, if sales are not resumed, the U.S. trade balance will not benefit from gold sales as it did last year.

Exchange-rate considerations are less favorable for the trade balance than they were last year. While the lags involved are not known with certainty, it seems likely that most of the beneficial impact of the September 1977-October 1978 depreciation of the U.S. dollar has already occurred. Although there have been some sharp, brief rises and declines in the rate, the trend of the dollar's weighted-average exchange rate has been rather flat since mid-1978. It is unlikely to have much beneficial impact on trade in 1980.

In conclusion, this examination of the trade outlook, although certainly not an exhaustive treatment of trade-influencing factors, suggests to this observer a massive, and perhaps a record, U.S. trade deficit in this first year of the new decade.

The views stated herein are those of the author and not necessarily those of the Federal Reserve Bank of Cleveland or of the Board of Governors of the Federal Reserve System.