## Has Excess Capacity Abroad Reduced U.S. Inflationary Pressures?

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WHILE U.S. manufacturing capacity utilization has been rising in recent years, capacity utilization in the manufacturing sectors of the major foreign industrial economies has declined. Falling utilization rates abroad have given foreign firms the potential to expand production without incurring significant cost increases. This article investigates whether sizable slack abroad, which has helped to slow foreign inflation, could also have eased U.S. inflationary pressures by preventing the prices of imports from rising as fast as the prices of U.S. -produced goods.

The analysis shows that growing foreign excess capacity has provided only a limited amount of protection against domestic inflationary pressures. Although inflation abroad has been lower than U.S. inflation, exchange rate changes have exceeded the inflation differentials and exerted significant and varied influences on import prices. For example, dollar depreciation against the yen has erased the depressing effects on prices of significant excess capacity in Japan, while dollar appreciation against the Canadian dollar has greatly enhanced the effects of moderate excess capacity in Canada. Aggregated across all sources, import price growth has roughly kept pace with U.S inflation. Moreover, in U.S. manufacturing industries nearing full capacity, imports have not seized an increasing share of the market, a development that one would expect if foreign excess capacity were going to influence U.S. pricing decisions significantly. Consequently, the analysis concludes that the mere presence of excess capacity abroad has not greatly restrained U.S. inflationary pressures.

## SLACK CAPACITY ABROAD AND IMPORT PRICES Excess capacity abroad would relieve inflationary pressures in the U.S. economy if foreign suppliers, responding to growing

U.S. demand, used their available capacity to expand production without increasing their prices significantly. Import prices that remained flat or rose more slowly than the prices of domestically produced goods would slow U.S. inflation in two ways directly, as the imports entered into U.S. consumption, and indirectly, as the imports siphoned off increases in U.S. demand and thus restrained price increases by competing U.S. firms.<sup>2</sup>

A significant amount of excess capacity exists in the manufacturing sectors of Japan, Canada, Germany, France, Italy, and the United Kingdom, countries that together account for more than one-half of all U.S. imports. Although aggregate foreign manufacturing capacity utilization in these economies increased slightly in the first half of this year, it declined more than 10 percent between the end of 1990 and the beginning of 1994 (Chart 1). In two previous downturns, capacity utilization abroad reached even lower levels, but the decline for the past several years is particularly notable because it occurred as U.S. capacity utilization was rising sharply

The available evidence shows that growing excess manufacturing capacity abroad, among other factors, has exerted downward pressure on the prices of foreign manufactured products expressed in local currency <sup>3</sup> Foreign producer prices have risen more slowly than U.S. prices. In fact, producer prices in Canada and Western Europe have lagged growth in U.S. producer prices by roughly 2 percent since the end of 1990 (Chart 2). During the same period, Japanese prices have lagged U.S. price growth by almost 10 percent <sup>4</sup>

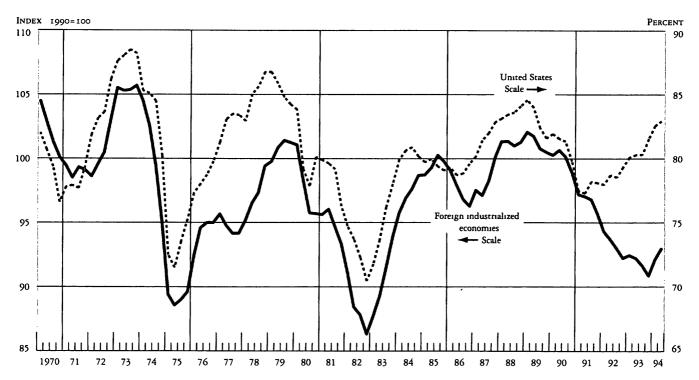
Nevertheless, although excess capacity abroad has helped to lower the local currency prices of foreign manufactured goods relative to U S prices, other factors affect the U.S. dollar price of imports—specifically, changes in the exchange rate and the extent to which these changes are passed through by foreign suppliers to U.S. consumers. Movements in the nominal value of the dollar against the currencies of key industrial countries have far exceeded the moderate slowing in their producer prices relative to U.S. producer prices. Since the end of 1990, the dollar has appreciated more than 15 percent against the Canadian dollar and 16 percent against an average of Western European currencies, while depreciating 25 percent against the Japanese yen. Dollar appreciation against the Western European and Canadian currencies has thus augmented their modestly lower inflation rates, by contrast, dollar depreciation against the yen has more than offset Japan's sizable decline in producer prices relative to U.S. producer prices.

