ECONOMIC COMMENTARY

How Desirable Is Dollar Depreciation?

by Gerald H. Anderson

Introduction

In September 1985, the Secretary of the Treasury joined his counterparts in the Group of Five (G-5) nations—France, Germany, Japan, the United Kingdom—and in announcing a joint effort to lower the exchange value of the dollar.

If this effort to depreciate the dollar is successful, there will be many effects on our economy, some good and some bad. The extent of these effects and their net impact on the nation’s well-being is uncertain. Moreover, the consequences of the dollar depreciation and discuss the difficulties that various economic factors cause in predicting how it will affect the overall economy.

Impacts of Dollar Depreciation

Most analysts expect the dollar to depreciate further. The effects of that depreciation will depend on how it is achieved, including the permanence of the exchange rate. One may wonder why policymakers chose to seek dollar depreciation in September 1985, rather than some years earlier. One explanation is that economic conditions had changed between August 1985 and September 1985 in ways that substantially altered the risks facing the economy. In the spring of 1985, the dollar had appreciated an additional 6 percent on balance, despite a decline from its 1985 first quarter peak, adding to the difficulties facing U.S. firms in the tradable goods sectors. A fall in the dollar would help reduce the trade deficit.

The degree of pass-through will be different for different products and will depend on such things as a producer’s profit margin, capacity utilization, expectations regarding the permanence of the exchange rate change, and terms of sales contracts.

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2. Ibid. p. 4.
It has been estimated that, in past periods of exchange-rate change, foreign firms on average passed through 60 percent of an exchange rate change into price increases, absorbing the other 40 percent. U.S. exporters did the opposite, passing through 40 percent and absorbing the other 60 percent. Some analysts expect less pass-through this time than usual, reasoning that foreign firms have unusually wide profit margins now because the dollar has appreciated so much since 1980. Since empirical evidence on size of profit margins is mixed, we assume that pass-through will be similar to past experience. However, there is less-than-usual pass-through, dollar depreciation will do less than usual to raise the U.S. price level and to improve our merchandise trade balance.

Prices and Inflation

Dollar depreciation tends to raise the prices of imports and domestic goods that compete with imports, but the prices of imports and domestic goods that compete with exports may fall. The reason is that many imports are raw materials, intermediate goods, and components. Domestic manufacturers often use these inputs to produce final goods that compete with imports. So dollar depreciation raises the prices of inputs to domestic manufacturers, but the prices of the intermediate goods may fall. The pass-through coefficients of dollar depreciation, then, is likely to be less than 1.0.

The estimates were made assuming different pass-through rates for the dollar, starting from its actual level of 1985 fourth quarter (see chart; In Path A, the dollar remained stable and the trade deficit remained constant. A strong upward thrust to prices would present a difficult challenge to monetary policymakers. Excessive resistance to a price rise could trigger recession, while not enough resistance could allow the suddenly rising prices to ignite consumer and producer inflationary pressures. Thus, depreciation is potentially dangerous because if it occurs too rapidly, the price increase in prices could be so great as to make either renewed inflation or recession almost inevitable.

Because depreciation of the dollar could reignite inflation, other economic factors that affect inflation must also be considered. For example, whether or not depreciation is an acceptable risk. As noted earlier, other factors influencing economic growth rate, recent behavior of inflation, and inflation expectations have come into play. Inflation stabilization had been achieved between September 1983 and September 1985, perhaps causing policymakers to view the inflationary tendency of depreciation as less of a threat.

Balance of Trade

Dollar depreciation will tend to increase the trade balance. The size of the improvement will depend on the magnitude of the depreciation, on the degree of pass-through, and on the response of the import and export demand to prices changes.

The time pattern of trade balance improvement involves what is called the J-curve. Theoretically, currency depreciation could cause the trade balance to get worse before it gets better—that is, the trade balance could decline initially as the rate of price increases. The adverse net impacts on the price level would continue to grow in 1986 and 1987, but the year-to-year growth rate of consumer prices would be lower than in 1985. Obviously, the beneficial impact on prices from dollar appreciation is going to be mixed. The charts show that pass-through will be similar to past experience. Because depreciation of the dollar may not come soon enough or be big enough to forestall protection of domestic industry.

