

Economic Review



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Outlook, and Policy Options

The International Role of the Dollar

Farm Prosperity: Policies for the Future

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The U.S. Dollar—Recent Developments, Outlook, and Policy Options 3

By Craig S. Hakkio and J. Gregg Whittaker

The U.S. dollar is overvalued and will eventually decline according to a consensus view of participants in a symposium sponsored recently by the Federal Reserve Bank of Kansas City. The consensus view was not uniformly shared, however.

The International Role of the Dollar 17

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The U.S. dollar is the most important international price because of its large effects on the world economy — effects that may be positive and negative. Since the dollar is a world currency, it must be free floating. A reduction in the U.S. budget deficit is the appropriate way of reducing the dollar.

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The overriding policy question for U.S. agriculture is how to turn around the sector's sagging fortunes. A reduction in federal budget deficits, initiation of market-oriented farm policies, and efforts to boost agricultural exports are needed to overcome current difficulties and to sustain agriculture's recovery.

The U.S. Dollar—Recent Developments, Outlook, and Policy Options

By Craig S. Hakkio and J. Gregg Whittaker

Widespread concern has been expressed about the strength of the U.S. dollar. While the sharp increase in the dollar since 1980 has contributed importantly to a lowering of inflation, many analysts argue that it has also contributed to the large trade deficit and to imbalances in the U.S. economy. Moreover, many analysts feel that the strength of the dollar cannot be sustained and that the dollar could fall precipitously. As a result of these concerns, some have argued for a reduction in the federal budget deficit, exchange market intervention, and increased protection for U.S. industry.

To achieve a better understanding of these concerns about the U.S. dollar and to discuss alternative policy recommendations for the dollar, the Federal Reserve Bank of Kansas City sponsored a two-day symposium on "The U.S. Dollar—Recent Developments, Outlook, and Policy Options." The symposium was held at Jackson Hole, Wyoming, on August

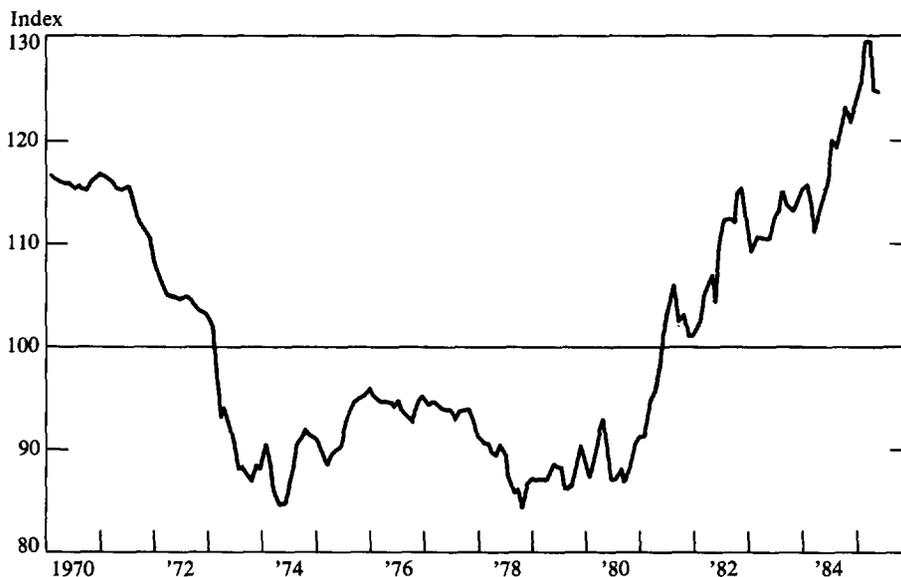
21-23, 1985. The consensus view at the symposium was that the dollar is overvalued and will eventually decline. However, the consensus view was not shared by all participants. There was disagreement on whether the dollar was actually overvalued and on how fast the dollar would, or should, decline.

This article summarizes the presentations and discussions of the participants at that symposium.¹ The organization of this summary

¹ Members of the program include Robert Roosa, partner at Brown Bros. Harriman & Co.; Richard Levich, associate professor of finance at New York University; Robert Lawrence, senior fellow at the Brookings Institution; William Branson, professor of economics at Princeton University; Jacob A. Frenkel, professor of economics at the University of Chicago; Robert Solomon, guest scholar at the Brookings Institution; John Flemming, economic advisor to the Governor of the Bank of England; Otmar Emminger, former president of the Deutsche Bundesbank; Walter Heller, professor of economics at the University of Minnesota; Paul Krugman, professor of economics at the Massachusetts Institute of Technology; Michael Mussa, professor of economics at the University of Chicago; Richard Cooper, professor of economics at Harvard University; Paul Craig Roberts, professor of political economy at Georgetown University; Jeffrey Sachs, professor of economics at Harvard University; Ronald McKinnon, professor of economics at Stanford University; C. Fred Bergsten, director of the Institute for International Eco-

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CHART 1
Real effective exchange rate of the U.S. dollar



follows the formal agenda of the symposium. The first section discusses recent developments in the value of the dollar, the second section reviews the international role of the dollar, the third section discusses the outlook for the dollar and various policy options for dealing with the strong dollar, and the final section summarizes the remarks of the overview panel.

Recent developments in the value of the dollar

Several issues relating to recent developments in the value of the dollar were addressed on the first day of the symposium.

nomics; William Poole, professor of economics at Brown University; and Henry Wallich, member, Board of Governors of the Federal Reserve System.

These included the strength and volatility of the dollar, and the causes and effects of the strong dollar. This section summarizes the views of the participants on these issues.

The strength of the dollar

In a paper entitled "Gauging the Evidence on Recent Movements in the Value of the Dollar," Richard M. Levich claimed that the recent rise of the dollar was unprecedented. Since 1980 the dollar had appreciated nearly 50 percent relative to the pound and the Deutsche mark. While the dollar's rise was dramatic, the nominal movements were similar to those of other major currencies during the period from March 1977 to November 1978. However, there has been no parallel for the appreciation of the dollar in conjunction with an ever growing current account deficit.

Chart 1 shows the behavior of the inflation-adjusted, or real, value of the dollar since 1970. The real value of the dollar provides a measure of the purchasing power of the dollar that takes into account movements in the nominal exchange rates and the inflation rate in the United States relative to its trading partners. A rise in the real value of the dollar means U.S. goods are more expensive relative to foreign goods. From 1970 to 1973, the real value of the dollar fell almost a third; from 1973 to 1980, the real value fluctuated in a narrow range between an index value of 82.0 and 97.0. Then, from its low in 1980 to its high in 1985, the real value of the dollar rose 47.5 percent. Since March 1985, the real value of the dollar has declined 10 percent. Although the dollar appears to be volatile, Levich pointed out that exchange rates are actually less volatile than many financial and real asset prices.

According to Levich, the extent of overvaluation—or misalignment of the dollar—is difficult to estimate, resulting in a wide range of estimates. One reason for the difficulty is that because the exchange rate is determined in a world capital market, a wide range of exchange rate behavior is possible. Another reason is that if the dollar is overvalued, it must be overvalued relative to some benchmark. Several benchmarks have been proposed, but all could be in error as much as 10 percent. Taking all factors into account, Levich estimated that the extent of dollar overvaluation could range from 20 percent to as much as 40 percent.

In discussing Levich's paper, Robert Lawrence agreed that while economists cannot provide good explanations for short-run movements in the exchange rate, they can explain longer run movements. After considering various explanations, Lawrence concluded that the federal budget deficit was the major factor

accounting for the strength of the dollar since 1980.

Lawrence then questioned whether the United States "should have let the dollar get as high as it did." He agreed that intervention in the foreign exchange market would not have been appropriate. However, he also noted that if the United States had fixed exchange rates, then the United States would have needed more inflation and much higher real interest rates to generate the current account deficit needed to finance the budget deficit. Therefore, he concluded that floating exchange rates enabled the United States to finance its budget deficit with less inflation and lower real interest rates. But it also meant that U.S. industries competing in world markets suffered as a result.

Causes of the strong dollar

In "Causes of Appreciation and Volatility of the Dollar," William H. Branson discussed why the dollar had risen almost 50 percent since 1980. Based on an analysis of the goods market and the asset market, Branson argued that the major cause of the historic increase in the real value of the dollar was the shift in the federal budget position that was announced in early 1981.

Equilibrium in the goods market requires that the budget deficit equal the excess of domestic saving over investment plus net foreign borrowing. The sources and uses of funds framework shows why this is true. Investment spending and the budget deficit are the two domestic uses of funds. Domestic saving and net foreign borrowing are the two sources of funds. Therefore, funds to finance investment spending and the budget deficit must come from either domestic saving or net foreign borrowing. This relationship is shown in Equation 1.

$$(1) \quad (G-T) = (S-I) + NFB$$

where G = government spending,

T = government tax revenues,

S = domestic private saving,

I = domestic private investment
spending, and

NFB = net foreign borrowing.

Using this model of equilibrium in the goods market, Branson argued that an increase in the budget deficit raised U.S. interest rates and raised the real exchange rate. A higher budget deficit must be financed by an increase in saving relative to investment, or an increase in net foreign borrowing. As the Treasury bid for funds to finance the budget deficit, interest rates rose. With the rise in interest rates, saving increased and investment was reduced. Since a current account deficit is financed by borrowing from abroad, the current account deficit must equal net foreign borrowing. Therefore, the real appreciation of the dollar—which increased the price of U.S. exports and decreased the price of U.S. imports—led to a current account deficit and an increase in net foreign borrowing.

Branson then showed that equilibrium in the financial markets also requires that an increase in the budget deficit lead to an appreciation of the dollar. Equilibrium in the financial market requires that the return to holding U.S. assets equal the return to holding foreign assets. The return to holding U.S. assets is the U.S. real interest rate plus the expected appreciation of the dollar. The return to holding foreign assets is the foreign real interest rate. Thus, if the budget deficit caused the U.S. interest rate to rise relative to the foreign rate, equilibrium

required that people expect the dollar to depreciate to offset the higher interest rate. Therefore, the dollar must have risen above its current level so that people would expect the dollar to depreciate back to its constant long-run level. As Branson put it, "What must go down in the future, must go up today."

Although the budget deficit did not worsen until 1982, interest rates and the exchange rate jumped in 1981 because people expected the budget deficit to worsen. The expected increase in the budget deficit meant people expected an increase in the value of the dollar and interest rates. Therefore, because interest rates and the dollar were expected to rise, they rose immediately.

Alternative explanations for the strength of the dollar were proposed by Branson and others. For example, a change in corporate or investment taxation, as well as financial deregulation, could have had effects similar to those attributed to the budget deficit. However, Branson found little evidence to support such a conclusion. The "safe haven" argument—that investors are attracted to the relative security of the United States—cannot explain simultaneous increases in the interest rate and the exchange rate. Consequently, Branson argued that while these arguments might have some credence, the dominant factor has been the budget deficit.

In discussing Branson's paper, Jacob A. Frenkel argued that the budget deficit could not be the only cause of the strong dollar. While agreeing that U.S. fiscal policy had a major effect on the dollar, he said the relationship between budget deficits and the value of the dollar has been ambiguous. Budget deficits are sometimes associated with a strong currency, sometimes with a weak currency. Therefore, he concluded that other factors must have also explained the rise in the dollar.

Frenkel then argued that U.S. monetary pol-

icy caused the initial increase in the real value of the dollar. Inflation had been increasing throughout the 1970s. When the Federal Reserve changed operating procedures in October 1979 to reduce inflation and inflation expectations, there was a sharp increase in interest rates and the value of the dollar. That is, actual monetary policy, not expected future fiscal policy, caused the dollar to rise in 1980.

