



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

UNITED STATES AGRICULTURE IN THE WORLD ECONOMY

G. Edward Schuh

The major problem U.S. agriculture faces is the fact that commodity programs operate counter to the best interests of both agriculture and the national economy. These programs are counter-productive because they do not take into account fundamental changes in the U.S. and other economies, and the interdependence of the U.S. economy with the rest of the world. U.S. agricultural commodity programs were designed for an era and an economic system that was substantially different than that of the 1980s. Continuation of these programs as they are now conceived will lead to a continuation of excess resources committed to agriculture, high level program costs and general disillusionment with farm programs on the part of the body politic.

U.S. agricultural commodity programs of the early 1980s were a serious impediment to agricultural adjustment, with the result that commodity stocks burgeoned with little improvement in farmer welfare. The PK program of 1982-83 was a costly return to a bygone era that promises to give farmers some short-term gain in exchange for the potential of considerable longer-term pain (2). Moreover, it does this without addressing the longer-term resource adjustment problem which U.S. agriculture faces.

This paper addresses the major issues confronting U.S. agriculture in a world economy and is divided into three parts:

- 1) Changes in the U.S. economy of particular importance to agriculture,
- 2) Implications of these changes for agriculture, and
- 3) An outline of the main elements of a policy perspective for U.S. agriculture that is consistent with the changed economic conditions.

CHANGES IN THE U.S. ECONOMY

The U.S. economy, and the international setting in which it operates, was subject to dramatic changes between the 1950s and the 1980s. Some of these changes are important to U.S. agriculture and agricultural commodity policies. It is those changes that are addressed in this section.

Increased Dependence on Trade

The growth in U.S. agricultural exports over the decade of 1970s is well recognized. There are a number of ways this increased dependence on trade can be measured. Professor Tweeten of Oklahoma State University measured it by estimating the share of total

demand for agricultural products that is attributed to exports (3). The estimates he developed in percentages by crop years are as follows:

1971/72	13.2	1977/78	23.1
1972/73	17.9	1978/79	22.9
1973/74	22.3	1979/80	27.4
1974/75	21.7	1980/81	26.0
1975/76	22.6	1981/82	22.5
1976/77	21.7		

U.S. agriculture experienced more than a doubling in the relative dependence on exports between 1971-72 and 1979-80. It is important to note that this increased dependence on trade was not unique to agriculture. The total U.S. economy became increasingly dependent on trade, and by about the same margin. Hence, the economic forces affecting agriculture were also affecting the rest of the U.S. economy.

In order to gain understanding of the growth in agricultural trade, episodic events such as the difficulties of the Peruvian fish industry, the weather, and changes in Soviet policy should be discounted; and more basic, underlying changes in economic conditions should be identified. This increased openness of the U.S. economy, or increased dependence on trade, makes it more difficult to influence the economy with strictly domestic policies. Unless these policies are designed to accommodate changes in the international economy, they can well be counterproductive.

Emergence of a An Integrated International Capital Market

The emergence of an integrated international capital market is among the most significant developments of the 1963-83 era. This capital market links the national economies of the world in ways and to an extent that are as important as their linkage through international trade. Moreover, it links the economic policies of individual countries in ways that are equally as important.

Until the end of World War II, an international capital market did not exist. Limited transfers of capital among countries were on a government-to-government basis designated largely as "foreign aid." The Eurodollar market emerged during the 1960s, and subsequently expanded into a Eurocurrency market and effectively linked most of the countries of the world. The value of loans extended in this market is huge, and almost all countries make use of it, including the industrialized countries of the West and the centrally-planned economies. Also, loans are

made to the less-developed countries. Subsequently, transfers of capital on a government-to-government basis -- foreign aid -- paled into relative insignificance as a share of the total transfers of capital among countries.

