Macroeconomic Policies and U.S. Agriculture

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Macroeconomics is the "big picture" of an economy's overall performance. The policies that governments use are of particular importance in influencing the economy as a whole. Macroeconomic tools consist of *fiscal policies*--the level of government spending and the balance between taxation and spending--and *monetary policies*--the control of the availability of money and access to credit.

Macroeconomic policies can influence U.S. agriculture in direct or indirect ways. Policies involving interest rates have a direct effect on the value of land in the agricultural sector. They also directly affect the profitability of production because agriculture is a very capital-intensive industry.

Indirectly, macroeconomic policies can affect the relative demand for and competitiveness of U.S. exports. Fiscal and monetary policies spurring high growth rates in the U.S. economy tend to increase our demand for foreign goods relative to the foreign demand for U.S. products, causing a trade deficit. Macroeconomic policies also send signals to investors worldwide about the future performance of the U.S. economy. These signals influence investors' willingness to place their money in U.S. assets, thus impacting the demand for U.S. dollars.

In today's globalized financial markets, changes in the demand for a country's currency cause fluctuations in its exchange rate. Investment decisions can be revised rapidly as new information emerges. A huge stock of all types of assets is held at any given time, and shifts among investments create large financial movements. In recent years, the financial flows among nations have dwarfed the value of world trade in goods and services. For the United States, for example, annual merchandise trade amounts to $1 trillion, compared to annual capital flows totaling $16 trillion (Federal Reserve, 1993). There is a bottom line, however, that links all of these financial movements directly to trade. That bottom line is that the net financial flow from one country to another must be offset by the net trade balance. It is this long term balance that gives rise to some of the most important effects of macroeconomic policies on U.S. agricultural trade.

As goods and financial markets worldwide have grown more interdependent, the linkages between the policies of the U.S. and our major trading partners have also become an important influence on international trade. Because much of the growth potential for U.S. goods--especially food and other agricultural products--lies in foreign markets, a basic understanding of how these economic policies affect world trade is crucial for producers, agribusinesses, consumers, and taxpayers.

Macroeconomic Policy Tools

In the United States, responsibility for monetary and fiscal policy belongs to separate institutions. Fiscal policy is determined by the president's administration in consultation, or in confrontation, with Congress. Tools of fiscal policy include setting the level of federal government expenditures, setting the level of tax revenue, and determining the manner in which taxes are levied. The objectives of specific fiscal policies and their impacts on the performance of the national economy have to be weighed against other national priorities.

Monetary policy is determined by the Federal Reserve System (Fed). The Fed exerts control over the money supply by selling or buying government bonds. It also influences interest rates, and borrowing and lending by commercial banks. Although monetary and fiscal policies are officially separated, in the long run there are pressures that bind them together. Both the Fed and fiscal policymakers seek a strong and stable economy, and fiscal and monetary decisions affect each other.

Financial Market Linkages to U.S. Agriculture

Interest rates closely and inextricably link U.S. agriculture to national financial markets in a number of ways. For example, in 1994 agricultural debt equaled almost 20 percent of the total value of all farm assets in the United States (USDA Agricultural Outlook, 1994). Agriculture is particularly sensitive to interest rates because it is one of the most capital intensive industries in the economy. Interest rates can influence variable production costs by raising or lowering the payments required for short-run planting-to-harvest borrowing. They also affect the cost of long-term capital investments.

Interest rates are a key determinant of land values, the base of wealth in agriculture. A major factor in the farm financial crisis of the 1980's was high real (inflation-adjusted) interest rates. Farmland prices depend on the relationship between expected earnings and interest rates. Even when land prices remain constant--and they fell sharply in the 1980's--a higher interest rate lowers the expected value of future profits just as it makes borrowing more expensive. This is a critical issue in considering the wealth of farmers since land accounts for 74 percent of all U.S. farm assets (USDA Agricultural Outlook, 1994).

The interdependence of world financial markets also has important implications for U.S. agriculture. There are some countries, like Canada or Belgium, which have economies small enough that they can borrow continuously without influencing domestic or world interest rates. For the United States, this is not true. When the United States significantly expands its public debt, as it has throughout the last two decades, it uses up such a large quantity of funds that it can drive up both domestic and world interest rates.