Finally, Frenkel argued that tight fiscal policy abroad was also responsible for the strong dollar. While the United States was pursuing a loose fiscal policy, the United Kingdom, West Germany, and Japan were following tight fiscal policies. According to Frenkel, it was this combination of tight fiscal policy abroad and loose fiscal policy in the United States that contributed to the rise in the dollar.

Effects of the strong dollar

Robert Solomon, in "Effects of the Strong Dollar," argued that the appreciation of the dollar had a significant effect on the U.S. current account deficit. The U.S. current account changed from a near-zero balance in 1980 to a deficit of more than \$100 billion in 1984. Part of this deterioration was due to a real appreciation of the dollar that caused the price of U.S. goods to rise and the price of foreign goods to fall, leading to a shift in demand from U.S. goods to foreign goods. Solomon estimated that the appreciation of the dollar accounted for about two-thirds of the increase in the U.S. current account deficit from 1980 to 1984.

Appreciation of the dollar also contributed to the decline in U.S. inflation by reducing the price of imports. Inflation in the United States, as measured by the consumer price index, averaged 6.0 percent between 1981 and 1984. In the absence of dollar appreciation,

Solomon estimated that inflation would have averaged 7.6 percent. That is, the strong dollar reduced U.S. inflation by an average of 1.6 percentage points between 1981 and 1984.

According to Solomon, the net foreign borrowing associated with the current account deficit meant that U.S. interest rates were lower than they would have been without the net foreign borrowing. As shown in equation 1, a budget deficit and domestic investment are financed by domestic savings and net foreign borrowing. If the United States could not borrow from abroad, then the entire budget deficit would have to be financed from domestic sources. As the Treasury bid for domestic funds, interest rates would rise and crowd out domestic investment. Therefore, by supplementing domestic savings, net foreign borrowing enabled the budget deficit to be financed at lower interest rates.

Solomon also argued that the United States is not becoming a two-tiered economy, with an expanding service sector and a depressed manufacturing sector. According to Solomon, the ratio of goods output to GNP has been relatively stable since 1950. The fall in manufacturing employment is part of a long-term trend, in which rising productivity, not declining production, has caused employment in manufacturing to fall relative to total employment.

Solomon saw the strong dollar and the large U.S. current account deficit as having a stimulative effect on foreign economies. As noted above, the current account deficit reflected a shift in demand from U.S. goods to foreign goods. Therefore, the current account deficit increased the demand for foreign goods, which stimulated foreign production.

John Flemming discussed Solomon's paper from the point of view of a foreign monetary policy advisor. In discussing capital inflows to the United States, Flemming said the global

supply of savings could not be taken as given and then split between domestic and foreign investment. For example, he felt that the U.S. budget deficit was not the only reason for the U.S. capital inflow. The dismantling of exchange controls in the United Kingdom was also important in accounting for the U.K. capital outflow to the United States. Reducing obstacles to capital outflow meant higher interest rates and a lower exchange rate for the United Kingdom, which led to higher savings and lower investment in the United Kingdom.

Flemming also discussed the role of the dollar-pound exchange rate in the conduct of monetary policy in the United Kingdom. In conducting monetary policy, Flemming stated that the Bank of England uses the effective exchange rate—the average exchange value of the pound relative to the currencies of all of the United Kingdom's trading partners—rather than the dollar-pound exchange rate. However, he pointed out that not all changes in the effective exchange rate are treated the same—changes in all components of the effective rate call for responses different from those if only one rate changes a great deal. Flemming disagreed with Solomon's argument that a fall in the dollar would allow foreign countries to reduce their interest rates and stimulate their economies. He doubted that the United Kingdom would reduce its interest rates if doing so would increase the U.K. inflation rate.

The international role of the dollar

Otmar Emminger, former president of the Deutsche Bundesbank, discussed "The International Role of the Dollar" in a luncheon address.² He argued that the dollar is the most

important price in the world economy, because of its effects on the world economy. He then discussed the role of the dollar in the world economy, the impact of the misaligned dollar, and the future prospects for the dollar.

Emminger argued that the dollar is a world currency, and therefore must be freely floating. It is the most important currency for intervention in the foreign exchange market, and for trade and financial transactions. In addition, more than any other currency, the dollar is determined by capital movements. Therefore, Emminger argued that the dollar exchange rate must be flexible. Any fixed exchange rate would eventually be "toppled by irresistible capital flows."

The strength of the dollar had both positive and negative effects on the world economy, according to Emminger. The strong dollar initially benefited the U.S. economy by keeping the economy from overheating in 1983 and 1984, by reducing inflation, and by keeping interest rates lower than they otherwise would have been. But, the strong dollar and U.S. trade deficit are now a drag on economic growth. The situation in the other industrial countries developed in reverse order. The strong dollar hurt foreign economies initially since high U.S. interest rates forced other countries to raise their interest rates. But, the strong dollar and U.S. trade deficit are now a stimulus to foreign economies and interest rates in those countries are no longer so closely tied to U.S. interest rates.

Emminger concluded by saying that the dollar will eventually decline. He felt that the current strength of the dollar could not be justified, and therefore he expected a moderate decline in the value of the dollar. However, there is the risk that the dollar might fall too fast or overshoot its long-run level. Since the Federal Reserve cannot solve the problem of the strong dollar by itself, Emminger con-

² His address is published as the second article in this *Economic Review*.

cluded that the U.S. budget deficit must be reduced.

Outlook and policy options for the strong dollar

The outlook for the dollar and policy options for dealing with its strength were discussed on the second day of the symposium. It was concluded that the dollar would decline sometime in the future. Some participants thought the Federal Reserve should intervene in the foreign exchange market to bring the dollar down quickly. However, others thought the dollar should decline only gradually. Finally, alternative exchange rate systems, designed to respond optimally to various disturbances, were discussed. This section summarizes the views of the participants on these issues.

Outlook for the strong dollar

In "Is the Strong Dollar Sustainable?" Paul Krugman argued that the dollar's strength represents a speculative bubble soon to burst. Krugman argued that the dollar was overvalued relative to its long-run level, which implied an implausible buildup of U.S. debt. Therefore, he concluded that the current strength of the dollar was not sustainable, and the dollar would plummet some time in the future.

According to Krugman, in May 1985 the market implicitly expected the dollar to decline 2.4 percent a year for the next several years. The reason was that Krugman estimated that long-term real interest rates were 2.4 percent higher in the United States than in other countries. Therefore, financial market equilibrium required that the market implicitly expect the dollar to decline by 2.4 percent a year, the difference between U.S. and foreign real inter-

est rates. Otherwise, there would have been an opportunity for profit from investing in U.S. securities.

If the dollar declined at a rate of 2.4 percent a year, then the dollar would be too high for too long, leading to an infeasible level of foreign debt. As long as the dollar remains strong, the United States will run a current account deficit. If the dollar was 33 percent overvalued, as Krugman assumed, and if market expectations of a 2.4 percent depreciation in the dollar were correct, then Krugman estimated that the dollar would remain overvalued for 23 years. This would mean that the United States would continue to run current account deficits for 23 years. However, since a current account deficit is financed by net foreign borrowing, a current account deficit means an increase in the foreign debt of the United States. Therefore, as long as the dollar is overvalued, the United States will accumulate foreign debt, eventually reaching a level of debt equal to 45.7 percent of GNP. Krugman believed that this level of debt, comparable to that of Mexico and Brazil, was infeasible.

On the basis of this analysis, Krugman concluded that the market is irrational and that the strength of the dollar cannot be sustained. His reasoning was that the implicit expectation of a 2.4 percent decline in the value of the dollar implied a debt to GNP ratio of 45.7 percent. But, Krugman believed this level of debt was infeasible. He concluded, therefore, that the current value of the dollar was not justified by economic fundamentals: the dollar was on a speculative bubble. Since the current value of the dollar was not justified, the dollar must fall—sometime. A fall in the dollar, by reducing current account deficits now and in the future, would prevent the buildup of an infeasible level of foreign debt. Unfortunately, Krugman could not say when the decline would occur or by how much the dollar would

fall. All he could say with assurance was that when the dollar fell, the fall would reveal its speculative component either by plunging for no apparent reason or by overreacting to some stimulus.

Krugman admitted that the safe-haven argument mitigated the consequences of these calculations. While this argument—that the dollar is strong because investors view the United States as a safe place to invest their funds—may be relevant for the value of the dollar relative to the Latin American currencies, Krugman argued that it had little relevance for the value of the dollar relative to the currencies of the industrialized countries.

Some have argued that since the government would not allow the strong dollar to endure indefinitely, forecasts of an infeasible level of foreign debt are irrelevant. For example, suppose there is a possibility that the government will reduce its budget deficit so that the dollar falls. If this possibility is strong enough, then the possibility of accumulating a large amount of foreign debt would be small. Although the United States may accumulate a large amount of foreign debt, it is unlikely to do so. Therefore, it is argued that the previous analysis is irrelevant for practical purposes.

Krugman contended that the possibility of government intervention strengthens his argument that the dollar is on a speculative bubble. The possibility of intervention must be accounted for in market forecasts. That is, the U.S. real interest rate must compensate for the expected depreciation of the dollar and for the possibility of government intervention. Therefore, given an interest rate differential of 2.4 percent a year, the possibility of government intervention implies lower expected rates of dollar depreciation. If the depreciation is less than 2.4 percent a year, then the dollar will remain overvalued longer and, consequently, will accumulate even more foreign debt.

Michael Mussa, in discussing Krugman's paper, disagreed with the assertion that the dollar is on a speculative bubble; he argued that economic factors explain the current strength. Mussa agreed with Frenkel that factors other than the budget deficit were critical in explaining the strength of the dollar. Much of the dollar's strength, he said, arises from the increased confidence in the anti-inflationary monetary policy adopted in October 1979. A variety of temporary factors have also caused the United States to run a current account deficit and the dollar to be strong. As those factors abate, the current account deficit and the value of the dollar will fall. For these reasons, Mussa argued that the current value of the dollar was explainable by economic factors. Therefore, Mussa saw no reason for asserting that the dollar was on a "speculative bubble."

Even though Mussa did not believe the dollar was on a speculative bubble, he did agree with Krugman that the dollar will fall in the future, but by less than Krugman asserted. Mussa said that the dollar was undervalued in 1980 and therefore using 1980 as a base year was misleading. Also, economic factors imply that the United States should run a current account deficit in the long run.³ These two factors mean the dollar did not have to fall as far as Krugman assumed. Mussa also said that assuming a constant real interest rate of 8 percent, as Krugman did, was not realistic. With

³ Mussa argued that the population of the United States is growing faster than the populations of Western Europe and Japan. Therefore, the United States will need more investment than Western Europe and Japan to maintain a constant capital to labor ratio. Also, since the average age in Western Europe and Japan is rising faster than in the United States, Western Europe and Japan will need high savings rates to support their older, retired workers. Therefore, since investment should be high in the United States and savings should be high in Western Europe and Japan, the United States should run a "structural" current account deficit.

a real interest rate of 5 percent, Mussa found that the level of debt implied by Krugman's analysis was not excessive. Therefore, he did not expect the dollar to plummet for this reason. In addition, Mussa noted that Krugman's estimate of a \$1 trillion foreign debt was only 1 or 2 percent of U.S. wealth and, therefore, not excessive.