The inability of Poland, Mexico, and Brazil to meet their international debt obligations in 1982-83 heightened the awareness of this capital market. It has also made the U.S. aware that this market may pose some very real threats to U.S. capital markets and credit institutions. However, the extent of the linkage between commodity markets and capital markets has not been fully recognized, nor the extent to which this capital market provides an important link between monetary policy and commodity markets. These additional linkages are discussed in the following sections.

The Shift to Floating Exchange Rates

Participating countries agreed to establish a system of fixed currency exchange rates at the end of World War II at a meeting of international monetary authorities in Bretton Woods in 1944. The motive for establishing such a system was a general consensus that beggar-thy-neighbor competitive devaluations during the 1930s had greatly exacerbated the Great Depression of that decade. It was the prevailing wisdom that adherence to a system of fixed exchange rates would keep individual countries from attempting to dump their unemployment problems abroad by devaluations of their currencies and force them to make changes in their domestic policies instead.

This fixed exchange rate system served the free world reasonably well for about 30 years. However, President Nixon devalued the U.S. dollar in 1971 and also closed the gold window, and when that did not solve the chronic balance of payments problem, he devalued again in 1973, and forced the world to a system of floating exchange rates. This shift in exchange rate regimes ranked in importance with the emergence of the international capital markets. In retrospect, it is amazing how little political debate was directed to the issue whether or not the system should be changed. It is also amazing how little recognition there is of the significance of that change in the economic system, or of its significance to agriculture and agricultural commodity programs. The change to a system of flexible exchange rates has important implications for domestic commodity programs. The significance of this development for agriculture has not yet been fully recognized.

The U.S. Shift to Highly Unstable Monetary Policy

During the 1950s and 1960s, the United States benefitted from relatively stable monetary policies and low price inflation. However, beginning about 1968, U.S. monetary authorities embarked on unstable policies, with alternate periods of extreme expansive and tight monetary policies. This imposed

unprecedented monetary disturbances on the economy including substantial and unexpected shocks to the agricultural sector. Shifting U.S. monetary policies were a major source of the instability agriculture experienced during the 1970s and early 1980s.

IMPLICATIONS OF THE CHANGES IN THE ECONOMY FOR U.S. AGRICULTURE

These changes in the economy and economic policies have important implications for agriculture and for agricultural policy. The implications are addressed in this section.

The Shift to a More Responsive Market

An important part of the intellect of many economists regarding U.S. agriculture is that market response is relatively small for changes in product prices, and changes in per capita income. It is generally conceded that changing the price of agricultural products has substantially smaller relative impact on the quantity demanded; or conversely, changes in farm output cause relatively large changes in price. This premise likewise applies to changes in per capita income.

Low responsiveness of market demand to changes in price and income was valid when exports of U.S. agricultural products were relatively small. Price and income elasticity of demand for most agricultural products is quite low in the domestic market, on the order of 0.1 to 0.2 in absolute terms. This is attributed to the fact that there are few close substitutes for agricultural products in the food system. Moreover, with the relatively high per capita income levels in the U.S., there is little response to changes in income.

However, the increased dependency of U.S. agriculture on international trade has significantly changed these conditions of demand and is important to U.S. commodity policy. With increased dependence on trade, the demand for U.S. agricultural products is a combination of domestic and foreign market demand. Foreign demand for U.S. agricultural products is more price and income responsive than domestic demand. Therefore, as foreign trade increases in relative importance, average elasticity increases.

Export demand for U.S. agricultural products is relatively price responsive because most countries import only a small part of total food requirements, with the exception of Japan. Therefore, domestic substitutes for food imports are readily available. Moreover, food importing countries can obtain needed imports from alternative sources, as the Soviet Union has amply demonstrated. Again, this availability of alternative sources of supplies causes the price responsiveness or elasticity of demand for the exports of a particular country to be relatively high.

Given the increased dependence on international trade, price elasticity of foreign import demand for U.S. agricultural products in the range of -3.0 translates into an elastic total demand for several commodities. Given exports that represent half of total

production, as is the case of soybeans and wheat, then the foreign elasticity of import demand for U.S. commodities in the range of -2.0 translates into an elastic total demand for U.S. output.