Direct evidence on the prices of manufactured imports from industrial countries compared with U.S. producer prices between the end of 1990 and mid-1994 bears out the significance of exchange rates for import price move-

ments (Chart 3). Even with only part of the change in nominal exchange rates being passed through into import prices, exchange rate movements largely undercut the potential benefits of relatively lower inflation rates abroad. From 1990 through the second quarter of 1994, dollar prices of US manufactured imports from Japan rose roughly 6 percent compared with the prices of U.S. manufactured goods This rise was consistent with the combination of a 10 percent fall in Japanese local currency prices relative to U.S. prices and a 20 percent nominal appreciation of the yen. The exchange rate movement thus overwhelmed the potential benefits of Japan's excess capacity for U.S inflation. The dollar prices of manufactured imports from Western Europe and Canada fell roughly 7 percent against the prices of U.S. manufactured goods, a decline that was much more than the relative fall in their local currency producer prices but consistent with their nominal currency depreciations of more than 10 percent.

Overall, prices of imports from industrialized countries grew only 1 percent less than U.S. prices between 1990

Chart 1
MANUFACTURING CAPACITY UTILIZATION



Notes The index of capacity in foreign industrialized economies is an import-weighted average of the utilization rates in Japan, Germany, France, the United Kingdom, Canada, and Italy The 1994 utilization rates for France and Italy are estimates

and mid-1994.<sup>7</sup> Slack capacity alone, without any changes in exchange rates, would likely have caused import prices to fall perhaps 5 percent more than U.S. prices—a difference that was roughly equal to the gap between foreign and U.S. producer price inflation. However, largely because of exchange rate changes, the rise in the relative dollar price of imports from Japan offset a large part of the decline in the dollar price of imports from Western Europe and Canada and hence limited overall relative import price declines.

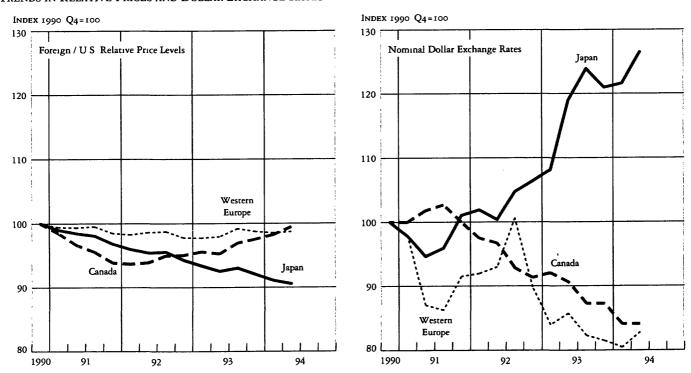
## IMPORT PRICES IN SELECTED INDUSTRIES

Several U.S. manufacturing industries that reached or were nearing previous peak capacity utilization rates during the second quarter of 1994 have also had a large share of imports from industrialized countries. These industries include automobiles, primary metals, and electrical and industrial machinery. Import prices that have been flat or falling relative to U.S. prices in these industries would indicate that

slack capacity abroad is easing inflationary pressures where U.S capacity strains are most concentrated. It is in these industries that we would expect to see import price growth lagging U.S. price growth even if it did not show up in aggregate import prices.

The results of the import price comparisons for these industries are mixed. Prices of imported primary metals and industrial machinery have not risen as fast as U.S. producer prices in these industries (Chart 4). The steady decline in the relative price of imported primary metals since early 1992 is broadly consistent with the continued expansion of excess capacity abroad and the increased utilization of U.S. manufacturing capacity. However, unlike primary metals, industrial machinery imports exhibited a sharp decline in relative price in the first half of 1991, when significant foreign excess capacity was only beginning to appear and U.S. capacity utilization was not particularly tight. Since the end of 1991, the price of imported industrial machinery has kept pace with

Chart 2
TRENDS IN RELATIVE PRICES AND DOLLAR EXCHANGE RATES



Notes The left panel plots the ratios of foreign wholesale price indexes (the producer price index for Japan) to the U.S. producer price index for finished goods. The right panel plots the indexes of the foreign currency price of the U.S. dollar a rise signifies dollar depreciation. The index of relative prices and exchange rates for Western Europe is an import-weighted average of relative prices and exchange rates in Germany, France, Italy, and the United Kingdom

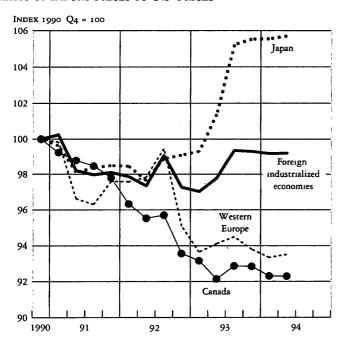
the price of domestically produced industrial machinery, suggesting that growing foreign excess capacity has not eased inflationary pressures in this industry.

