The United States is currently experiencing the strongest economic recovery since the Korean War, with virtually no increase in the rate of inflation. Uncertainties associated with persistently large federal-budget deficits, and with international-payments imbalances, however, cloud the outlook for continued prosperity.

The federal-budget deficit will equal approximately $210 billion in the current fiscal year, representing 5.4 percent of Gross National Product (GNP). In the absence of significant budget-cutting measures, the deficit will remain in the neighborhood of 4 percent to 5 percent of GNP throughout the decade. During the 1970s, the federal-budget deficit averaged slightly more than 2 percent of GNP; during the 1990s, a decade of rapid capital accumulation, the deficit averaged less than 1 percent of GNP. As the economy continues to expand, and as private credit demands continue to firm, hefty federal credit needs could place increasing pressure on interest rates and could threaten the continued growth of the interest-sensitive sectors of the economy.

Meanwhile, the current-account deficit reached a record $102 billion, or 3 percent of GNP, in 1984. The current-account balance measures our net international trade in goods and services plus U.S. unilateral transfer payments to foreigners.

The current externality on the dollar-price of U.S. imports, thereby lowering the current-account deficit, while raising revenues to reduce the federal-budget deficit. In this Economic Commentary, we examine the possible effects of an across-the-board tariff and estimate its costs.

Many analysts regard the current-account surplus or deficit as the most useful summary statistic of the nation's gains or losses from international commerce. Throughout most of the post-World War II period, the United States has run a current-account surplus. Most observers expect the current-account deficit to remain in the neighborhood of 3 percent of GNP at least through 1987. The large current-account deficit bears witness to the substantial gains foreign competitors have made recently against U.S. firms in domestic and world markets.

Recently, some policymakers have expressed interest in the possibility of using an across-the-board tax on imports to reduce the federal-budget and current-account deficits. Proponents of a tariff surcharge argue that the levy would reduce U.S. imports, thereby lowering the current-account deficit; while raising revenues to reduce the federal-budget deficit. In this Economic Commentary, we examine the possible effects of an across-the-board tariff and estimate its costs.

The Current International Environment
Economic theory and centuries of economic history have taught that nations engaged in international trade reap substantial benefits in terms of the quantity and diversity of products available for consumption. Trading nations have always prospered more than nations that have closed their borders. Recent experience has demonstrated, however, that the benefits of international trade are not always evenly distributed. The United States is currently experiencing a record current-account deficit, much of which is attributable to the 72 percent appreciation of the dollar since 1980. A dollar appreciation lowers the dollar-price of U.S. imports and raises the foreign-currency price of exports. A dollar appreciation benefits consumers and importers, but hurts U.S. industries that compete against imports and that sell goods in foreign markets.

Many analysts cite the federal-budget deficit as one important factor contributing to the dollar's strength. The relationship between the federal-budget deficit and exchange rates is neither simple nor direct. It relies on the deficit's tendency to raise domestic interest rates and to attract foreign capital, which depends crucially on the behavior of private savings and investment both here and abroad. Heavy federal borrowing is consuming a record peace-time share of the private savings available to finance private credit needs in the United States, and is helping to keep U.S. interest rates above levels they otherwise would have attained. With domestic demands relatively weak abroad, the attractive return on dollar-denominated assets has encouraged heavy net inflows.
The Effects of a Tariff

Tariffs, which are taxes on imports, raise the dollar prices of goods imported to the United States. As prices rise, consumers buy fewer imports. The extent to which a tariff alters the price and quantities of imports depends on many things. Three important factors are the response of exchange rates to the tariff, the behavior of foreign exchange rates following imposition of the tariff, and the price-sensitivity of U.S. consumers.

The ultimate impact of the proposed tariff on U.S. consumer prices depends on the resulting behavior of exchange rates. Another important factor is the response of the foreign currency to the tariff. Because of the tariff, the amount of foreign currencies needed by U.S. consumers to purchase goods and services abroad will increase. The shift in production to a higher-cost foreign currency will tend to make the dollar more expensive in foreign-exchange markets. Consequently, the dollar's exchange rates (the price of foreign currencies) tend to rise.

Table 1 provides our results. We incorporate into these estimates the offsetting effects of a 15 percent tax levied on imports. The tariff also will affect the dollar's prices of goods imported to the United States. As prices rise, consumers will shift purchases away from foreign goods and toward domestic goods. This will reduce the demand for foreign goods and increase the demand for goods produced domestically. As Table 1 shows, the tax will raise, for example, the price of clothing by $3.3 to $5.6 per $100.

The Effects on the Import Market

To consider the quantitative implications of a comprehensive tariff, we estimated the effects of a 15 percent tariff on all merchandise imported beginning in 1985. Table 1 provides our results. We incorporate into these estimates the offsetting influence of a dollar appreciation. The exchange-rate effects were derived from a model that allows foreign prices to respond to the tariff and that assumes the value of the dollar is determined solely by trade in goods and services and, therefore, by its exchange rates, especially in the short run. Because we are uncertain how the tariff will affect these factors, we could not include their influence in the exchange-rate model. The estimates also span two time frames. The short run refers to a period of approximately three years. Some proposals for a tariff surcharge would limit the tax to a period of three years. The long run refers to a period longer than three years, in which consumers have adjusted more fully to the tariff.