The important point is that, given an elastic combined domestic and export market for U.S. agricultural commodities, the basis for price policy changes. Given an elastic total market, a decline in U.S. price will actually increase the gross revenue flowing to producers, not decrease it, as was the conventional wisdom when the export market was relatively unimportant. This means that a one percent decline in the price of U.S. origin commodities will increase the quantity sold in both domestic and export markets by more than one percent. Hence, derived revenue will increase. This important aspect of increasing dependence on trade is largely ignored by both policymakers and farm groups. We sorely need to recognize the changed conditions. Prior to the 1970s an increase in price actually increased gross farm income, since there was a less than proportional decline in sales. However, with an increased reliance on the export market, this is no longer true. Hence, for commodities exported in large quantities, an increase in price leads to a reduction in gross income to agriculture. Unless the U.S. government stands ready to acquire the supplies that are not sold at relatively high prices, aggregate U.S. gross farm income decreases.

Similar arguments apply to the responsiveness of the market to consumer income. A large share of export demand for U.S. commodities comes from the low-income less-developed countries. The income responsiveness of demand for food commodities is relatively high in these countries. When this is combined with the domestic component of demand, the average income elasticity of demand for aggregate output becomes significantly higher.

Unfortunately, there is little recognition of how increased dependence on international trade has increased the price and income responsiveness of demand for U.S. agricultural output. Instead, policy is still premised on low price responsiveness. This causes agricultural interests to press for higher prices, when in fact lower prices would increase gross farm income.

Adjustment in the International Economy

Changes in the value of the U.S. dollar in foreign exchange markets cause disturbances in the international economy. Failure to recognize these changes has caused U.S. domestic commodity programs to be implemented which are contrary to the best interests of farmers and the national economy. The experience of 1980-83 substantiates this argument. The value of the U.S. dollar rose about 25 percent, depending on how the increase is measured and the exact period chosen as a base. During that same period the inflation-corrected value of the loan rate for three principal U.S. exports - corn, wheat, and soybeans - remained approximately constant in

terms of domestic currency. However, in terms of the currencies of countries that import U.S. products, the value of those loan rates increased by approximately 25 percent. Although there was virtually no change in domestic prices as determined by commodity programs, there was a substantial increase in these prices as perceived by the importing countries and other exporting countries.

There are two important consequences of this rise in the price of U.S. commodities in terms of foreign currencies. First, it reduced the quantity demanded in the export market. This is why the exports of agricultural products declined during 1980-82 from \$43 billion in 1979-80 to approximately \$34 billion in 1982-83. Longmire and Morey (4) of the USDA's Economic Research Service estimate that the rise in the value of the dollar alone in 1981 and 1982 reduced the value of our agricultural exports by \$3 billion dollars and the volume by 16 million tons -- 10 million tons of which was corn. These estimates indicate the extent to which the export demand for U.S. agricultural output is responsive to price. It also indicates the importance of changes in the value of the dollar in explaining the slump in exports and the decline in U.S. farm income.

Moreover, the impact of the rising value of the U.S. dollar does not stop there. The rise in prices of these commodities in terms of the currencies of other countries is a strong stimulus to increase output. Increasing production in other parts of the world -- at the same time that the quantity of U.S. exports is declining -- causes a declining market for the U.S. This is over and above the effects of the European Community's use of export subsidies and the lingering effects of the embargo on sales to the Soviet Union. In fact, it may be the most important of these three impacts.

This adjustment is expected with floating exchange rates. The U.S. share of total exports declines, other things being equal, when the value of the dollar rises in foreign exchange markets and the share of other traders rise. It serves no useful purpose for the U.S. to berate the Canadians and Australians and other exporters because they do not reduce their agricultural output in accord with U.S. programs. In fact, it appears rather foolish for the U.S. to expect such a response when the price signals conveyed to the international economy are strong incentives for other exporters to increase output for export. At the same time, if it were not for U.S. commodity programs, there would be even stronger signals to U.S. producers to reduce output. That is precisely the way international adjustment should take place under existing arrangements.