U.S. policy options for dealing with the strong dollar

In "The U.S. Payments Deficit and the Strong Dollar: Policy Options," Richard N. Cooper discussed the various policy options for countering the effects of the strong dollar and the large U.S. current account deficit. He agreed with Branson that the budget deficit was the major cause of the strong dollar. He also agreed with Frenkel and Mussa that tight monetary policy led to high interest rates and the strong dollar. Therefore, he proposed a reduction in the budget deficit and an easing of monetary policy to reduce the value of the dollar. Protectionism, he said, is not the solution.

Using a framework similar to Branson's, Cooper concluded that a reduction in the budget deficit was needed to reduce the value of the dollar and the current account deficit. However, he argued that a reduction in the current budget deficit would have undesirable side effects. Specifically, a sharp reduction in the budget deficit, through a decrease in government spending or an increase in taxes, would push the economy into a recession.

Cooper concluded, therefore, that the most effective policy option was for the United States to gradually reduce its budget deficit and immediately ease monetary policy. A gradual reduction in the budget deficit would slowly reduce the demand for funds, reducing U.S. interest rates and the value of the dollar,

thereby allowing for a gradual reduction in the current account deficit. An easier monetary policy would further reduce U.S. interest rates and the value of the dollar. Given the lags inherent in the economy, a decline in the dollar would eventually stimulate the manufacturing and agricultural sectors of the economy, offsetting the recessionary effects of a gradual reduction in the budget deficit.

Cooper also recommended that the Federal Reserve intervene in the exchange market, despite the possible inflationary consequences. He argued that the Federal Reserve should increase the money supply by purchasing foreign securities, instead of domestic securities. This would reduce the value of the dollar directly. He also argued that such a move would have symbolic significance, showing that the Federal Reserve was concerned about the dollar and not simply printing money to finance the deficit. Cooper argued that the price increases resulting from a fall in the dollar are inevitable, and therefore should occur as soon as possible.

According to Cooper, protectionist policies, such as an import surcharge or a tax on interest payments to foreigners, would be inappropriate and ineffective. They would be inappropriate, he said, because the dollar would rise instead of fall, making U.S. exporters and farmers worse off. Also, although protectionist policies might be installed as temporary measures, they would probably become permanent. Moreover, foreign repercussions and emulations are likely, which could offset any U.S. gains and leave the world worse off than before. A tax on interest payments to foreigners would be ineffective because it would be difficult to effectively implement such a tax in an efficient world capital market.

The changes in Japanese policy many seek—trade liberalization, export taxes, and restrictions on capital outflows—would not be

effective in reducing the Japanese trade surplus with the United States. Liberalization of Japanese trade might reduce the Japanese trade surplus, but Cooper argued that the result would probably be a change in the composition of the trade surplus rather than a reduction in its size. Moreover, the U.S. trade deficit would not necessarily fall; that would depend on how other countries respond. An export tax designed to reduce Japanese exports to the United States would be counterproductive, according to Cooper. Such a tax would reduce the Japanese budget deficit. Also, because Japanese firms would likely cut prices to remain competitive, profitability would be reduced, which would reduce Japanese investment and income. Therefore, Cooper argued that an export tax would increase the Japanese trade surplus, not reduce it. Finally, Cooper argued that although restrictions on capital outflow from Japan might reduce the Japanese trade surplus and depreciate the dollar, it would run counter to pressure for liberalization of the Japanese capital markets.

Fiscal expansion abroad would help to reduce the value of the dollar, according to Cooper. As Frenkel noted, tight fiscal policy by foreign governments contributed to the rise of the dollar. Easier fiscal policy by Japan, Germany, and the United Kingdom would reduce the value of the dollar by stimulating the economies of these countries. With more vigorous economic growth, domestic and foreign investment would be attracted and their currencies would appreciate relative to the dollar. However, Cooper noted that these policy suggestions require action by foreign governments that might not be willing to undertake them.

In discussing Cooper's paper, Paul Craig Roberts argued that restrictive monetary policy and the Reagan administration tax cuts led to the strong dollar. The rapid fall in inflation in

1981 and 1982, not loose fiscal policy, caused the large budget deficits, he said. The reduction in inflation increased the demand for dollars by making the dollar a more desirable currency. With no change in the supply of dollars, the value of the dollar rose. The Reagan tax cuts also made the United States a more attractive place to invest. This increased the demand for U.S. assets and led to an increase in the value of the dollar.

As a result of his analysis, Roberts agreed that there should be a reduction in the budget deficit and an easing in monetary policy. Whereas Cooper argued for a reduction in the budget deficit without specifying how the reduction should be made, Roberts argued that the budget deficit should be reduced by cutting federal expenditures, not by increasing taxes. A reduction in government spending would make the United States more competitive, while an increase in taxes would make the United States less competitive.

Alternative exchange rate system

Jeffrey D. Sachs considered various national and global exchange rate policies in his paper entitled "The Case for More Managed Exchange Rates." Many observers have viewed the appreciation of the U.S. dollar after 1980 as a failure of the floating exchange rate system and have called for a return to a more managed global exchange rate system. Sachs discussed the arguments for and against a managed exchange rate system.

The choice of an optimal exchange rate policy depends on the source of the disturbance. Policies that seem appropriate for some types of shocks are not appropriate for other types of shocks. For example, fixed exchange rates are best if most disturbances are monetary in origin. Flexible exchange rates, however, are best if most disturbances are due to shifts in

the demand for goods. Sachs argued that the large swings in global economic activity since 1971 can be traced to synchronized shifts in the money supplies of the major countries. A major reason for these synchronized shifts was a joint attempt by the major non-U.S. countries to intervene in support of the dollar in the 1970s and in support of their own currencies in 1980 and 1981. However, Sachs argued that this did not mean most future shocks would also be due to synchronized shifts in the money supplies of the major countries. Therefore, the exchange rate system that is chosen must be able to withstand the wide variety of shocks that could hit the economy.

Sachs argued that a managed exchange rate system can enforce policies that benefit all countries. For example, a country faced with domestic inflation has an incentive to pursue a tight monetary policy and a loose fiscal policy. The hope is that its currency will appreciate without a recession. But, if all countries attempt to fight inflation in this way, their efforts would cancel out. As a result, all countries would suffer from large budget deficits and tight monetary policies. Since a fixed exchange rate would force every country to have the same inflation rate, a managed fixed exchange rate system would allow countries to decide together on less restrictive monetary policies. Another argument for a managed exchange rate system is that the current system has an inflationary bias. However, an international gold standard, for example, would eliminate discretionary monetary policy and thereby reduce the inflation bias.

Ronald McKinnon, in discussing Sachs' paper, argued that Sachs assigned too much responsibility to the Federal Reserve. One of Sachs' proposals was that the Federal Reserve stabilize nominal GNP. McKinnon argued that this is not technically feasible. Instead, he felt that the goal of the Federal Reserve should be

to ensure price stability in the long run. To do this, the Federal Reserve should stabilize the exchange rate or the growth of money. McKinnon felt that such a policy would be technically feasible.

In fact, McKinnon argued that the Federal Reserve should use the exchange rate as a target for monetary policy for two reasons. First, the exchange rate is available daily. Second, he argued that changes in the exchange rate accurately predict changes in future inflation. McKinnon argued that a rise in the value of the dollar reflects an increase in the demand for U.S. assets. If the Federal Reserve did not accommodate the increased demand, then the U.S. price level would decline in the future. Therefore, he concluded that when the dollar rises the Federal Reserve should increase the money supply to accommodate the increase in demand; conversely, when the dollar falls, the Federal Reserve should decrease the money supply to offset the decrease in money demand.

An overview

The symposium ended with three prominent observers of the international monetary system offering their views on the strong dollar and the policy options for dealing with it. The three overview panelists were C. Fred Bergsten, director of the Institute for International Economics; William Poole, professor of economics at Brown University and former member of the Council of Economic Advisors; and Henry Wallich, member of the Board of Governors of the Federal Reserve System.

C. Fred Bergsten believed the dollar is massively overvalued, a continued drag on the economy, and unsustainable. He stated that the dollar is approximately 30 percent overvalued. This overvaluation means the United States will continue running current account

deficits that will be a drag on economic growth. Bergsten argued that the strength of the dollar cannot be sustained, however, because the strong dollar and associated current account deficit imply an implausible level of debt accumulation. He did not believe foreigners would be willing to continue providing sufficient funds to the United States. In addition, he argued that a major risk associated with the strong dollar is the outbreak of trade protection.

As a result of this assessment, Bergsten argued that the dollar and the current account deficit must fall. He stated that the merchandise balance of trade would need to move into surplus in order to finance the net interest cost of the high level of foreign debt and to maintain current account balance. Such an improvement would require a fall in the dollar and must come from both domestic and foreign sources. Domestic export industries, hurt by the rise in the dollar, will have to provide some of the improvement. Foreign countries that are currently running surpluses would need to run deficits.

To deal with the strong dollar, Bergsten advocated a reduction in the budget deficit over three to five years, an easing of monetary policy, and stimulation of foreign economies. However, he did not see much action on the budget deficit or stimulation of foreign economies. Therefore, he recommended that the Federal Reserve engineer a rapid and substantial decline in the value of the dollar. When the dollar moves, the Federal Reserve should "lean with the wind." He also argued that the authorities should make it clear that they want a dollar correction. Bergsten argued that the inflationary consequences of this policy are temporary, lasting only as long as the dollar fell. Finally, he also recommended that Japan limit its capital outflows.

William Poole disagreed with the consensus

view at the conference. He did not believe the dollar was overvalued. The strength of the dollar was due to the nature of the 1981 change in fiscal policy, and not the budget deficit per se. The 1981 change in fiscal policy cut business taxes. In addition, the reduction in inflation led to a further cut in the effective corporate tax rate through the interaction of inflation with existing tax laws. Both of these factors led to an increase in the after-tax rate of return on new business investment. According to Poole, the increase in the after-tax rate of return accounted for about two-thirds of the increase in the value of the dollar.

On the basis of this analysis, Poole felt chances were about even that the dollar would rise further or fall. The change in business taxes and lower inflation were permanent changes in the economy that required permanent changes in the real value of the dollar. As long as business taxes are not raised and as long as inflation remains subdued, Poole saw no reason for the dollar to fall. In fact, if the budget deficit crisis could be "satisfactorily" solved, he believed the dollar might rise further.

Governor Wallich agreed with much of the consensus view expressed at the symposium. He felt the strong dollar and associated current account deficit benefited the rest of the world. And by helping finance the large federal budget deficit, the strong dollar kept U.S. interest rates lower than they otherwise would have been. Finally, less developed countries also benefited from the strong dollar and lower U.S. interest rates.

Contrary to Cooper and Bergsten, Wallich felt that a rapid fall in the dollar could be harmful for two reasons. First, a rapid fall in the value of the dollar, without action on the budget deficit, would be counterproductive. It would lead to higher inflation and higher

interest rates. Second, although some argued that the rise in inflation would be temporary, Wallich said the rise in inflation would be built into wages and prices and would become permanent.

Wallich also disagreed with McKinnon's proposal that the Federal Reserve use the exchange rate as the sole target for monetary policy. He argued that the Federal Reserve has several targets—inflation, the state of the economy, and the exchange rate.

Wallich concluded that a reduction in the budget deficit was the only real solution to the strong dollar. Since he felt that the budget deficit was the major cause of the strong dollar, he concluded that a reduction in the budget deficit was needed to reduce the value of the dollar. Without action on the budget deficit, monetary policy can do little to reduce the real value of the dollar. Finally, Wallich was opposed to protectionist policies as a cure for the strong dollar.