No significant declines have occurred in the prices of imported road vehicles, largely autos, or electrical machinery compared with U S prices to date. In fact, in these industries, import prices have risen slightly more than U S. domestic prices since 1990 Japan is an important supplier of both products, and the failure to observe any relative price declines could be related to the yen's appreciation since 1990.

These same four industries offer little broad-based evidence that foreign excess capacity has held down U.S.

Chart 3

RATIO OF IMPORT PRICES TO U.S PRICES



Source US Department of Labor, Bureau of Labor Statistics

Notes Chart plots the ratios of import price indexes to the US producer price index for manufactured goods. The index for the group of foreign industrialized economies is the average, weighted by US imports, of the individual indexes for the European Community nations plus Japan, Canada, Australia, New Zealand, and South Africa. The Western Europe index includes the twelve economies of the European Community.

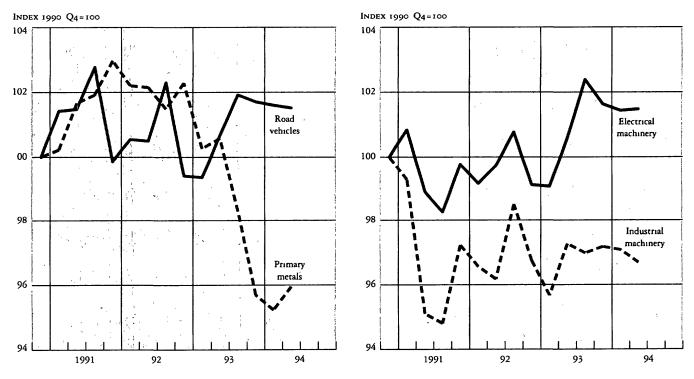
inflationary pressures by enabling imports to capture an increasing share of growing U.S. domestic demand. Import market shares in autos have remained constant or declined slightly since 1990 (Chart 5). The same pattern holds for primary metals, despite the steady fall in the relative prices of these imports Although import market shares in both categories of machinery have increased since 1990, neither the timing nor the magnitude of the rise in import market share appears linked to the growth in excess capacity in foreign industrialized economies since 1990. Rather, the rise in the past several years essentially continues the trend increase in import penetration in these industries that appeared before 1990. This longer term rise in import penetration, particularly in the electrical machinery industry, in part represents the steady expansion of capacity in developing economies. Therefore, despite the relative importance of imports in domestic consumption in these four sectors, the data do not show that growing excess capacity abroad has caused a significant increase in the penetration of the U.S. market by foreign suppliers in the past several years.

Growing excess capacity in industrialized countries since 1990 has provided at best a limited amount of protection from inflationary pressures in the U.S economy. The price of U.S. imports from industrialized countries relative to U.S. prices has declined only modestly as lower inflation abroad has been offset by exchange rate changes. Dollar depreciation in the case of Japan has rendered excess capacity there basically ineffective against U.S. inflationary pressures.

In the years ahead, the strengthening expansions in the United Kingdom and Canada as well as the beginnings of recovery in continental Europe and Japan will increase the utilization of foreign manufacturing capacity. Consequently, the likelihood that excess capacity abroad will offer future inflation relief appears limited.

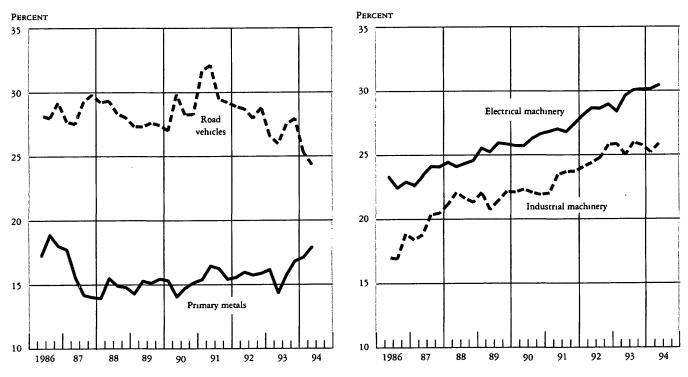
Chart 4

## RELATIVE IMPORT PRICES: SELECTED INDUSTRIES



Notes Chart plots the ratio of import prices to the U S producer price index for each industry

Chart 5
IMPORT MARKET SHARE: SELECTED INDUSTRIES



Notes Chart plots the ratio of imports to domestic demand Domestic demand is defined as shipments plus imports less exports