Current U.S. Agricultural Commodity Programs are Counterproductive

United States domestic commodity programs were designed in the 1930s when trade was relatively unimportant. These programs were subsequently refined in the immediate post-World War II period and essentially adapted

for conditions in which trade was still relatively unimportant. Moreover, the programs were formulated in an era when the international economy operated with a system of fixed exchange rates (5). However, as trade increased in the 1970s, substantial program changes were made in both the 1973 and 1977 programs to make them more responsive to an open, trading economy. More flexibility in prices was established to enable the U.S. to remain competitive over a wider range of conditions. Also, a reserve program was established, together with a system of deficiency payments, to even out fluctuations in agricultural prices and farm income in what was obviously expected to be an unstable economic environment.

These programs were also deficient in some respects. Target prices encouraged production at levels that could not be absorbed by domestic and foreign markets. Moreover, the price floor established by loan rates provided strong incentives for producers in other countries to increase output. U.S. loan rates provide an umbrella for producers in other countries. Unfortunately, if the U.S. were to set out to design a system that would cause a loss of market share, we would be hard pressed to design a better one. The U.S. also loses credibility on the international scene by lecturing others to do something different than its own price signals suggest they should be doing.

To summarize, in a world of flexible exchange rates -- with wide fluctuations in the value of the dollar -- current commodity programs no longer serve the best interest of the U.S. In fact, such programs are counter-productive both to U.S. farmers and to the national economy. Moreover, Treasury costs for these programs have increased at unacceptable rates. Unmarketable commodity supplies are thrust into government-controlled stocks at the very time that deficiency payments remain high.

The U.S. Government Budget Deficit and Agriculture

U.S. agriculture fared well during the 1970s when the dollar was weak but fared poorly in the 1980s when the dollar was strong. As agriculture is an export sector, this was to be expected. In order to understand what has happened to U.S. agriculture, it is important to understand what has caused this substantial change in the value of the dollar. It is true that other factors affected U.S. export performance both in the 1970s and the early 1980s. What has not received adequate attention is the very large changes in the value of the dollar. Hence, the focus will be on this issue.

Two important factors affected the value of the dollar in the 1970s and 1980s -- energy, and monetary and fiscal policy. The combination of OPEC-induced increases in petroleum prices in the 1970s and the failure to let those price increases be fully reflected in the domestic economy caused the U.S. import bill for petroleum to burgeon. In effect, the U.S. subsidized petroleum imports

at the very time the OPEC cartel was unilaterally raising prices. The large increase in the U.S. petroleum import bill contributed to the weakness of the dollar in the latter half of the 1970s.

Concurrently, inflation was out of control in the U.S. domestic economy, with little commitment to do anything about it. This further contributed to a weak dollar -- a weak dollar which significantly benefitted agricultural exports. As the 1980s unfolded, both of these policies changed. President Reagan deregulated the domestic petroleum industry, thereby removing the implicit subsidy on imports. This increased the competitive pressure on OPEC and thereby contributed to a decline in the price of petroleum. A significant decline in the U.S. petroleum import bill followed. No doubt this was an important factor contributing to the strength of the U.S. dollar in the 1980s.

Beginning in late 1979, the Federal Reserve initiated policies to dampen price inflation. Subsequently, budget deficits of the 1980s were unprecedented. The Federal Reserve for all practical purposes stopped monetizing the budget deficits which resulted in very high interest rates. As long as large budget deficits continue, and the Federal Reserve does not monetize the corresponding debt, a strong dollar is likely to continue. In effect, the real interest rate is permitted to rise to a level sufficient to generate the savings needed to finance the debt. Given the integrated international capital market, these savings come from abroad as well as from domestic sources. It is the inflow of capital from abroad that maintains a strong U.S. dollar in international trade.