Expansion of the money supply by the Fed can help offset upward pressure on interest rates by making more credit available in the economy. Restrictive monetary policy, however, also drives up interest rates, as it did throughout 1994. Among industrialized nations as a whole, real interest rates have been high throughout the 1990's when compared to historical levels. Long-term rates have reached as much as six percentage points, or two to three times their levels in comparable periods of earlier business cycles (Olser, 1994). Japanese short-term rates doubled to 2.5 percent in 1994. The U.S. Federal Reserve likewise boosted domestic short-term rates almost 2.5 percentage points between February 1994 and February 1995 (from 3.29% to 5.74%) to combat inflationary pressures as the United States recovered from recession (The Wall Street Journal, February 1995).

High interest rates in the United States relative to the rest of the world ultimately have a detrimental effect on U.S. agricultural exports. Foreign investors become eager to invest their funds in U.S. financial markets, and to do this they must buy dollars with their foreign currency, generating a high demand for U.S. dollars. With the floating exchange rate system in operation since 1973, exchange rate values are generally an expression of demand for a country's currency. A high demand for U.S. dollars induced by high domestic interest rates or other factors thus manifests itself as an appreciation of the dollar, which makes U.S. exports less competitive in world markets.

Figure 1 shows the negative effects of rises in the real (inflation adjusted) trade-weighted exchange rate on U.S. agricultural exports. Between 1980 and 1985, the trade-weighted U.S. dollar appreciated approximately 75 percent as a result of restrictive monetary policy and heavy government borrowing. After a coordinated international effort, initiated by the 1985 Plaza Accord, the dollar fell to its 1980 level in 1988 (Fratianni and Salvatore, 1993). It has appreciated slightly since then, but remains at about 50% of its peak 1985 value. The Fed's current restrictive monetary policy serves to strengthen the dollar's value, but the large and persistent U.S. trade deficit exerts the opposite effect, and in early 1995 the dollar depreciated further against the Japanese yen and the German mark, before stabilizing.

Although expansionary monetary policy might seem to help the agricultural sector by keeping interest and exchange rates low, it can induce other harmful effects by fueling inflation. Real shocks to the economy, like the oil crises during the 1970s, can have the same effect. During long periods of inflation, nonfarm prices tend to creep upward more than farm prices. There is evidence that farm prices rise faster during short bursts of inflation. Farmers may have a positive view of this in the short term, but the national economy has little tolerance for long inflationary periods. When policies are implemented to restore price stability, agriculture has a difficult adjustment to make.

World Demand for U.S. Agricultural Exports

At $43.5 billion in 1994, the value of U.S. agricultural exports constitute one fifth of total U.S. agricultural production (Capehart, 1994). In the dynamic world of global trade, consideration of major influences on foreign demand is essential to understand the fluctuations of this potentially large market.

The openness of overseas markets is the most fundamental determinant of foreign demand. In the past, agriculture was omitted from most international trade agreements because it is closely tied to sensitive domestic policy and social issues in many countries. However, the last several years have brought breakthroughs for world and regional trade.

On the global scene, implementation of the Uruguay Round Agreement under the General Agreement on Tariffs and Trade (GATT-UR), is expected to create growth in U.S. agricultural exports and net farm income over the next decade. Trade liberalization was at least partly responsible for the doubling of both Mexican and Canadian imports of U.S. agricultural goods between 1988 and 1994 (USDA Outlook for Agricultural Exports, 1994). The North American Free Trade Agreement (NAFTA) will stimulate further growth.

Fluctuations in world economic performance also influence demand for U.S. exports. Countries can sustain higher levels of imports when their incomes rise. Differences

between world and U.S. growth rates impact heavily on the trade balance. Figure 2, for example, demonstrates how U.S. agricultural exports to developing countries rise and fall with foreign income growth.

The growth rates of all nations are interrelated through the effects of each government's macroeconomic policies. The debt crisis that occurred in many developing countries in the early 1980's is an example. During this period, the United States pursued a tight monetary policy to combat domestic inflation. This policy helped drive up world interest rates, triggering a world credit crunch, which caused a financial crisis and depressed growth in many debt-ridden developing nations.

Conversely, it can be said that the unsustainable borrowing of the nations that experienced this debt crisis slowed the growth of the United States when U.S. exports decreased in the mid-1980's. The consumers in these developing nations could not sustain their previous levels of import purchases during this period of adjustment (Orden, 1986). In general, as economic growth rates fall in other countries, so do imports of U.S. goods.