Conclusions

The consensus view was that the dollar would eventually decline, but participants disagreed on how far the dollar would decline. They also disagreed on whether the dollar was on a speculative bubble, or whether its strength could be explained by fundamental factors. Most participants felt the federal budget deficit was the main cause of the dollar's strength and should be reduced. However, several participants also pointed to tight monetary policy in the United States, to tight fiscal policy abroad, and to the Reagan tax cuts. Since low inflation and low tax rates benefit the economy, no one suggested reversing these policies. However, some participants felt that the Federal Reserve should ease monetary policy to engineer a rapid decline in the dollar. Finally, there was general opposition to trade restrictions as a means of reducing the dollar and the trade deficit.

The U.S. Dollar—Recent Developments, Outlook, and Policy Options

To examine the strength of the U.S. dollar, the Federal Reserve Bank of Kansas City brought together several leading economists to discuss recent developments, outlook, and policy options. The symposium was held August 21-23, 1985, at Jackson Hole, Wyoming. Contents of the symposium proceedings are listed below.

Moderator: *Robert Roosa*

Gauging the Evidence on Recent
Movements in the Value of the Dollar,
Richard M. Levich
Commentary, *Robert Z. Lawrence*

Causes of Appreciation and Volatility
of the Dollar, *William Branson*
Commentary, *Jacob A. Frenkel*

Effects of the Strong Dollar,
Robert Solomon
Commentary, *John S. Flemming*

The International Role of the Dollar,
Otmar Emminger

Moderator: *Walter Heller*

Is the Strong Dollar Sustainable?
Paul R. Krugman
Commentary, *Michael L. Mussa*

The U.S. Payments Deficit and the Strong
Dollar: Policy Options,
Richard N. Cooper
Commentary, *Paul Craig Roberts*

The Case for More Managed Exchange
Rates, *Jeffrey D. Sachs*
Commentary, *Ronald I. McKinnon*

Overview Panel, *C. Fred Bergsten,*
William Poole, and Henry Wallich

For a free copy of the proceedings of this symposium, or any of the previous symposiums listed below, write the Public Affairs Department, Federal Reserve Bank of Kansas City, 925 Grand Avenue, Kansas City, Missouri 64198.

Price Stability and Public Policy (1984)

*Industrial Change
and Public Policy (1983)*

*Monetary Policy Issues in
the 1980s (1982)*

*Modeling Agriculture for Policy
Analysis in the 1980s (1981)*

*Future Sources of Loanable Funds
for Agricultural Banks (1980)*

*Western Water Resources:
Coming Problems
and the Policy Alternatives (1979)*

*World Agricultural Trade:
The Potential for Growth (1978)*

The International Role of the Dollar

By Otmar Emminger

The dollar is certainly the most frequently discussed economic phenomenon of our times. Wherever I go I am asked (because in the past I had for many years a lot to do with the dollar): what about the dollar? Will it continue to fall? Will it rise again? And if it should continue to fall, will it be a gentle slide towards a soft landing, or will it end in a crash landing? Why is there so much discussion about the dollar? There are three reasons:

The dollar value — the most important price in the world economy

First, the dollar's exchange rate is at present the most important price in the world economy (while ten years ago one would probably have attributed this role to the oil price). The high dollar — even at the present DM 2.80 exchange rate it is still quite high (higher than at the end of 1983) — has had an enormous

Otmar Emminger is the former president of the Deutsche Bundesbank. This article is based on an address he gave at the symposium on the dollar sponsored by the Federal Reserve Bank of Kansas City.

impact on the world economy. It has affected the competitive position of other industrial countries versus the United States, the U.S. trade balance, the structure and development of world trade, the prices of commodities and other internationally traded goods, and price inflation both in the United States and elsewhere. More recently the high dollar has been called the major drag on the American economy. And it has certainly been the foremost cause of protectionist pressures which threaten to undermine our trading system. No wonder that the high dollar has been a subject of discussion and complaints at several economic summit meetings; although in my view the complaints of other countries have since 1984 assumed more the character of a habitual rite, since most industrial countries have learned to live with a high dollar and have drawn from it more benefits than disadvantages.

A second reason why the dollar is so ardently discussed is because it is such a controversial subject. Its behavior has seemed to defy all conventional wisdom. At least until the beginning of 1985, we could watch a

rather paradoxical, if not “perverse,” spectacle: the more the American budget deficit and trade deficit increased, the higher rose the dollar.¹ What would have made all other currencies weak seems to have strengthened the dollar. We have already heard at this conference some interesting views about this strange connection between high budget deficits and a strong dollar.

A third reason for the worldwide keen interest in the dollar is concern about the future. What will happen to the world economy if and when a definitive reversal of the dollar trend should lead to a much lower level of the dollar’s exchange rate? This concern is, of course, based on the belief that the present external position of the U.S. economy is in the longer run unsustainable, and that sooner or later the budget deficit chicken and its consequences will come home to roost — and that this may severely hit the dollar and, in its consequence, also American interest rates. I don’t think one can get around the fact that the present external payments position is fragile and represents a “high risk situation.” It makes the dollar and the U.S. economy dependent on the unpredictable and uncontrollable whims of international capital flows. The dollar is performing a circus act, and there is no net under it. My view has been for a long time that the uncertain future of the dollar is becoming much more an American problem than a problem for the other countries—although they, and particularly the high-debt countries, may be greatly affected, too.

¹ The height of absurdity was reached when a leading European financial newspaper (Financial Times, July 20) wrote: “This week’s news that Congressional talks about cutting the U.S. deficit have broken down may have been the best news for the dollar in months...The budget deficit keeps rates high...and it discourages the Fed from easing further.”

The topic assigned to me is the international role of the dollar. So I shall first make a few general remarks on how this role has evolved over recent years. Second, I will discuss the international impact of the high dollar, and third, venture a bit into the foggy area of future prospects.

General remarks on the international role of the dollar

The powerful position of the dollar is not only based on its being the currency of the largest and most powerful economy. It goes beyond that because the dollar fulfills a unique role as a world currency.

This role has undergone some changes over the last 15 years. Until 1971 we had the gold-dollar standard which gave the dollar a key role, as the system’s official link to gold and as the anchor for other countries’ parities. When President Nixon suspended the gold convertibility of the dollar in August 1971, many experts —both inside and outside America — expected that this had finished the key role of the dollar in the world monetary system. They believed that the dollar had become a normal currency like all the others, and that the United States now had lost what deGaulle had called the “exorbitant privilege” of financing its external deficits with its own domestic currency.

These assumptions have proved thoroughly wrong. The dollar has not only maintained its special position, it has in some fields even enlarged it. Although we no longer have an official dollar-exchange standards, we are living *de facto* in a largely dollar-based international financial system.

First, the dollar has remained by far the most important reserve and intervention currency. Since August 1971, central banks have nearly quadrupled their reserves of inconvert-

ible dollars. And the international banking system has built up even much larger dollar holdings since the beginning of the 1970s. Thus the dollar has remained the main provider of international liquidity — contrary to the well-known predictions of Prof. Triffin and others — and has carried this role even to excess. Even without gold convertibility, the United States enjoyed until recently the “exorbitant privilege” of seeming to have no external financing problem, so that it could afford—and many believe it can still afford—the luxury of a passive balance-of-payments strategy (or “benign neglect”). This phase is probably over.

Second, the dollar has remained the main currency for trade and financial transactions. More than 50 percent of world trade is priced in dollars, and that comprises most of the internationally traded commodities including oil. Thus the ups and downs of the dollar in the exchange markets have a much more than proportionate effect on the import prices in other currencies. In Germany nearly 30 percent of total imports are priced in dollars (while direct imports from the United States are only about 7 percent), and in France about 40 percent.

The dollar's position is even more pronounced in the financial sphere. It has become the dominating currency in the international financial markets, and this position has been built up particularly during 1970s. As a consequence, 80 percent or more of the external debt of the Third World is expressed in dollars. A large part of this debt bears variable interest rates tied to dollar interest rates. Thus, large movements of the dollar exchange rate and, in particular, of dollar interest rates, have a big impact on the international debt situation. We witnessed the effects a few years ago.

Third, high dollar interest rates have not

only been a heavy burden on the high-debt countries, but also an attraction for foreign investors, and thus an important reason for the high dollar. It was certainly not the only factor: in the period between 1982 and 1984, when net annual capital imports into the United States soared by the tremendous amount of \$90 billion, a large contribution came also from the decline in American lending abroad; this was to a large extent due to other causes than high American interest rates (debt crisis, stricter banking regulations, etc.). But taking everything together, dollar interest rates and their changes are a major factor in the world payments system, mainly because of the key position of the dollar in the world's financial markets and as an international investment asset.

Fourth, a further distinctive feature of the dollar is the predominant role which capital movements play, both in the U.S. balance of payments and for the dollar's exchange rate. There is no other currency with a similar predominance of capital movements over the so-called “traditional fundamentals” (like inflation differences or the trend of the current account balance). Capital movements may vary quickly under the influence of changing expectations or shifting confidence. This makes the exchange rate of the dollar so volatile and unpredictable, like a “Russian roulette.” The fact that in the case of the dollar, the key currency, the capital balance completely overwhelms trade and current account flows is a major problem and a weak point in the present international monetary system for it is bound to lead not only to great volatility, but to long-lasting misalignments measured against cost and price differences.

The overwhelming influence of capital movements and the huge amount of liquid dollar holdings in the world explain another unique feature of the dollar: it is the only cur-

rency for which it can be said with certainty that under conditions of capital mobility it can function only as a fully floating currency. Any fixed dollar rate, or even a mere target zone for the dollar, would sooner or later be toppled by irresistible capital flows and the enormous amount of volatile dollar holdings. As a counterpart against that, compare the European currency situation: here we have a group of countries for which the potential for disturbing mutual capital flows is much smaller, and among which the payments flows are mainly dominated by inflation differences and current account trends. Just look at the history of the European Monetary System (EMS) over the last six years: exchange rate adjustments have always been made so as to offset inflation differentials and untenable current account trends. Therefore the deviations of real exchange rates against the other member currencies have never been more than 5 to 8 percent (against up to 50 percent or more for several currencies against the dollar). This explains why inside Europe an adjustable peg system, a "mini-Bretton Woods," has functioned while it could never function again in relation to the dollar.

A currency which is the leading reserve and intervention currency, the dominating currency in the financial markets, and is itself largely dominated by capital movements, cannot be subjected to the same rules for exchange rate policies, for intervention in the exchange markets, etc., which may be appropriate for other currencies. I have always considered it a great mistake that in reviewing our exchange rate system, both economists and government officials, including the most recent Report of the Group of Ten, nearly always try to offer uniform rules for exchange rate policies and do not sufficiently differentiate between currency relations with the dollar on the one hand, and the relations among

other currencies. Intervention, for instance, functions reasonably well among the EMS currencies, but it is a very controversial subject — rightly or wrongly — in relation to the dollar. I repeat: there are good reasons for this difference.

The impact of the "misaligned" dollar

Let me add a few remarks on the international impact of the high dollar. When I spoke about the "strong" or the "high" dollar, I might as well have called it the "misaligned" dollar for the value of the dollar has over the last few years been completely out of line with international cost and price relationships, and also out of line with the trend of the American trade and current account. I am reluctant to use the word "overvalued" (if fundamental factors of the capital balance are properly taken into account). I also think one should use the word "misaligned" only if it is accompanied by a clarification against which measure (or standard) the dollar is misaligned, and against which basis period. Used in that sense, a statistically verified "misalignment" may be a useful indicator for a change in competitiveness, etc. For the sake of brevity, however, I shall refrain from quoting figures here.