This is not to argue that the Federal Reserve should pursue an easier monetary policy and monetize the debt generated by budget deficits. That would surely lead to another round of rampant inflation and eventually to another boom and bust cycle. Rather it is to emphasize the extent to which the problems of U.S. agriculture are rooted in domestic monetary and fiscal policies, rather than in the agricultural sector alone.

Monetary Disturbances to Commodity Markets

Following two decades of relatively stable prices for agricultural commodities during the 1950s and 1960s, prices became highly unstable during the 1970s and continued into the 1980s. This increased instability is attributed to several factors, but the important factor generally neglected is unstable monetary policy. As noted, U.S. monetary policy was relatively stable during the 1950s and the 1960s. Moreover, during that period the economic system was such that minor changes in monetary policy had little effect on agriculture.

However, economic conditions and policies changed in the 1970s. Monetary policy was less stable, and the structure of the economy changed such that agriculture emerged as one of the sectors that bears a large share of the adjustments to changes in monetary policy. The key factors are the emergence of an

integrated international capital market, and the shift to a system of flexible exchange rates. Under these conditions, sectors depending on exports and sectors competing with imported products bear the burden of adjustment to changes in monetary policy.

U.S. Federal Reserve action designed to dampen inflation by slowing the growth in the monetary aggregates resulted in an unprecedented increase in interest rates in the U.S. economy in the early 1980s. Increasing interest rates attracts an inflow of capital (or a reduction in the outflow), which in turn bids up the value of the dollar in foreign exchange markets. A rise in value of the dollar thwarts exports, while concurrently encouraging imports due to lower prices in terms of U.S. currency. The result is a recession in both the export sectors and the import competing sectors. The Federal Reserve accomplishes its goal, but the burden of the adjustment is forced onto the export and import competing sectors. An important point to note is that the problems of the automobile and textile industries are cut in part from the same fabric as the problems of agriculture.

When the Federal Reserve pursues an easier monetary policy to stimulate the economy, exactly the reverse occurs. Interest rates decline, capital flows out of the country (or the inflow declines), the value of the dollar declines, U.S. exports become more competitive in international markets and imports become more expensive. The result is an expansion of the export sectors, including agriculture, and an expansion of the import-competing sectors of the economy. Again, a major share of the adjustment -- in this case favorable -- is in these sectors.

Hence, much of the instability in U.S. agriculture during the 1970s and 1980s is attributed to monetary disturbances, rather than to changes in the weather. The export component of U.S. agriculture was victimized by a highly erratic monetary policy at the very time that it became one of the sectors that bore a major adjustment to changes in monetary policy.

A U.S. POLICY PERSPECTIVE FOR THE FUTURE

Future policy for U.S. agriculture and food should take into account the changes in the economy and increasing international interdependence. Given the extent to which the U.S. economy has become internationalized, solutions to many problems lie in the international arena. They will not likely be found in policies designed only with the domestic economy in mind, to the neglect of the international economy.

U.S. Agricultural Commodity Programs

Conventional U.S. agricultural commodity programs have probably outlived their usefulness. Given the changes in the economy, more stable prices and farm incomes can be achieved under these programs only at the expense of very high budget costs. Moreover, under international monetary relationships of the 1980s, these programs are counterproductive.

They preclude the adjustments that a regime of flexible exchange rates is designed to achieve.

Economic development and deregulation of the U.S. economy in the 1980s reduced the need for agricultural commodity programs. Well-integrated domestic capital markets, plus efficient commodity markets have reduced the need for government programs. Farmers can participate in both of these markets in a variety of ways not previously available. Moreover, improvements in communication and transportation permit information and resources to flow freely. The progressive deregulation of both the commodity and credit markets enable these markets to bear more of the adjustment to changing demand and supply conditions. Farmers can forward price, contract, and use credit and capital markets much more extensively than they did in the past. Also, an efficient capital market is available to enable speculators to help carry stocks and even out fluctuations in commodity prices.