Economic growth also brings about changes in the preferences of a nation's consumers, which has an impact on the demand for U.S. agricultural exports. Many developing countries are demanding more high-valued goods and less bulk commodities. Their changing preferences reflect rising incomes, trade liberalization, and the relative decline of their own agricultural sectors in the process of development (USDA Outlook for Agricultural Exports, 1994).

Revitalized growth of the world economy bodes well for agricultural exports in the coming years. Growth has accelerated in many of the developed economies, most notably in the United States and the United Kingdom. Developing countries as a whole are expected to maintain a 5 percent growth rate, and incomes in the some of the economies of the former Soviet bloc countries are gradually taking an upward turn. Implementation of the GATT-UR agreement will improve the prospects for long-term growth as it adds hundreds of billions of dollars to the world economy (Fatseas and Orden, 1994).

Fiscal Policy Issues

The government's expenditure decisions also have important implications for agriculture. Fiscal policy changes prompting adjustments in federal spending can influence the exchange rate through the expansion or contraction of the federal deficit. Figure 3 shows the relationship between the "twin" federal budget and trade deficits held strongly until the late 1980's. After 1986, other factors in the world economy counteracted the detrimental influence that the continued federal deficit would be expected to have on the trade deficit.

Specifically, high growth rates in other countries stimulated expansion in foreign direct investment overseas that exceeded investment flows into the United States (The Economist, 1988). Economic growth also increased world demand for U.S. exports, which was complemented by depreciation in the value of the U.S. dollar (Krugman et al. 1987).

Unchecked government spending can fuel inflation by generating excess demand for goods and services in the economy. However, fears of such inflationary deficit spending must be balanced against the positive effects government spending can have on national income and employment growth. Domestic income growth, like world income growth, creates demand for farm products, and high levels of nonfarm employment create opportunities for some farm people to seek other jobs. Conversely, when economic growth slows down, demand for farm products is reduced.

The balanced budget Emergency Deficit Control Act of 1985 and the Budget Enforcement Acts of 1990 and 1993 are manifestations of the weight of the national debt burden in fiscal policy decision making. This legislation instituted caps on discretionary spending and enacted a pay-as-you-go rule, requiring that existing programs be cut to offset any new spending which might increase the deficit. The annual federal budget deficit has fallen from its high of $290 billion in 1992, but Washington's struggle to restrain government spending has impacted heavily upon agricultural programs since the late 1980's.

For agriculture, fiscal constraints lead to successive cuts in farm program support. By 1994, annual outlays for commodity credit programs had fallen 70 to 80 percent from the historically high levels in 1986 (USDA Agricultural Outlook, 1994). The 1994 elections elevated budgetary considerations to an even higher priority and this lead to the total elimination of farm price support programs under the 1996 Farm Bill. In conjunction with intensifying overseas competition and recent progress in multinational trade agreements, these policy changes will leave many farmers more vulnerable to price fluctuations and market signals will play a larger role in agricultural production decisions.

Prospects for the Big Picture in U.S. Agriculture

Interest rates, the exchange rate, world demand, and government spending patterns are all key macroeconomic influences on the prosperity of the agricultural sector. Interest rates are expected to remain relatively high in the U.S. to help reduce the prospects of inflation. However, the U.S. dollar is not expected to strengthen as long as a large and persistent national trade deficit undermines confidence in the currency.

Sluggish world economic growth relative to the U.S. has contributed to the rapid growth of the trade deficit since 1992. However, economic recovery throughout the world,

particularly in the developing and transitional economies, should strengthen world demand for U.S. exports in over the next several years. The enactment of several new multilateral free trade agreements should also expand U.S. trade. Changing preferences in the world market reflecting the economic development of many of the United States' trading partners has caused a shift in agricultural export demand from bulk commodities to high-value agricultural goods.

The evidence of recent decades and arguments made in this leaflet suggest that macroeconomic policies have had and will continue to have a greater influence on the economic well-being of U.S. agriculture than more narrowly focused farm programs. The interdependence between agriculture and the macroeconomy will become stronger in the future as producers rely more heavily on market forces for profits and market opportunities.

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