But there can be no doubt that we have never before had a currency whose "real" exchange rate — the nominal exchange rate compared with price or cost differentials — has risen so much and for so long as has the dollar over the past few years. Inevitably, the prolonged misalignment of the world's key currency has produced distortions and deformations. Let me first look at the American economy because its reactions to the high dollar are so important for the whole world economy. The impact of the high dollar on the American economy was at first mainly positive: in 1983-84 it helped to prevent an over-

heating by deflecting excessive demand abroad. In addition, it has held the inflation rate down and helped to overcome the inflationary psychology, it has kept interest rates lower than they otherwise would have been, and it has exerted pressures to rationalize production. But the longer the misalignment has lasted, the more the balance has shifted to the disadvantage of the American economy: I note the growing drag on the economy, in particular manufacturing, mining and farming, and the ensuing distortion in the structure of the American economy; the building up of a large external debt the service of which will severely burden the American payments balance on current account for a long time ahead; and the increasing risk that an unsustainably high dollar exchange rate could reverse itself too sharply. This may in the near term become a greater risk for American economic stability than the budget deficit. Paul Volcker said recently: A precipitous decline in the dollar "is the greatest risk we have on the inflation front."

The impact on other industrial countries has developed in the reverse order: at first the negative influences clearly prevailed, with the high dollar and the high American interest rates behind it forcing overly high interest rates on the rest of the world. But the picture has changed. In a number of countries, especially Japan and West Germany, monetary policy has since 1984 been largely (although perhaps not entirely) "uncoupled" from the high dollar. The price-raising effect of the high dollar on import prices was temporarily, especially in 1981, quite disturbing. But since 1983 it has been partly offset by the fall in the dollar prices of commodities — particularly oil — and partly by lower domestic cost increases. Thus, in Japan and Germany the domestic inflation rate declined in 1984 towards 2 to 2 1/2 percent, despite the weak-

ness of their currencies against the dollar, and is now on its way to somewhere below 2 percent.

Between the United States and a group of other industrial countries (and some outlying countries) a queer kind of mutual interdependence has developed over the last few years: these other countries have supplied large amounts of capital to the United States, while the United States has in exchange supplied additional demand to them, which these countries have so badly needed (and did not dare to create themselves because they shied away from an increase in their indebtedness.) Is this going to be a new structure of the world economy — a big capital gap in the United States standing opposite a capital surplus in Japan and other countries? This is, of course, in part simply a reflection of the contrasting policy mixes—a very expansive budget policy here, a restrictive budget policy there. But there lies more behind it, namely deepseated structural differences in the net savings ratio in the private sector. The most striking examples are the United States with its low private savings ratio and Japan with its very high ratio. The Japanese capital surplus appears to be a structural and lasting one, but not necessarily on its present huge scale which is partly a consequence of very high profits on its dollar exports; and it should not go so one-sidedly into dollar assets. As concerns other countries it is, in my view, an unreliable structure. At any rate, it is not very satisfactory that the richest country is drawing huge amounts of capital from the rest of the world—more than twice the amount of the net capital imports of the whole Third World! This cannot possibly remain a durable position.

At any rate, it is important to know that many industrial countries have learned to live with a high dollar. More and more the stimulating effects on Japan and Europe due to the

combination of American expansion with the high dollar have outweighed the initial negative effects. This external stimulus came just at the right time, namely when domestic demand in Europe and Japan was languishing because of restrictive fiscal policies and other reasons. Without this helpful stimulus from the outside it might not have been possible for some European countries and Japan to carry through the budgetary corrections so badly needed for longer term structural reasons. Now the export-led recoveries of some of these countries have begun to spread also to the domestic field, particularly in Japan, but less so in Europe.

But these other countries, too, live under the shadow of risks arising from the misaligned dollar. A prime risk is that a perpetuation of the distorted competitive positions would lead to very harmful protectionist reactions in the United States. This risk is particularly acute for Japan with its very distorted bilateral trade position vis-a-vis the United States. Another risk is that a continuing drag on the American economy from the misaligned dollar might over time lead to an externally generated dampening effect on the world economy and would aggravate the situation of debtor countries. A third risk is an abrupt and exaggerated decline of the dollar which would unsettle established trade relationships and might provoke interest rate increases in the United States. The worst scenario, particularly for the international debt situation, would, of course, be a continued weakness of the American economy, accompanied by an excessive dollar fall due to a loss of foreign confidence which might force the Federal Reserve to keep interest rates high in spite of the weaker economy.

Future prospects

These various risks for the world economy

let it appear useful to form at least a tentative opinion on what we may expect from the dollar in the near future. I shall not be so presumptuous as to forecast the short-run evolution of the dollar. As I said: forecasting the dollar in the short run is a "Russian roulette."

What we can, however, say with some assurance is that the overpriced dollar will sooner or later have to decline to a more normal level. The crucial question is whether this will become a "soft landing" or a "crash landing." Many experts believe that the external balance of the United States is so much out of joint that its correction will inevitably lead to an abrupt and exaggerated fall of the dollar. I believe, however, that there are also some good reasons for expecting a "soft landing." First, there is the unexpectedly low inflation rate in the United States and also the foreign confidence in the Federal Reserve. Second, other countries which are greatly interested too in softening an eventual dollar fall, will probably help by lowering their own interest rates; the dampening influence of a lower dollar on their export and their prices will push them towards such a policy anyway. Third, it is in my opinion wrong to assume that the dollar would have to decline until the U.S. current account is in full balance; there may well remain as continuing net capital inflow over the next few years, although at a reduced scale. And finally, one cannot exclude that Congressional action may still lead to a confidence-inspiring cut in the budget deficit. This is a crucial point. It makes all the difference in the world whether the dollar falls because foreign investors lose confidence in it, or whether it declines because the American capital gap is diminished by budgetary action. In the first case, American interest rates will be forced up in order to attract enough foreign capital, and the budget deficit will crowd out private invest-

ment, leading to an economic downturn. In the second case, American interest rates will decline and this will lead to a lower dollar.

Up to now, the decline of the dollar can be considered to have been rather moderate and not precipitous (one commentator called it a decline "at a dignified and tolerable pace"), even though it has fallen by about 17 percent (on a weighted basis) against its peak at the end of last February. But this peak was so clearly an exotic aberration that it was an easy goal for a fully justified, massive (and successful) central bank intervention. The present level of the dollar was considered very high, when it was first reached in 1984. Nobody can say precisely what the "right" exchange rate of the dollar should be. But one can at least say that a further modest downward movement would be in place. This is not a forecast; it remains to be seen whether the dollar, with its exchange rate being a "riddle inside an enigma," will oblige. We should, however, not overlook that even a stronger fall of the dollar would probably have a significant effect on the trade balance only after a considerable time lag. This is one reason why one cannot exclude an overshooting on the downswing.

The dollar as a major risk factor for the American economy

I hope it has become clear that the exchange rate of the dollar, and the huge external deficit which is in part due to the high dollar,² have now become acute problems also for the American economy. About a dozen years ago a Secretary of the Treasury said to the Europeans: "The dollar is our currency, but your

² The deterioration of the U.S. trade deficit (with equivalent benefit to other countries) over the last three years is estimated to have been due to about half to the high dollar, and for the rest mainly to the relatively stronger expansion in the United States.

problem." Now the dollar problem has returned home to the United States, particularly if we look ahead to the somber eventualities for the future.

It corresponds to this new situation that recently the level and trend of the dollar's exchange rate have become an important criterion or indicator for the monetary policy of the Federal Reserve (which seems at present to be "the only guy in town" as concerns American economic policy). Henry Wallich has said: "The exchange rate of the dollar has gained weight as a factor in monetary policy formulation." This is a far cry from "benign neglect."

When the Federal Reserve last May lowered its discount rate to 7 1/2 percent, it made clear that its main concern at the time was the weakness in the U.S. economy as well as the continued strength of the dollar, which had partly caused that weakness. When two months later Paul Volcker explained the Fed's newly rebased monetary targets, he indicated that the Fed was not interested in a further appreciable decline of the dollar, except if it were accompanied by a considerable cut in the budget deficit.

Thus, there seems to be a rather narrow path between what the Fed considers an excessively strong dollar and a dangerously low dollar. After all, the dollar was around DM 3.08 when the discount rate was lowered in May, and around DM 2.85 when Paul Volcker recently showed himself concerned about a further decline. But he may have been looking less at the then existing level than at the apparent speed of the downward trend.

At any rate, one conclusion seems to be warranted. The Fed may find itself before a difficult dilemma: on the one hand, to keep interest rates high enough to attract sufficient funds from abroad and prevent a too steep fall of the dollar and, on the other hand, to keep

interest rates low enough in order to prevent the domestic economy from falling into stagnation or recession. Isn't it a strange reversal of fate that now the Federal Reserve may be more dependent on external factors, while central banks of several other industrial countries are less dependent than before.

There is perhaps one relieving factor. The impact of a further decline of the dollar on American prices may be less than is commonly assumed: First, most commodities traded in world markets are priced in dollars and some, particularly oil, are declining even in dollar terms. Second, many foreign exporters will probably lower their prices for the American market because they are enjoying high profit margins thanks to the high dollar. Third, we have seen in Japan and West Germany that moderate increases in wages and other domestic costs are in the medium term much more important for the inflation rate than movements in import prices; after all, the share of imports in total GNP is much lower in the United States than in Germany, which has shrugged off the price-raising effects of the high dollar fairly quickly.

But one cannot exclude that the external deficit and its possible effect on the dollar may become a critical factor for the American economy, more so and sooner than other offshoots of the big budget deficit. The only reliable way out of this risk situation would, of

course, be a gradual improvement in the American budget situation. This would give the Fed more freedom to maneuver. Another possible way out would be a vigorous recovery in other industrial countries, which would lead to a significant improvement in the American trade balance even without a sharp fall in the dollar. Unfortunately, this latter way out does not look very likely at present, even though there are some modest improvements in other industrial countries on the horizon. Even with a further decline in interest rates, a sufficient domestic demand response in these countries will take a lot of time.

Why have I intruded into the field of American monetary policy, about which you understand probably more than I? For the simple reason that the rest of the world is so much dependent on how the United States will cope with the problem of its twin deficits. The exchange rate of the dollar, American interest rates, and the growth rate of the American economy are three of the most powerful influences on the world's economic and financial evolution. To mention just one obvious example: the solution to the international debt crisis is critically dependent on a further steady expansion of the American economy and on moderate dollar interest rates. This puts a heavy international responsibility on the United States. But no country can escape the responsibility arising out of its importance.

Farm Prosperity: Policies for the Future

By Marvin Duncan, Mark Drabenstott, and Kim Norris

The performance of U.S. agriculture has continued to worsen throughout the current strong business expansion. Agricultural export sales have slumped, whether measured in current dollars or tonnage, asset values have declined, and farm income has stagnated at levels unacceptably low for many farmers. As a result, farm business failures have increased dramatically from the very low levels of the previous two decades. And problems on the farm have spilled over into the rural communities. Most businesses serving agricultural producers, regardless of the region of the country, have experienced reduced sales and downward pressure on profits. Farm financial stress problems have been particularly evident among agricultural lenders.

Much of the adjustment has been the inevitable result of changes in three market fundamentals—a return to a less inflationary envi-

ronment, structural changes in financial markets, and U.S. integration into a world market for food and fiber. It is, nevertheless, increasingly apparent that agriculture may decline well beyond the adjustment required by these changes in market fundamentals. Unless changes are made in public policy, the bleak outlook for the sector could worsen. The overriding policy question, therefore, is how to turn around the sector's sagging fortunes.