Three conditions should accompany elimination of U.S. agricultural commodity programs. First, the programs should be phased out gradually, especially the dairy program. That program has induced far too many resources into the dairy sector. A period of adjustment, plus positive adjustment policies, are needed to help bring the dairy sector into adjustment. Second, a case can probably be made for a production or income insurance program for small producers, especially those embarking on internal growth. Small producers will probably find it difficult to access credit and capital markets in the same way that larger producers can. Hence, some means should be available to prevent them from being wiped out when natural disasters strike or the market makes a sudden lurch. Such programs should be cost shared, however, along the lines of the present all-risk crop insurance program. Moreover, the subsidy should be kept modest so that resources are not induced into areas that would not otherwise be in production, or to keep producers in production who would not otherwise be able to survive. Third, a case can be made for a modest loan program at relatively low levels. The purpose of such a program should be to circumvent periods of very tight credit that might coincide with the planting season or marketing.

The biological constraints on agriculture are what ultimately give such a program some social value. A period of tight money that coincides with the planting season may not just delay a crop for a period of months, as would occur in the nonfarm sector. It may well cause a loss of production for a year. The same applies to the marketing season, when the inability to borrow at that time may force a crop onto the market, causing prices to decline, only to rise at a later date. The loan levels for such a program should be kept modest to avoid interference with trade. The interest rates should be subsidized only in periods of extreme monetary tightness.

Science and Technology Policy

Science and technology policy for U.S.

agriculture should be seriously examined. It may be the key to improving the competitive position of the U.S. in international markets, and an important source of income gains for U.S. farmers. With the exception of the dairy sector, a major share of the benefits of technical change in U.S. agriculture in the past has been passed on to consumers. With international trade being relatively unimportant, increases in productivity led to lower prices with the consumer being the major beneficiary.

However, with increased dependence on trade, U.S. producers stand to reap a larger share of the benefits of technical change. As the demand for U.S. agricultural output becomes relatively more elastic, increased output can lead to a relative expansion of sales compared to the traditional decline in price and subsequent consumer benefits. When viewed in this context, farmers should be paying for a larger share of the costs of science and technology. The check-off system now widely used provides a convenient means of assembling producers' contributions to such programs and channeling them to research institutions. Also, the Federal government has a greater interest in agricultural research in the 1980s than it had during the 1950s and 1960s. Maintaining a highly productive and competitive agriculture is the key to maintaining a strong export performance and an improved balance in international trade. Hence, a stronger commitment on the part of the Federal government to agricultural science and technology is mandated. In fact, such a program should become an important part of U.S. export promotion.

U.S. Fiscal Policy and Agriculture

The large budget deficits of the 1980s threaten serious damage to agriculture and are an important cause of farm problems. Deficits exert upward pressure on interest rates, and strengthen the dollar which subsequently raises prices of U.S. products in foreign currencies and thwarts exports. Unfortunately, U.S. policymakers have forced the Federal Reserve to bear the brunt of the battle against inflation. It can do it, of course, as the experience of 1980-83 demonstrated. But it does so at the expense of real interest rates -- which rose to historical highs -- and high levels of unemployment. Smaller deficits would contribute to a decrease in interest rates. A decline in interest rates would cause a relative decrease in the value of the dollar in international currency markets and enhance the competitive position of the agricultural, textile and automobile industries in international markets. In fact, nothing is more important to the well-being of these important sectors than a more nearly balanced budget.

U.S. Monetary Policy and Agriculture

An expansive U.S. monetary policy undoubtedly benefits agriculture. But until the federal budget is brought into balance, inflationary pressures would be exerted.