Table 1 Change in Consumer Price Index Caused by Exchange Rate Changes

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<tbody>
<tr>
<td>Path A</td>
<td>0.7</td>
<td>-0.1</td>
<td>-1.7</td>
<td>-1.5</td>
<td>-1.5</td>
<td>0.1</td>
<td>1.1</td>
<td>1.2</td>
</tr>
<tr>
<td>Path B</td>
<td>0.7</td>
<td>-0.1</td>
<td>-1.7</td>
<td>-1.5</td>
<td>0.1</td>
<td>0.5</td>
<td>1.5</td>
<td>1.8</td>
</tr>
<tr>
<td>Path C</td>
<td>0.7</td>
<td>-0.1</td>
<td>-1.7</td>
<td>-1.5</td>
<td>0.6</td>
<td>1.0</td>
<td>1.8</td>
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NOTE: In Path A, the dollar resuming its previous pace in Path B, the dollar plateaus at its level of 1985:IVQ.

Table 2 Cumulative Change in Annualized Merchandise Trade Balance from the 1985:IIIQ Level Caused by Exchange Rate Changes

<table>
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<tbody>
<tr>
<td>Path A</td>
<td>-1.0</td>
<td>-1.6</td>
<td>-1.4</td>
<td>-0.5</td>
</tr>
<tr>
<td>Path B</td>
<td>-1.0</td>
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</tr>
<tr>
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<td>-1.4</td>
<td>-0.5</td>
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NOTE: In Path A, the dollar resuming its previous pace in Path B, the dollar plateaus at its level of 1985:IVQ. In Path C, the dollar falls 2.5 percent per quarter in 1986 through 1988.

1. In billions of dollars.

5 More precisely, a rise in price level can be accomplished by an increase in money supply, an increase in the velocity of money, or a decrease in real output. In this case, dollar depreciation has not, itself, been caused by U.S. price increases. For further discussion of this point, see Gerald H. Auadue and Owen F. Humphage, "Exchange Rates and U.S. Prices," Economic Commentary, Federal Reserve Bank of Cleveland, April 18, 1983.


8. A $12 billion reduction in changes in inventories causes in net investment for the real value of real gross domestic demand and domestic output. This is the change in the future level that is what that was available to policymakers in summer 1985.

9. More specifically, public's financial assets are also the public's financial liabilities and have no effect on real wealth. Government bonds, however, have no offsetting liability; they are part of the U.S. private sector's financial assets. Government bond purchases are a necessary precursor for them.

It has been estimated that, in past periods of exchange rate change, foreign firms on average passed through 60 percent of an exchange rate change to the dollar, with the remaining 40 percent absorbed by the first and second years. A 0.75 percent spread evenly over the first year and by 0.75 percent in the second year. However, the beneficial impact on prices from dollar depreciation is greatest in the second year.

A strong upward thrust to prices would present a difficult challenge to monetary policymakers. Excessive resistance to a price rise could trigger recession, while not enough resistance could allow the suddenly rising prices to ignite the kind of domestic inflationary pressures. Therefore, the dollar depreciation will tend to raise the U.S. price level and to improve our merchandise trade balance.

The estimates were made assuming a different path for the dollar, starting from its actual level of 1985 fourth quarter (see chart). In Path B, the dollar depreciated by a 3 percent annual decline and rises through 1988 at the same average pace as in 1980 third quarter change on prices was still beneficial throughout 1985. In 1986, however, the impact will be adverse by 0.3 percent in the first quarter and 1.3 percent in the second year, because of excess demand pressures. However, the beneficial impact on prices from dollar depreciation is greatest in the second year. A 0.75 percent spread evenly over the first year and by 0.75 percent in the second year. Therefore, the dollar depreciation will tend to raise the U.S. price level and to improve our merchandise trade balance.

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The effort to depreciate the dollar comes after nearly a five-year advance in its value. The dollar began slowing from its rapid pace and capacity utilization had become flat well below levels that in the past were associated with rising inflation. In this Economic Commentary, we examine some of the possible effects of dollar depreciation and discuss the difficulty that various economic factors cause in predicting how it will affect the overall economy.

Impacts of Dollar Depreciation

Most analysts expect the dollar to depreciate further. The effects of that depreciation will depend on domestic conditions. In September 1985, the dollar had appreciated an additional 6 percent on balance, despite a decline from its 1985 first quarter peak, adding to the difficulties facing U.S. firms in the tradable goods sector. In the absence of government response, imported goods would become cheaper, threatening the survival of business firms in the tradable goods sector. How depreciation might accompany dollar depreciation.

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Gerald H. Anderson is an economic advisor at the Federal Reserve Bank of Cleveland. The author would like to thank Susan Black, who provided research assistance.

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