This article considers a set of policies that are likely to be needed to restore long-lasting farm prosperity. The article begins by cataloging the basic problems now facing the agricultural sector. This is followed by a discussion of policy changes that appear to be needed for agriculture to overcome current difficulties. Three policy changes are identified: reducing federal budget deficits, crafting a market-oriented farm policy, and easing the transition to a market-oriented policy. The article then examines three additional policy changes that likely will be needed to strengthen and prolong agricultural growth: greater attention to trade issues, increased emphasis on value-

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added products, and policy changes to encourage demand growth in developing countries.

Farm problems to address

U.S. agriculture has rediscovered a number of basic problems in the 1980s. While the 1970s was a decade of general farm prosperity—with some notable exceptions, such as the cattle industry—nagging problems from earlier decades have reappeared in the 1980s along with striking new problems.

Excess capacity

For decades, the United States has been able to produce more food than it can consume. This problem gave rise to the farm legislation of the 1930s that generally remains in effect today. A boom in farm exports in the early 1970s emptied U.S. grain bins and led many to think excess capacity had become a problem of the past. To capture growing export markets and high commodity prices in the 1970s, U.S. farmers increased planted acreage and adopted more intensive production practices. Harvested acreage of coarse and food grains swelled to 171 million acres in 1981, compared with about 130 million in 1970. But with the onset of a world recession in 1981, the export boom—already waning—ended abruptly. Almost overnight U.S. agriculture rediscovered the excess capacity problem.

With current world food demand, the United States has substantially more acres in production than the market would dictate, although harvested acreage of coarse and food grains declined to 158 million acres in 1984. As a result, crop prices remain low under the burden of large carryover stocks. Moreover, because much of the acreage that came into production over the previous 15 years is mar-

ginal land, soil erosion has become a more significant problem in many regions of the country. Thus, farm policy must allow the market to bring supply in line with demand or devise a program for taking land out of production. Some analysts estimate that 25 to 30 million acres, or about one-twelfth of the nation's cropland, may need to be idled.¹

Compounding the excess capacity problem are continued advances in the productivity of U.S. agriculture. Historically, U.S. agriculture has increased productivity about 1.5 percent a year. While many analysts in the 1970s believed that agricultural productivity growth might slow, recent developments in biotechnology point toward higher, rather than lower, future rates of productivity growth. Thus, the United States will be able to meet its domestic food needs with a steadily declining amount of productive capacity.

Slow demand growth

Closely associated with the excess capacity problem is a slowdown in the growth of U.S. and world food demand. The United States is an increasingly mature food market, with a slowly growing population. Many Americans are more concerned about reducing rather than increasing the number of calories in their diet. Per capita consumption of meat-based protein has been virtually unchanged in the United States since 1970. Per capita consumption of dairy products has declined. The major change has been in the composition of the nation's protein diet, with red meat consumption down and poultry and fish consumption up. Moreover, total U.S. grain consumption on a per

¹ S. R. Johnson, Abner Womack, William H. Meyers, Robert E. Young, II, and Jon Brandt, "Options for the 1985 Farm Bill. An Analysis and Evaluation," testimony before the House Budget Committee field hearing in Atchison, Kansas, February 15, 1985.

capita basis is closely tied to meat production. Thus, U.S. farmers cannot look to the domestic food market to solve their oversupply problem.

Great expectations emerged in the 1970s for rapid growth in the developing world's food demand. These expectations were fostered by relatively rapid economic growth in developing countries. For the decade, the real gross domestic product of all developing countries grew at an average annual rate of 5.2 percent, compared with only 3.0 percent in industrialized countries. The result was expanded U.S. farm exports, particularly in middle-income countries where strong economic growth combined with rapid population growth to spur food demand. Food exports to the developing world also were boosted by substantial loans to these countries in the 1970s.

Expectations for continued growth in food demand in developing countries have not been met in the 1980s. The worldwide recession in 1981 and 1982 left many developing countries in a financial and economic crunch that most have not overcome. Until more rapid economic growth returns, food demand will be sluggish and the United States will face large crop stocks.

Increased export competition

Another factor related to the problems of excess capacity and slow growth in demand is the increased competition the United States faces in the world food market. Since 1970, many countries have made large investments in their own food production capacity. The four main export competitors to the United States—Argentina, Australia, Canada, and the European Community—increased their crop production 65 percent in the past 15 years. Moreover, some countries, such as China, Thailand, and India, have moved from net

food importers to net food exporters because of intensified production. Overall, world coarse and food grain production increased 50 percent from 1970 to 1985, while world harvested area rose 6 percent (Chart 1).

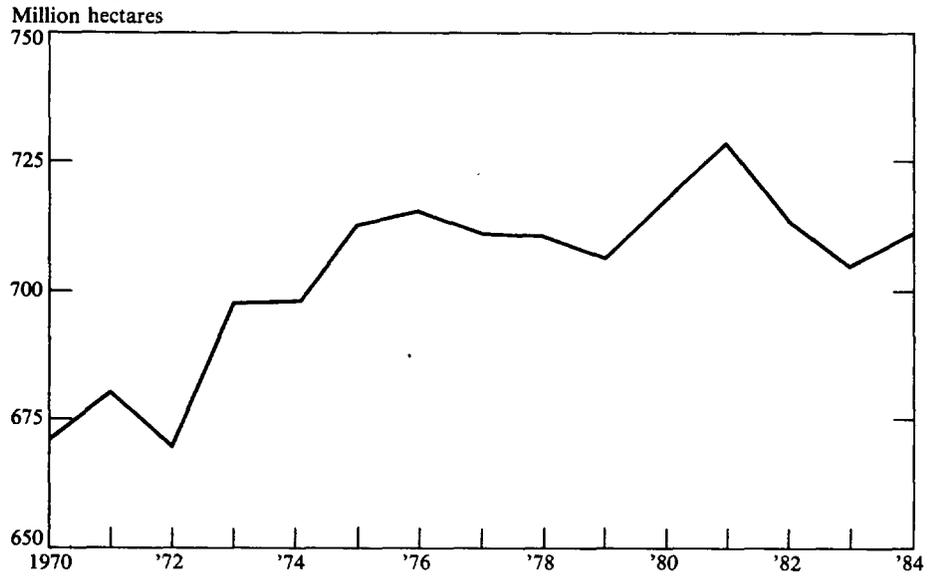
The net result is that the United States is forced to be extremely price competitive. As the world's largest exporter of food, the United States becomes a residual supplier and ends up carrying large stocks when world demand is sluggish.

High debt-carrying costs

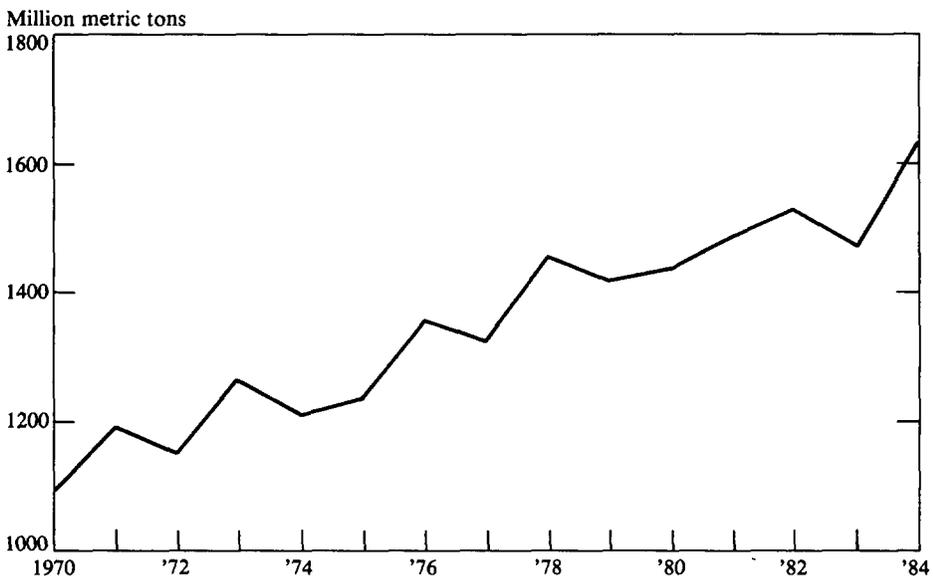
High inflation-adjusted interest rates are a major problem for U.S. agriculture in the 1980s. Historically, interest rates have been stable and low to farm borrowers. But deregulation of financial markets and deficit spending by the United States have dramatically raised farm loan interest rates. Between 1976 and 1980, interest rates for Tenth Federal Reserve District farm operating loans averaged 9.7 percent—2.9 percent in inflation-adjusted terms. From 1981 through 1984, the average rate jumped to 15.4 percent—8.9 percent after adjusting for inflation (Chart 2).

Because agriculture has become much more capital intensive through the use of more purchased inputs, interest rate increases have been particularly painful to the sector. They have increased production costs, both directly and indirectly, through the price of purchased inputs. The higher production costs have impaired U.S. competitiveness in world food markets. But most important, high interest rates have intensified debt-service burdens, especially for farmers that borrowed heavily when rates were lower. Debt-service problems have sharply increased farm liquidations. For the six months ended April 1, 1985, bankers in the Tenth District estimated that farm business liquidations were running nearly four

CHART 1
World area harvested
Coarse and food grains

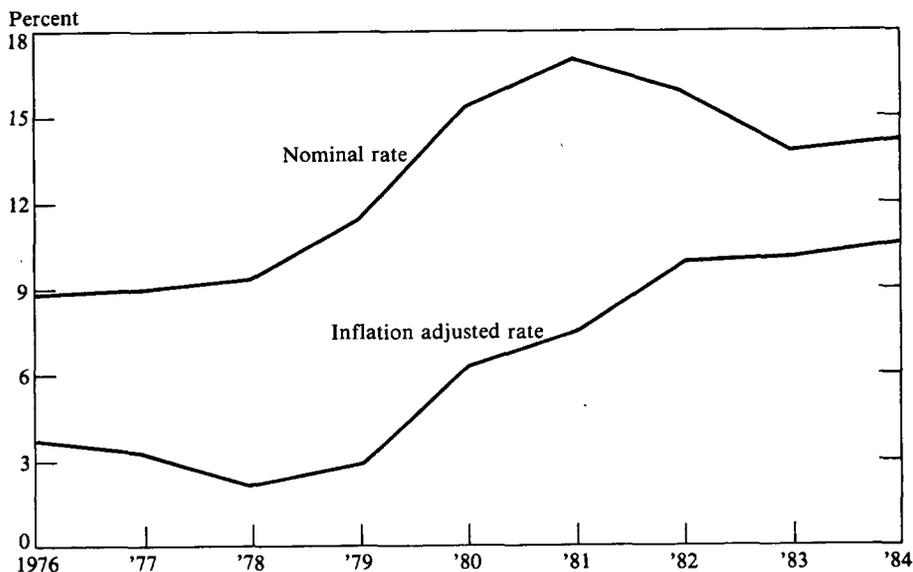


World production
Coarse and food grains



Source: U.S. Department of Agriculture

CHART 2
Farm loan interest rates
Tenth District



Source: Federal Reserve Bank of Kansas City, Survey of Agricultural Credit Conditions

times what the bankers considered normal. Partial liquidations were running more than five times what they considered normal.