However, there is one aspect of monetary policy that could be changed to the benefit to agriculture and that is to shift this policy into a more stable mode. The stop-and-go monetary policies of the 1970s and 1980s imposed large monetary shocks on agriculture. Agriculture's problems would diminish with more stable monetary policy. Alternating periods of feast and famine that characterized the 1970s and 1980s would be dampened. Asset values would not be bid up during periods of easy money, only to be wrenched downward when a tight monetary policy followed. Most importantly, farmers would be able to plan more effectively, and therefore make more efficient use of their resources.

Reforming International Institutions

The monetary and trade institutions which serve the international economy were created at the end of World War II. Those institutions served both the U.S. and the international economy reasonably well for a while. But many of them have broken down with the crush of economic forces, or have become largely irrelevant. In some cases, adequate international institutions were never in place and still need to be established.

In terms of furthering the interests of agriculture, two issues require serious and immediate attention (6). The first is the need to establish an International Central Bank. For all intents and purposes the U.S. now serves as central banker for the world. The world is essentially on a dollar standard. Hence, U.S. monetary policy is of central importance to the world economy.

Although the U.S. reaps certain gains from being central banker to the world, it does so only at the expense of imposing certain costs on selected sectors of the economy. These costs arise because the U.S. has to overvalue its currency if it is to be the central banker for the world. An over-valued currency is an implicit import subsidy that discriminates against import-competing sectors such as the automobile, textile and steel industries. It is also a tax on export sectors such as agriculture.

The main elements of an International Central Bank could be had by converting international dollar reserves into Special Drawing Rights, (SDRs) and giving the International Monetary Fund (IMF) a mandate to keep the stock of these SDR's growing at a constant rate. Although not a full central bank as we understand it, the IMF would have the principal mandates of an international central bank. Moreover, the U.S. Federal Reserve bank would then be left with the technical problem of adjusting to conditions in international monetary markets. Creation of such an International Central Bank should reduce the monetary instability experienced in the 1970s and 1980s. It would also remove the onus of having to overvalue U.S. currency in foreign exchange markets which would benefit agriculture as well as the automobile and other industries.

The second issue needing serious attention at the international level is the need to

reform the General Agreement on Trade and Tariffs (the GATT). Here, a number of things are important. First, trade in agricultural products was largely excluded from the benefits of the GATT when it was originally created. That, combined with the reluctance to discuss domestic commodity programs in later multilateral negotiating sessions, has kept agriculture from benefitting from the general trade liberalization.

There is also a need for a broader GATT membership base. The GATT was created in large part to serve the interests of the industrialized countries of the West. The centrally-planned economies and the less-developed countries were not signatory to the agreement in the beginning. Although membership in the Agreement has grown over the years, the centrally-planned and less-developed countries are still largely outside the reach of its provisions. Yet it is with those countries that U.S. agricultural trade has expanded. Hence, an international institution, which the U.S. has so carefully nurtured over the years, is less and less effective in protecting the U.S. from trade distortions and interventions. As the world economy recovers, a serious attempt to renegotiate the GATT or to establish a comparable new organization is in order. High priority should be given to agriculture in these negotiations, to including as many countries as possible, and to establishing rules for distortions in foreign exchange markets as well as in trade markets.

U.S. Agriculture Adjustment Policies

Adjustment policies are important for two reasons. In the short term, there is the need to bring U.S. agriculture into adjustment with its current market opportunities. This applies not only to dairy, but to export commodities such as wheat, corn and cotton as well. Given a persistently strong dollar, resources need to be shifted out of agriculture if production is to be brought into balance with demand.

The other kind of adjustment is that needed to respond to changing conditions in domestic and international markets over the longer pull. If prices are permitted to flex both in the U.S. domestic market and abroad, these kinds of adjustments should come about relatively easily, unless large monetary disturbances continue.