It is important to remember that our approach considers only the effects of the tariff on imports. The tariff also will affect exports through its influence on exchange rates and income levels both here and abroad. These effects on exports are discussed in later sections of this Economic Commentary, but are not incorporated in the results presented in Table 1.

The imposition of a 15 percent tariff by the United States would produce a 4 percent to 6 percent appreciation of the dollar in the short run and a 7 percent to 9 percent appreciation in the long run, according to our models. Foreign producers would then reduce their prices by approximately 4 percent to 1 percent in the short run and 1.5 percent to 2 percent in the long run. U.S. consumers would experience a 7 percent to 10 percent rise in import prices in the short run and a 4.5 percent to 7 percent rise in import prices in the long run.

According to our model, the efficiency losses associated with the tariff would be fairly small, amounting to slightly more than $1 billion per year. U.S. consumers would incur nearly all of the efficiency losses associated with the tariff. In total, U.S. consumers would incur costs associated with the transfer of purchasing power to the federal government and with the increased inefficiency resulting from the tariff.

Table 1 Impacts of a 15 Percent Across-The-Board-Tariff

<table>
<thead>
<tr>
<th>Response</th>
<th>Short-run estimates</th>
<th>Long-run estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tariff revenues (billions)</td>
<td>$35.1 to $33.4</td>
<td>$32.8 to $31.4</td>
</tr>
<tr>
<td>Consumer burden (billions)</td>
<td>$8.0 to $8.8</td>
<td>$6.6 to $7.4</td>
</tr>
<tr>
<td>Producer burden (billions)</td>
<td>$3.3 to $5.6</td>
<td>$6.4 to $9.7</td>
</tr>
<tr>
<td>Change in import values (billions)</td>
<td>$1.0 to $1.1</td>
<td>$1.1 to $0.9</td>
</tr>
<tr>
<td>Efficiency losses (billions)</td>
<td>$1.0 to $1.1</td>
<td>$1.1 to $0.9</td>
</tr>
<tr>
<td>Exchange rate change (%)</td>
<td>9.7 to 7.4</td>
<td>6.6 to 4.5</td>
</tr>
<tr>
<td>Foreign price change (%)</td>
<td>-1.0 to -1.5</td>
<td>-1.6 to -2.9</td>
</tr>
<tr>
<td>Exchange rate change (%)</td>
<td>4.3 to 6.1</td>
<td>6.8 to 8.5</td>
</tr>
</tbody>
</table>

Note: These estimates are average annual values and allow for exchange-rate feedbacks. The authors will provide a description of the estimation technique upon request.

The model suggests that the U.S. trade deficit would decline approximately $25 to $35 billion in the short run and $58 to $47 billion in the long run. The tariff would be sufficient to reduce the U.S. current-account deficit to a level approximately equal to 2.5 percent of GNP through 1987. These figures consider only the effects of the tariff on imports, but the induced appreciation of the dollar will also raise the foreign-currency price of U.S. exports. Consequently, U.S. exports will also fall, and the resulting improvement in the trade balance will be smaller than our model suggests.

Price Responses

The tariff will tend to cause a one-time rise in the price of foreign goods. The extent of which depends on many variables. As already discussed, the effect of the tariff on domestic goods depends on how foreign prices react to the tariff and on the resulting exchange-rate appreciation. We have indicated in earlier sections that making our estimates of the tariff's impact on import prices. Weighting the increase in import prices according to their importance in the consumer price index (CPI) suggests that the tariff will add approximately 1 to 2 percentage points to the CPI, but this estimate could be on the low side. The extent to which import prices change ripple through the economy depend importantly on the amounts of unused resources and unused capacity in the economy. A tariff works by switching consumer expenditures from foreign goods to domestically produced goods. With unused resources in the economy, domestic producers can accommodate this increase in demand largely through increased output. Prices under these circumstances will rise only modestly. When the economy reaches full capacity and limit capacity, however, no additional output is possible; producers then will accelerate the rate at which domestic demand through higher prices.

The U.S. economy is showing strong and steady growth, as it enters its second year of expansion. GNP is currently above $10 billion in the short run and $33 to $37 per $100 in the long run. The model suggests that the U.S. trade deficit would decline approximately $25 to $35 billion in the short run and $58 to $47 billion in the long run. The tariff would be sufficient to reduce the U.S. current-account deficit to a level approximately equal to 2.5 percent of GNP through 1987. These figures consider only the effects of the tariff on imports, but the induced appreciation of the dollar will also raise the foreign-currency price of U.S. exports. Consequently, U.S. exports will also fall, and the resulting improvement in the trade balance will be smaller than our model suggests.


2. The CPI trend is the mid-expansion trend as defined by the Bureau of Economic Analysis, U.S. Department of Commerce.

3. Large-scale econometric simulations suggest that an across-the-board tariff would reduce real economic activity and raise the unemployment rate modestly. See, for example, Christopher Caskey, "The Effects of a Temporary Import Tariff," Special Studies, Data Resources U.S. Review, March 1985, pp. 13-20.

In summary, the tariff could cause greater price increases than we normally might expect based on the current percentage of imports in the CPI.