Declining farm asset values

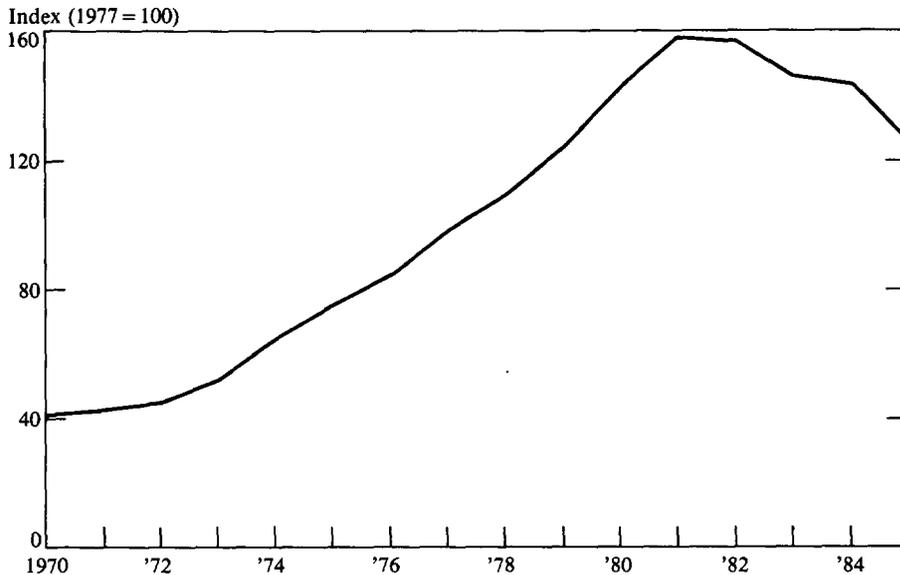
Farm asset values have declined more in the 1980s than at any time since the Great Depression. For the nation, farmland values peaked in 1982 and have declined 18 percent since then (Chart 3). Declines have been even steeper in many parts of the country. Land values in some areas have fallen as much as 60 percent. In the Tenth District, land values are 40 percent below their 1981 peak.² And the pace of asset value decline has quickened over the past year and a half. Tenth District

land values fell 22 percent between June 1984 and June 1985.

The decline in land values has added to the financial strain of farmers by eroding their equity base and credit reserves. As land values have continued to decline, more and more borrowers find themselves unable to service existing obligations without restructuring their debts or selling their assets. Either approach is increasingly difficult in a declining market. For lenders, the deterioration in the credit quality of farm borrowers pushes more loans into troubled categories. This in turn forces lenders into more actions to settle problem loans. But in a declining land market, property acquired through foreclosure or forfeiture can be sold only at substantial loss. Thus, with the debt-service problems borrowers face—and the prospects of loss if property is sold—it is not surprising that loan losses have risen dramatically for nearly all farm lenders.

² Tenth District figures are from the Survey of Agricultural Credit Conditions conducted quarterly by the Federal Reserve Bank of Kansas City.

CHART 3
United States farm land values



Source: U S. Department of Agriculture

Based on current cash returns to farmland, it appears that values could decline considerably more. And if crop prices decline further from current levels due to generally weak commodity markets, land values could come under further downward pressure. Prices received by U.S. farmers for crops in July 1985 were down 15 percent from a year earlier. Livestock prices were down 9 percent. Additional declines will further complicate farm credit problems for both borrowers and lenders.

The policy agenda

A number of public policy changes are likely needed to ensure agriculture's return to health. These changes involve national economic policies, as well as agricultural policies. But unless national policies are corrected, it is not likely that agricultural policy

initiatives alone will reverse the sector's decline.

National economic policies

Policy changes aimed at reducing the enormous federal budget deficits would be very helpful to U.S. agriculture. Reduced credit demands by the federal government would lead to an easing of market interest rates, other market factors being equal. Realistically, however, farm loan interest rates might decline more slowly than market interest rates. Thus far in 1985, farm loan rates have declined much less than market rates. High farm loan losses appear to be an important explanation for the divergence.

The direct effects of lower interest rates would be reduced agricultural production costs and an early halt to declines in farm asset values. Some assets could even prove underval-

ued. With lower debt-carrying costs and higher commodity prices, these assets might appreciate in value somewhat. But the indirect effects would be even more beneficial. Lower U.S. credit demand and interest rates would tend to bring further declines in the U.S. dollar, improving the competitiveness of U.S. products in export markets. Also, lower U.S. interest rates would help lower interest rates worldwide. Other countries could adopt more expansionary macroeconomic policies without triggering a flight of capital to the United States. World economic growth rates would increase and, as a result, so would world demand for food and fiber products.

Tax policy has provided an array of income sheltering advantages to investors in agriculture. These advantages have included the use of cash rather than accrual accounting, which facilitates shifting income and operating expenses from one tax year to another. Also, investment tax credits have been widely used by farmers—and more recently by nonfarmers—to shelter income from taxation. The ability to write off development expenses as they occur rather than to amortize them over the productive life of the improvements has been a very attractive tax shelter. The ability to shelter unlimited amounts of off-farm income in agricultural investments has attracted substantial investment into agricultural production.

These tax laws have encouraged investment in agricultural production beyond what commodity price signals would call for. Rapid increases in production of affected commodities have, in turn, put downward pressure on commodity prices for all producers, whether they take advantage of tax incentives or not. With major crops in excess supply, prices for farm commodities weak, and financial problems widely shared across the sector, questions can be raised about the appropriateness

of current tax incentives.

Agricultural policy

U.S. agricultural policy changes also seem necessary to regain price competitiveness in world markets. In particular, policies are needed that improve the flow of correct market information to domestic and foreign producers. Current policies tend to place a price umbrella over world markets, calling forth more production of protected commodities than can be marketed at government-supported prices. U.S. farmers must now market abroad the production from one out of every three acres. And with slowing U.S. demand growth and productivity improvements in agriculture, that proportion will increase. Farm policy fashioned 50 years ago for a domestically oriented farm sector no longer serves the sector well.

A move toward more market-oriented pricing in agricultural policy seems both inevitable and essential for U.S. farmers to compete successfully in world markets. Market orientation entails a phased linking of U.S. commodity program support prices to world market clearing prices. It probably also entails a gradual opening of currently protected U.S. markets to foreign competition. Producers in the United States should bargain for better access to foreign markets in exchange for greater foreign access to U.S. markets. Negotiation for better access to some food and fiber markets, such as Japan, may need to be linked with their access to U.S. markets for nonagricultural products.

While the farm bills that have been proposed offer a range of policy choices, a move toward market pricing receives general agreement (Table 1). Moreover, there appears to be wide agreement that transitional policies are needed.

TABLE 1
Highlights of major 1985 farm bill proposals

<u>Provision</u>	<u>Administration Bill</u>	<u>Helms Bill</u>	<u>Farm Bureau Bill</u>
Loans	75% of three-year moving average farm price, no minimum	75-85% of five-year moving average farm price	75% of five-year moving average farm price, maximum change 10% from previous year
Target Price	100% of three-year moving average farm price for first year, declining 5% annually thereafter until 75% is reached	110-125% of loan rate	1986 prices frozen at 1985; 1987 prices equal to 110% of the average price used to set loan rate
Payment Limits	Per person maximums of \$20,000 for 1986, \$15,000 for 1987, \$10,000 thereafter	Previous year's median family income; \$100,000 for disaster	\$50,000 per person
Loan Limits	\$200,000 maximum on non-recourse loans; no interest repayments on defaults	No limit on commodity loans	No provision
Credit	No FmHA disaster relief loans where crop insurance is available; phase out direct operating loans; FmHA guaranteed loans at 75% of loan amount	Disaster loans only where crop insurance is not available; FmHA ownership loans phased out over six years; interest rate raised to commercial level	No provision

Transition policy

Changes in U.S. fiscal policy and agricultural policy are both necessary to improve U.S. agricultural performance, and neither will provide the desired results without the other. But current and prospective levels of agricultural financial stress suggest that some interim policy initiatives may also be needed to ease the transitory period of adjustment. Three such initiatives seem relevant.

One is the current effort to return as much as 20 million marginal acres to grass or forest for a decade or more. The substantial excess productive capacity of U.S. agriculture results from the expansion of crop production onto

fragile or marginal land during the export boom of the 1970s. During that time, U.S. cropland increased 62 million acres. Some of the most severe problems of financial stress are on such farms, often along with serious soil erosion problems.

Landowners could offer marginal acreage to the government on a whole-farm bid basis, with the government selecting the low bids to hold down the cost of the retirement program. Consideration might be given to establishing a maximum amount of land in a county or state that would be allowed into the program. A prohibition against forage or timber production on such land during the life of the program is appropriate, given that a reduction in crop

production is the objective of the program. To facilitate long-term cropland adjustments, acreage allotments for government price-support programs on land entering the conservation reserve should probably revert to the federal government. Alternatively, the government could purchase easements from participants in the conservation reserve program and prohibit the production of certain soil eroding crops—or maybe all crops.

Such a program would reduce soil erosion from fragile lands and marginally reduce crop production. Just as important, it would also provide a long-term cash flow to the holders of the property and dampen the decline in land values.

Related to this might be a transition policy to stabilize farm land values. However, the appropriate role for public policy in such stabilization will not be determined easily. Policies to cushion the decline in farm land values will be constrained by the need for the United States to compete in a world food market. And while a painful adjustment for farmers and their lenders, declining land values will lower production costs and make U.S. farm exports more competitive.

Another initiative would be to provide some direct government payments to farmers. Market-oriented farm legislation, in the current world supply/demand environment, will almost certainly entail some reduction in commodity prices and cash receipts for farmers. Thus, it might be appropriate in the early years of the new program to replace a substantial part of lost cash receipts with direct government payments. These payments could be weighted toward the front end of a five to ten-year transition period. At the end of that time, U.S. farmers could be fully integrated into the world market.

Finally, relocation and retraining benefits might be made available to farmers and other

rural people forced from their businesses or jobs as a result of the change. Large numbers of financially troubled farmers and rural businessmen may be forced to liquidate their businesses over the next few years. Indeed, prospective technology changes, productivity gains, and farm structure shifts point toward sharply higher rates of structural change in rural America over the next two decades. These changes, on balance, will be beneficial to U.S. society, but they will exact some heavy costs on individuals and on many rural towns. Relocation and retraining benefits would make the needed change easier and avoid much of the long-term misallocation of resources accompanying current federal credit assistance programs.

Increasing agricultural exports

The policy initiatives discussed so far merit a high priority, but these initiatives by themselves are not likely to return agriculture to long-term prosperity. Efforts to increase exports are increasingly important to U.S. agriculture.

As outlined earlier, a mature domestic food and fiber market, with only slow growth likely, and rapid growth in the productivity of U.S. agriculture present a problem impossible to solve within the United States. If the sector used its current capacity to produce principally for a domestic market, foregoing its future export opportunities, the increases in supply would hold agricultural commodity prices so low that they would bring financial hardship to many in the sector. Alternatively, reducing production enough to maintain acceptable farm commodity prices would require very large production cuts.

The problem could also worsen in the future. Production from about two-thirds of the U.S. harvested farm acreage is currently

consumed domestically. But the cumulative effect of current rates of increase in agricultural productivity implies that by the end of the century only about half of the U.S. harvested farm acreage will be needed to meet domestic needs.

Three policy initiatives seem part of a balanced program to increase agricultural trade. These include more attention to trade issues in national policymaking, more emphasis on value-added exports, and efforts to encourage demand growth in developing countries.

Trade policy initiatives

Trade policy seems destined to play a more important role in overall national policymaking. The proportion of the nation's GNP accounted for by trade has doubled over the past two decades. Recent declines in U.S. export competitiveness and increased protectionist sentiment in the United States—and in trading partner countries—will almost certainly spur increased U.S. participation in both bilateral and multilateral trade negotiations.