In addressing the adjustment problem, it is important to note that it should be easier for agriculture to adjust in the future than it was in the past. In the first place, some 63 percent of the income of farm families came from off-farm sources in the early 1980s. That indicates the extent to which agriculture is an industry of part-time employment. It also indicates the extent to which economic activity in the U.S. has become decentralized. In any case, the agricultural labor force is already well integrated into the nonfarm labor market. Making additional adjustments in labor should not be as difficult as it was in the 1950s and 1960s. Moreover, the agricultural labor force as a share of the total

labor force is relatively small and decreasing. That in itself should make the adjustment easier.

Similarly, agriculture is becoming progressively more dependent on inputs purchased from the nonfarm sector. As relative prices change, the use of these inputs changes accordingly. To the extent that these inputs are important to the level of output, as in the case of fertilizer, a decline in commodity price which causes a decline in fertilizer usage brings about a corresponding adjustment in output.

The most efficient solution to the short-term adjustment problem may be something like the 1950s Soil Bank program. Incentives for participating should be designed to remove from production that land that is subject to greatest wind and water erosion. Such an approach will enable the program to attain both resource adjustment, and soil and water conservation goals.

In order to expedite international trade and exploit the competitive advantages of U.S. agriculture, commodity programs should be phased out as quickly as the corresponding adjustment problems are resolved. Concurrently, reduction in federal budget deficits and a more stable monetary policy are needed to avoid victimizing agriculture with macroeconomic policies. On the international scene, an International Central Bank is needed to preclude the need to overvalue U.S. currency, and for a reform of the GATT to provide a more efficient apparatus for dealing with trade conflicts and trade problems.

The United States and world economies have changed dramatically. The changes have altered in an equally dramatic way the perspective of U.S. agricultural policy. Failure to change U.S. perspectives in accord with these changes will result in commodity programs that don't work, waning domestic and export markets for U.S. producers, unhappy farmers, and a body politic that is increasingly disenchanted with farmers and farm programs.

G. Edward Schuh is Professor and Head, Department of Agricultural and Applied Economics, University of Minnesota, St. Paul.

This paper is based on the testimony Dr. Schuh presented before the Joint Economic Committee of Congress in June 1983 (1). That hearing was important as U.S. agriculture has become progressively integrated into the U.S. and world economies. The Joint Economic Committee is the appropriate body to address agricultural policy issues.

It is also noted that he testified before that same Committee with a paper titled "Agriculture in Transition" in mid-1982. An important point addressed at that time was that U.S. agriculture faced a severe adjustment problem and that the welfare of farmers would not improve until that adjustment problem was resolved. The need for adjustment resulted from a weak U.S. dollar in foreign exchange markets during the 1970s that induced additional resources into agriculture. Subsequently, a strong dollar in the early

part of the 1980s required resources to be shifted out of agriculture in order to regain a profitable position. Views presented in this paper were also presented at a conference on Farm and Food Policy - Critical Issues for Southern Agriculture, at Clemson University, South Carolina in June 1983.

(1) See Schuh, G. Edward, "U.S. Agricultural Policy in an Open World Economy", testimony presented before the Joint Economic Committee of the U.S. Congress, May 26, 1983, Washington, D. C. Most of this paper is taken from that testimony.

(2) See Schuh, G. Edward, "The Costs of PIK", Department of Agricultural and Applied Economics, University of Minnesota, St. Paul, May 1983.

(3) Tweeten, Luther, "Excess Farm Supply:

Permanent or Transitory?", paper presented at National Agricultural Policy Symposium, March 28, 1983, Kansas City, Missouri.

(4) Longmire, Jim, and Art Morey, "Exchange Rates, U.S. Agricultural Exports Prices and U.S. Farm Program Stocks", Economic Research Services, U. S. Department of Agriculture, Washington, D.C., November 1982.

(5) Even in that earlier period U.S. commodity programs had pernicious effects for agriculture.

(6) For more detail on this set of issues, see Schuh, G. Edward, "Towards Reform of Our International Monetary and Trade Institutions", in issues in Third World Development, edited by Kenneth C. Nobe and Rajan K. Sampath, West View Press, Boulder, Colorado, 1983, p. 419-434.