In the past, trade negotiations have primarily focused on reduction of tariff barriers affecting the flow of goods across international boundaries. These tariff barriers have largely been reduced among major trading partners and are no longer the central focus of trade negotiations for agriculture or for the rest of the economy.

Far more critical for agriculture now are such nontariff barriers as health and labeling restraints. Subsidization of a country's production to augment its export competitiveness, along with indirect and direct subsidization of exports, have also become major issues for U.S. agricultural interests. The United States has already chosen to vigorously address on a bilateral basis perceived unfair trading prac-

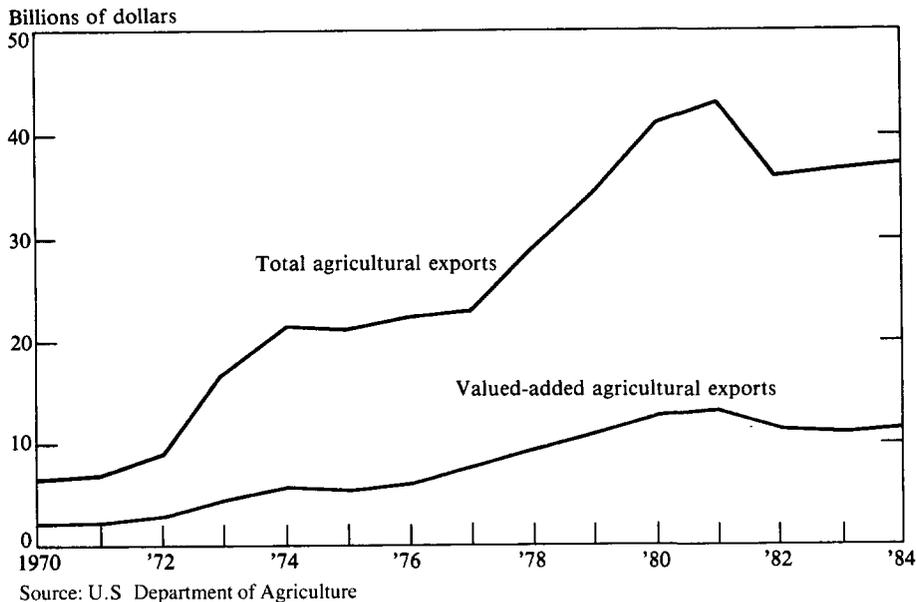
tices by two of its best customers, Japan and the European Economic Community (EEC). These efforts have included targeted export subsidization in retaliation for general subsidization by the EEC and encouraging Japanese trade officials to increase citrus and beef imports into Japan.

As trade policy assumes a larger role in U.S. policy development and execution, old trade programs should be improved on and perhaps new ones developed. Programs now in place include increased export credits and credit guarantees to purchasing countries, and the administration's bonus incentive commodity export program (BICEP), which subsidizes agricultural exports to targeted countries in response to EEC agricultural export subsidies. Agricultural producers are particularly interested in increasing intermediate-term credit guarantees of three to ten years to round out an effective program including short-term credit assistance and long-term food aid assistance. Also in place are cooperator programs in which federal funds are added to those of commodity groups in operating market development programs. Such programs, directed primarily at countries targeted for their market growth potential, have long been used as part of the U.S. post-World War II trade strategy. Some observers credit these programs with substantial success in developing commercial markets for agricultural exports in such countries as Japan, Korea, the Phillipines, and the Middle East.

Value-added product export initiatives

U.S. agricultural exports historically have been mainly raw agricultural products, such as grain and cotton (Chart 4). Comparatively little value has been added to products before shipment, other than transportation and handling. But increasingly mature markets in the

CHART 4
Composition of U.S. agricultural exports



United States and other industrial countries may mean very slow growth for traditional agricultural product sales in such markets as Canada, western Europe, and Japan.

To continue growth in trade with industrial countries, more attention will need to be given to marketing processed agricultural products and food items abroad. This may be a way not only of increasing total export value but also of increasing domestic job formation in food processing. Also, increased value-added exports would help provide a more stable level of demand. But because most, if not all, of the value is added beyond the farm gate, an increase in processed exports is not likely to add much to farm product prices.

While it would be difficult to predict the processed products that might be most marketable, it is safe to assume that many products would require technologically advanced processing. Examples might include prepackaged

and prepared food portions or diet meals. Food chains and product franchises might become more important, examples being fast food restaurants and branded products.

Yet optimism over processed exports must be tempered with realism. Several impediments are likely. Country-specific food preferences are one. Also, the United States has imported many new processed food lines in recent years, raising the question of whether U.S. products can match foreign competition. Finally, many countries with excess capacity in processing agricultural products prefer to buy the raw materials and add the processed value themselves.

Demand growth initiatives

Future prosperity for U.S. agriculture seems irretrievably linked to growth in world trade. And the prospects for growth in world food

demand seem pinned on the economic performance in middle-income and developing countries. Professor Alex F. McCalla of the University of California, Davis, has projected population, income, and other food demand factors for four major groups of countries (Table 2).³ On the basis of his analysis, several observations can be made.

Developed countries offer only limited opportunities for growth in agricultural exports. The United States and Canada are very mature markets for food and fiber, and the same is increasingly true for western Europe. Population growth rates in developed countries are low and stable. Income levels are high and will grow only slowly. Their populations are, on balance, well fed. Income elasticities of demand for food are, therefore, low. An increase of 1 percent in income could be expected to result in only about a tenth to a third percentage increase in expenditures for food. What opportunities there are for market growth are linked to slow population growth and development of new value-added agricultural products.

Centrally planned countries share many of the population and income characteristics of developed countries. On balance, these countries represent only moderate export growth opportunities for U.S. agriculture. While export growth to these countries will likely be confined to feedstuffs, their enormous population does represent significant export opportunities. The political systems of centrally planned economies, however, may not be receptive to most U.S. development initia-

tives. China could be an exception. In many ways, its food consumption and income levels are more closely representative of a developing country. Its population of over a billion adds substantially to prospective market demand.

The world's developing countries—both middle and low income—will contain a projected 2.5 billion people by 1990 and will represent a very large reservoir of potential food and fiber demand. Population growth will be moderate to high, and income elasticities of demand for food will be large. An increase of 1 percent in income could be associated with up to a 1 percent increase in demand for food.

While most third-world countries seek self-sufficiency in staple food crops, their agricultural production gains will not be great enough to meet the demand increases, especially if these countries can achieve satisfactory economic growth. Moreover, the commodities many of these countries produce, being largely tropical, may complement U.S. products, both within those countries and in the world marketplace. For example, the agricultural output of low and middle-income countries increased 40 percent between 1970 and 1983. But by 1983, 47 percent of U.S. agricultural export sales were to those countries, compared with only 30 percent in 1970.

Thus, demographic patterns in the developing countries, when coupled with continued rapid growth in U.S. agricultural productivity, provide an opportunity for growth in U.S. agricultural trade with these countries. However, while these countries have rapid population growth and a high propensity to spend income gains on food, an equally vital factor is often missing, that of income growth sufficient to turn human need into effective market demand. Improved economic performance is essential to growth in food demand in less developed countries. And improvements in

³ See Alex F. McCalla, "Demand for U.S. Agricultural Products and Future Adjustments," in *Proceedings for the National Agricultural Policy Symposium*, March 27-29, 1983, sponsored by the University of Missouri-Columbia Department of Agricultural Economics in cooperation with the Agribusiness Council of the Kansas City Chamber of Commerce.

TABLE 2

Characteristics of U.S. export customers by four country groups

	Country Grouping			
	Developed Countries	Centrally Planned Economics	Middle Income Countries	Less Developed Countries
Current importance to U.S. exports in early 1980s				
Food grains	small (less than 15%)	moderate, less since embargo (about 35%)	moderate (20%)	large (60%)
Feedstuffs	large (over 50%)	important (20-30%)	growing (20%)	small
Other agriculture	important	moderate	growing	small
Demand influences				
Population				
Current level	500 million	1.5 billion	600 million	1.9 billion
Growth rates	low, stable	low — USSR, Eastern Europe moderate — China	moderate but declining	high
Income				
Level	high	middle	low to middle	low
Growth rate	slow to moderate	moderate	rapid	slow to moderate
Income elasticity	slow and declining	high but declining	high	very high
Supply growth rate	generally high, high yields	moderate but erratic	slow	slow or static
Policies				
Producer prices	high	moderate	moderate but rising	generally low
Consumer prices	high	low	low	very low and nominally fixed
Trade	very protective	state trading	relatively free	managed
Foreign exchange constraint	not a real constraint	a relative constraint	not a real constraint	severe constraint
Changes in importance by 1990				
Food grains	decline (EC an exporter)	some growth	some growth	rapid growth constrained by foreign exchange
Feedstuffs	relative decline	rapid growth	rapid growth	slow growth
Other agriculture	steady	some growth	rapid growth	some growth

Source: Alex F. McCalla, "Demand for U.S. Agricultural Products and Future Adjustments," in Proceedings for the *National Agricultural Policy Symposium*, March 27-29, 1983, University of Missouri-Columbia.

their economic performance may be the only way of significantly expanding U.S. agricultural commodity exports.

The United States has traditionally played a humanitarian role in providing food aid in cases of famine, war, and natural disaster. But such relief meets only short-term needs. The developing countries would benefit greatly from a much longer term effort to improve their economic performance. Such an effort would give the United States an opportunity to achieve two objectives: to assist in long-lasting improvement in the economic circumstances of developing countries and to improve the market demand for U.S. products, importantly including agricultural products. Therein lies the rationale for emphasizing economic assistance to developing countries.

Two characteristics of economic assistance programs appear critical. First, the programs must be targeted to countries where economic assistance can materially improve economic performance and where income gains would be translated quickly into market demand. That suggests selecting countries just below the middle-income category or in its lower strata. These countries are in the process of developing economic infrastructures, and additional development funds would stimulate economic activity with a multiplier effect. Moreover, these countries often show population growth and dietary characteristics that would result in a substantial increase in food demand as incomes improved.

Second, the programs must be long term. Economic development is slow and often uneven. For the desired results, assistance to developing countries must be provided consistently over an extended period. Assistance will likely embody private sector involvement, institution building in recipient countries,

technology transfers, and coordination among donor countries. The development experience of the past two decades suggests that assistance programs often failed because they were too short in focus and not country specific.

Conclusion

Agriculture's problems are increasingly well understood, as are a number of policy initiatives required to correct the problems. Most of these initiatives are broader than agriculture. The most straightforward initiative would be to redirect the nation's fiscal policy to bring federal budget deficits under control. A reduction in the federal deficit would be enormously helpful to agriculture. Tax policies could be changed to encourage business decisions for economic rather than tax reasons. And more market-oriented agricultural policies seem important to making U.S. producers more competitive. Furthermore, as these policy changes will bring improvements to agriculture only slowly, some continued adjustment assistance for the sector seems likely to be needed for the next several years.

The foregoing policy initiatives, however, are not likely to be sufficient to turn around the fortunes of U.S. agriculture. Additional policy initiatives may be necessary. National policy may need to reflect more fully the growing importance of international trade to the U.S. economy. A stronger program of value-added export development may be needed to maintain the level of agricultural product sales to traditional U.S. food and fiber markets. And a long-range program of development assistance to developing countries may be needed to spur overall growth in world food demand. These initiatives could improve the austere outlook many now suggest for both U.S. agriculture and developing countries.

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